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Appendix



On-site and desktop reviews of conditions on the ground were conducted to document circulation of various modes of transportation, where students congregate, and identify network gaps.



This Plan included analysis of the existing and planned surface transportation network, posted speed limit, traffic volume, and crash data, providing a snapshot of the present-day mobility landscape within the city. A baseline understanding of the network connectivity, efficiency, safety, and capacity enables identification of network gaps and improvements, and serves as a critical reference point for proposed recommendations.

Below is a description of what was mapped and how it informs the analysis (click title to view map):

Existing and Planned Surface Transportation

 Bike lanes, trails, greenways, and sidewalks are mapped to identify gaps in the existing and planned network.

Posted Speed Limit – Speed limits across the networks are evaluated to understand their impact on traffic flow and safety, and to identify transportation barriers that discourage active transportation.

Traffic Volume – Average annual daily traffic (AADT) is a key indicator of congestion levels and transportation demand, in order to identify transportation barriers that discourage active transportation due to the built environment catering more towards motorists.

Crash data – This analysis includes patterns in accidents, such as high-risk locations, common causes, and the times at which they are most likely to occur to understand the underlying issues contributing to incidents, to reduce the frequency and severity of accidents, and increase safer travel for all network users.

Parents and guardians influence how children get to and from school. Each parent or guardian has personal criteria they consider when determining whether or not an environment is considered safe or at what age their student is capable of walking and biking to school. The following reasons may influence parents' and guardians' decision to allow their children to walk, bike, or roll to school:

Weather – Parents may feel as though the weather is too extreme for their student to walk or bike, especially during Cheyenne's very cold and windy winters. In addition, students may not have adequate cold weather or rain gear for their trip to school.

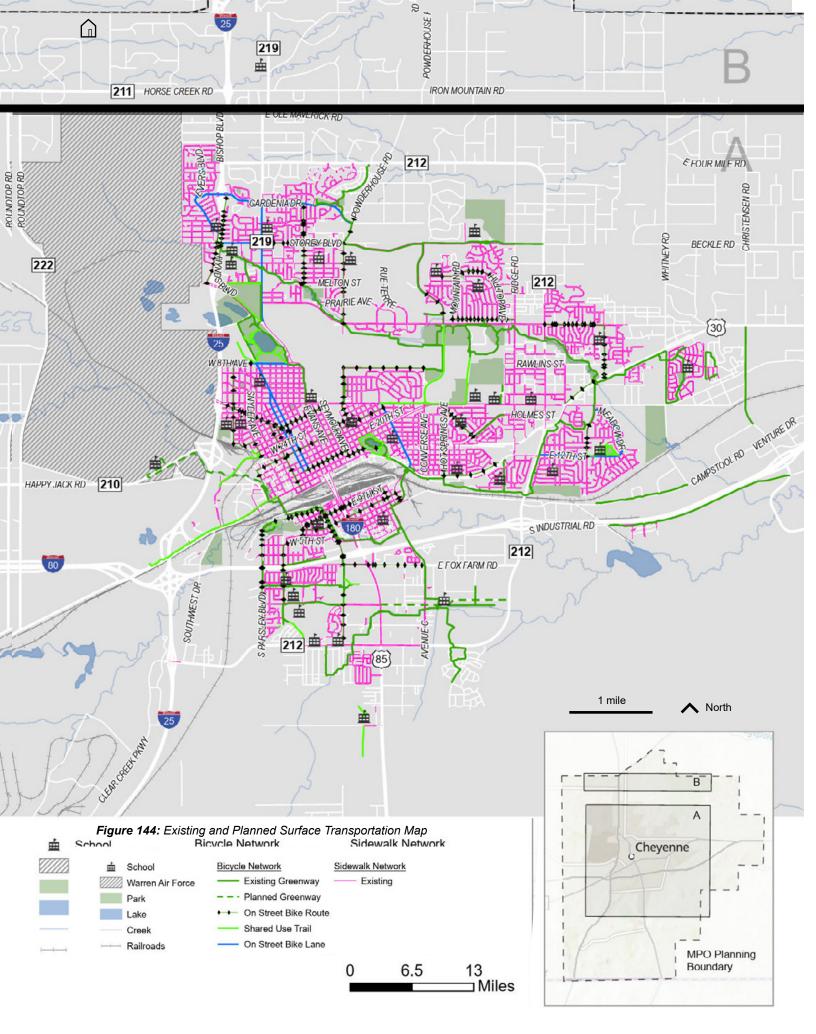
Age – Children are smaller in stature than adults and therefore their visibility to motorists is reduced and their ability to see over obstacles in inhibited. Also, until the age of ten, children have a limited concept of road rules and why they need to exhibit safe behavior. Further, children have both limited cognitive ability and peripheral vision. These limitations increase the difficulty of accurately judging the speed of cars. Because of these and other limitations, parents are protective of their children and can be hesitant to allow them to walk or bike to school.

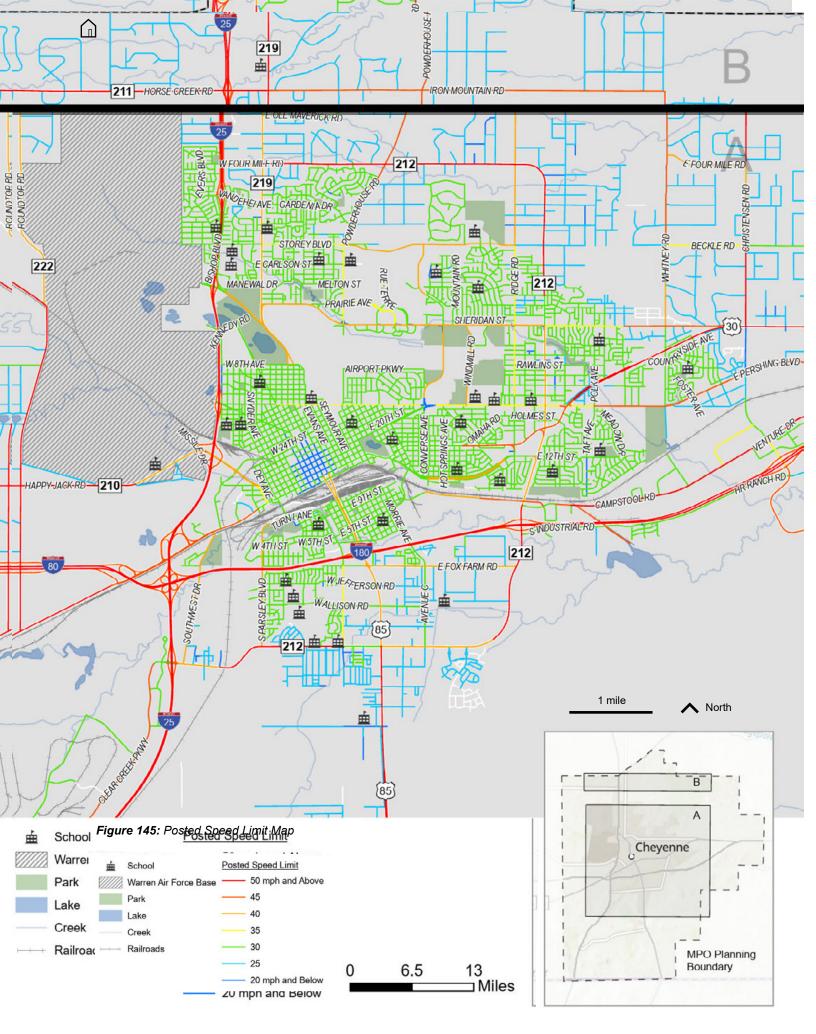
Convenience/Quality Time – Many parents drop their children off at school on their way to work. Because parents and guardians are busy, they cite the convenience of being able to do "double duty" and take their students to school on the way to work. Further, parents often report feeling that the time in the car on the way to school is quality time with their children.

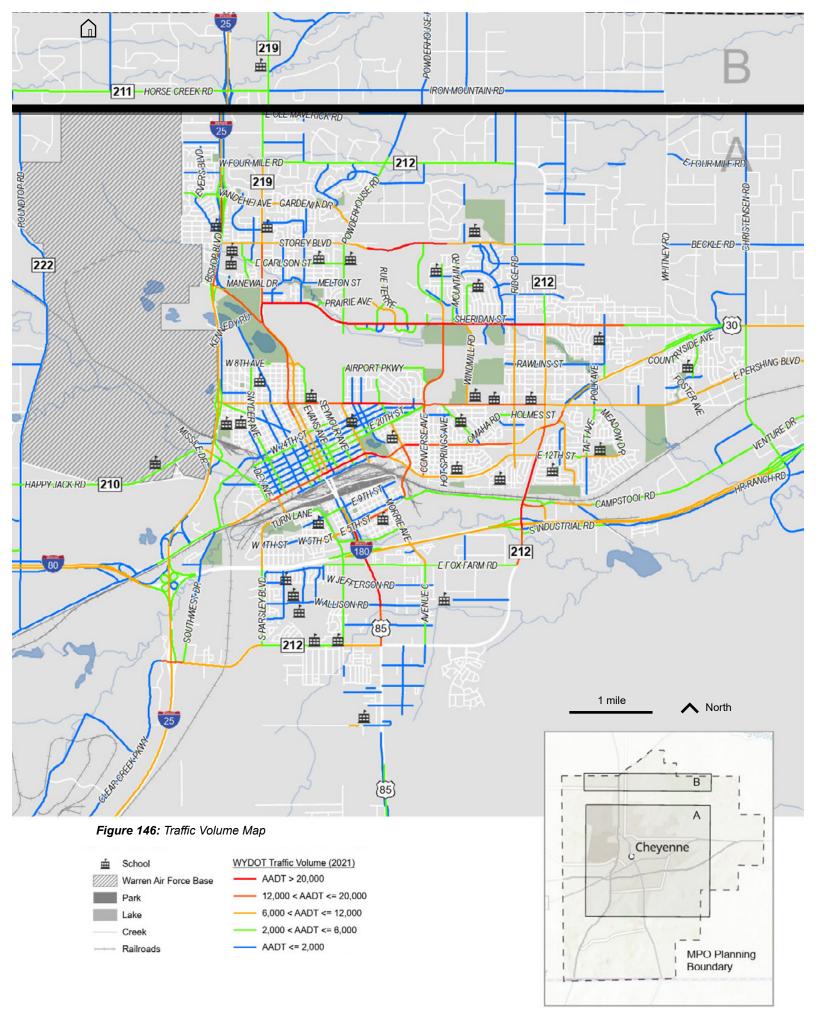
Traffic – If the route to school is high-speed, high-volume, or without proper facilities, parents can be reluctant to allow students to walk or bike to school. Parents are often concerned that their student does not have a safe route that is separated from motor vehicle traffic.

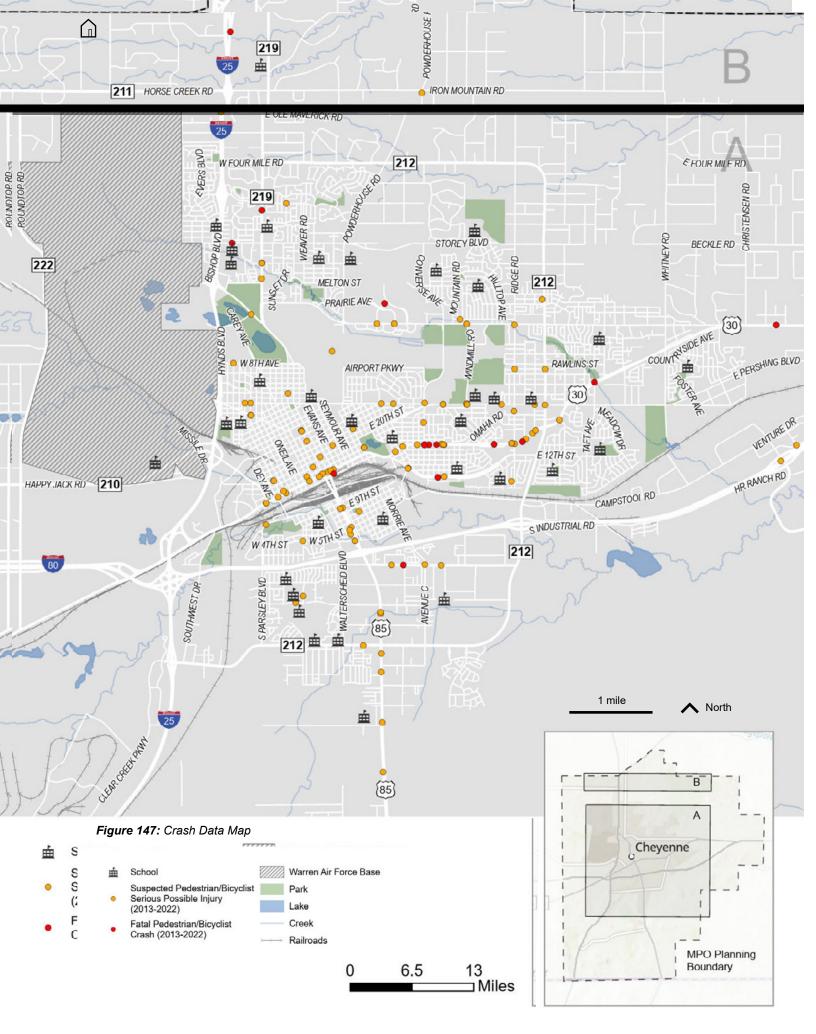
Distance – Even though physical activity is an important component of a healthy lifestyle, parents may feel as though the trip to school is too far. Alternately, parents may choose to place their students in a non-neighborhood school and the distance to the school is beyond a walkable or bikeable distance.

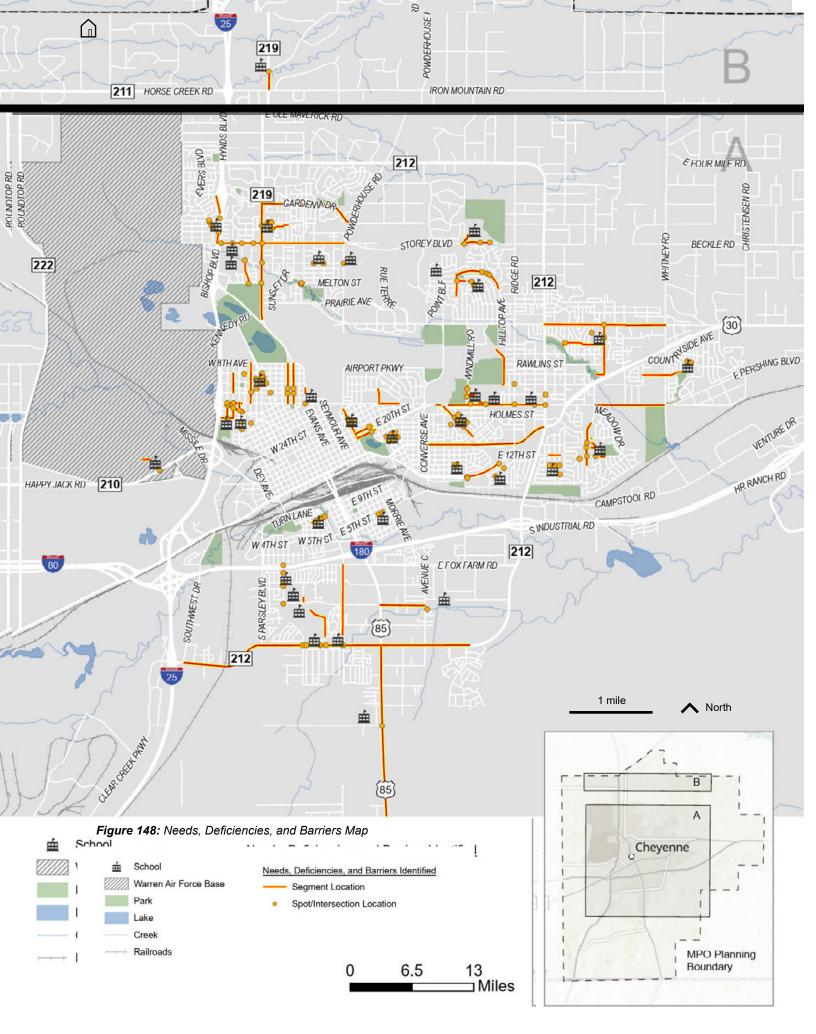
Fear of Strangers/Abduction – Parents express fear of strangers and abduction as a reason why they do not allow their children to walk or bike to school.













Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff ParkingOther Parking

Marked Crosswalk

Existing Sidewalk

— Existing Greenway or Trail

- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)
School Bus Circulation

→ Car Circulation



1 Afflerbach Elementary School

| Description | Pre-Kindergarten, K-6 |
|----------------------------|---|
| | Enrollment: 328 Campus open: 8:00am Doors open: 8:00am for breakfast, 8:25am for school Classes start: 8:30am School dismissed: 3:35pm |
| Walking conditions | It will not be safe to cross South Greeley Highway until a light is put in at Wallick Road and a crosswalk is installed in that area. It would be helpful to have sidewalks up South Greeley Highway to have a safer walking environment. |
| Biking conditions | West side of South Greeley Highway is unsafe compared to the east side. |
| Bus drop/pick-up zones | No pickup zones identified |
| Parents drop/pick-up zones | No pick-up zones identified |
| Road conditions | Speed limits, presence of highways |
| Infrastructure issues | Missing bikeways, sidewalks, signals. |
| Other safety issues | There is one crossing guard to help students cross Walick Road on the west end of our parking lot. The school would like to have a crosswalk and crossing guard at the east end of the parking lot as well. The school does not have volunteers and use staff members for these duties even though they would prefer having volunteers. All the necessary equipment for crosswalk guards are available. |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

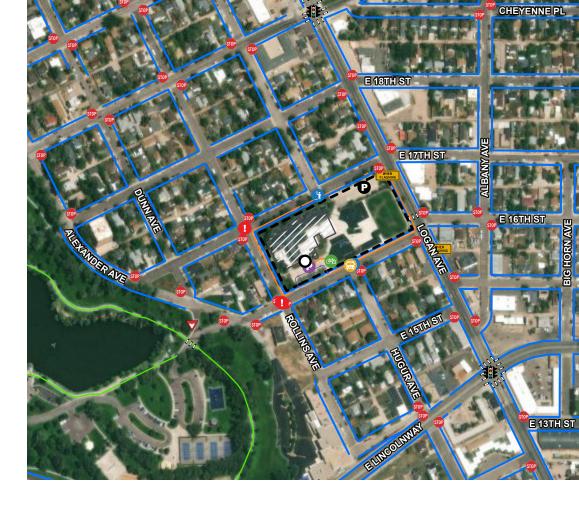
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



Alta Vista Elementary School

| Description | Pre-Kindergarten; K-6 |
|----------------------------|--|
| Walking conditions | Unsafe due to lack of crosswalks and stop signs especially along Rollins Avenue. |
| Biking conditions | Bike lanes present on either side of the streets. |
| Bus drop/pick-up zones | Bus pick-up and drop zones present along the East 16 th Street. |
| Parents drop/pick-up zones | Parents also park along E 16 th Street waiting to pick kids and only some parents use the loop to drop and pick-up. |
| Road conditions | Crossings marked along Logan Avenue and marked 20 mph speed zone on Logan Avenue |
| Infrastructure issues | The pavement markings have worn off along the raised crosswalks. |
| Other safety issues | No crossing guard at the Logan Avenue crosswalk which is a busy street where students cross. Many vehicles do U-turns to go east, and most vehicles come from Logan |
| | Avenue |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

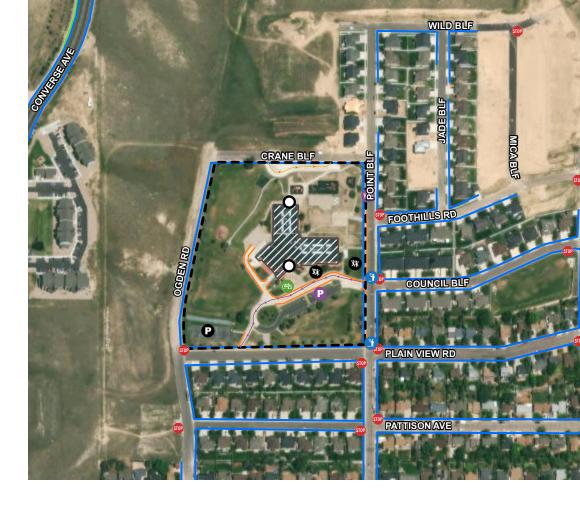
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



Anderson Elementary School

| Description | Pre-Kindergarten, K-4 |
|----------------------------|---|
| | Enrollment: 298 Campus open: 8:15am Doors open: 8:35am Classes start: 8:40am School dismissed: 3:35pm |
| Walking conditions | Sidewalks present along Point Bluff Road and Plainview Road. |
| Biking conditions | No dedicated bike lines, but there are sidewalks |
| Bus drop/pick-up zones | Bus circulation along the Crane Bluff Road |
| Parents drop/pick-up zones | Parents parked in no parking zone, partially blocking entrance to parking, parents drop off kids closer to playground |
| Road conditions | Satisfactory road conditions observed |
| Infrastructure issues | Since street parking is near the crosswalk, there may be a need for a bulb out or "no parking zone" near the crosswalk. |
| | Traffic seems to be congested but orderly. |
| Other safety issues | Students have been observed to cut across lawn |



Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



4 Arp Elementary School

| Description | Pre-Kindergarten, K-4, 5-6 |
|----------------------------|--|
| | Enrollment: 333 Campus open: 8:15am Doors open: 8:20am Classes start: 8:45am School dismissed: 3:55pm |
| Walking conditions | Walking unsafe because of incomplete sidewalk connections |
| Biking conditions | Unsafe between Concord and Pershing Blvd Biking network incomplete because of incomplete sidewalk connections |
| Bus drop/pick-up zones | No bus drop or pick up observed. |
| Parents drop/pick-up zones | Parents park on the road where there is a private spot |
| Road conditions | Beltway is often flooded and hence unusable |
| Infrastructure issues | Not lot of sidewalks have a complete pathway in the neighborhood making it challenging to stay on a sidewalk from homes to school. Sidewalk access is also a challenge |
| Other safety issues | Temporary location for the past 5 years. Unsure how long it will continue as temporary location. Speed limit is 35mph along Perishing Blvd |



Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

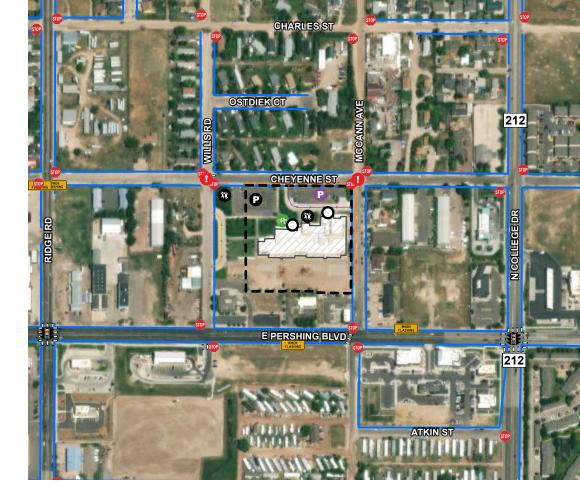
- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

→ School Bus Circulation

Car Circulation



5 Baggs Elementary School

| Description | Pre-Kindergarten, K-6 |
|----------------------------|---|
| | Enrollment: 288 Campus open: 7:50am Doors open: 8:20am Classes start: 8:20am School dismissed: 3:35pm |
| Biking conditions | Crossing Perishing Blvd and North College Drive difficult |
| Bus drop/pick-up zones | Despite sidewalks, unsafe due to the higher speeds along E Perishing Blvd |
| Parents drop/pick-up zones | Some parents had extended time parking in drop off. |
| | The pickup line queue during the afternoon extends into the street. |
| Road conditions | RRFB might be required for crossing streets that don't have RRFB at present. |
| Infrastructure issues | One-way signage at parent/visitor parking needs to be reviewed and modified. |
| | Curb marking (paint) needs to be redone. |
| Other safety issues | Some parents drive too fast. |
| | Some students enter the street from car driver's side. |



Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

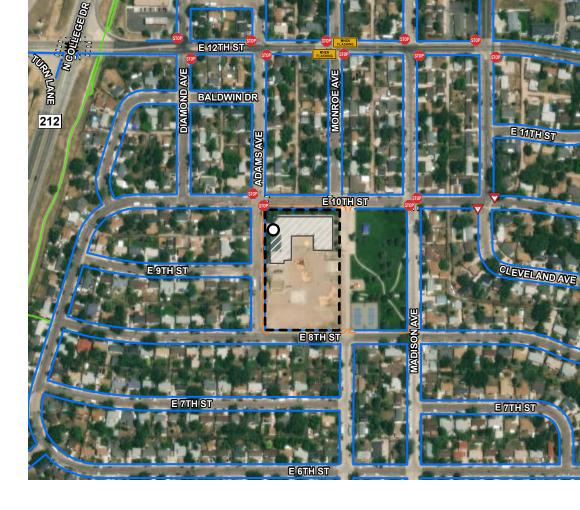
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



6 Bain Elementary School

| Description | K-4; 5-6 • Enrollment: 223 • Campus open: 8:05am • Doors open: 8:05am • Classes start: 8:35am • School dismissed: 3:35pm |
|----------------------------|---|
| Walking conditions | Sidewalks present on all four streets bordering the school |
| Biking conditions | Bike racks out front preferred |
| Bus drop/pick-up zones | No issues observed |
| Parents drop/pick-up zones | No issues observed |
| Road conditions | Thick, block lines need to be painted |
| Infrastructure issues | A 4-way stop sign preferred on Madison and 8 th Street. No street markings on 8 th St 10 th Street, north of school could be better monitored |
| Other safety issues | Despite 20 mph speed limit on 12th, cars go fast |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

— Existing Greenway or Trail

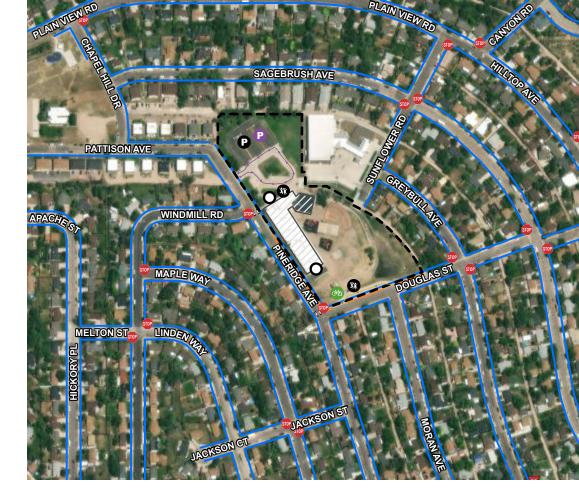
- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

→ School Bus Circulation

Car Circulation



7 Buffalo Ridge Elementary School

| Description | Pre-Kindergarten, K-6 |
|----------------------------|---|
| | Enrollment: 171 Doors open: 8:00am Classes start: 8:25am (8:05am for breakfast) School dismissed: 3:35pm |
| Walking conditions | No marked crosswalks within the parking lots. |
| Biking conditions | Bike rack in good condition and is painted. |
| Bus drop/pick-up zones | Bus drop and pick-up zones seems to be congested in the evening but still orderly. |
| Parents drop/pick-up zones | Parents park in student drop off leading to parking in "no parking" zone along Pineridge Road. |
| Road conditions | Crosswalk paint needs improvement along Douglas Street and Pineridge Ave and Sunflower Road and Greybull Ave. |
| Infrastructure issues | The ADA curb ramps need truncated dome. |
| Other safety issues | Students enter the street from between cars or buses. |
| | Students enter the street from car driver's side. |
| | Parents with children sometimes do not use the crosswalks. |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



Carey Junior High School

| Description | 7-8 |
|----------------------------|--|
| | Enrollment: 847 Campus open: 6:30am Doors open: 6:30am Classes start: 7:40am School dismissed: 2:40pm |
| Walking conditions | Students have to cross mid-block in parking lots with no crosswalks or controls |
| Biking conditions | Perishing despite busy have signalized intersections that are safer but T-Bird drive gets very busy during drop-off and pick up times causing intimidation to cross. |
| Bus drop/pick-up zones | Congestion likely to happen during drop off and pick up times |
| Parents drop/pick-up zones | Parents drove through "do not enter" signs that is basically bus loop |
| Road conditions | No "ADA" warning for pedestrians along E Perishing Blvd |
| Infrastructure issues | The curb ramps needed repair along Forest Drive and E Perishing Blvd |
| Other safety issues | Flow of traffic congested Another crossing guard preferred Some parents drive too fast in the parking lots |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



Central High School

| Description | 9-12 • Enrollment: 1,218 • Doors open: 6:45am • Campus opens 7:15am • Class start time: 7:45am • School dismissed: 2:45pm |
|----------------------------|---|
| Walking conditions | Western Hills Blvd, Education Drive and Hynds Blvd have dedicated sidewalk for walking. There is a pedestrian overcrossing that has access over I-25 |
| Biking conditions | Even though it is safe for biking because of adjacent residential streets having lower speed limits, there is no dedicated bike trail. |
| Bus drop/pick-up zones | Bus drop/pick up zone adjacent to parent drop zone |
| Parents drop/pick-up zones | Parents drop off in visitor lot |
| Road conditions | Speed limits, presence of highways |
| Infrastructure issues | Missing bikeways, sidewalks, signals, crossing inadequate |
| Other safety issues | Crashes and high speed limit |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

— Existing Greenway or Trail

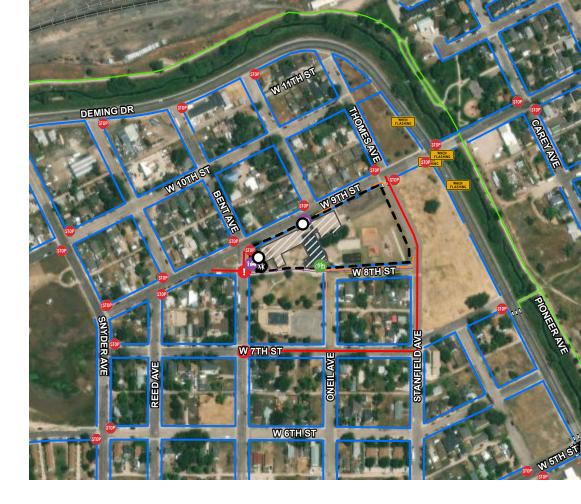
- Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



10 Cole Elementary School

| Description | K-6 |
|----------------------------|---|
| | Enrollment: 137: Campus open: 8:00am Doors open: 8:15am (breakfast) Classes start: 8:35am School dismissed: 3:35pm |
| Walking conditions | Residential area with no control signs such as yield or stop making it difficult to walk and lacks infrastructure for a safe walking environment for kids. Group of kids used the park/trail path to get to school |
| Biking conditions | No infrastructure for biking but biking rack present |
| Bus drop/pick-up zones | Bus drop and pick-up zones works well |
| Parents drop/pick-up zones | Parents park on all surrounding streets to pick their kids |
| Road conditions | Road conditions are satisfactory even though walking infrastructure needs improvement. |
| Infrastructure issues | Crosswalks to be painted on the street directly in the front of the main door No ADA compliant entrances to the building |
| Other safety issues | No security guard along Bent Ave and 8 th Street and Bent Ave and 7 th Street. |
| | Cars traveling on Bent can not see the cars parked to pick up the students since the road is narrow creating a safety hazard |



Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Existing Sidewalk

Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

---- Car Circulation



11 Coyote Ridge Elementary School

| Description | |
|----------------------------|--|
| Walking conditions | |
| Biking conditions | |
| Bus drop/pick-up zones | |
| Parents drop/pick-up zones | |
| Road conditions | |
| Infrastructure issues | |
| Other safety issues | |
| | |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

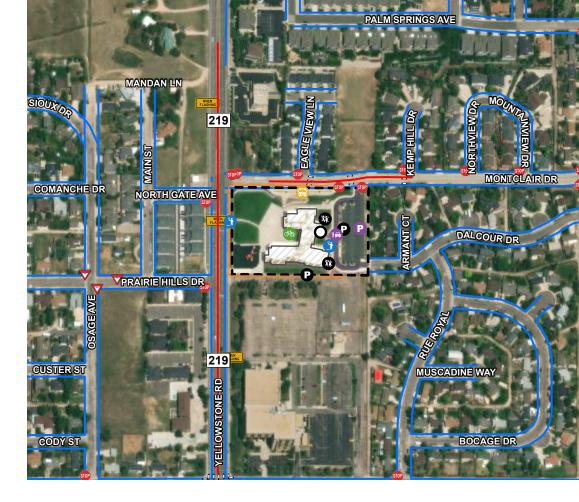
- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

→ Car Circulation



12 Davis Elementary School

| Description | K-6 |
|----------------------------|---|
| | Enrollment: 314 Campus Open: 8:00am (breakfast) Doors Open: 8:00am (breakfast) Classes Start: 8:35am School Dismissed: 3:35am |
| Walking conditions | BEACON supported crosswalks on Yellowstone Road and crosswalk in Montclair Drive. |
| Biking conditions | There is a dedicated bike lane along Yellowstone Road. Bike racks are present in locked gate yard only |
| Bus drop/pick-up zones | No issues observed |
| Parents drop/pick-up zones | Some parents drop off on streets |
| Road conditions | Satisfactory road conditions |
| Infrastructure issues | Visibility issues along Dalcour Drive due to lacking controls |
| Other safety issues | The crossing guard has experienced drivers disobeying HAWK, passing while the guard and the students are present in the crosswalk. |
| | There is a lot of traffic on Yellowstone Road posing a safety concern. |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Marked Crosswalk

Other Parking

Existing Sidewalk

Existing Greenway or Trail

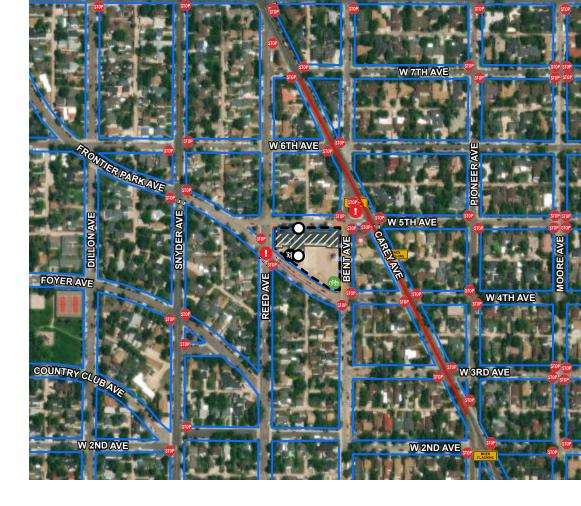
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



13 Deming Elementary School

| Description | K-6 • Enrollment: 82 • Campus open: 8:00am • Doors open: 8:00am • Classes Start: 8:35am • School Dismissed: 3:35pm |
|----------------------------|---|
| Walking conditions | Designated crosswalks on Carey Ave and around the school such as Bent Ave, Frontier Park Ave, 5 th Ave and Reed Ave preferred for safe walking conditions. |
| Biking conditions | Presence of Bike lanes on both directions on Carey Avenue |
| Bus drop/pick-up zones | Bus pick-up and dop off works well. |
| Parents drop/pick-up zones | Parents drop off in "No Parking" signage across Reed Avenue |
| Road conditions | Since the intersection is so wide, lots of U-turns observed. |
| Infrastructure issues | Infrastructure in and around the school in satisfactory condition. |
| Other safety issues | Flashing lights and public announcements to support traffic awareness around Deming and Miller Elementary. Area of concern is corner of 4 th Ave and Bent |
| | Some cars parked in "No parking" zone. |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

—— Existing Greenway or Trail

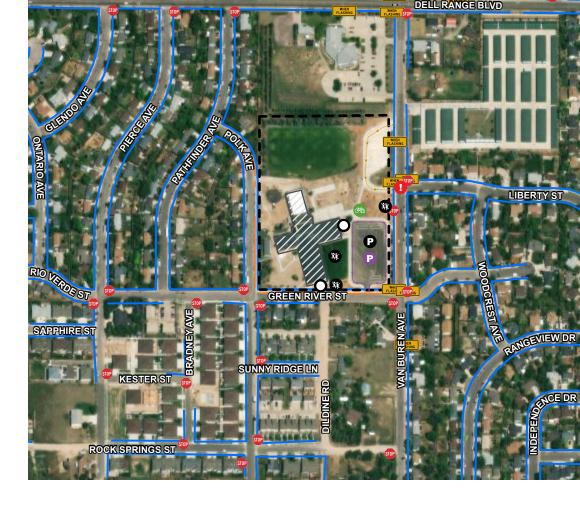
– – Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



14 Dildine Elementary School

| Description | K-4 Enrollment: 300 Campus open: 8:00am Doors open: 8:30am Classes start: 8:35am School dismissed: 3:35pm |
|----------------------------|--|
| Walking conditions | Sidewalks are relatively new |
| Biking conditions | Biking along Green River Street a challenge. Fair amount of students bike but careful about biking outside of the sidewalk. |
| Bus drop/pick-up zones | No issues with bus drop/pick-up zones |
| Parents drop/pick-up zones | Parents exit the parking lot to switch lanes |
| Road conditions | Mostly residential road with no lane markings |
| Infrastructure issues | Only one crosswalk that connects close to the bus loop and one more on intersection of Van Buren and Liberty preferred. |
| Other safety issues | Side Streets around the school busy with vehicular and pedestrian traffic especially on Green River Street. |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



15 East High School

| Description | 9-12 |
|----------------------------|---|
| | Enrollment: 1,500 Campus open: 6:45am Doors open: 6:45am Classes start: 7:45am School dismissed: 2:45pm |
| Walking conditions | Crosswalk discontinued at Perishing and Windmill. Another crosswalk desired at Staff parking/ Windmill/ VA three way entrance/ exits |
| Biking conditions | On street bike lanes along E Perishing Boulevard, Windmill Road, and T-Bird drive. |
| Bus drop/pick-up zones | Common entrance for bus drop and parent drop off zones. |
| Parents drop/pick-up zones | Current parent drop/ pick up insufficient. Additional one would be beneficial |
| Road conditions | Crosswalk needs improvement in visibility. Existing curb ramps need improvement |
| Infrastructure issues | Traffic signal does not provide enough time to cross the entire street. |
| Other safety issues | Traffic congestion on Windmill because of buses and student traffic and parents. |
| | Speed limit is 35-40 mph for E Perishing Blvd |



Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff ParkingOther Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

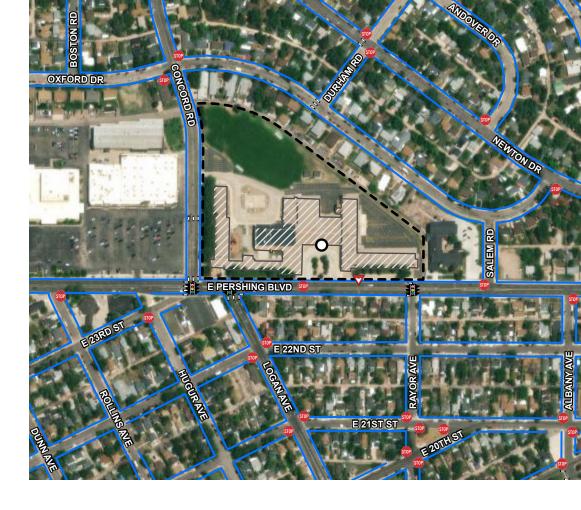
– Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



16 Eastridge

| Description | Temporary facility for schools with home facility under construction. |
|----------------------------|--|
| Walking conditions | Sidewalks present along Concord Road, Salem Road and E Perishing Blvd but lack of control along Concord Rd might pose a safety concern |
| Biking conditions | Sidewalks present along Concord Road, Salem Road and E Perishing Blvd but lack of control along Concord Rd might pose a safety concern |
| Bus drop/pick-up zones | None observed |
| Parents drop/pick-up zones | None observed |
| Road conditions | Lack of crosswalk along Salem Road |
| Infrastructure issues | Some crosswalks might need repainting |
| Other safety issues | High speed and lack of control along Concord Road and high speed along E Perishing Blvd. |



Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

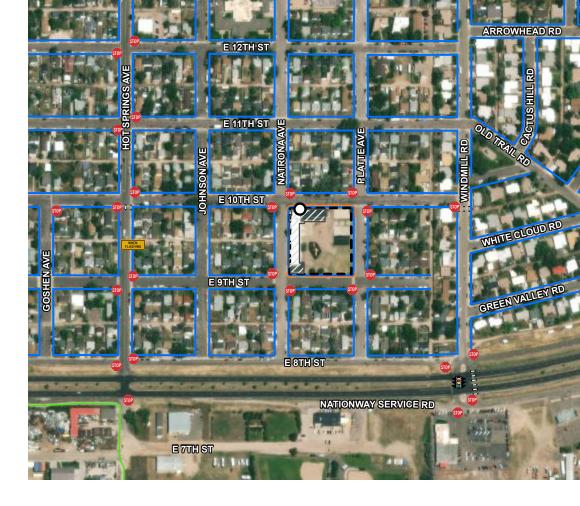
- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

→ Car Circulation



17 Fairview Elementary School

| Description | Pre-Kindergarten, K-6 |
|----------------------------|---|
| | Enrollment: 87 |
| | Campus open: 8:00am |
| | Doors open: 8:00amClasses start: 8:35am |
| | School dismissed: 3:35pm |
| Walking conditions | Presence of sidewalks. However, no stop signs or crosswalks at the four intersections |
| Biking conditions | Presence of sidewalks. However, no stop signs or crosswalks at the four intersections |
| Bus drop/pick-up zones | No bus drop/pick-up zones identified |
| Parents drop/pick-up zones | No issues with parents drop/pick-up zones |
| Road conditions | No stop signs or crosswalks at the intersections |
| Infrastructure issues | Natrona Avenue and East 10 th Street lacks signalized crossing |
| Other safety issues | No other issues identified |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Existing Sidewalk

Existing Greenway or Trail

- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)
School Bus Circulation

→ Car Circulation



18 Freedom Elementary School

| Description | K-6 |
|----------------------------|---|
| | Enrollment: 317 Campus open: 8:00am Doors open: 8:00am Classes Start: 8:35am School Dismissed: 3:35pm |
| Walking conditions | Walkable only to the residential locality northwest of the school campus but lacks direct connection |
| Biking conditions | Bikeable only to the residential locality northwest of the school campus but lacks direct connection |
| Bus drop/pick-up zones | No issues with bus drop/pick-up zones. |
| Parents drop/pick-up zones | No issues with parents drop/pick-up zones |
| Road conditions | Growing residential locality to the northwest. |
| Infrastructure issues | Sidewalk adjacent to the bus lane from Zeimann Blvd |
| Other safety issues | Crossing between parking and pick up zone one of the biggest concerns |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

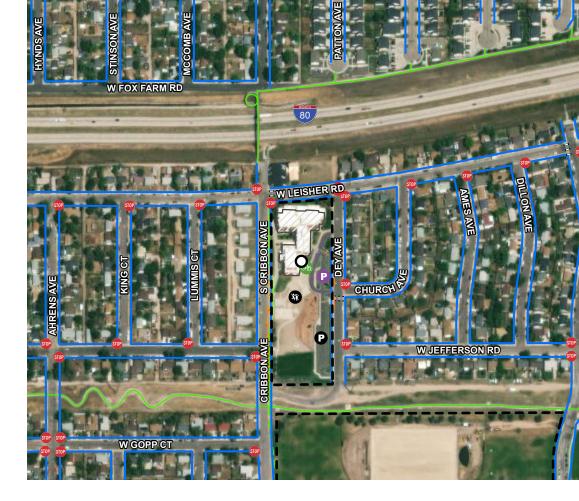
Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor) School Bus Circulation

Car Circulation



19 Goins Elementary School

| Description | Pre-Kindergarten, K-6 |
|----------------------------|--|
| | Enrollment: 296 Grade Levels: Campus open: 8:00am Doors open: 8:00am Classes start: 8:35am School Dismissed: 3:35pm |
| Walking conditions | 40% of those who walked to school walked alone. |
| Biking conditions | Students who ride bikes or scooters cross midblock |
| Bus drop/pick-up zones | No issues identified |
| Parents drop/pick-up zones | Many parents and students cross mid-block to access the parents drop/pick-up zones. |
| Road conditions | The crosswalks along Weisher Road connecting Dey Avenue and Church Ave and Dey Ave and W Jefferson Road needs paint improvement. |
| Infrastructure issues | Cribbon Ave wide in section, likely to encourage speeding. |
| Other safety issues | Multiple parent vehicles use bus drop off zones for dropping their kids. Parent vehicles also park in "no parking to corner area" and in the fire lane near drop off zones |
| | Many students enter the street or drive from between cars or between buses. Few students hop over the 6' chain link at the south side of the field. |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff ParkingOther Parking

Marked Crosswalk

Existing Sidewalk

—— Existing Greenway or Trail

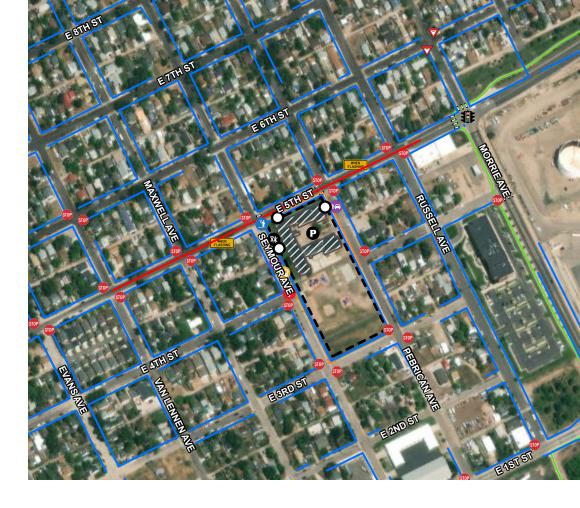
- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

→ School Bus Circulation

→ Car Circulation



20 Hebard Elementary School

| Description | Pre-Kindergarten, K-6 |
|----------------------------|---|
| | Enrollment: 102 Campus open: 8:00am Doors open: 8:00am Classes start: 8:35am School dismissed: 3:35pm |
| Walking conditions | Not safe for walking |
| Biking conditions | Not safe for biking |
| Bus drop/pick-up zones | Small buses pick-up/ drop along Seymour Avenue |
| Parents drop/pick-up zones | Parents pick up/drop kids along Seymour Avenue |
| Road conditions | Crosswalk visibility needs to be improved along Seymour Ave |
| Infrastructure issues | Traffic is hectic in the afternoons especially at E 5 th street. Car drivers disregard the crossing stop sign held by the Crossing Guard for kids at Seymour Avenue |
| Other safety issues | People drive fast along E 5 th Street. |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

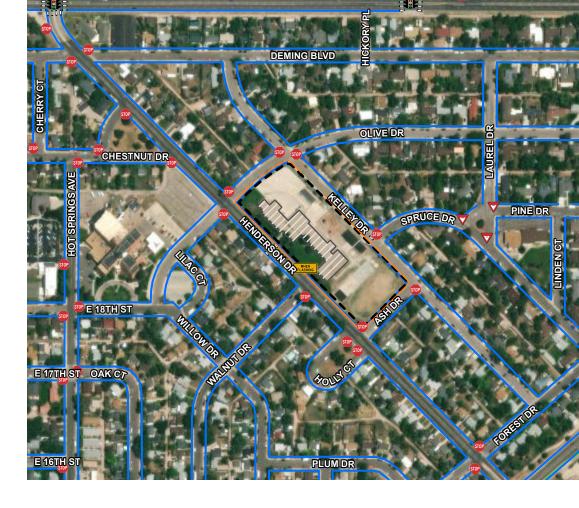
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

→ Car Circulation



21 Henderson Elementary School

| Description | K-6 |
|----------------------------|--|
| | Enrollment: 271 Grade Levels: Campus open: 8:00am Doors open: 8:00am Classes start: 8:30am School Dismissed: 3:35pm |
| Walking conditions | Generally safe, but RRFB crossings both in the front of the school on Henderson Drive and back of the school on Kelly Drive preferred. |
| Biking conditions | Kids don't look before crossing |
| Bus drop/pick-up zones | Not observed |
| Parents drop/pick-up zones | Not observed |
| Road conditions | Henderson Drive is wide and lacks control |
| Infrastructure issues | All the four surrounding roads lack crossing |
| Other safety issues | Lack of safety awareness with parents and kids. Some parents use Kelly Drive to park and pick up their children as opposed to the allowed Henderson Drive. |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

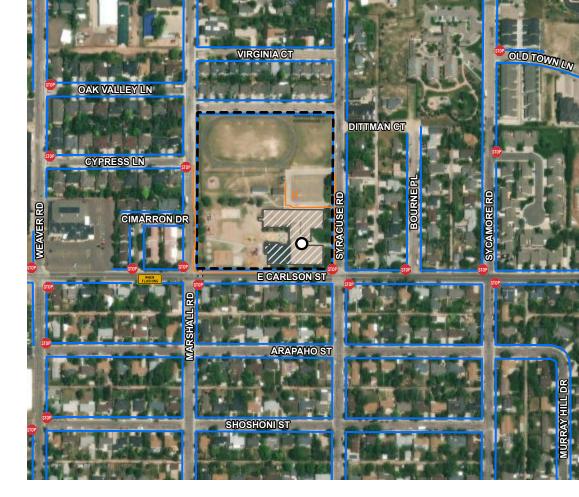
Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor) School Bus Circulation

Car Circulation



22 Hobbs Elementary School

| Description | K-6 |
|----------------------------|---|
| | Enrollment: 305 Campus open: 8:00am Doors open: 8:00am Classes start: 8:35am School dismissed: 3:35pm |
| Walking conditions | Sidewalks not always shoveled or are ice free |
| Biking conditions | Sidewalks not always shoveled or are ice free |
| Bus drop/pick-up zones | Not observed |
| Parents drop/pick-up zones | Not observed |
| Road conditions | Crosswalk on East Carlson Street inadequate, drivers fail to yield to pedestrians and there are multiple conflict. |
| Infrastructure issues | Lack of control on Carlson Street |
| Other safety issues | Parents park on no parking crosswalk zone on Syracuse |



Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

— Existing Greenway or Trail

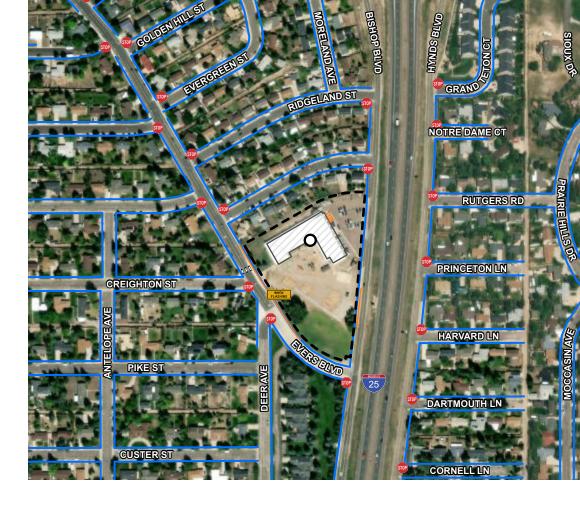
- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

→ School Bus Circulation

→ Car Circulation



23 Jessup Elementary School

| Description | K-6 Enrollment: 211 Campus open: 8:00am for bus riders/breakfast; 8:15am for everyone Doors open: 8:00am for bus riders/breakfast; 8:15am for everyone Classes start: 8:30am School dismissed: 3:35pm |
|----------------------------|--|
| Walking conditions | No signage and flashing light |
| Biking conditions | Students do not take precautionary measures while biking and bike between cars and inadequate biking connections |
| Bus drop/pick-up zones | Not observed |
| Parents drop/pick-up zones | Not well utilized Parents utilize unmarked parking lot for pick up and drop leading to safety concerns |
| Road conditions | Satisfactory road conditions |
| Infrastructure issues | Crossing inadequate at Evers Blvd and Creighton Street |
| Other safety issues | Only one our six doors is ADA accessible |



Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

- Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

→ School Bus Circulation

Car Circulation



24 Johnson Junior High School

| Description | 7-8 |
|----------------------------|---|
| | Enrollment: 733 Campus open: 7:00am Doors open: 7:00am Classes start: 7:30am School dismissed: 2:45pm |
| Walking conditions | Students walk from all directions |
| Biking conditions | Students came on bike but bike storage unknown since bike racks were empty |
| Bus drop/pick-up zones | 1 bus has been observed to use the fire lane route around north of the building and along Cribbon Avenue and Woodward Drive. |
| Parents drop/pick-up zones | Students enter the street from car driver's side in the drop off zone |
| Road conditions | 4-way stop had only crosswalk painted on east leg and no truncated domes present on south leg |
| Infrastructure issues | There is no separation between the crosswalk and the striping of adjacent parking space Staff parking is at capacity |
| Other safety issues | Kids were not using the Rectangular-Rapid-Flashing Beacon (RRFB) while crossing Allison Street Along Synder Ave, absence of truncated domes |



Safety Concern

O Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

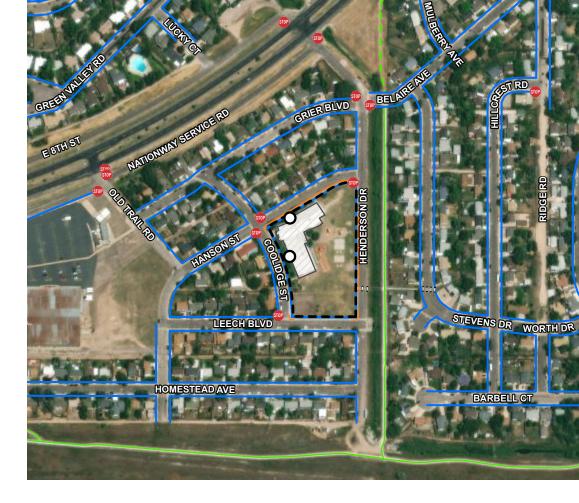
- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

→ School Bus Circulation

Car Circulation



25 Lebhart Elementary School

| Description | Pre-Kindergarten, K-6 |
|----------------------------|---|
| | Enrollment: 86 Grade levels: Campus open: 8:00am Doors open: 8:00am Classes start: 8:35am School dismissed: 3:35pm |
| Walking conditions | Sidewalks present but need improvement. |
| Biking conditions | Sidewalks present but need improvement. |
| Bus drop/pick-up zones | Not observed |
| Parents drop/pick-up zones | Not observed. |
| Road conditions | Crosswalk is wide and lacks control along Hanson Street and Coolidge Street |
| Infrastructure issues | Sidewalks needs improvement |
| Other safety issues | There are stop signs but no crosswalks. |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

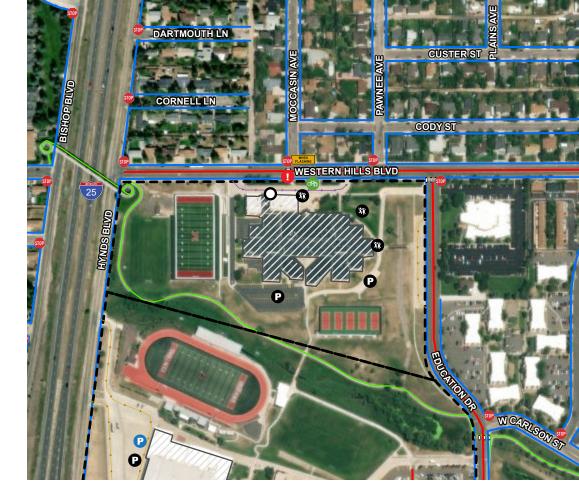
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



26 McCormick Junior High School

| Description | 7-8 |
|----------------------------|---|
| | Enrollment: 709 Campus open: 7:00am Doors open: 7:00am Classes start: 7:45am School dismissed: 2:45pm |
| Walking conditions | Western Hills Blvd, Education drive and Hynds Blvd have dedicated sidewalk for walking. There is a pedestrian overcrossing that has access over I-25 |
| Biking conditions | Even though it is safe for biking because of adjacent residential streets having lower speed limits, there is no dedicated bike trail. |
| Bus drop/pick-up zones | Bus drop/pick up zone adjacent to parent drop zone |
| Parents drop/pick-up zones | Parents drop off in visitor lot |
| Road conditions | Speed limits, presence of highways |
| Infrastructure issues | Missing bikeways, sidewalks, signals, crossing inadequate |
| Other safety issues | Crashes and high speed limit |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Existing Sidewalk

Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



27 Meadowlark Elementary School

| Description | Enrollment: 487 Grade levels: 5-6 Campus open: 7:45am Doors open: 7:45am Classes start: 8:10am School dismissed: 3:20pm |
|--------------------------------------|---|
| Walking conditions | No marked crosswalks anywhere |
| Biking conditions | No marked crosswalks anywhere |
| Bus drop/pick-up zones | Significant congestion in the bus loop and auxiliary parking lot in the AN Passenger vans also use bus loop |
| Parents drop/pick-up zones | Many parents stopped and waited in parents drop off loop, but the loop itself has several no parking/ no stopping signs. |
| Road conditions | Curbs needed repair or replacement along Storey Blvd |
| Infrastructure issues | Limited pavement marking to guide the drivers. No controls to help cross Storey blvd |
| Other safety issues | Students run across Storey blvd and Blue buff road. Students and parents crossed through the parking lot without looking both ways. For our visually impaired students it is difficult to exit the bus and enter the building and vice versa on poor weather days. Good trails near school but busy roads with no crossing inhibits connectivity and use. |
| Source: planning staff visits, deskt | op review, and/or principal feedback. |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

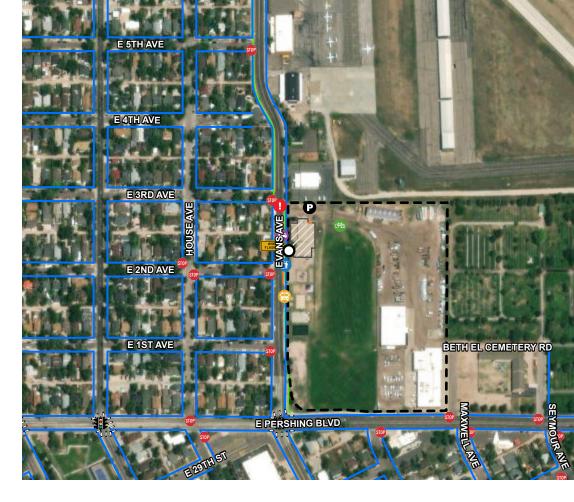
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

→ Car Circulation



28 Miller Elementary School

| Description | K-6 • Enrollment: 68 • Campus Open: 8:00am • Doors Open: 8:00am • Classes Start: 8:35am • School Dismissed: 3:35pm |
|----------------------------|--|
| Walking conditions | Students who crossed always did with the crossing guard |
| Biking conditions | Students did not bike |
| Bus drop/pick-up zones | Satisfactory functioning |
| Parents drop/pick-up zones | Parents drop off queue in northbound drop off lane exceeded capacity |
| Road conditions | Crossing too wide at E Perishing Blvd |
| Infrastructure issues | Curb ramps need improvement at E Perishing Blvd |
| Other safety issues | Students run across Storey blvd and Blue buff road For our visually impaired students it is difficult to exit the bus and enter the building and vice versa on poor weather days. Parents double parked blocking traffic. One passenger car made U-turn after dropping off a student in school zone. |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

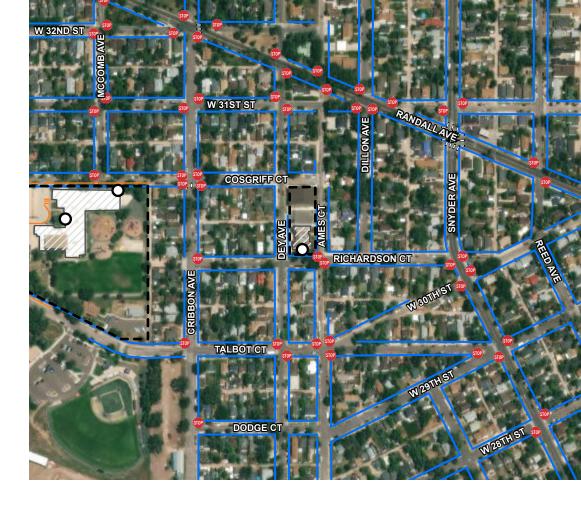
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



29 PASS (Poder Secondary)

| Description | 6-12 |
|----------------------------|---|
| | Entollment: 120 Campus open: 7:50am Doors open: 7:50am Classes start: 8:10am School dismissed: 12:10pm, 4:10pm |
| Walking conditions | Walking seems to be safe but higher speed limits on Morrie Ave could pose a concern. |
| Biking conditions | Only one rack for bicycle storage, might be insufficient |
| Bus drop/pick-up zones | Seems satisfactory |
| Parents drop/pick-up zones | Some parents used the teacher parking lot to drop off the kids. |
| Road conditions | Ramps on Bradley avenue needed repair The ramps present around all corner need ADA warning pads. |
| Infrastructure issues | No marked crosswalks within the parking lots. |
| Other safety issues | Cars double parked blocking traffic Students enter the street from car driver's side. One car failed to stop for a school bus. Many parents performed U-turn after dropping/ picking kids. Many students and parents crossed mid-block and enter the street from the car driver's side. |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

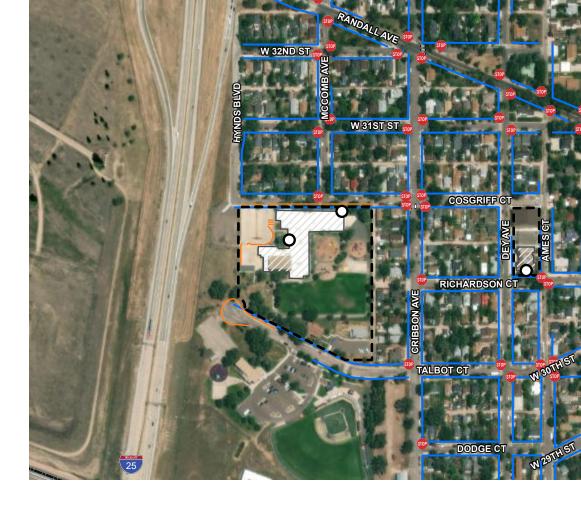
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



30 Pioneer Park Elementary School

| Description | Pre-Kindergarten, K-6 |
|----------------------------|---|
| | Enrollment: 145 Campus open: 8:00am Doors open: 8:30am Classes start: 8:30am School dismissed: 3:35pm |
| Walking conditions | Not safe to walk on Randall or Snyder due to absence of crosswalks |
| Biking conditions | No clearly marked bike routes. Need to bike on the streets. |
| Bus drop/pick-up zones | The bus loop off of talbot requires the wheelchair to climb a steep hill. During the winter this is often not possible so buses have to come to the parking lot and our student has to drive his chair through the car parking lot to get to the bus. |
| Parents drop/pick-up zones | Parents sometimes park on the left side of the one-way street and have their kids run across to get to their car even though they have been asked many times to only load and unload on the right side. |
| Road conditions | Crossing inadequate at McComb Ave and Cosgriff Ct intersection |
| Infrastructure issues | Crosswalks need repainting. |
| Other safety issues | Cosgriff ct can become congested. |



Safety Concern

Building Entrance
Gathering Area

Gattlefilig Area

Crossing Guard
Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

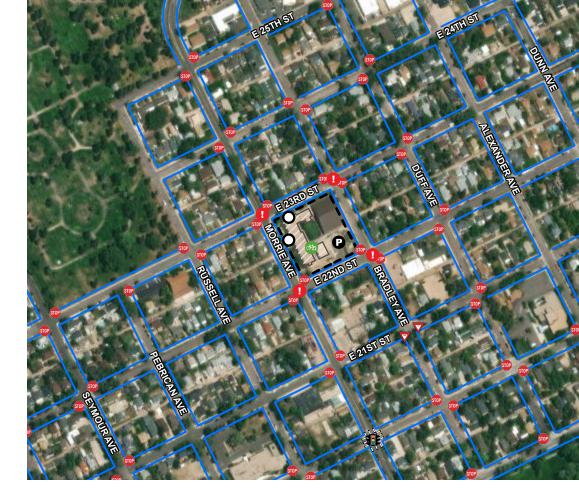
— Existing Greenway or Trail

- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)
School Bus Circulation

→ Car Circulation



31 Poder Academy Charter

| Description | K-6 • Entollment: 194 • Campus open: 7:40am • Doors open: 7:50am • Classes start: 8:10am • School dismissed: 12:15pm (K), 12:20 (5), 4:00pm |
|----------------------------|--|
| Walking conditions | Not safe to use the sidewalks as they are old and uneven. |
| Biking conditions | Not safe to bike due to the old sidewalks |
| Bus drop/pick-up zones | None observed |
| Parents drop/pick-up zones | No issues observed |
| Road conditions | Needs improvement |
| Infrastructure issues | Lack of signs that identify the school as school zone Narrow streets and not one way leading to traffic congestion |
| Other safety issues | None observed |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Existing Sidewalk

Existing Greenway or Trail

- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

---- Car Circulation



32 Prairie Wind Elementary School

| Description | K-6 • Enrollment: 443 • Campus open: 8:00am • Doors open: 8:15am • Classes start: 8:35am • School dismissed: 3:35pm |
|----------------------------|--|
| Walking conditions | Not walkable |
| Biking conditions | Not bikeable |
| Bus drop/pick-up zones | Not observed |
| Parents drop/pick-up zones | Not observed |
| Road conditions | Traffic issues observed along Yellowstone Road |
| Infrastructure issues | During snow, can be difficult for wheelchair bound students to access the school Main entrance too narrow leading to near head on collisions frequently |
| Other safety issues | No other issues identified |



Safety Concern 0

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

P Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

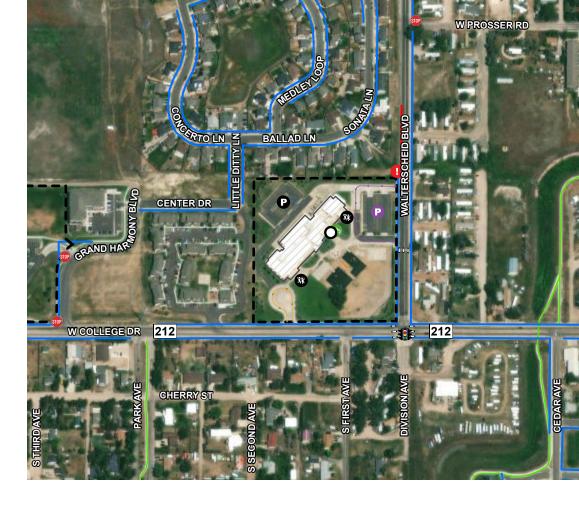
Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor) School Bus Circulation

Car Circulation



33 Rossman Elementary School

| Description | Pre-Kindergarten, K-6 |
|----------------------------|---|
| | Enrollment: 294 Campus open: 8:00am Doors open: 8:00am Classes start 8:30am School dismissed: 3:30pm Primary, 3:35pm Intermediate |
| Walking conditions | Many students walk to school and use Walterschield crossing each day. |
| Biking conditions | A lot of kids bike to school and the bike racks are in good condition |
| Bus drop/pick-up zones | Working in a satisfactory manner. |
| Parents drop/pick-up zones | Traffic congestion in the afternoon with traffic extending towards staff lot. |
| Road conditions | Crosswalks need improvement in painting and curb ramps needed repair. |
| Infrastructure issues | Truncated domes needed at West College Drive and Walterschield Blvd No Crosswalk marks on East-West Routes |
| Other safety issues | Several vehicles go faster than 20 mph, the designated school zone speed. Traffic signals do not give enough time to cross the entire street along W College Dr and Walterschield Blvd |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

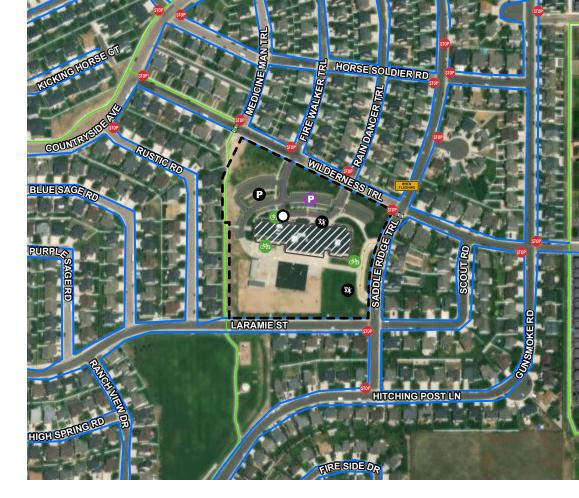
— Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)
School Bus Circulation

→ Car Circulation



34 Saddle Ridge Elementary School

| Description | K-4 Enrollment: 348 Campus open: 8:00am Doors open: 8:30am Classes start: 8:35am School dismissed: 3:35pm |
|----------------------------|--|
| Walking conditions | Crosswalk missing on Wilderness Trail in the front of the school |
| Biking conditions | Bike racks present at two places- one near the entrance and one near the bus loop |
| Bus drop/pick-up zones | Bus loop is along the Saddle Ridge trail. Bike rack is closer to the bus loop. |
| Parents drop/pick-up zones | Parents parking is present as mixed all parking. Parents park on the street and walk to the door to pick the kids in the afternoon. |
| Road conditions | Curb present only in places and no marking in some crosswalks. Concrete visual separation has no point along Laramie Street. |
| Infrastructure issues | Wilderness Trail - no crosswalk and cars line up to pick up children, so visibility is a concern. |
| Other safety issues | Students enter the street from between cars or between buses. |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff Parking

Other Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

Car Circulation



35 South High School

| Description | 9-12 |
|----------------------------|---|
| | Enrollment: 1,150 Campus open: 7:00am Doors open: 7:00am Classes start: 7:45am School dismissed: 2:45pm |
| Walking conditions | Roundabouts lead to the main entrance and there are marked crosswalks. |
| | No yield sign for round about entrance from West Allison Road. |
| Biking conditions | No yield sign for round about entrance from West Allison Road. |
| Bus drop/pick-up zones | Bus and parent drop off close to visitor zone |
| Parents drop/pick-up zones | Bus and parent drop off close to visitor zone |
| Road conditions | No yield sign for round about entrance from W Allison Rd. |
| Infrastructure issues | None observed |
| Other safety issues | Safety concern due to behavior of non-motorists |
| | Speed limit is 30 miles/hour along W Allison Road |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff ParkingOther Parking

Marked Crosswalk

Existing Sidewalk

Existing Greenway or Trail

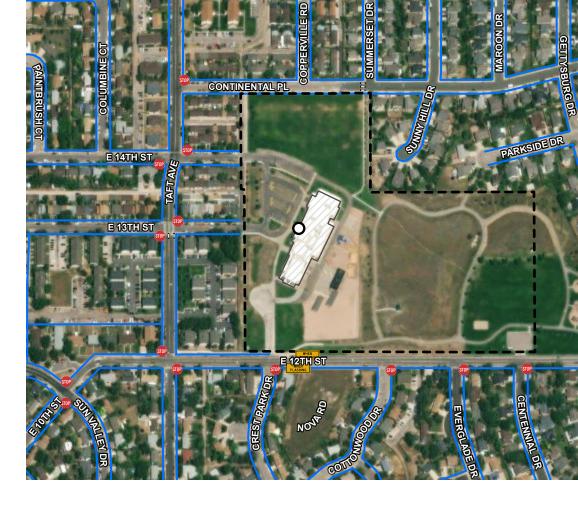
Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

→ Car Circulation



36 Sunrise Elementary School

| Description | K-6 |
|----------------------------|--|
| | Enrollment: 314 Campus open: 8:00am Doors open: 8:00am Classes start: 8:35am School dismissed: 3:30pm |
| Walking conditions | No crosswalk or dedicated crossing on Taft and lacks pedestrian connection |
| Biking conditions | Lacks adequate safe connection for a bikeable environment. |
| Bus drop/pick-up zones | Not observed |
| Parents drop/pick-up zones | Driveway congested causing multiple conflicts |
| Road conditions | Taft Ave has high speeds and lacks controls |
| Infrastructure issues | Alley in front the of school on the west side that is unsafe |
| Other safety issues | The parking lot layout is not conducive to student safety. Kids cross in front of traffic. Circulation in the parking lot has been changed to one way to help with safety concerns but the principal believes a redesign of the parking lot is required. |
| | Students enter the street from car driver's side |



Safety Concern

Building Entrance

Gathering Area

Crossing Guard

Bike Rack

School Bus Stop

Car Drop Off

Student Parking

Staff ParkingOther Parking

Existing Sidewalk

Existing Greenway or Trail

- - Planned Greenway

No Parking / Loading Only

Safety Concern (corridor)

School Bus Circulation

- - - - - -





37 Triumph High School

| Description | 7-12 |
|----------------------------|---|
| | Enrollment: 200 |
| Walking conditions | Dedicated sidewalk along W College Drive |
| | No crosswalk to access the school from Park Ave |
| Biking conditions | Unsafe biking conditions due to lack of access from Park Avenue |
| Bus drop/pick-up zones | Not observed |
| Parents drop/pick-up zones | Not observed |
| Road conditions | Some intersections need crosswalk and existing crosswalks needs paint improvement |
| Infrastructure issues | Only stop sign and no crosswalk to access the school |
| Other safety issues | High speed at West College drive |



Appendix C: Community Engagement Summary

Community engagement was crucial in developoment of this plan update to understand experiences and identify locations and corridors in need of improvement.



Public Engagement Summary

The Cheyenne Metropolitan Planning Organization (MPO) and Laramie County Schools District 1 (LCSD1) developed a Safe Routes to School plan informed by community engagement. Two phases of engagement included in-person and online platforms.

- Phase 1: Understand public sentiment and identify barriers
- Phase 2: Review recommendations to reducing barriers

Participants generally felt the transportation network between their home and school was not safe enough to allow children to walk, bike, or roll to school or that special precautions were needed to allow them to do so. By and large, participants noted vulnerability to drivers, roads with high design speed, and limited alternative routes as barriers to safely accessing school by any other mode than driving themselves.



Website and survey

Phase 1 Engagement (2023)

In November 2023, the MPO led initial phases of engagement including 3 public workshops, 21 school visits, 2 stakeholder meetings, and 1 online survey.

Public workshops were held at East, South, and Central high schools to introduce the project, present initial findings, and gather comments and concerns related to safety around schools. The majority of attendees were parents. Student participation was boosted with attendance of one high-school class that helped setup and facilitate a meeting.

School visits consisted of observing drop-off and pick-up patterns in the morning and afternoon at select schools based on known safety concerns, roadway characteristics, and lack of area trails and sidewalks.

Stakeholder meetings were held to provide information to key groups and ask for help in spreading the word to the larger community. One was held at the Laramie County Library for Cheyenne Regional Medical Center (CRMC) and the other at the Stantec Office with ForMak—for the two organizations that contributed funding for this study.

In the online survey, a total of 485 responses were collected – 414 were from parents, 24 responses from students, 94 from staff, and 14 from neighbors (some fit under multiple categories). Additionally, over 450 location-based comments were received in-person and online, included in *Full Documentation*.

Key themes – what we heard:

- Parents don't feel comfortable letting their kids cross busy streets in Cheyenne a requirement for many to access their schools.
- Parents suggested greater willingness to allow kids to walk/bike/roll to school if they, or another
 adult, or group of kids accompany their kids walking/biking/rolling to school age of child was
 repeatedly mentioned as a factor in parents deciding if their kids could walk/bike/roll to school.



- Driver behavior was commonly referenced in relation to danger; improved safety infrastructure was often discussed as potential solutions including consistent sidewalks and crosswalks.
- Some wished school bus service was provided in their area, or that pick-up times were later.
- There's strong appreciation for law enforcement in calming traffic but an understanding that police presence at every school is not always possible.
- Many wished for 'school zones' designation and/or enforcement to improve safety, sometimes
 noting drivers don't always comply and present continued danger despite rules.
- Parents encourage their students to use safety infrastructure (greenways, crosswalks, crossing guards) even if it's not the most direct route to school.
- A lack of sidewalks, and unmaintained sidewalks, were described as significant barriers and opportunity for improvement.
- Weather, distance, and time were also referenced as barriers.

More details in the following section.

The <u>project website</u> was a source of information, it included a link to the online surveys, and will continue to be a landing page into the next phase of engagement.







Public engagement, November 2023

Key themes – what we heard

Most people going to and from Cheyenne schools are doing so by riding in a car but survey responses and in-person conversations indicate people want to allow or encourage their kids to walk, bike, or ride the bus to school but many don't see those alternative modes as options that are currently available.

Across conversations and survey responses, 'driver behavior' was noted as the most pervasive deterrence from kids walking/biking/rolling, and parents not allowing kids to do so. If infrequent, memorable dangerous situations remain at top of mind for parents when making decisions related to their kids' mode of transportation. There were instances mentioned of a driver running a red light or crosswalk, not stopping for pedestrians, or driving too fast or near – leaving some parents feeling unsure or unwilling to let their kids get to school on their own, or even with an adult, if walking/biking/rolling.

Crossing guards were repeatedly mentioned as assets to improving a sense of safety and security despite being limited in numbers and resources, and sometimes experiencing unsafe situations themselves.

School drop-off and pick-up procedures sometimes detracted from a sense of safety, with people referring to situations while walking/biking/rolling and also while driving. Some mentioned the car pick up lines prevent them from safely crossing the street, sometimes having just been dropped off by a car themselves. Others noted lines of cars obstructing regular traffic patterns, putting drivers passing in potentially



dangerous situations. Increased car traffic at school pick-up and drop-off times presented a number of safety concerns.

Bussing, and potentially lack thereof, was a source of complaints. Some wished for bus service in closer proximity to schools. Others wanted later morning pick-up times. Survey respondents indicated 'distance' as most common factor preventing walking or biking to school.

Police presence was frequently highlighted as an effective safety improvement. Notes also indicating that constant or consistent police patrol didn't seem like a possibility. There were calls for "school zone" designation, signage, and/or enforcement, flashing beacons, and other safety infrastructure paired with cynicism of driver compliance. Some suggested traffic speed is prioritized over pedestrian safety around schools.

People mentioned feeling safe on neighborhood streets, back roads, alleys, and greenways but unsafe at busy roads, sometimes noting location of schools on such busy roads. Greenway underpasses were noted as connections that made kids and parents feel safe while walking. Consistent sidewalks, and sidewalk maintenance, were described as an opportunity to increase walking/biking/rolling. Crosswalks were also noted as critical treatments, sometimes with a sense of unease over the risk that drivers disobey traffic controls and put lives at risk. Still, crosswalks were mentioned repeatedly as critical components of being able to safely accessing school, particularly across busy roads.

For individual responses to survey questions and location-based comments see Full Documentation.

Phase 2 Engagement (2024)

In September 2024, the MPO led final phases of engagement including 3 public workshops and an online survey. The intent was to present a set of strategies for reducing barriers, and recommendations for implementing strategies around each school.

<u>Strategies</u> were presented and attendees (online and in-person) were asked to select two strategies per "E" that they would prioritize. Most selected strategies per "E":

- Engagement: Safe Routes to School Task Force
- Equity: Cold Weather Clothing Drive
- Encouragement: Suggested Routes, Maps & Wayfinding
- Education: Crossing Guard Resources
- Evaluation: School Site Audit
- Engineering: Narrow Width of Drive Lanes to Minimum Standard

<u>Recommendations</u> for where strategies may be implemented were presented on maps of each school surrounding area. Participants were asked to review school maps relevant to them and confirm or suggest changes.

For individual responses to survey questions and location-based comments see *Full Documentation*.



Full Documentation: Phase 1

Survey (Online, in-person)

Promoted and facilitated at in-person workshops and embedded in project website, written surveys included. 485 responses were received in total.

1. How are you connected to Cheyenne schools?



Note: opportunity to increase engagement with students and staff in next round of engagement

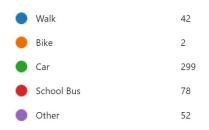
2. What school do you (or your students) attend? Select all that apply.

| High Schools | | Eler | Elementary | | | |
|-----------------------------|---------|------|---------------|----|----------------------------------|----|
| Central | I HS 82 | • | Meadowlark | 42 | Afflerbach | 13 |
| East H | S 55 | • | Prairie Wind | 37 | Miller | 13 |
| South I | HS 41 | • | Hobbs | 34 | Anderson | 12 |
| | | • | Buffalo Ridge | 24 | Henderson | 12 |
| Junior High | | • | Dildine | 23 | Coyote Ridge | 11 |
| | | • | Saddle Ridge | 21 | Alta Vista | 10 |
| Carey | 64 | • | Davis | 20 | Bain | 9 |
| McCorr | mick 60 | • | Pioneer Park | 19 | Cole | 9 |
| Johnso | on 42 | • | Arp | 15 | Fairview | 9 |
| Triumph | h 12 | • | Baggs | 15 | Hebard | 9 |
| | | • | Goins | 15 | Freedom | 7 |
| | | • | Rossman | 15 | Lebhart | 4 |
| | | • | Sunrise | 15 | PODER | 2 |
| | | • | Deming | 14 | PASS | 1 |
| | | • | Jessup | 14 | | |

Note: opportunity to increase engagement with less represented schools in next round of engagement

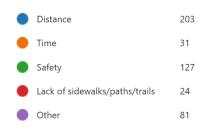


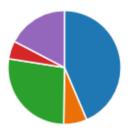
3. How do you currently travel to and from school? [See question 8 for preference]





4. What prevents you from walking and biking to school?





5. Success Stories: If you walk or bike to school, what routes do you take that feel safe and comfortable to use?

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- Through our neighborhood (Carmel to Connnie to Opal to Van Burean) until we hit Van Burean. Cross at Dell Range, and continue down Van Burean to Dildine.
 Occasionally we just take Ontario to Dell Range straight to Van Burean, however, drivers in the morning rarely slow down. Police presence it good at the beginning of the year, but always disappears as the year goes on.
- Shaun to dalcore all the way to davis
- we don't feel safe walking due to lack of lights and crossing guards
- Safe crossing but that is not the case
- Canyon to Storey and the under crossing to get to Meadowlark. The under crossing is critical to safely crossing Storey
- Neither school has a safe crossing area. Both Storey Blvd and the areas around Buffalo Ridge need to have them in order to keep walkers safe.
- NA

- Greenway
- N/A
- Jefferson and greenway
- My student walks home from school because it is light and less dangerous than trying to cross Western Hills Blvd when it is dark in the morning.
- The catwalk from western hills to McCormick junior high
- Occasionally, we will walk and we take Montclair Drive, although many people drive way too fast down this road, so we avoid walking.
- None . We are half a mile ,It is too far to walk in bad weather. To much traffic, Not enough sidewalks, not enough crosswalks or crossing guards. I think there should be buses if you live half a mile or more, not more than 1 mile.
- West Prosser and Waltersheid
- None



- My child uses an ally and a crosswalk to get to McCormick. I feel great about her walking. I will not allow my children to walk to Jessup. We live on the east side of I-25. I do not think crossing western hills or the round about a is a safe option
- Medley Loop to ballad lane to little ditty lane and walk the back side. It would be nice to have an official sidewalk on the north side of Rossman especially when the winter snows hit
- We walk from maple to windmill then windmill to pineridge. Cars zip around that corner and it makes me nervous. I don't let my kids walk that way alone. But the sidewalks on pineridge to Jackson (which is shorter for us) are really beat up and overgrown. We end up having to walk in the street that way. Or cross without the crosswalk.
- We do have our children walk and/or bike to school, but we see where some improvements to safety could be made
- · South on Marshall to West playground gate.
- My son walks and rides his bike, safety crossing over Logan ave is my biggest concern. So far he has done well. But there have been instances he told me card did not slow or stop for him to cross.
- My daughter walks when the weather is nice and she takes the greenway for the most part
- The viaduct over I-25
- Our neighborhood has very few safe or comfortable routes really
- Youngest can walk to Fairview.
- NA
- Sidewalk
- Most the kids ride on the back road between south fork park and big country
- My Rossman student walks to school but is right next to where he lives, my other two kids it's the distance
- N/A
- We love 2 blocks from Alta Vista and my kids get there safe. I know small kids that have to cross 19th and 20th though which is terrifying
- Sidewalk to Buffalo ridge
- Wouldn't cause of the distance
- None! There is no safe route from our neighborhood to any school.
- My kids take a route through our neighborhood behind Rossman, but I'm concerned for when my daughter goes to Johnson and my son is still at Rossman.
- I would not let my son ride his bike or walk. I've seen way too many things to hold me against in.
- · Crest park drive & cottonwood drive

- The green way that goes under Yellowstone Road
- Access by the Greenway (especially under Yellowstone Rd). Is key!
- We walk from house, across little ditty lane and around side of school to the front
- The sidewalk and when the guard cross walk people tell you to go ahead
- Not sure. I live a few miles away, and I haven't looked into the walking/biking paths.
- Sidewalks in the neighborhood.
- N/:
- I have taken our own bike- hitched with a carriage- to pick up my children. We take gardenia- to right on powderhouse- right on Storey- left on Syracuse. It's about 4 mins in car- 5-7mins on bike- very similar time frame.
- Hobbs has a reliable crossing guard in the morning on the corner of Carlson and Sycamore. She is great and I feel comfortable letting my kids walk to school because of her. Hobbs staff monitor the crosswalk in the afternoon.
- NA
- When our kids went to Deming, living in the west avenues, walking was simple and safe. At miller, I'm not comfortable with kids crossing central and Warren until they are at least in grade 5
- N/A
- We walk from Central and First to Deming at Bent and 5th. Most mornings and afternoons we are able to walk across Central and First, but sometimes opt to use the Central and Pershing light's beg button to get a safe crossing, and feel safe walking through the avenues toward Carey and Fifth to use the cross walk across Carey there. Due to the tightness of the streets around Deming, though, crossing Bent while student drop off is busy can take some time to ensure safety. The return trip home is much the same, but I feel afternoon traffic on Carey is often not paying attention for pedestrians and it feels touch and go some days.
- Crosswalks
- Buffalo Ridge installed a fence cutting off access to the front door from the neighborhood to the north.
- When my children walk or bike to school, I usually walk with them a ways and I require them to stay on the sidewalk.
- The route we take feels safe except when crossing Gardenia. There are sidewalks on our route and a school crossing guard at Montclair.
- None
- Our family prefers to walk or bike if we can. It's why we live downtown. Currently only feel safe if I am walking with my child due to the busy streets they must cross.



This makes it difficult to walk them to school and still get to work on time. Ultimately hinders our ability to walk

- The redesign of Evers that created wider sidewalks is AWESOME. They're a million times better than they were before.
- Utilize neighborhood roads and avoid main thoroughfares
- Green way
- My neighborhood
- The crossing guard at Miller is great. Walking through the avenues is generally safe, but there are some problematic roads.
- Not a success story but an unfortunate reality for all the kids that can't ride in a car to school. Very few areas along Taft are safe. Sidewalks are poorly maintained both by the city as well as the individual property owners. Traffic on Taft is getting heavier every year. Lack of crosswalks from Pershing until beyond Sunrise are an issue, as well as the one crosswalk servicing the area crosses directly to the Bain boundary so no kids that would be coming from that direction even go to Sunrise. The official safe walking path from Pershing takes kids up Copperville which has such a steep hill that it is unsafe for biking, roller skating, scooting, or even pushing a stroller. WE NEED A BUS FROM PERSHING TO SUNRISE!!!
- When my daughter walks home she has to Yellowstone and cross it. Then she will walk on Carlson to when she can go to Myler park and bring the trail to Prarie Dr. Then she has to cross Prarie Dr. to get home.
- Firewalker Trl to front of school
- My oldest walked to and from Buffalo ridge a few times, but drivers are unsafe, roads are busy with cars parked along them so it is hard to see up and down streets before crossing. There are only sidewalks part of the way. They did make it to and from but it's was extremely stressful every time. We live too far away from Carey for a young girl to walk alone.
- Across Carlson at the intersection of Carlson and Marshall
- Crossing Carlson at Marshall to get from the neighborhood to school and back
- Shoshoni to Marshall and then cross Carlson
- My daughter uses the same route to and from school everyday
- Greenway
- Slow traffic, with sidewalks and grassy boulevards
- Parking lot at school is dangerous
- · My son does not feel safe on the crosswalks
- More safety personnel near McCormick

- N/A
- None
- Some days we walk over the pedestrian bridge on Cribbon Ave.
- None, city and schools don't make safe routes a priority
- · Plan to stay off busy streets
- Staying in the Neighborhood
- Evers is pretty safe and so is the pedestrian bridge.
 There is only one option to safely walk to McCormick from our neighborhood. We do not feel comfortable with kids walking through the roundabouts.
- We usually walk from our home on Bent Avenue down Randall Ave to get to Pioneer Park. I will say the crosswalk over Randall (the one nearest the school) does not seem very safe - cars blow through that intersection all the time, even when pedestrians are waiting to cross. I think it should be made a school zone.
- N/a
- Definitely not areas on Yellowstone Rd. Only possible safe route may be the greenway leading to central high that goes under Yellowstone rd if my son was to walk or ride a bike.
- N/A
- We walk when the weather is nice.
- I like the underpasses for meadowlark to pass the busy roads
- clear neighborhood sidewalks, no need to cross any major streets
- N/A
- We live on East 5th Avenue, and we will travel up East 5th Avenue together, then cross at the crosswalk on Carey. I feel comfortable if I accompany my son but would not be comfortable letting him walk to Deming unsupervised.
- N/A
- My son will take the catwalk when the weather is nice and that is safe.
- None, major roads around the schools and unsafe for the kids to walk or ride bike.
- None
- Previous school in another state our child rode bike, but at the previous school they had teachers, volunteers that directed car traffic on campus and at cross walks to campus. We're shocked that at the 3 schools our child has been to we never saw any of this provided for children's safety --- it's just a crazy free for all.
- Too far away!



- Now that Arp is at the Eastridge facility, and will be for some time, it's definitely impacted our travel to and from the school. I'm greatly disappointed at the lack of school zone around that facility. There is nothing on Pershing Blvd, and signage on Concord does not apply to our school hours. When I reached out to Andy Knapp at the district I was told it was a decision made by the city. It's disheartening that the city seems to care more about the congestion of traffic on a business street and not the safety of children attending a school.
- The school district I attended as a child used major streets as dividing lines between school territories. No student ever had to cross the busy Penn Ave. before high school. Many schools in Laramie 1 are on major streets. This foolish approach to building is something that cannot be easily remediated, but a multi-decade plan to transition to a walkable school district is probably needed. In addition, having school buses stop on major roads like South Greeley Hwy is extremely rude and unsafe. This practice needs to stop immediately. Also, bus pickup times in some areas are so early as to be impractical. Picking up SHS students at 6:20am from near Sunrise Elementary is utterly ridiculous.
- None
- I walk my younger daughter to the bus stop at Deming. Though she is old enough to walk alone, I never let her for fear of finding her flattened body on Snyder Ave later in the morning.
- When we walk, we have to climb fences and cross a street with no traffic signs or walk along Converse during very busy traffic times.
- South on Ames, East on Jefferson, South on Snyder, and then West on Allison
- We do not have a safe route we have to walk across South Greeley Highway it's very dangerous and people don't slow down
- Crossing ridge
- Hayes to liberty. Or Hayes-Rangeview Dr- Woodcrest Ave- Green River St
- From rawlins st to wills rd all the way to cheyenne st.
 Safer then McCann to cheyenne st due to hills that ppl speed over and don't see what's on the other side makes it scary when taking that route
- The walkway over 125
- Neighborhood streets and sidewalks are in ill repair and snow/ice/weeds are not cleared.
- When my child did walk he didn't have to cross a street.
- NA
- My son walks or bikes most days. The exception is on super cold days he may get dropped off and/or picked up.
- Currently, my student lives west of Central and Warren.
 She can safely walk to Deming Elementary and back

- with an adult. She is in 1st grade currently. She will be allowed to walk in a group in 3rd grade. There is not a safe place to cross the streets across Warren or Central Aves. Even at the lights, people run the lights or are turning and don't look for pedestrians. I would like to see a light similar to that on Yellowstone or Storey Blvd. placed across these two streets somewhere between 2nd and 5th Aves for students to cross safely. I will not let my kids cross Central and Warren when they attend Miller elementary unless something like this is installed. Even with an adult, it seems unsafe as most people speed down Central and Warren--I notice people flying past me when I'm going 30. I would love to have my kids walk to school. The Buffalo Ridge neighborhood has many students that walk safely to school. The bridge under Storey Blvd even makes it safe for them to walk to Meadowlark.
- clearly marked crosswalks with indicator flash are most comforting for biking and walking
- Neighborhood streets 7th to Monroe
- If/when walking I prefer my children stay in areas with the greenway OR on larger sidewalks that aren't on the very busy streets (Powderhouse, Carlson, Storey, Vandehei, etc.)
- Where I used to live by East, I would walk but had to cross Pershing which isn't safe early morning because of the sun shining and blocking the light
- None
- Carey Ave.
- If both of my children were to walk or bike to school, they would take busy, high traffic streets. As a parent, I do not feel comfortable with them traveling to school by bike or walking.
- None. Have to cross both Dell Range and College. No bike paths or sidewalks available for most of the route.
- None
- Live in the county; not feasible
- We look for those that are well lit and have minimal traffic crossings.
- After school crosswalk person with a stop sign
- Kids walked and biked to elementary school, but then distance for secondary school has been way to o far even though there are secondary schools located within biking distance from my home
- Greenway
- More greenways attached to school routine
- I usually bike down to 19th and take the one way to East.
- Up Pasadena right onto Mont Clair down to Weaver, turn right and then turn left onto Mont Clair down to Davis



- The grewn way as cars dont watch for you. But there is no safe place to cross at the school from the green way
- Undeveloped land adjacent to the school
- None
- Well since you don't provide a space on what the problem is i'll put it here. There is no crossing card Willis and Cheyenne street. There are so many cars parked, and traffic that you can't not see cars coming and children trying to cross the street. it would help if there were crossing guards there especially when there is no speed zone either.
- I drive one kid to Anderson as Story has too much traffic. My oldest walks to Meadowlark and does great, unless it is too cold.
- N/A
- We do walk to Fairview. The lack of school zones and police presence on windmill makes it a bit unnerving
- We're able to walk straight up Rio Verde to school.
 There not usually a lot of traffic.

- May sighted walks to Anderson and then takes the bus up to Meadowlark. She feels safe. Most days she walks to and from school with a group of kiddos - so safety in numbers. On really cold days one of the parents will either take the kids to Anderson to catch the bus or directly to Anderson. Same for pick up on cold days. But most days she walks.
- No
- No routes feel safe.
- Not sure but would like to start assessing a good route to take. Our Cheyenne weather is always a concern of mine too.
- Jessup is not a success story. I think it is dangerous because Bishop Blvd. does not have a school zone and a decreased speed limit where Evers does. The staff parking lot and the main entrance is on the Bishop Blvd. side. I do not understand why the city or county refuses to decrease the speed limit or create a school zone.
- Sidewalk
- Back roads

6. Have current or past programs, events or initiatives encouraged you to try walking and biking?





7. Please describe any current or past programs, events or initiatives that encouraged you to try walking and biking.

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- miles for fundraising
- Bike bus/ walk to school day/bike to school day
- Bike to Work Day, food and drink celebration for biking
- Having volunteers do crosswalk duties, the #ForMAK signs and volunteers on the first day of school to remind people to stop and pay attention
- Greenway and sidewalk improvements.

- crossing guards
- Presence of crosswalk guards in the form of physical people. Well marked and lit crosswalks like the one on north Yellowstone road by Davis Elementary.
- We love to walk or bike to dildine but the cross walk on dell range is incredibly dangerous. Cars blow through the school zone even with flashing lights and a sheriff that frequently sits there. I wish there was a tunnel or



bridge that would allow children to cross safely everytime and not risk their lives.

- · Been long time
- Turkey Stampede
- · Activities encouraging more walking
- I've always encouraged my kids to walk or ride.
- Literally only necessity because we have no other choice
- Biked all my life group rides for less skilled riders to teach how to thrive with traffic
- None
- Walking around Lions park
- The Greenway and ForMak make me feel like we're making walking and biking safer.
- my own biking love
- My own desire that my child should get to walk safely to school is what guides my decision to walk her each day. I have had kids in school for ten years, and I have never been encouraged to walk them anywhere. What programs are you even talking about?
- Amenities nearby, bike share programs

- I like the bike to work day. I wish it were in the fall when the weather is a bit more predictable.
- there was once a "Bike to school" day activity
- The cold and how fair it is to the old carry Junior high on Pershing with no school zones.
- Bike to school @ Buffalo Ridge
- When Meadowlark complained a few years ago about parents and cars we tried walking/biking to the shuttle at Dildine.
- Wellness LCSD1
- Greenway
- Climate change
- When I know there will be crosswalk guards present by the school.
- Green way
- When the Greenway near highway 30 was open and safer kids I encouraged my kids to walk or ride their bikes to school but because the increased traffic and dangerous conditions we drive them to school and do a rideshare program with other parents out of Dakota crossing and surrounding subdivisions
- Dell Range and college are a night mare to cross

8. How would you prefer to travel to and from school? Or how would you prefer to have you students travel to and from school?





9. What would make you more likely to walk or bike to school regularly or more often?

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- Relying on the drivers in our community to stay off their cell phones and pay attention. The death of a child in a crosswalk and knowing the sheriffs wife who hit him basically got off with a slap on the wrist is VERY upsetting and prevents us from walking. It's sad when walking is more
- dangerous than the benefits it provides physically.
- Nice weather
- more stop lights, hawks, crossing guards, paths
- Shorter Distance



- Safe crossing
- We currently walk and use the bus
- Safety.
- Better weather
- School zone signs, cross walks, not having a 30 mph speed limit in a neighborhood, complete sidewalks
- Safer crosswalks and designated waking/biking zones
- Live closer to the school
- Safe paths and crossings lights
- We live in rural area.
- Unable to walk or ride the bike when the streets are not safe. Numerous speeding cars and no crossing guards at busy intersections. No Sheriff's visible during morning hours. No parents.
- Safety, repaint crosswalks at Carey and East High. Make 20mph zones on Pershing during school walking times.
- The weather being a big part of the only reason why we don't walk but on nice days we do
- If I lived closer
- Nicer weather
- Less cold mornings
- · Distance into far to the school from home
- Closer school
- it was safer. So many cars go speeding down the road, they even almost hit cars
- Lived closer to school
- Safety. Cars no longer stop for kids to safely cross anywhere and nobody slows down or truly pays attention.
- Consistent crossing guards on duty, safer routes.
- Living closer
- People no driving recklessly

- If there was an actual stop light in front of McCormick (like the one on Yellowstone for Davis kids) ESPECIALLY in Sept/Oct when it is dark in the morning and students are crossing Western Hills Blvd. It is very dangerous.
- Not great sidewalks from pedestrian Bridge to Central
- Cross guards or school zone speed limits actually enforced. Sidewalks would be huge.
- If my child was older then I would be more comfortable with her walking to and from school. Right now she is too young.
- If the cats in the surrounding area slowed down and the weather was nice.
- Better weather and better routes that didn't require crossing heavily traffic roads
- Round about crosswalk lights
- Sidewalks
- Trust worthy adult with my kids
- We live out of town
- I would have to live closer than 4 miles away
- Good sidewalks
- More walkable sidewalks
- More crosswalks (especially at Goins), more signage about being a school zone to remind people to slow down and pay attention, maybe a crosswalk light to alert drivers of a pedestrian in the walkway, better ice removal around schools and bike racks
- Would not due to distance to school from house and safety (close to highway, no crossing guards)
- Improved walkways along Carlson, Oak Valley Lane and Syracuse.
- Knowing my kids are safe
- If the distance from home to work was shorter.
- More direct greenway options
- Either a cross guard or better lights and Alerts for crossing Logan Ave



- Distance.
- If I lived closer
- Better crossing caution
- Weather/safety
- We live too far to bike or walk.
- Safer crosswalks and sidewalks. In the winter the sidewalks are so icy my son fell twice last year walking to school.
- Better district. Closer to East.
- Pleasant weather
- Knowing students could maneuver routes safely. Marked and well lit pathways.
 Physical pathways, maybe like some parts of the greenway that are well kept and monitored, for students to travel on.
- If Goins Elementary had a resource officer, better patrolled school grounds and around campus, and the side road connected between Dey Rd and South Cribbon Rd was shut down. It would also be in the best interest of the students if Goins PTO could apply for the city to shut down the school park completely due to unsafe concerns.
- Closer distance to school and permittable weather.
- Move a block from the school
- More time, better weather
- Nothing
- If we live closer to the school
- Closer school
- More paths that are intended to get people directly to useful destinations instead of being scenic.
- School zones regulated due to cars speeding and not slowing down.
- Blinking crosswalk across converse, maybe they'll have it after the new apartments go in.
- School was closer

- Having a tunnel or bridge to safely cross dell range
- More crossing guards, more supervision
- Safe covered walk ways
- More cross walks and crossing guards
- Better options for routes in bad weather and clear paths in nice weather.
- Nicer weather
- None to far
- I think better signage and/or a school zone on Dalcour would help with safety. There is also not a stop sign at the intersection of Dalcour and Rue Royal. People travel very fast through that intersection.
- More pathways away from the main roads
- Daycare takes my child
- Having a crosswalk and lights at 12th and Adams
- Living closer
- Too far
- Distance
- An under pass crossing from orchard valley to the other side of college.
- If classes began at 8:15am.
- Safety on the roads from people driving to and from work. More signs that children are present
- Better signage and attention by drivers at the main crosswalk in front of Henderson
- Working fewer hours
- If the walk way to and from school wasn't near major roads and drivers were more cautious about school zones.
- If there was a safe route
- Safety
- Nothing
- An underpass that crosses Whitney Road
- Having more time in the morning



- Safer crossings at busy intersections
- Encouragement especially during good weather
- Nothing
- I live far outside of town, so I would be unable to bike or walk
- None
- More safety & recognition for crosswalk safety
- Walk
- I live 5 miles away
- Nicer weather, better sidewalks
- Side walks and safe pathways to schools and neighborhoods
- Less distance/busy roads
- Dinosaurs
- Living closer
- Better crosswalks and/or stop lights
- Good time management
- Distance is to great
- Warm weather
- Better weather and closer distance
- When my children are older ages 8 and 10.
 Currently they are ages 5 & 7.
- If I lived in Hawaii!
- Closer school and safer crossing to Meadowlark on story blvd.
- I am concerned about the crossing, or current lack thereof, for Coyote Ridge. I hope there is a solid plan to install a crossing that stops traffic across powderhouse. I currently do not feel comfortable letting my kids walk to Coyote Ridge at the intersection of Carlson and Powderhouse as it stands today.
- Crossing guard at cross walk
- Closer Distance

- Crosswalks! With lights or flags. A cultural shift/educational campaign to get people to LOOK for pedestrians.
- Consistent crosswalk monitors both before and after school.
- We usually walk now, but I would feel better letting my child independently ride to school if 1) enforcement of speed limits and crossings was consistent and reliable, 2) if Warren and Central Avenues between Pershing and Carey had a pedestrian crossings that were enforced and respected by drivers, and 3) if existing car infrastructure surrounding her schools were designed to reduce typical car speeds, I.e. more trees, calming islands, and other pressures on drivers were present to make them focus more on surrounding conditions).
- Shorter distance, better weather, more time in the mornings
- Flashing lights that you can activate when crossing at the crosswalk on Logan in front of Alta vista
- We wouldn't unless we lived very near the school
- Bike lanes
- Safe route
- Traffic control
- Trust that drivers are paying attention
- Better crosswalks or crossing guards
- Weather and cleared sidewalks
- Safe crossings
- If I wasn't so concerned about vehicles rolling through intersections and hitting my kids.
- shorter distance, less wreck less drivers
- A safe place to cross Gardenia (beyond just a sign)
- Safe drivers
- Safe busy street crossings and lower speed limits in residential areas. The default unmarked speed limit in Cheyenne is 30



mpg which is too fast in residential areas. Avenues has predominantly uncontrolled intersections which are unsafe because they encourage speeding and people assume they have the right of way.

- Nothing we live 10 miles out of town.
 Walking and biking are not possible on Horse Creek Rd. Sending Prairie Wind students to Coyote Ridge is just creating a larger problem for the rural kids that attend that school. All of this is nonsense to rural families.
- Educate DRIVERS that all pedestrians and cyclists are actual, real-life PEOPLE, not obstacles
- To unsafe to allow my kids to walk
- We are exactly one mile from our elementary school and this unable to us bus, however, my children would have to cross a dangerous and busy road to get to school and I'm not comfortable with that.
- If the school were closer
- Lights and/or stop signs to stop drivers at crosswalks.
- Easier routes to school, closer distance for my child (6 years old walking just shy of a mile alone is a lot)
- Why can't u have pillars that come up in crosswalks when activated
- Safety
- If we lived closer we would walk. Unless we had to cross a busy street. Then we would not walk as it is too dangerous. The cross walks are not safe in Cheyenne because there are no flashing lights and guards. The district could do a lot better.
- My kids being more interested in it.
- Protected cross walks and law enforcement to crack down on oblivious drivers and illegal parking
- Better crosswalks and signage
- Bike lanes on the streets. Driver education regarding sharing roads.

- Closer to school
- safer crosswalks at busy intersections.
- Better weather
- Crosswalks and stood signs in all 4 corners of the school. There are currently 2 controlled intersections however the busiest crosswalk at 8th and Madison has no stop signs even though the majority of children that walk to school use this intersection to cross the street. Traffic is often busiest between 730 and 8 amd often people speed to get to work on time.
- Safety
- Weather. Can't do much about that. But I
 would feel more comfortable sending my
 kids to walk on their own if there were some
 more slow down zones Snyder, Warren
 and Central make me nervous.
- Tunnels or archways
- Traffic lights and crossing guards.
- If Taft magically became a safe road to travel next to or the dangerous hill on Copperville became flatter overnight. Possibly usable crosswalks and city enforcement of sidewalk clearing by property owners.
- · Clear safe school routes
- Weather we live 1 block from current school but will need to walk to bus stop next year
- Safety measures added.
- I feel safe walking to and from school
- ?
- I bike year round everyday. If roads are too snowy to ride, I don't want to drive either.
 Things can wait a day or two
- Not possible with the distance
- Child needs to be older for the morning. After school it is required that someone picks them up. She is more then able to walk home alone by self, but only a 1st grader so not allowed



- Safety
- unlimited amount of time
- Safer routes
- N/A
- Safer routes
- The crosswalks need to be lighted and crossing guards always there near the schools and not based on volunteers. This should be planned by the school safety teams and required throughout the district.
- Garunteed safety
- More safety personnel near Yellowstone
- Safe crossing at busy intersections
- Safe paths off of streets
- A stop light near the highway intersection that the school is on
- N/A
- Being closer
- Safe crossing from the highway
- · Nothing, no longer a safe place
- Don't live close enough
- trailblazer access at all grade schools
- Better weather conditions
- Safe bike trail from where we live (College + 12th) along College to South High School
- Being closer. Safety of drivers paying attention to kids in school zones
- Moving closer to schools
- We live too far from one school for my child to walk to school. Bus is an option but we have not heard good things about the program. My other child does not walk to school due to the safety and crossing busy roads. If the weather is bad the sidewalks and roadways often are not cared for.
- traffic
- We live too far from the schools.
 Yellowstone is a very busy and dangerous road to walk/bike across or along

- Nothing
- Make crossing Pershing for Carey jr high and East high safer. Keep up with crosswalk painting install school zone speed restrictions.
- The graffiti on the pedestrian bridge needs to be cleaned or covered. There needs to be more school zone signage on the street directly north of the school.
- Lighting, speed bumps, sidewalks
- More marked crossings and guards
- Weather
- No choice
- If someone was able to help him cross dell range
- Easier paths
- Distance
- Snow prevents it. Side walls aren't cleared, drivers do not pay attention or go 20 through school zones.
- Safer routes, more attentive drivers to students, safer/patrolled cross-walks
- Safer method of crossing E. Pershing not everyone pays attention to or respects the school zone and/or flashing lights at crosswalk
- If sidewalks were smoother/connected all the way and if there was a school zone on Randall near Pioneer Park.
- When it's not windy
- Side walks and street lights need to be added in the neighborhoods around Apr elementary especially on Fox Farm (no sidewalks) and the Apartments around Montalto Dr. (No sidewalks or lights) these students are waking in the dark on busy or small roads without sidewalks. These neighborhoods also have a lot of sex offenders living nearby so police presence during and after school on these roads would keep kids safer to walk.



- Less Wind and closer to school we live 2+ miles from school
- We would be more likely to walk or ride bikes if there was a safer place to cross Plainview. We are north of Plainview and it would be nice to have a crosswalk, preferably with a pedestrian light-either at the corner of Mountain or even at Blue Bluff/Sunflower.
- When my child is older and can go on his own and even then I think I'd prefer to drive him so I know he makes it safely...at least before his late middle school Years begin
- Safer crossing near the high school. Traffic gets backed up off Manewal Drive & education drive. Drivers in general speed.
- If busy intersections were better protected for pedestrians (e.g. crossing Snyder Ave)
- FIX McCormick's safety issues. McCormick is ridiculously unsafe for pedestrians and bikers. The only efficient way for parents to drop off crosses the bike lane, and that whole street gets super backed up. Cars and moving in and out of the bike lane constantly, and kids have to cross the drop off area in front of the school to get inside. The whole area needs to be reconfigured for safety. You also need a light/button/flashing crossing across West Dale. One lane inside the drop off area in front of the school needs to be for getting out and one for drop off. People just park wherever and there is no order, which decreases sight lines for kids crossing to get into school.
- Nothing right now
- Sidewalks, crossing guard at college and walterscheid, school zone along college
- Safer sidewalks and paths
- pedestrian crossing (with lights) across
 Warren and Central Ave between Deming and Miller buildings
- I need to know my child can get to and from school without being kidnapped.
- Better crosswalks with lights in front of the school. Safer sidewalks as well. Some of

- the Dell Range sidewalks are super close to the street. Also, I used to be a teacher at South and the sidewalks on South Greeley and bus stops on South Greeley are scary.
- Shorter distance, closer proximity to Deming, crosswalks with flashing lights on Warren and Central.
- It is not possible due to distance. My child has a disability and remains in the best school to meet his needs with his 504 plan. When we lived in district it was 20+ minutes walking on unplowed and icy streets across busy downtown main roads that were not safe for a child to travel alone. I am a single parent and cannot stay home from work to walk him to school. He now has a boundary waiver as we were unable to remain in district but he needed the consistency of being in the same school and though we are not far, he cannot bike across main roads due to safety or that are not maintained during the winter. It's simply not safe.
- A safer way to cross Dell Range
- Not having kids on a highway
- A safer crosswalk and more enforcement of the speed limit
- Weather, daylight, time
- Depends on the school attended. Buffalo Ridge is fine to walk to, but Meadowlark and Carey are not during the majority of the school year.
- Safe route, for pedestrians, over train tracks, at College Drive/I80.....where Walmart was suppose to build safe passage, but never has.
- the distance is to far to walk or bike to school
- Neither to many days with high winds and frigid temperatures. No child should have to walk in that weather.
- I live too far.
- If my child were older, they're too young to walk alone and we have a baby at home.



- The lights/crosswalks at East timed differently
- Later school start
- Shorter distance
- Safety, sidewalks, actual pick up and drop off zones, crosswalks that are seen, proper signage, school zone monitoring
- Nicer weather year round and more crossing quards. They are very hit and miss.
- n/a
- We live too far away from Johnson Junior High School to walk or bike in a timely manner. My youngest child could walk or bike to Fairview, but there is no safe route from our neighborhood near Lebhart to Fairview as there are no sidewalks along Nationway and no safe place to cross Nationway, a 4-lane 40 mph dangerous road. There is one light to utilize, but no sidewalks leading to it and the light remains green for less than 5 seconds, which is not enough time to cross!
- I don't feel any of our neighborhoods are safe for students to walk or bike to school in unless they are with a parent or guardian.
- If felt it was safe (not get hit by a car)
- Zoning change to Junior and Senior High schools, currently live a mile away from Carey and East, but student has to go to Johnson and South which is over 4 miles away.
- Crossing guards in place at dangerous locations.
- Sidewalks or pathway to ride or walk and distance is another factor safety for my children. As fox farm can be a issue.. as some drivers don't pay attention on that rd.
- · Safer bike rack area
- a school in our area
- I'm a driver can't walk
- Other drivers on the road being more cautious, not speeding and paying attention more

- We live rurally, walking or biking is not an option for us
- Weather is too unpredictable for safety in walking.
- (1) Not having to cross busy streets to attend elementary school; (2) Adequate bike racks, (3) Reasonable bus pickup times, (4) Late bus for after school activities
- Sidewalk on both sides of the road so less crossing to make safer
- Safety.
- Safer routes. Also, the bus to Central leaves our neighborhood at 6:45 am—an hour before school starts. It just doesn't make sense for it to leave so early. It doesn't take an hour to get from Deming to Central. I would absolutely have my children ride to central if the bus didn't leave so early. My daughter does take it home to our neighborhood in the evening.
- Nothing. School is not close enough to safely walk to
- Safer route, more cross walks, side walks for my kids to use.
- If we lived closer to the school and there was a safe route other than Yellowstone Road.
- If people would clear their sidewalks of debris
- if i lived closer
- We live in the county
- If there was a traffic light on Wallach and South Greeley Highway where it would be safe for us to actually walk across the highway
- More lights and more speed enforcement in school zone, or even install speed bumps or stoplights
- A safe path/sidewalk and being able to trust my kids could cross the busy road
- Safer speed limit and a sidewalk. Local police presence to enforce? People drive over 70 mph on yellowstone.



- We are too far away to walk or bike
- When @ Dildine no sidewalk up one side of van buren, plus buckled on other side. Nobody stops at the crosswalks. Why don't we employ crossing guards like other districts? For meadowlark it's too far to walk or bike. And to catch the bus I'd still have to drive to Dildine for him to catch the bus. Might as well just drive all the way.
- Controlled crosswalks by Central. Traffic lights at intersections by the school. Too many cars driving recklessly
- less traffic
- More sidewalks there's very few on my route and it gets really muddy or hard to hike thru several areas in weather like snow n rain
- A better stop at Evers and Vandehei, a bike lane on the frontage road by Western Hills
- Streets and sidewalks clear of snow/ice/weeds
- Nothing too far
- Too far, it's 15 miles. I would, however, like my children to ride the school bus instead of me having to drive them. The problem is this year for the first time the bus is coming to their stop an hour and 45 minutes before school starts. That is just too long for them to be on the bus at their age, they really do need to sleep a little bit longer.
- Less traffic or more traffic control
- Never. Unsafe and distance
- If we lived a reasonable distance from school
- Multiple crosswalks. Yellowstone is too busy and cars never obey the school zone speed.
- Safer school zones
- Sidewalks and lights
- Walk or bike
- Safer way to get across college dr
- completely inappropriate for kindergarten to walk a ride bike down, gardenia down

- Powderhouse down story Boulevard and then cross over
- Living closer to work and path to get to school
- Older child, warmer weather, traffic and speed controls. I also leave near meadowlark and had a child attend there. I think school zone should be added there for lower speeds in Storey Blvd and an intersection/traffic light near the entrance would support better traffic control and safety.
- If it wasn't uphill most of the way. Buffalo Ridge area to East is all uphill
- too far to walk several miles
- Safe crossings at Pershing and Randall very near the school of pioneer park elem, and a dedicated bike path on streets going to/from school (along Cribbon and McComb). The bike to school makes me nervous, especially with a young rider (7yo), even with me. A better place/way to park and lock bikes would also help. Coordination with Latchkey program.
- Too far from house to school
- More lights that you can push to cross the street safely
- Just more time, amicable weather
- Drivers being careful of kids
- clearly marked crosswalks with indicator flash on busy streets
- Clear sidewalks and less traffic on 10th
- Knowing my child arrived/departed safley(with time)
- Better access points, quality of trails/pathways, safety systems (including crosswalk guards), maintenance (including plowing), etc.
- Safe crossing path over dell range
- Nothing. Past walking or biking.
- Better paths. Increased safety when crossing.



- Safer school zones
- None
- If there was a high school closer to my home I would consider it.
- Closer and safer paths
- N/A
- If we lived closer to the school, and not on such a busy road
- If there were better safety measures around the schools. There rarely are cross walk guards at McCormick and the parents drive crazy. It's a matter of time before another student is killed or injured.
- less ice
- nothing
- Living closer to the school
- As a parent, I would feel safe with my children riding their bikes to school if there were specific bike paths (off the streets).
 Currently, riding their bikes would involve using heavy traffic, busy streets.
- Not feasible
- None
- Not feasible with the distance we live out of town
- Well lit ways and minimal traffic crossings
- Need flashing school zone lights for all Sunrise Elementary school zones. Need road rumble strips. Crosswalk gaurds
- We live across Pershing and that road is terrible to cross, I won't allow my child to cross when most people don't follow the school zone there.
- Bike trails off the roadway
- a crosswalk near the school, in front of the school, there is none. A slow down light closer to street directly in front of school
- Bike paths intended for transportation rather than recreation, and the corresponding safety and control systems that requires.

- Closer bus stops having a shuttle bus is great but it's not close enough
- Distance
- Safer crossings on Gardenia and Yellowstone.
- more school safety zone more lights
- We live way to far out off horse creek we won't be walking or riding a bike.
- Nothing
- Different climate ;)
- Better sidewalk
- Time, weather, and health
- Nothing
- People paying more attention to pedestrians.
- We live within easy biking distance of East high. My neighborhood (Sunrise) is zoned for South. We live so far away from our assigned school that my kids qualify for a hardship driver's license. This is ridiculous. We never should have been zoned for South.
- Distance. My kids go to South/Johnson even though East/Carey schools are closer to our home.
- Shorter distance
- Time between dropping off at school and work start time
- Crosswalks, 20mph speed limits school zone speed limits
- Safer closer routes
- If there was sidewalks for the entire route to school and crossing guards for after school
- Better weather
- Increased safety. Crossing guards and police presence to ensure safe traffic flow around the school
- If we lived in town
- An over or underpass to get across nationway



- Crossing guard
- Live where it is warmer
- If there were sidewalks all the way in Pershing past College
- Redoing the boundaries. I'm closer to Carry jr high than Johnson but my kid has to go to Johnson. It makes no sence.
- Shoveled side walks as well as de iced sidewalks and roadways
- A safer route due to traffic and a busy intersection
- Shorter walk. Crossing guards on busy roads. Kess homeless population and dangers along the route.
- Being closer to the school area
- Cross walk and flashing sign
- I drive between buildings everyday. I don't think there is anyway I could walk or ride a bike. One of my schools is Afflerbach which is a distance from my home located by Anderson. If I lived closer to where I work and was only assigned to one building I would most likely walk.
- If I was in one school only closer to home.
- Not safe for my kids, the bus drops them off 4 blocks away from the house. That is bad enough.
- If I was closer
- I am not able to ride a bike. I would walk but I work at Carey and Live on the south side.
- My son is to young to be riding a bike to school without an Adult with him. as he is in Kindergarden.
- Safer route.

- Sidewalks on both sides of the street all the way down the south end of Van Buren Avenue. As well as pedestrian crossing lights to indicate to drivers that children are attempting to cross.
- school is too far, and the path to use when she was in elementary was next to highway 30. I do not feel safe for a young child walking or riding a bike next to a highway where people drive over 40mph.
- I wish our weather would allow more good days to walk or ride a bike. If I could be inspired to work my way to being able to walk the distance or ride my bike.
- better weather
- If there where school crossing Adults to watch out for the kids
- Safe route with school zone lights
- Living closer to school
- Shorter distance, safer route, better climate
- Clear roads (hard to bike in snow) and safe routes where crossing lights are functional, especially around Carey
- Safe walkways in neighborhoods
- Moving closer to the school where my child wouldn't have to cross a major throughway would encourage me to let my child walk or bike to school.
- We live to far away from school to do either
- Dedicated groups who walk together, more well lit streets, and less adult loitering on the sidewalks used
- Safer ways to get there without a track record of death

10. Would you be willing to have a follow-up discussion?

Yes: 180 (Q11)
 No: 276

11. Please write your email address below so we may contact you for a follow-up discussion. Thank you!

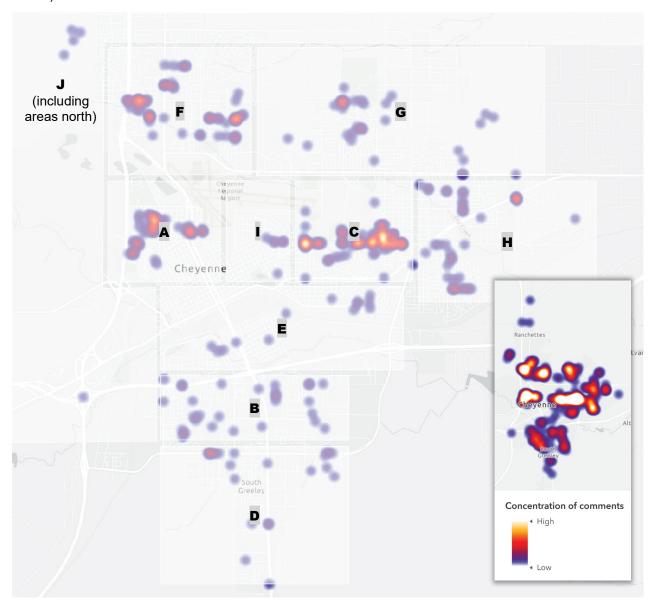
[Redacted]



Map Comments (Online, in-person)

A large map was hung at workshops to inspire conversation and record comments. A similar app for placing comments on a virtual map was also on the project website. A total of 465 comments were received.

Concentration of location-based comments (not necessarily corresponding to concentration of complaints or issues):







A. Deming – Miller – Pioneer Park - PASS

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

 Blindspot from the South as you come up the hill on Snyder. Heavy Traffic

Lighted crosswalk to alert cars to crosswalk. Heavy traffic.

Snyder is very dangerous to cross. My children and I were almost hit here once when a car stopped to let us use the crosswalk, and a vehicle behind the stopped car pulled around and started to come through the crosswalk. This needs a school crossing sign.

The streetlight is on the north side of this intersection while the crosswalk is on the south side. In the winter when the sun comes up after 7 am, it is very hard to see secondary students who are walking to the bus stop at Deming.

Blindspot from the North as cars come down the hill.

Needs a lighted crosswalk to get across Snyder.

Unmitigated speeding on Snyder Ave and the hill leading up from Pershing make any crossing between Country Club Ave and Frontier Park dangerous for pedestrians.

Snyder is dangerous for kids to cross.

Need school zone flashing lights on Snyder. People do not slow down, lots of deming miller kids walk this route regularly.

 Young pedestrians and children on bikes often attempt to cross Snyder Ave via an east-west route at Country Club Ave, particularly in the early evening hours around 5 PM. In several instances, drivers have had to slam on their brakes to avoid children.

This intersection has no safe way to cross. The way multiple streets meet up in this spot make it impossible to choose the safest spot to cross Snyder. My daughter and I were almost hit on Country Club in this area by a car speeding as they turned off Snyd

 I've witnessed a number instances where vehicles have come close to colliding at this uncontrolled intersection.

Dey Avenue is a very narrow street, but it is treated as a race track all day long by cars. It is nice wide enough for two cars to pas each other if there is a parked car in the street, yet drivers for 50 all day long. Kids need a safe way to cross it

5. Kids walk to Deming to bus to Miller and vice versa



Need safe way from western avenues to Deming - across uncontrolled busy intersections and Snyder.

- Crosswalk present but not much help. There are cars still passing through Carey/5th
- Deming/Miller neighborhood very special grow up with same teachers, kids
- 8. Show safe route between Miller and Deming

Central and Warren are the reasons I worry about letting my Miller kid walk on his own.

People speed 40 plus down Warren and Central, and do not pay attention. I am always afraid of my kids getting hit.

Need school zone for Warren and Central.

Dangerous crossing due to speeding cars and those a aware

- Crosswalks here for Deming/Miller kids (1 building on either side)
- Central lacks control, State Highway, needs better crossing between Deming/Miller. No change after kid hit

Central uncessarily wide, visibly wider than even Warren just a block over.

 Warren lacks control, State Highway, needs better crossing between Deming/Miller. No change after kid hit

Warren uncessarily wide here.

- Potential need for controlled intersection to help students get safely across cribbon - Cribbon is busy and people drive quickly.
- 13. Need safe way from western avenues to Deming across uncontrolled busy intersections and Snyder.
- 14. Generally Cribbon needs a marked speed limit of 20 mph. The default is 30 and with the street being as wide as it is, people easily exceed 30.
- Cribbon speed limit should be reduced the street is wide enough that people fly down the street without any controlled

intersections. People often treat it as a primary artery similar to Snyder. City should also consider formal bike lane.

 Needs a crosswalk to lineup with the crosswalk across Randall

Crosswalk could use improvement - lighted crosswalk.

No marked Ped Xing here

Should be a school zone because people do not pay attention for pedestrians

 Dangerous for students who walk to Pioneer Park from Avenues (Trailblazer students)

Dangerous for students walking to Pioneer Park - heavy traffic heading downtown in am

Also not suitable crossings for kids

- Not safe crossing, no reduction in speed limit other than right at school (and only for limited hrs, should cover school day), no lights, no dedicated bike lanes
- 19. One way traffic helps

Narrow, congested streets working as traffic calming. Slow driving. But some walk between cars.

Crossing guard serious about telling kids and parents to only cross at crosswalk

Pioneer Park, semi difficult to parent-pick-up (not necessarily encouraged) still happens

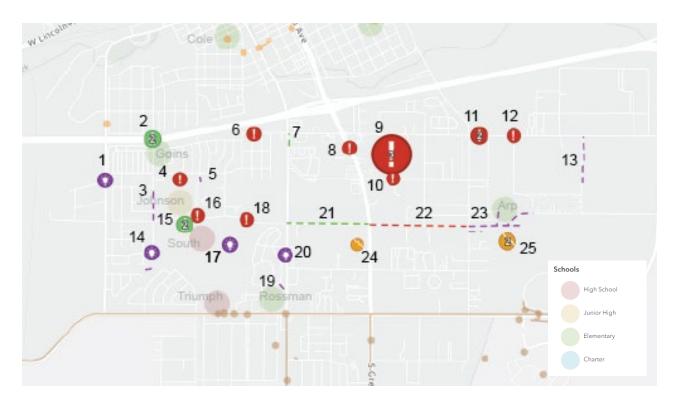
20. Dangerous Crossing, Would like to see a protected crossing for walking to Latchkey and Pioneer Park. The bend in the road to the north makes it hard to time the crossing. Vehicles parked on the street limit visibility. Also, high speed traffic.

Dangerous intersection with blind corner to the north. High speed traffic.

Sidewalks are incomplete or impeded in many parts of this walking route. Narrow roads with on-street parking limit visibility.

Would make a nice protected crossing as it leads directly to Latchkey and Pioneer Park





B. South – Triumph – Johnson – Goins – Arp – Rossman

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- Bike path to (almost) nowhere, throws you out on Parsley, and no sidewalks at this point.
- Good crossing

Hill on the north side is quite steep. Other than that, proably about the best you'll be able to do with a crossing over/under an interstate.

- 3. Cribbon uncecessarily wide here
- Trucks even drive on this, rolled over, passenger died, others went to hospital
- 5. No sidewalk present
- Ames Avenue, just before the corner with Leisher sidewalk is cluttered and overgrown.
- When they built the new Home2 hotel, they finally fixed the sidewalk/bike path; got rid of the obnoxious control box that made biking on the walkway a pain.
- 8. They have a bus stopping right in the middle of the highway in this area. It's dangerous for kids and traffic. Seems like it would make much better sense to use one of the nearby parking lots so that the buses could pull in out of traffic

- 9. No sidewalks, no streetlights
- 10. <Null>
- 11. <Null>
- 12. No sidewalks
- 13. No sidewalk/bike path here; existing path just ends partway north on Energy Dr
- 14. Future road connection south through residential development

The angle which the bike path intersects the roadway is awkard; one must crank their head to see traffic coming from behind when crossing southbound.

Possibly have a sidewalk/bike path that gradually goes from harmony valley to the exisiting bike path west of south high?

Creative placemaking - parking lot spots painted for senior parking

Crosswalk between Johnson/South



People speed and kids run through traffic and In between cars.

No sidewalk present

- 17. Connection between school and neighborhood
- 18. 3 jr high girls got hit crossing over here
- 19. Could a pathway be placed here to shorten the distance one must go to access Rossmann and vicinity?
- 20. No sidewalk on school side of Waltersheid
- 21. New sidewalks on Allison
- 22. No sidewalks on Allison east of Greeley
- 23. Potential future Allison connection

Potential future connection to Allision

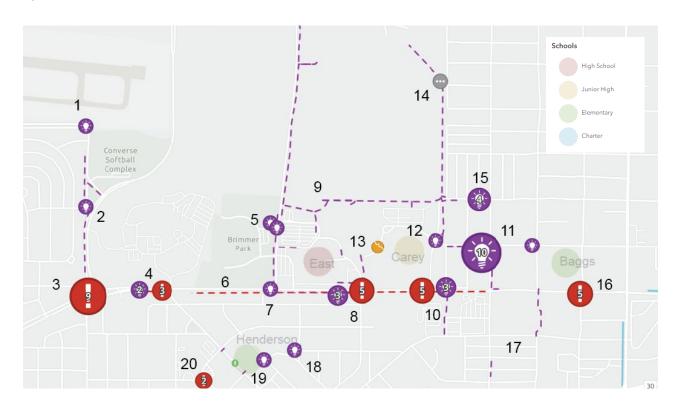
No connection on east side of Ave C. Makes it hard to use this path when the underpass is flooded, which is frequent.

Existing bike path doesn't connect up.

- 24. The intersection of this drive way between S Greeley and Allison is frequently flooded and unusable.
- 25. Good crosswalks at Arp

Last winter, using this path was a challenge; it wasn't plowed, making it an icy mess at the same time the nearby college dr tunnel had the puddle of ice.

Path is regularly flooded at this point!



C. East – Carey – Baggs – Henderson

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- Crossing here feels awkard and unsafe. Hard to watch both directions for traffic, especially when walking eastbound. Poor alignment with bike path. Sidewalk damaged on west edge of Airport Pkwy.
- Leeds PI between Converse and Foxcroft is uncessarily wide for two lanes of travel. No Marked PED Xing for crossing Leeds PI either.



No sidewalk. A dirt path has formed from lots of use. A bit of a drop off throughout much of this area where people could fall/slide.

No sidewalk

No sidewalk

3. Fast/high speed

At the Pershing roundabout, cars regularly do not wait for any pedestrians. Maybe a raised up, level crossing could help, similar to what's in front of East High? Too high of speeds too, PED an Yield signs are frequently damaged/knocked down.

PED crossing sign still not replaced.

Vacant land. Maybe a good spot to add a pedestrian/bicycle connection?

Crossing is ignored by drivers - when it works

Need something more solid in the median. delineators are frequently knocked down by cars.

I live right next to the roundabout and too many times I've seen too many kids trying to cross over it and cars are not paying attention. These kids have almost gotten hit, these are even groups of kids not just one single child trying to cross it.

I won't let my 15 year old daughter walk to East because of the roundabout.

No sidewalk. A dirt path has formed from lots of use. A bit of a drop off throughout much of this area where people could fall/slide.

 Directory sign here is great for directing people! Needs to be here some how. But needs to be placed differently; sidewalk here is already quite narrow, and the pole is an obstacle on the sidewalk.

Drivers blow through this light all the time

Idea: put a ramp here for bikes/other users to use to access roadway. Going up to corner of Pershing/Henderson isn't always ideal.

Chain link fencing is not enough to prevent cars from going over edge into alleyway, that's a bit of a drop.

Need something more solid in the median. delineators are frequently knocked down by cars.

Fencing on south edge E Pershing between alleyway and Pershing between BlueHQ and Henderson is not the tallest and sketchy. Its current state helps PEDS a little, but frequently suffers damage from cars plowing into it.

Not much of a way to safely cross to the sidewalk, especially during peak traffic times.

EHS students like to go over to parts of Brimmer Park during lunch or off hours. Could better PED connections be made to things like the Skate Park?

A foot bridge would be awesome here.

Idea: Restrict north-bound right lane to turn into parking lot. Take advantage of north side of interesection to add in a pedestrian crossing. Narrow southbound traffic to one lane until after Ped Xing.

Doesn't really meet the standard for a bike path. It's narrow and shoved up against the roadway.

No sidewalk on east edge of Windmill between EHS and Rock Springs St. People frequently walk along this bit. It's awkard to walk here with the drainage/overflow areas, grass, and not even a road shoulder.

Difficult to traverse this area as a pedestrian, especially during the morning and afternoon rush

- 6. Speed limit 35 needs to be reduced
- 7. Project anticipated

A foot bridge would be great here. Covered.

8. Needs 'No Turn on Red when Peds Present'

All way stop for crosswalk [Pedestrian Scramble]

Permit parking successfully keeping school parking away

Dangerous to cross, even on Walk. Forest Hills and Pershing

Bridge over Pershing - There is tons of traffic on Pershing a bridge over the street would be so helpful and so much safer..

School zone speed limit - Why is the speed limit 35 all day in front of East and Carey?

Dangerous intersection. Paint on Crosswalks are not kept up. Requiring all traffic to stop when the crosswalk button is pushed would help. Speed reduction for school zone should be implemented.

A covered footbridge would be awesome.

No sidewalk here.

Bike path connecting golf course, Okie Blanchard, and vicinity

Idea for an additional connection to Windmill



Idea for an additional connection to potential pathway along north edge of EHS and CJHS area

10. Many students seem to cut through Jonah parking. Signs have been posted in the past discouraging this. This can be a shorter distance to walk/bike, so maybe the solution is putting in a higher quality PED connection between TBird Dr/Pershing & Holmes/Omaha

Overall, this stoplight functions quite well. Typically, one can even ride a bicycle in the street on T-Bird Dr and reliably have the light turn to green without the need to go push the crossing button, at least when heading southbound toward Pershing.

Dangerous intersection. Paint on Crosswalks are not kept up. Requiring all traffic to stop when the crosswalk button is pushed would help. Speed reduction for school zone should be implemented.

Turn lanes paint needs to be kept up with. There are no lanes markings there right now (Dec 2023)

A covered foot bridge would be awesome.

Cars often skip stopping before Grove Dr and continue to Pershing before stopping. This makes crossing here as a PED a challenge.

The design of the NW corner @ Pershing/T-Bird Dr could be improved. It's awkard to manuever the corner going either east or west, at least when on a bicycle; practically have to swerve into Pershing or slow way down to cross (this is worse going uphill).

11. No handicap accessible ramps on SE corner

Random wooden pole partially obstructs an already narrow sidewalk, also no handicap accessible ramp

Sidewalk randomly ends next to alleyway, telephone pole blocks way of pedestrians.

Dangerous intersection. Paint on Crosswalks are not kept up. Requiring all traffic to stop when the crosswalk button is pushed would help. School zone flashing lights; they flash some days and some days they do not.

Many people don't stop at this crossing when occupied, even when rapid flashing beacon lights are flashing. Yes, the lights help to some extent, but they don't solve the problem

Side note: Frequently see school students using this intersection on school days.

Very narrow, unsafe spot for PEDS at NE corner of Pershing/Ridge! No sidewalk, narrow paved bit between high speed traffic and ditch.. Just terrible!

No sidewalk at ditch! Peds must step carefully over the ditch and rocks, walk in the road, or go through the parking

lot. Drainage is good generally, but something different needs done here.

Awkward crossing at the parking lot entry for PEDs, vehicles frequently won't wait for PEDS/block the path to get across the entryway.

SW corner of Ridge Rd, Cheyenne St flooded after rain storm or snow melt, especially in the dip. Hard to cross Cheyenne st on west side of ridge.

Poles for stop sign and other signs make it a bit awkard for pedestrians to maneuver this spot, worse for those on wheels (bicycles included).

Poles are in the middle of the sidewalk. Very sketchy to go between poles and ridge with high traffic; not always ideal to go behind of poles.

Pole stands in middle of side walk. Not as hard to maneuver as the one just south of pershing on Ridge, but it still should be changed as it is still hard to maneuver at times.

PED Xing Signal pole AND telephone pole are in the middle of sidewalk (NW corner Ridge and Pershing), making it hard to manuever this corner. Also, poor design choices on PED ramp to cross Ridge; curb is a trip/fall hazard.

Stop light pole is placed in sidewalk, foring users to be even closer to high-speed traffic.

- 12. During lower traffic times, cars often go the wrong way through this roundabout to turn left. Seen this happen more than once in different directions. Maybe the medians need to be lengthened some, or other changes.
- Lack of sidewalk at this point by carey jr high, no wheelchair ramp access.
- 14. Hill is super steep here. Hard to bike/walk up, a bit nerve wracking to bike/walk down. If path were to be built here, weave around the hill to reduce steepness.

Bike path connecting golf course, Okie Blanchard, and vicinity

15. Improve Charles east of Carey maybe other road to south

People cross here fairly often. Need a crossing at this point.

Telephone pole literally in the middle of the sidewalk. Hard to pass at all. Hard to see people/cars present from both PED and car's POV.

Lack of ramps for sidewalks, the worst one being the SE corner of Birch/Charles



16. In its current state, cars the Pershing/McCann intersection frequently don't stop for people crossing.

Weird harsh angles in the sidewalk makes it hard for users to manuever.

Add a crossing guard to walk students across the street. I have seen several small children almost get hit here because they are not visible adding a crossing guard with high Vis may help drivers see students

People speed through this school zone, they do not stop when pedestrians are present. A walking bridge to the other side would be beneficial to cross 5 lanes of traffic.

Idea: do some good traffic calming measures here to make crossing safer for everyone including school children. Slow down traffic + make it more clear that it's a PED crossing.

 No pathway here. Would reduce walking/biking distance, more direct route.

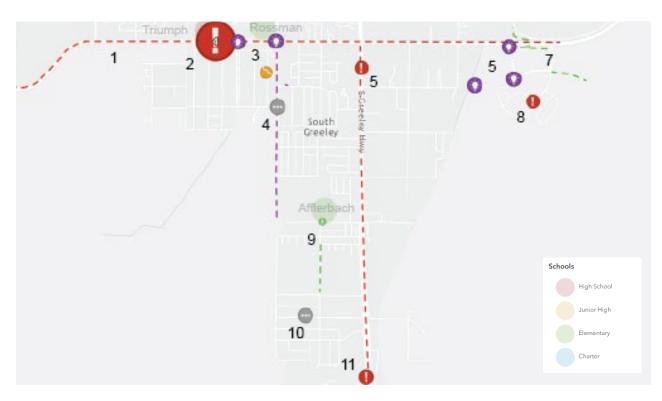
No sidewalk here right now.

- 18. Rediculously/unecessarily wide curve at this point.
- 19. Appreciate crossing guard

Crossing guard after school is needed here.

20. People drive fast around curve

Dangerous from all directions. I live right at the intersection of East 18th and Olive Dr. and as someone who will eventually send children to Henderson, I worry about the safety of this intersection and how it's laid out all the time.



D. Afflerbach

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- No sidewalk between Sweet Grass and Harmony Valley
 No sidewalk, shoulder very narrow at points with 50 MPH speed.
- 2. No crosswalk across College, multi jurisdictional

Stantec

There is no way to cross College safely here. There should be crosswalks, school speed zone and stop in all directions when a student it trying to cross.

3. Bike path just throws you onto the sidewalk. No crossing or under/overpass here?

Crossing guard, and school zone needed here

No sidewalks in most of this neighborhood, kids walk in snow or in the road

4. Lack of sidewalks on south side

Potential connection coming soon: Walterscheid to Wallick "penny wise"

Another bus stop right in the middle of the highway.
 Dangerous! There are multiple parking lots and empty lots within walking distance where a bus could pull in and be out of traffic while picking up kids.

Kids walk along highway between trailer parks and school, no sidewalk

The raised crossing at this point generally seems to slow down traffic enough that it'll stop without having to push the button for flashers.

Last winter, a puddle of water formed and froze on the north end of the College/Sweetgrass underpass, making it challenging and dangerous to use the tunnel.

Maybe have some kind of connection between Sweetgrass and the neighborhoods to the west?

Sidewalk just ends. Goes no where. Even with the new bank open now, still doesn't connect to anything useful.

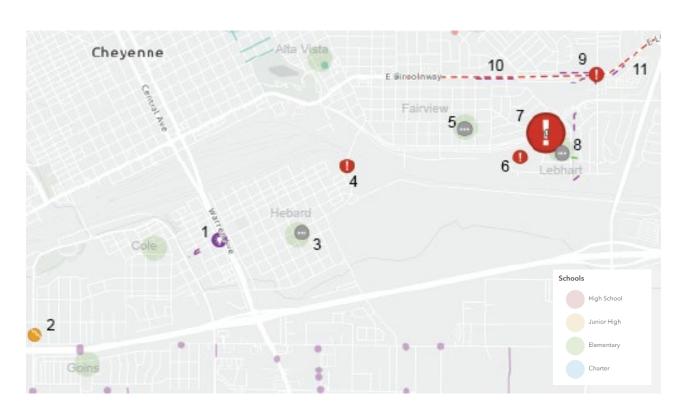
Pathway ends. Maybe a good spot to connect to the rest of Murray Rd?

7. No sidewalk between Sweet Grass and Harmony Valley

Pathway at this point is quite peaceful and easy to use. See blip about the underpass.

New wide pathway here.

- Blind corner. As a car, easy to get to the crosswalk and not notice it is there; as a bike/PED, hard to see cross traffic till the last moment.
- HAWK signals working well, lots of foot traffic
 New intra mobile home park connection since 2010 plan
- Kids walk to school from mobile home parks even without sidewalks
- 11. Greely is only route south





E. Cole – Hebard – Fairview – Lebhart

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

1. Likely to be rebuilt/expanded

Sidewalk has a nasty bump at this point. Also, the angle to get off the bridge/to the street while biking is awkard.

This intersection is awkward. Maybe Curve the eastern portion of W 7th St; turn into two T-intersections instead of awkward fourway?

Align Central Ave PED Xing with ramp for bridge. Slight blind spot is created by the ramp, so a raised crossing could help with encouraging vehicles to yield to PEDs.

It would be convenient to have a bike path connection at this point so that one doesn't have to either walk through the dirt or go several blocks extra distance just to access the crossing on Deming/W 7th st

Alternate connection spot if Central Ave PED crossing next to PED bridge is adjusted.

- 2. Crossing I-25 via Parsley as a bicycle or pedestrian at this point is better, but the sidewalk randomly ends...
- 3. Hebard may close, consolidate
- 4. No speed limit reinforcement
- 5. Fairview may close, consolidate
- 6. No crosswalks here or in front of the school
- 7. Visibility to help enforce safety

Kids crossing Nationway now due to district to Lebhart and Fairview xing Hotsprings

Hard and dangerous to cross here as a pedestrian.

No crosswalk in front of school.

8. Extend existing bike path

Idea for connection to Barbell Ct

A nice connection between two different areas that otheriwse would be less connected.

- This intersection isn't even safe for cars; regular car crashes and close calls. At least two of the crashes resulted in drivers/passengers being injured or killed. Lack of handicap facilities for pedestrians too.
- 10. Fast traffic

Need Side walk

Need sidewalk

 No sidewalk (must walk on the shoulder), high speed traffic, and frequent issues with left turning traffic (ie including vehicles getting in the center lane way sooner than they should)

No side walk on south edge of Lincolnway next to Cheyenne Plaza/Sharis area

High speed traffic

No side walk in this area

No sidewalk here

.





F. Central – McCormick – Jessup – Davis – Hobbs – Coyote Ridge

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

1. Crossing Western Hills dangerous

Stagger start/end times at secondary schools within proximity

Front door moving to Education Drive?

It's nice to have additional connections right from the bike path.

Can't see to make left turns during high traffic times

2. Is there a project to slow traffic on Western Hills?

Center lanes gets backed up. Police distracted from speed enforcement to guide turning traffic

Blind spot at the cross walk with the parked vehicles - there will be a bump out at the crossing

No crossing guard or flashing pedestrian sign. There is no school crossing guard 4 days of the week.

Dangerous crossing. No one paying attention.

- 3. No connection for PEDs here, must go through grass.
- 4. No sidewalk
- Maybe could have a refuge island at this point; very wide roadway to cross.

This is a dangerous road for students to cross. Motorists run the flashing lights and the school zone is not flashing when high school and jr. high students cross. Elementary students should not be asked to cross this busy of a street.

There is no school zone warning on this street.

There is not a yield sign in this alleyway. Cars will travel through the intersection without stopping.

Very dangerous street for elementary students to cross. Vehicles park along Yellowstone, making it more difficult to see small children attempting to cross. Vehicles are driving fast and do not always watch the lights and obey school zone signs.



- Cars travel at a high speed on this road. Flashing lights at this crosswalk would be helpful
- Bike lanes are good, but Yellowstone Bike Lanes don't feel safe! Even as an adult, I'd rather ride on the sidewalk (which isn't much better). Need separation between traffic to have these, especially with 40 MPH traffic.

Bike lanes here are worse with no shoulder (let alone no separation from 40 MPH traffic). It's worse going up hill, hard to even go 15 MPH. Still doesn't feel safe as an adult.

No side walk

Speeding an issue on Gardenia

Need a safe route to cross

Gardenia is used as a main route with heavy traffic rather than as a typical residential street, but signage does not match this use. It is nearly impossible for kids to safely cross to go to or from Davis, Hobbs, or Coyote Ridge.

Although it could use some TLC, separated bike lane is a nice touch, especially with a harder barrier instead of flexible traffic delineators

There should be a crosswalk on gardenia to allow for safe crossing.

Reconfigure NE corner of Yellowstone and Gardenia. Difficult for users on wheels (bikes included) to maneuver.

 Faulty traffic light. Often cuts immediately to red/green, short times, leading to impatient drivers

Need an all way stop for pedestrians and bicyclists

10. Intersection, lots of traffic

Remove ~3' of island at Coyote Ridge to get bike lane

The SE corner at Carlson and powderhouse is awkard for users riding bikes.

Crossing Carlson at Marshall, there is a dense shrub on the SE corner which makes it difficult to see pedestrians waiting. Morning sun can make it difficult for drivers heading east

Drivers don't slow down, they don't yield to peds, and they drive around stopped school busses

I think we will be walking so have a crossing guard

It would be nice to have a stop light w ped crossing at Carleton

Island sticks out into Powderhouse. Blocks bike path/shoulder on east side of the road. Dangerous in snow

Crossing Melton, there is a small hill, cars parked on the side of street, cars speeding, not safe to cross.

There are cars parked along the street making it hard to see traffic

Add bump-outs or something to make distance of roadway to cross at this point shorter.

Add bump-outs or something to make distance of roadway to cross at this point shorter.

11. What will happen here

What will happen here?

 Would be nice to have HAWK and monitor here in addition to Carlson

Agree w HAWK/monitor - I imagine Melton will be a natural crossing for kids from Indian Hills. They have grown up being warned about Carlson

Crossing and sidewalk to Coyote Ridge

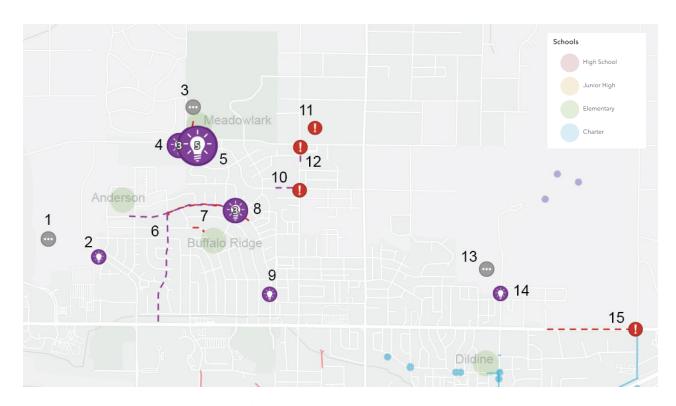
Could use a sidewalk here connecting new walkway next to Coyote Ridge. Could be wider than the sidewalk on the otherside that is often obstructed by bushes, weeds, and other plant life.

 Crossing Melton, there is a small hill that is hard to see over, cars parked on the side of the road make it difficult to see over, small sidewalk, cars speed on Melton

This is an ally entrance, poor plowing, top of hill with blind spot

- 14. Insanely wide corner.
- Could use more connections along the greenway (including Dry Creek area) to make it easier/quicker to access the greenway (i.e. the nearby two marked spots).
- 16. Advanced interval walk signal? Right turns dangerous
- This intersection is chaos during school drop off times. It could honestly use some sort of stop light.





G. Anderson – Meadowlark – Buffalo Ridge

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- 1. New housing
- 2. No crossing/signal, bike path just ends here.
- 3. Built for parent waiting, not really used
- Separate southbound left/right, aux right into school, improved NE corner for sight

No school zone speed limit. Busy area at pick up and drop off. Traffic along Storey is 40mph during morning drop off and afternoon pickup

Traffic light!!!!!!

Idea: a connection for PEDs be made between the Wild Bluff/Mountain Road and Storey/Chief area

- 5. Positive: good that kids don't have to interact with traffic
- 6. Underpass kind of long and inconvenient. Potential signal?

Very Dangerous spot that ELEMENTARY kids cross daily with no crosswalk or school sone in sight. Both of those items could be added to increase safety on this high speed, heavy traffic road/intersection

School zone. Traffic needs to be slower here

Connection between thomas Rd/Crestridge and Storey/Chief Washakie area

Idea: Connection between Summit Dr/Crestridge and Storey/Chief area

- 7. Dangerous curve
- 8. Negative: Plainview has fast traffic
- Plainview is dangerous to cross. Multiple cross walks needed

Children crossing between Buffalo Ridge Elementary and Meadowlark but no cross walk and cars speeding

Dangerous curve

This section of plainview is way too wide, arguably part of why vehicles go so quick.

 Children seen crossing daily to go to bus stop on the other side of this busy road. Nearest cross walk far for children to walk up to and then walk back

No side walk



- Storey is a busy road. Speed should be reduced during school hours. Cars can't turn onto Storey safely during drop off and pick up hours. 40mph posted speeds are not adhered to.
- Busy road difficult to cross, not kept well in poor weather conditions
 - Missing walkway connection
- 13. 800 new housing units

- 14. No PED Xing
- When a vehicle on east-bound Dell Range turns right onto whitney, other vehicles use restricted left turn lane as a passing lane.
- Unsafe to traverse if not in car. No side walk, 45+ MPH traffic, narrow roadway.



H. Sunrise – Dildine – Saddle Ridge – Bain

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- Path here is sometimes flooded/muddy and almost unusable. Otherwise, a good spot for a connection.
- No flashing lights to indicate people crossing. With that, cars drive through as children attempt to cross.

No side walk. Drew the line to further clarify where other's markers had been placed.

No side walk, children forced to walk in the ditch/dirt or the road. No side walk, children forced to walk in the ditch/dirt or the road.

No side walk, children forced to walk in the ditch/dirt or the road

People speed down these roads, and roll through the stop signs. A 4-way flashing light, that children can press when crossing would be beneficial.

 Lack of Sidewalk facility on north edge of US-30! Late one summer night, had a near miss with people walking along the edge of the roadway, on the divided highway part



where there isn't even a paved shoulder! Useless sidewalks to nowhere too!

- No sidewalk
- This pathway is almost always closed. Alternate route is okay except when wanting to continue NE on US 30

Between the greenway being closed and the dangerous crossing of Whitney road, having children traverse through a gas station parking lot to get from Dakota Crossing to Saddle Ridge is not ideal. Or safe.

Dangerous intersection

Not a safe location for children to walk

Idea for a raised pedestrian crossing and/or other traffic calming measure to make crossing safer

- Can't walk/bike all the way down Laramie. Fencing blocks crossing, no crossing at Whitney.
- Cars don't tend to stop here even though bikes and peds appear to be given priority. May be a good spot for a raised PED Xing.
- Need a better crossing here. Curbs are ramped instead of providing proper PED xing here. Blind spot. Maybe a good candidate for a raised crossing?

No sidewalk/bike path

 A tiny bit of sidewalk to nowhere. An otherwise pretty good little sidewalk (separated too!) that doesn't truly help the situation.

High speed, no bikeway

No bikepath/bikeway

11. Lack of sidewalk connection

Lack of sidewalk connection.

No sidewalk on north edge of Pershing

No sidewalk along this portion of US 30, must go in street Or on uneven, dirt/weeds terrain

 No access directly to bike path from intersection of Lincolnway/College and vice verca.

No side walk

13. What happened to '25mph School Zones'?

 Students from Pershing Point or Mountain Side Apts don't use established safe route because it adds extra hills and time - they walk down Taft

The pathway on the south edge of pershing, taft to grasslands, is narrow and frequently overgrown with vegetation, hard to use it.

Very awkard connection to the street, not much of a crossing on grasslands.

Damaged sidewalk next to brown, metal drainage cover

 Hills with low visibility and high traffic load. Sidewalks are full of holes and never cleared of snow in winter

Need crosswalk near Pershing Townhomes

Please fix uneven sidewalks on this route. They're a sliding/tripping hazard

16. Taft is a dangerous road

Lots of kids use this poor visibility unmarked crossing

Feels like there should be a concrete walkway path here, but there isn't.

17. Crosswalk and/or flashing lights

Lack of cross walk across Taft toward school. Route has poorly maintained sidewalks and major hills that are dangerous. Poorly plowed.

Sunrise School crossing on 12th is on a hill, maybe adjust for better visibility, change to RRFB

Only use advanced warning if RRFB can be shut off when pedestrian is gone

Reconfigure parking lot

A connection here could help. Connect to existing pathway, like it appears it was meant to (but doesn't).

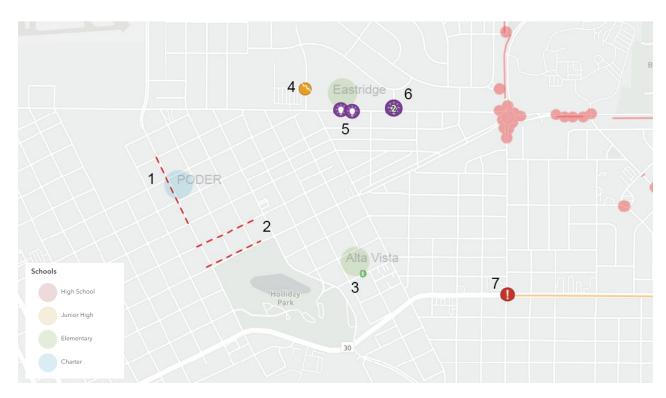
 Needs sidewalk for less street crossing and eliminates need to walk on other side of road with repeated cross street crossing

Possible secondary spot for a PED crossing/connection.

Need sidewalk across street so there is s walkway

Kids have to cross cross streets where there is no supervision or crossing guard and motorists fail to stop. If there is sidewalk across on the north side of e 12th st, the can cross without fear from cross street crossings to thier destination





I. PODER – Eastridge – Alta Vista

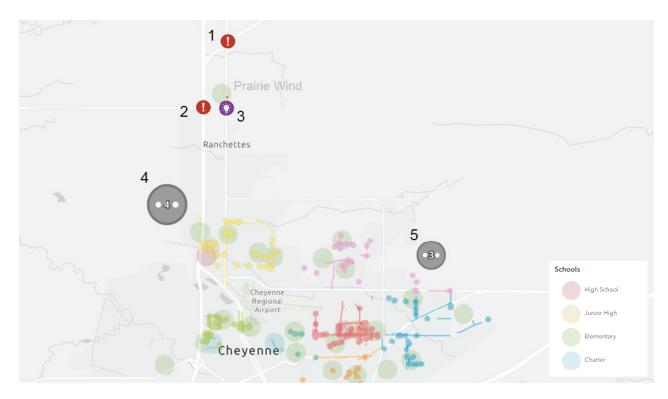
Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- 1. Bad visibility over hill. Fast driving up to Pershing
- Unsafe Unsafe
- 3. Speed table slows people down
- No handicap access at this crossing. Also road is rather wide!
- 5. School signage, maybe lacking with temporary use

Need school zone

- This bit that makes up the NE corner of Pershing Blvd/Salem Rd is very poorly designed. Hard to manuever on foot, nearly impossible to manuever with a bike.
 - Fire hydrand obstructs sidewalk on NE corner of E Pershing/Salem
- 7. Kid killed in crosswalk, with parent





J. Prairie Wind – miscellaneous or not location specific

Note: Comments are written as they were originally submitted by community engagement participants, not verified or spell-checked.

- 1. Dangerous intersection that buses must pass.
- 2. Horse Creek Bridge over I025
- 3. Stop light

The speed limit is 55mph with no school zone to decrease the speed. The intersection at Yellowstone and iron mountain is also very dangerous

4. Adopt Vision Zero? Reprioritize modes

Cycle: parents think too dangerous to walk so they drive and make roads more dangerous

Ft Collin's has a flashing speed reader at McMurry and Hamony

Parents anxiety reduced if group of kids walk together? Formal/informal walking school bus

5. We should have paid crossing guards at each school Help for crossing guards. Cones? Better stop signs?

Education: 'deal with the wind'. If you live within mile of school, education or benefits of students getting to school in ways other than dropped off by car. 'Stranger danger' overplayed?



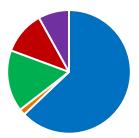
Full Documentation: Phase 2

Survey (Online, in-person)

Promoted and facilitated at in-person workshops and embedded in project website, written surveys included. 50 responses were collected through the online survey.

1. How are you connected to Cheyenne schools?

| • | Parent, guardian, care giver | 39 |
|---|------------------------------|----|
| • | Student | 1 |
| • | Staff | 10 |
| • | Neighbor | 7 |
| • | Other (please specify) | 5 |



2. What school do you (or your students) attend? Select all that apply.

High Schools

| • | Central HS | 10 |
|---|------------|----|
| • | East HS | 7 |
| • | South HS | 3 |
| | | |

Junior High

| • | McCormick | 6 |
|---|-----------|---|
| • | Carey | 2 |
| • | Johnson | 0 |
| | Triumph | 0 |

Elementary

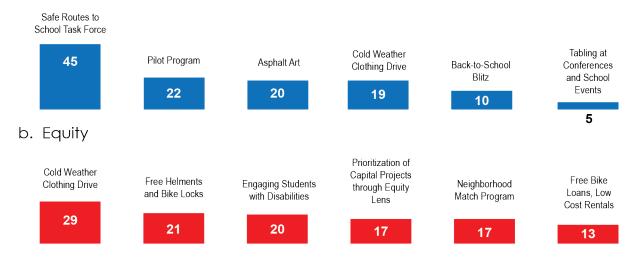
| • | Afflerbach | 6 |
|---|--------------|---|
| • | Deming | 8 |
| • | Cole | 3 |
| • | Coyote Ridge | |
| • | Jessup | 3 |
| • | Pioneer Park | 3 |
| • | Davis | 2 |
| • | Dildine | 2 |
| • | Henderson | 2 |
| • | PASS | 2 |
| • | PODER | 2 |
| • | Saddle Ridge | 2 |
| • | Sunrise | 2 |
| • | Alta Vista | - |
| • | Arp | - |
| • | Baggs | - |
| • | Goins | - |
| • | Hobbs | • |
| • | Meadowlark | , |
| | Miller | |

| • | Anderson | 0 |
|---|---------------|---|
| • | Bain | 0 |
| • | Buffalo Ridge | 0 |
| • | Eastridge | 0 |
| • | Fairview | 0 |
| • | Freedom | 0 |
| • | Hebard | 0 |
| • | Lebhart | 0 |
| • | Prairie Wind | 0 |
| • | Rossman | 0 |
| | | |



3. Which strategies would you prioritize under each "E"? (select 2 per category)

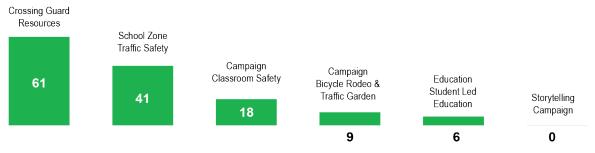
a. Engagement



c. Encouragement



d. Education

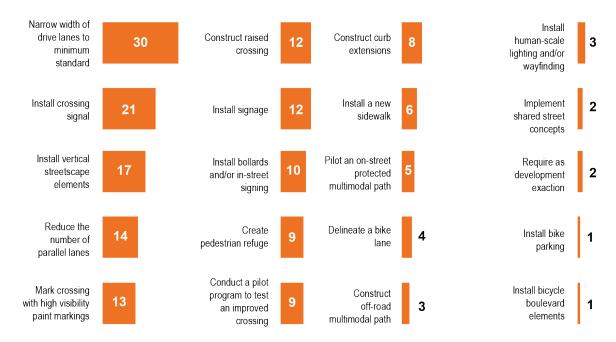


e. Evaluation





f. Engineering*



^{*}Indication of sentiment, not recommendation for any specific site

4. (Optional) When you chose strategies to invest, were there schools or areas you had in mind?

- Hard to know with the recent news that schools will be closing. There will be a major shift in how kids end up getting to school. I would like to see this group engaged in conversations about transitioning kids to new schools and how we will keep them safe.
- Henderson Elementary School surrounding area
- Coyote Ridge (Powerhouse) and Hobbs (Carlson)
- Deming
- If someone is walking toward Alta Vista from the west on the park sidewalk, it's awkward to

- cross over to 17th with the little pocket park with no sidewalk.
- All major streets and through ways that are AT LEAST within the 1-mile walking radius of every school.
- Carey Avenue, Warren Avenue and Central Avenue. On 3rd or fourth Avenue at least a place for the kids to press a button to get the lights flashing to raise awareness of children crossing on those busy streets.
- All school zones
- Dildine Elementary



- McCormick- the two lanes in front of the school — kids get out of cars in the left lane and walk in front of cars in the right lane.
 Why is this still allowed?
- All
- Afferbach. Kids have to cross south Greeley highway to get to school. There should be a stop light there to help them get acrossed.. that is a dangerous place for kids and adults to cross
- More signage, more speed enforcement, more parent awareness of school zone safety at the schools
- Yes, considered for each school location the different vehicle traffic volumes and speeds, availability of separated sidewalk/bike lanes, and how these solutions could work in each of these situations.
- Almost every curb corner in Chevenne could be extended based on winter observations of traffic patterns following snow storms. At this time, cars are driving slowly and carefully, and the appearance of "sneckdowns" shows that vehicles don't need nearly the generous turn radius we've allowed them that makes it easy for them to take corners fast and tight on dry roads. East High, Carey Jr., and Miller and Arp elementaries in particular would benefit from significant engineering solutions to slow traffic on Pershing. I would like to see lighted, midblock crossing signals, narrowed lanes, raised crossings, and pedestrian refuges to make this a much safer place for people to cross to school without risking death on Pershing. In my opinion, if you're not trying to make Pershing much more bikeable and walkable between Ridge

- and Evans, you're not serious about this push for Safer Routes to Schools.
- Meadowlark and East
- South side schools and schools off of main/busy streets (i.e Yellowstone, Pershing)
- Johnson and south high
- Afflerbaugh
- Cole
- Put a traffic signal or crosswalk on the intersection of wallick and South Greeley
- 5th street, deming and 9th street all high traffic areas also I think the neighborhood needs way more stop signs
- Dildine School the stop sign at Pierce and Rio Verde stops Rio verde traffic, but the Piercde traffic North and south does NOT stop and speeds. Also the students using Rio Verde to walk to Dildine have their vision of Pierce blocked on the south by a fence and a large camper always parked at the curb so that their vision to the south is blocked. The city put the sigh in the WRONG place to protect the kids walking to and from Dildine.
- I would like to see more school zone signs in the front entrance of Cole and a visible painted crosswalk there as well. My primary concern, however, is on South Greeley Hwy. There are children and parents that cross from the trailer park, across the highway and then walk on to Afflerbach. I'd love to see a flashing crosswalk like the one on Yellowstone to keep them safe when they need to cross. I stop for them, but many people do not. The speed limit is 50mph



there and it would be disastrous if someone got hit or even had a near miss there. Please keep these Southside kids safe too!

- · Yes, east high crossing on Pershing
- It's nearly impossible for children west of Central and Warren to cross to go to miller to the east and visa versa for the student east of Central and Warren to cross to the west to get to Deming. A crossing signal that would like up when kids were crossing is essential. Recently someone was ticketed going 85 miles per hour on Central Ave near 3rd Ave.
- All schools but Demming is a concern as we walk from McColm and Cribbon Ave is a very busy street with little acknowledgement from drivers when trying to cross the street.
- The avenues just needs stop signs, lower speed limits, and safe ways to cross uncontrolled multi-directional intersections, Snyder, Pershing, Central, and Warren. A designated bike lane would be nice too on the streets that already are very wide. Question 8 should have allowed more options considering the number of choices. Your survey made me remove them so I would not say that my survey answer fully reflects my thoughts.

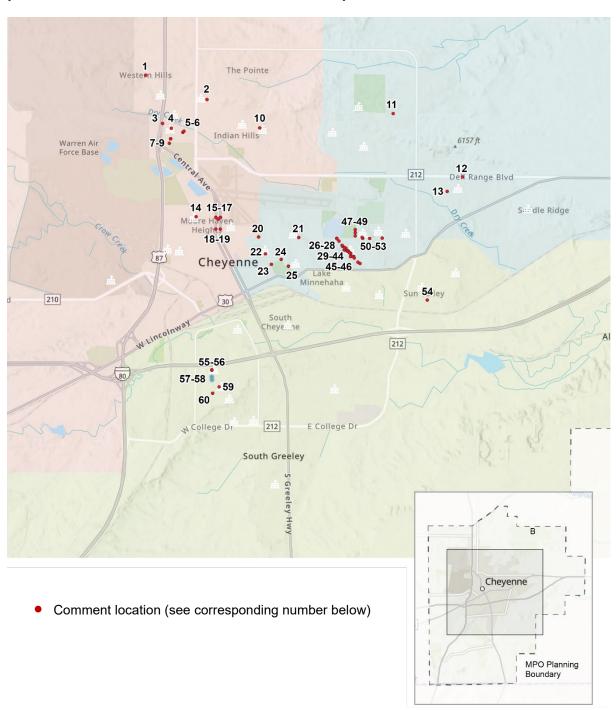
5. (Optional) Could you champion any of these strategies? Add your name and email to a list of volunteers.

- Sarah Brown sarahabrown40@gmail.com
- Leslie Beadles
- Megan Barr megansellscheyenne@gmail.com
- Dawn Elway dneal829@gmail.com
- Amorette Davis amdavis28.ad@gmail.com
- Caroline Barlow -<u>Liney.white@gmail.com</u>
- Kari Rebhahn karirebhahn@aol.com
- firststarontheleft@gmail.com
- Continue to work with Safe Routes to School Task Force

- Tom Dixon tzdwyo@gmail.com [senior communications specialist and content marketing manager, economic development agency, State of Wyoming] I would love to help with using paint and traffic cones to help pilot projects to extend curbs, test locations for bike lanes with bollards, assist with street art at crosswalks designed to slow down drivers, count pedestrians, use radar guns to track driver speeds.
- I wish I could but I'm a full-time working mom and can't control what the city chooses to do.
- Amy Spieker
- Kasey mullins
- Ashley White
- Erin Garcia

Stantec

6. Are there barriers, dangerous or uncomfortable connections or crossings that have yet to be identified? Add a comment to the map to mark a location of concern.





- Many people run or roll through this stop sign right into the bike lane when students are riding to and from school.
- 2. Cars speed through here
- 3. <null>
- 4. Driving, parking, pick up and drop off and walking is discombobulated. Needs a complete re-design as soon as possible.
- Hard to take a left here when driving north in mornings and kids walking have to cross in front of a lot of traffic. There are no sidewalks so they can walk up to school on the south side of the entrance
- 6. Same
- 7. <null>
- 8. Lots of kid drivers here after and before school, kids walking, dangerous area
- 9. <null>
- 10. The specific issue I have experienced here is an issue with vehicles on Carlson making a right turn on red while the pedestrian walk symbol is lit. This may be a driver sightline issue but could also be driver haste.
- 11. Cars need to pay more attention to pedestrians and cyclists crossing here
- Drivers fail to yield at beacon. Want red light. (open house)
- 13. Stop sign not placed so that kids can see Pierce traffic the south given the fence and large camper. Pierce traffic is a danger. The stop signs should be on Pierce, not Rio Verde.
- 14. Shorten crosswalks around triangle (open house)
- 15. Crosswalk here (open house)

- Connect Deming/Miller, 2nd or 3rd Crosswalk (open house)
- 17. Crosswalk here (open house)
- 18. Crosswalk here (open house)
- 19. Crosswalk here (open house)
- 20. Literally every Pershing intersection is horrifically dangerous for pedestrians and cyclists. Drivers ignore red lights, the stroads are engineered to encourage high speeds because the lanes are too wide, no vertical streetscaping elements, no bike lanes
- 21. This light sneaks up on drivers
- 22. The daycare here often has parents unloading and loading kids on the side of the road at the same time as there is lots of pick up and drop off traffic from PODER
- 23. People are often speeding on 19th especially as they come down the hill or accelerate through the light.
- Lots of people cross here but there is no crosswalk
- 25. No side walk in the pocket park
- Intersection needs left turn arrows to facilitate when pedestrians are crossing
- 27. Low visibility at intersection
- People stop ON crosswalks instead of behind them. Students have to walk into traffic to cross
- This intersection is angled oddly and its hard to see
- 30. Very little traffic enforcement during pick up and drop off times
- 31. No marked crosswalk
- 32. No signage to denote end of school zone

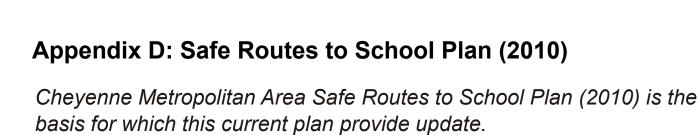


- 33. Blind entrance from Alley
- Parked card block vision for crossers and drivers
- 35. Parked cars block view of crossers and drivers
- 36. Parents and Neighbors park ON TOP of crosswalk to pick up their kids
- 37. This is the more important crossing, direct to playground where kids go
- 38. Kids exit playground here at the gate and run directly across street without looking. They do not use the crosswalk because it is too far away
- 39. Parents stop in travel lanes to pick up and drop off students
- Crosswalk at Walnut most important kids enter at playground sw of building. Existing mid block crossing less popular (open house)
- 41. Kids cut down alley and parents drive 30 or so around the circle with limited visibility. Residents park any which way, sometimes completely blocking the street and view. This area is also where unwanted vehicles get left or random people park their RVs
- 42. Low visibility pulling out onto Henderson
- 43. School zone should start here, not in middle of school block
- 44. Sidewalks are narrow and broken and most kids just walk on the street to avoid the hazards of walking on the sidewalk
- 45. Low visibility when stopped at stop sign. Cannot see walkers or street
- 46. Confusing intersection when drivers don't follow the rules and stop randomly when not required

- 47. This is where kids cross. They do not use the sidewalk
- 48. Place light to work during pick up and drop off hours
- 49. Make no left turn coming from this inlet to parking lot
- 50. Parents stop to drop kids off in travel lanes of Pershing
- 51. It might be more efficient to reverse the travel direction in the drive
- 52. Dangerous crossing. Right-turn on red allowed. Advanced interval sequencing? Pedestrian scramble? (open house)
- 53. I have seen numerous cars disregard students walking across Pershing to Carey. Perhaps no turning when pedestrians are present.
- 54. Safety, sign concern (open house)
- 55. School zone needs to be adjusted to new building site (open house)
- 56. Sign distance on crossing of concern (open house)
- 57. <null>
- 58. School crossing signs needed in this area
- 59. There are a lot of trees and distractions through the crossing areas between Johnson and South. The sidewalks at the round about are very short and gives drivers minimal time to see the pedestrians and stop. We are right on top of them.
- 60. Round about makes it hard to see pedestrians especially where there are trees and such.

Introduction

Appendix







Cheyenne Metropolitan Area Safe Routes to School Plan

Submitted to: Cheyenne MPO 2101 O'Neil Ave Cheyenne WY 82007

AUGUST 2010

CHEYENNE METROPOLITAN PLANNING ORGANIZATION
ALTA PLANNING + DESIGN | SUMMIT ENGINEERING

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Traffic Safety Committee
Planning & Construction Department
Support Operations
K – 8 School Principals
Parent Teacher Organizations

Laramie County

Planning & Development Department Public Works

Metropolitan Planning Organization

Policy Committee Technical Committee Citizen's Advisory Committee

Wyoming Department of Transportation

Planning Program
Traffic Program
Highway Safety Department/ Bicycle and
Pedestrian Program

Concerned Citizens of the Cheyenne Metropolitan Area

Cheyenne Metropolitan Area Safe Routes to School and Pedestrian Plan Steering Committee

Cheyenne-Laramie County
Cooperative GIS Program

Federal Highway Administration, Wyoming Division

Greater Cheyenne Greenway Advisory Committee

Consultant Team

Alta Planning + Design

Summit Engineering

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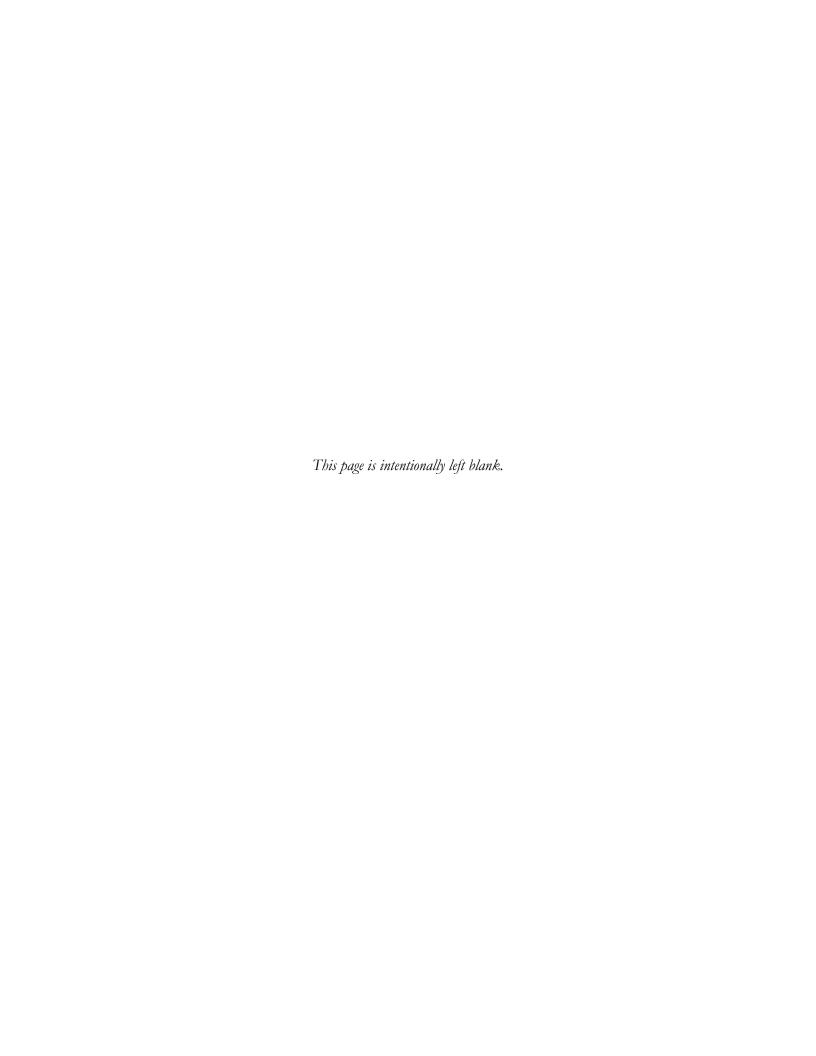


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How to Use This Document

The Cheyenne Metropolitan Area Safe Routes to School Plan is organized into four main parts. The introduction provides an overview of Safe Routes to School programs and their benefits, stakeholders who should be involved in the program process, and a description of the public input process for this plan. The second section provides a review of existing conditions and transportation barriers to walking and bicycling to school. This section includes a detailed description of the 27 Cheyenne area schools targeted in this Safe Routes to School Plan. It provides important information needed for completing a WYDOT grant application. The third section provides potential solutions to existing transportation barriers. The final section provides next steps for implementing projects and programs to improve the safety, health, and wellness of students in the Cheyenne Metropolitan Area.

The document is to provide a basis for completing an application to apply for Safe Routes to School funding from the Federal Highway Administration (FHWA) and the Wyoming Department of Transportation (WYDOT). This document outlines the district's as well as the individuals' intentions to make travel to and from school more sustainable and safe by improving bicycle and pedestrian travel routes and by providing education, encouragement and enforcement efforts.

The information presented in this plan can be used to complete a Safe Routes to School grant application for infrastructure or non-infrastructure grant funds. At the end of the document, a glossary defines important terms relating to Safe Routes to School programs and associated transportation improvements.

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II. Introduction

City of Cheyenne

People in Cheyenne have been getting around by foot since the time of the City's founding in 1867. The original City plat features wide right-of-ways and enough room to accommodate first wagons, then streetcars and motorized traffic while maintaining a quality pedestrian travel environment. Cheyenne has remained dedicated to pedestrian travel over the last 150 years; the City has consistently followed national best practices, constructing sidewalks and curb ramps in the 1930s, 1940s, and 1950s prior to the Americans with Disabilities Act (ADA) that mandated equal accessibility for people of all abilities.

Today residents have access to great pedestrian amenities including a citywide system of shared use paths and Greenways, beautiful streetscapes, generous sidewalks in the downtown area, many pedestrian friendly intersections, and miles of roadways with existing sidewalks. Despite these early improvements, many opportunities to improve the current environment remain. These improvements include widening narrow sidewalks constructed prior to the implementation of ADA, retrofitting existing facilities to meet the needs of pedestrians with physical impairments, extending the Greenway system, and making intersections even more pedestrian friendly.

Over the years Cheyenne residents have remained dedicated to the ideals of personal health education for the next generation. Like many cities and counties across the country, the City of Cheyenne and Laramie County have witnessed a decrease in the number of children walking and biking to school and a subsequent increase in the levels of inactivity and childhood obesity. In pace with national trends, Cheyenne residents have expressed a deep concern over the health and wellbeing of the next generation.

The development of a district wide comprehensive Safe Routes to School Program is an expression of the care and concern parents, teachers, and decision makers feel about the next generation. Regular exercise has been shown to reduce childhood obesity, increase a person's ability to concentrate and reduce stress. Providing children with the opportunity to walk and ride to school allows them to develop awareness and understanding of the physical world, nurtures their ability to rely on themselves, and develops healthy lifelong exercise habits while having fun and meeting new friends.

This plan analyzes existing infrastructure, institutional, and programmatic barriers that hinder students from walking and biking to school and proposes practical solutions to these problems. These barriers include higher speed roadways such as Pershing Boulevard, and sidewalk gaps or missing facilities such as those in the area developing around Saddle Ridge Elementary. Programmatic barriers include a lack of fun and encouraging activities such as the organized walks and runs before school at Deming Elementary.

By developing a plan that provides the necessary information to complete a Wyoming Safe Routes to School Grant Application, parents, teachers, and decision makers associated with Laramie County School District #1 can quickly and easily apply for federal grant funding to complete infrastructure projects or provide additional encouragement and enforcement

activities designed to make Cheyenne's residents happier, healthier and more productive in the next 150 years.

What is Safe Routes to School?

Safe Routes to School (SR2S) refers to a variety of multi-disciplinary programs aimed at increasing the number of students walking and bicycling to and from school. Such programs and projects improve traffic safety and air quality around school areas through education, encouragement, increased law enforcement, and engineering measures. SR2S programs typically involve partnerships among municipalities, school districts, community members, parent volunteers, and law enforcement agencies. Comprehensive SR2S programs are developed using five complementary strategies commonly referred to as the "Five E's":

Education – Educational programs teach students bicycle, pedestrian, and traffic safety skills as well as teaching drivers how to share the road safely.

Encouragement – Special events, clubs, contests, and ongoing activities encourage more walking, bicycling, or carpooling through fun activities and incentives.

Enforcement – Strategies designed to reduce drivers', bicyclists' and pedestrians' unsafe behavior encourage all road users to obey traffic laws and share the road.

Engineering – Design, implementation, and maintenance of signage, striping, and infrastructure improvements increase the safety of pedestrians, bicyclists, and motorists along school commute routes.

Evaluation – Evaluating the projects and programs is fundamental to assessing the successes of each of the "E's" above, helps to determine which programs were most effective, and helps to identify ways to improve programs.

Why is a Safe Routes to School **Program Important?**

Although most students in the United States walked or biked to school prior to the 1980's, the number of students walking or bicycling to school has sharply declined. Statistics show that 42 percent of students between five and 18 years of age walked or bicycled to school in 1969 (with 87 percent living within a mile of school). In 2001, fewer than 16 percent of students walked or bicycled any distance to get to school. This decline is due to a number of factors, including urban growth patterns and school siting requirements that encourage school development in outlying areas, increased traffic, and parental concerns about safety. The situation is self-

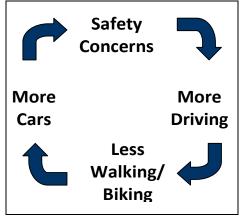


Figure 1. The downward spiral of safety concerns limiting walking and bicycling to school

¹ U.S. Centers for Disease Control and Prevention. Barriers to Children Walking to or from School United States 2004, Morbidity and Mortality Weekly Report September 30, 2005. Available: www.cdc.gov/mmwr/preview/mmwrhtml/mm5438a2.htm. Accessed: December 28, 2007.

perpetuating: as more parents drive their children to school, there is increased traffic at the school site, resulting in more parents becoming concerned about traffic and driving their children to school (Figure 1).

According to a 2005 survey by the Center for Disease Control, parents whose children did not walk or bike to school cited the following barriers:

• Distance to school: 61.5 percent

• Traffic-related danger: 30.4 percent

• Weather: 18.6 percent

• Crime danger: 11.7 percent

• Prohibitive school policy: 6.0 percent

• Other reasons (not identified): 15.0 percent

A comprehensive SR2S program addresses the reasons for reductions in walking and biking through a multi-pronged approach. Such an approach uses education, encouragement, engineering and enforcement efforts to develop attitudes, behaviors, and physical infrastructure that improve the walking and biking environment.

Benefits of a Safe Routes to School Program

SR2S programs directly benefit schoolchildren, parents, and teachers by creating a safer travel environment near schools and reducing motor vehicle congestion at school drop-off and pick-up zones. Students who choose to walk or bike to school are rewarded with the health benefits of a more active lifestyle, as well as responsibility, and independence that comes from being in charge of the way they travel. Students learn at an early age that walking and biking can be safe, enjoyable, and good for the environment. SR2S programs offer additional benefits to neighborhoods by helping slow traffic and by providing infrastructure improvements that facilitate walking and biking for everyone. Identifying and improving routes for students to safely walk and bicycle to school is one of the most cost-effective means of reducing weekday morning traffic congestion and can help reduce auto-related pollution.

In addition to safety and traffic improvements, a Safe Routes to School program helps integrate physical activity into the everyday routine of school children. Since the mid 1970's the number of children who are overweight in the US has roughly tripled from five percent to almost 17 percent. Health concerns related to sedentary lifestyles have become the focus of statewide and national efforts to reduce health risks associated with being overweight. Children who walk or bike to school have an overall higher activity level than those who receive rides to school, even though the journey to school makes only a small contribution to activity levels.²

² Cooper A, Page A, Foster L, Qahwaji D. Commuting to school: are children who walk more physically active? American Journal of Preventive Medicine. 2003 November; 25(4):273-6.

Cooper A, Andersen L, Wederkopp N, Page A, Frosberg K. Physical activity levels of children who walk, cycle, or are driven to school. American Journal of Preventive Medicine, 2005 October; 29(3):179-184.

The Safe Routes to School Team

A SR2S Team should be convened to plan, coordinate, and implement the recommendations set forth in this document. The Team should include a diverse combination of individuals and groups who have a stake in improving safety and encouraging walking and bicycling to school. The Safe Routes to School Team should be composed of planners, engineers, law enforcement officers, local officials, school district staff and administrators, school faculty and staff, and/or stakeholders from the following agencies and groups:

- City of Cheyenne
- Laramie County
- Laramie County School District (LCSD) #1 District Office
- LCSD #1 School Safety Committee
- School staff
- School Parent Teacher Organizations
- Parents and students
- Other stakeholders, such as health organizations, bicycle/pedestrian advocates, or neighbors

Public Input Process

The existing conditions, barriers, recommendations, and potential solutions presented in this plan are the result of a detailed and cooperative data collection effort. This effort included on-the-ground fieldwork, interviews with City of Cheyenne, Laramie County, Cheyenne Metropolitan Planning Organization (MPO), LCSD #1 district staff and LCSD #1 Safety Committee, secondary data collection including existing plans and policies, student surveys, and two community workshops.

Approximately 20 participants attended the first community workshop, held on June 9, 2009 at the Cheyenne-Kiwanis Community House. Project staff held a second community workshop on October 22, 2009 at the same location. Attendees at the first workshop submitted oral and written comments regarding existing pedestrian issues near schools and offered suggestions for improvements. Participants of the second workshop reviewed and commented on draft recommendations. With the assistance of group facilitators, participants submitted comments on large-scale maps, flip charts, and questionnaires.

III. Existing Conditions and Transportation Barriers

This chapter of the Cheyenne Metropolitan Area Safe Routes to School Plan describes existing conditions and barriers to active transportation at the 24 elementary schools and three junior high schools included in this plan (shown on Map 1). The first section of this Chapter provides an overview of LCSD #1 student characteristics. Characteristics evaluated include student demographics, the school travel environment, and current student travel patterns based on in-class surveys administered in spring 2009. The chapter then describes existing LCSD #1 and other agency policies, procedures, programs, and regulations affecting the student walking and bicycling environment. A more detailed section follows, discussing institutional and infrastructure "barriers" that create challenging conditions for students who walk or bicycle or who wish to walk or bicycle to school. The discussion describes district-wide and school-specific barriers. The findings presented in this chapter, combined with additional input from City, County, MPO, and LCSD #1 staff, inform the recommendations developed for the Cheyenne Metropolitan Area Safe Routes to School Plan.

Students and Active Transportation Trends

The number of students participating in active transportation (walking and biking) has decreased steadily since the late 1960s. Nationally, the percentage of students who walked or biked to school decreased from 41 percent in 1969 to 13 percent in 2001,³ and Cheyenne has experienced similar trends. Though the city reported a walk to school rate of about 16 percent and a bike to school rate of about 4 percent during a spring 2009 survey. As the number of students walking and biking to school decreases, the number of students suffering from diseases linked with reduced physical activity, such as obesity and upper respiratory diseases, has increased. While these findings do not indicate a direct correlation between decreased walking and cycling to school and deteriorating health, it is realistic to assume that regular non-motorized travel to and from school can contribute significantly to a child's health.

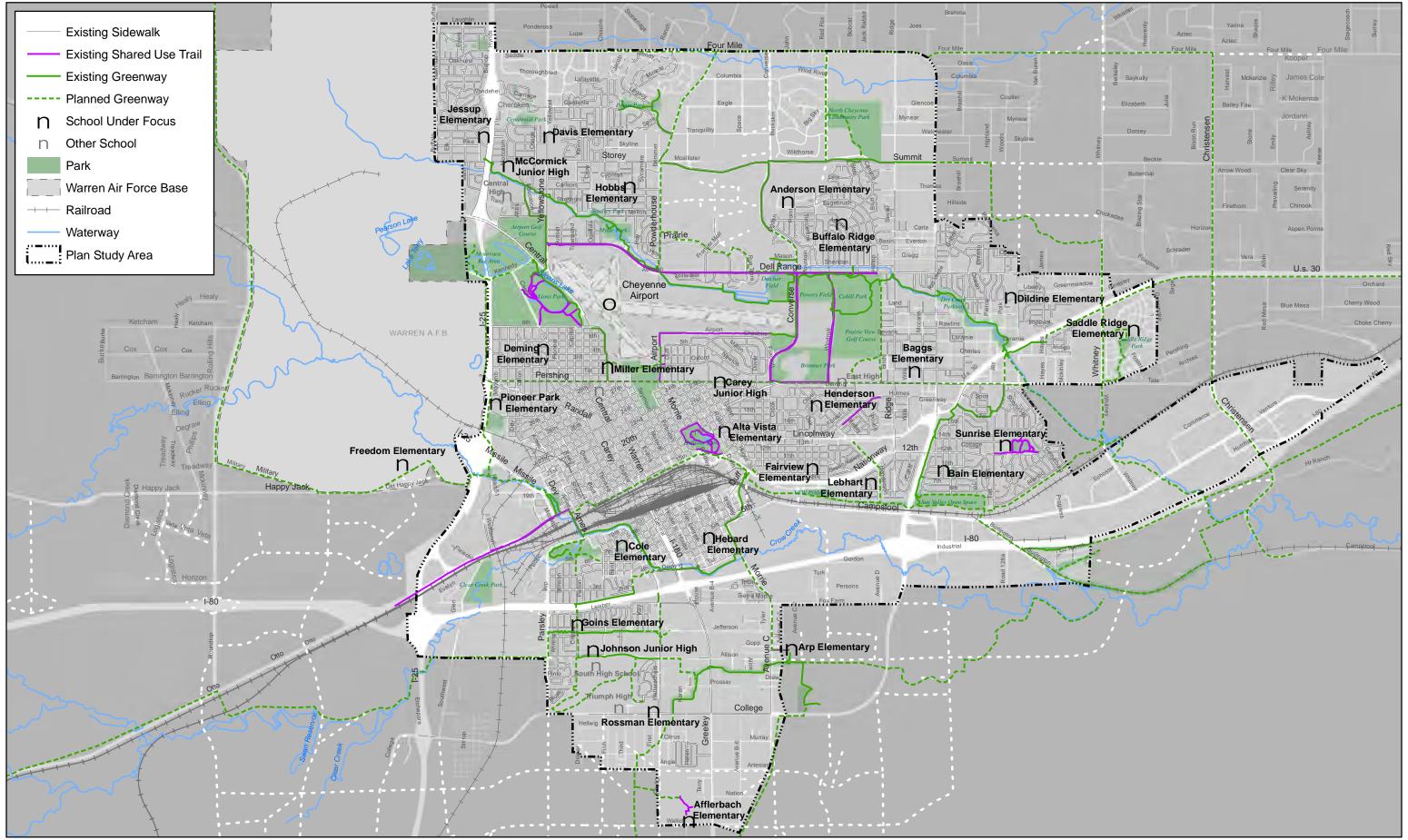
LCSD #1 School Demographics

As of June 2009, LCSD #1 had the following student enrollment:

- 7,025 elementary school students
- 2,761 junior high school students
- 2,833 senior high school students

³ McDonald, N. (2007). Active Transportation to School: Trends among U.S. Schoolchildren, 1969-2001. American Journal of Preventative Medicine. 32(6) 509-516.

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Map 1 - Schools Under Focus

Cheyenne Metropolitan Area
Safe Routes to School Plan
Source: Cheyenne - Laramie County Cooperative GIS Program
Date: August 2010

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During the 2009-2010 school year, the School District reported that over three-quarters of the student body were with, with Hispanic students being the largest minority (see Figure 2).

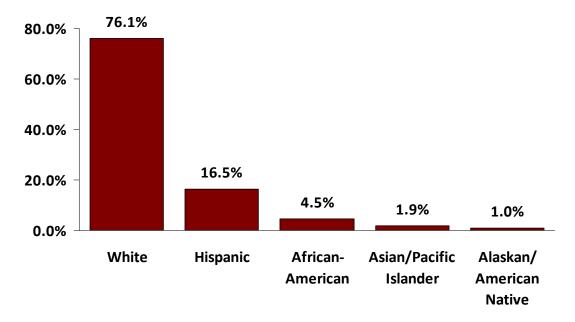


Figure 2. Demographic Distribution of Students in LCSD #1, 2009-2010 School Year

The school district reports that 37 percent of students receive free or reduced lunches, over 3 percent have limited English proficiency, and one-eighth are special education students.

Current School Travel Environment

This section summarizes current travel patterns of LCSD #1 students.

Current Travel Patterns

Kindergarten through eighth grade classrooms were asked to participate in the spring 2009 travel mode data collection project. The results from the 4,758 responses, shown in Figure 3, indicate how students travel to and from school. The in-classroom hand tally travel mode survey results are as follows:

- Walk 16 percent
- Bike 4 percent
- Bus 27 percent
- Family Vehicle 48 percent
- Carpool 2 percent
- Transit (city bus) 0 percent
- Other 2 percent

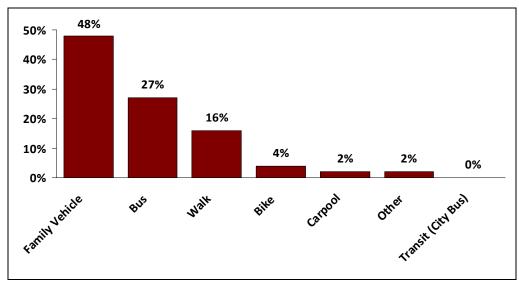


Figure 3. Current School Travel Modes of K-8 Students in LCSD #1, Based on 2009 Travel Mode Data Collection Project

Support During School Travel Times

Parents and volunteers support school staff during school travel times. Paddles displaying "Stop" and high-visibility vests are provided to parents and volunteers who help students cross the streets near schools. Elementary and junior high schools generally have personnel on site 30 minutes prior to and after school to assist in student travel.

Support from Law Enforcement

LCSD #1 and the Cheyenne Police Department currently have a Memorandum of Understanding regarding School Resource Officers (SRO's). Each secondary school has an assigned SRO to provide law enforcement support. Each SRO is also assigned to specific elementary schools where they provide support as necessary. The responsibilities of the SRO's include but are not limited to motor vehicle speed enforcement and student loading zone policy enforcement.

Arrival/Dismissal Procedures

Each of the 27 schools addressed in this Plan have unique arrival and dismissal procedures. There is no district-wide policy regarding student arrival and dismissal.

Parents and students at elementary schools are generally asked to wait until 30 minutes prior to the start of school to be on site. At newly constructed and renovated school sites, the main walking routes to student loading zones and bus loading zones are separated so that major traffic streams do not intersect. Students are taught which doors are open and where to line up at their school. These procedures are dependent on site variables and preferred staff protocols. At older schools within the LCSD system, bike parking areas are typically located inside school playground at the back of the school. Proximity to the main student entrance varies with each school's site plan. Newly constructed and renovated schools place bike parking near the main building entrance.

School dismissal procedures are also site specific. Staff are assigned to monitor the parking lot, bus pick-up, and walking route exits for 15 to 30 minutes, depending on the site size and school population. Bused students congregate at a specific location on the playground and are supervised by school personnel until the last bus pick-up, usually prior to 4:00 PM.

In general, secondary schools assign staff members to supervise the parking lots. The high schools have security camera systems observing the parking lots. Bike parking is located near the main entrance of the building.

School Travel Policies

LCSD #1 addresses bicycle usage in its Elementary School and Junior High School Handbooks:

"Students who ride bicycles to school are not to ride them on the school grounds at any time during the school day. It is the student's responsibility to provide a chain and lock for the bicycle. The school/district is not responsible for lost, stolen or damaged personal items—all should have the student's name on them."

The school district neither encourages nor discourages walking and cycling through any school district policies. There are currently no district-wide policies on pedestrian or bicycle safety, education, or promotion.

School Safety (or 'Hazard') Busing Policies

LCSD #1 addresses busing boundaries and hazard busing in their Board Policies Chapter V Supportive Services (Section 11):

"Following are the minimum distances for bus transportation according to area served. All stated distances are subject to change if walking would subject the students to crossing hazardous areas. The District Safety Committee shall be responsible for reviewing requests for transportation because of hazardous conditions and make recommendations to the Board. A set of criteria for establishing hazardous areas shall be developed by the Safety Committee and made part of administrative regulations.

- Elementary all students living outside a one and one-fourth (1 and 1/4) mile short-path walking distance of the school in their attendance area shall be eligible for transportation.
- Junior high school all students living outside a one and three-fourths (1 and 3/4) mile short-path walking distance of the school in their attendance area shall be eligible for transportation.
- Senior high school all students living outside a two and one-fourth (2 and 1/4) mile short-path walking distance of the school in their attendance area shall be eligible for transportation.
- Students with disabilities in the event that a student's disability is judged to be severe enough to interfere with participation in the regular student transportation program, the student shall receive specialized transportation to and from his home."

Busing students who live outside of a reasonable walking distance is beneficial for congestion reduction; students should be encouraged to walk to the bus stop if they cannot walk or bicycle to school.

Existing Efforts that Promote Healthy and Active Student Activities

LCSD #1 existing programs and policies designed to promote healthy and active student lifestyles are described below.

School Safety Committee

LCSD #1 convenes a School Safety Committee monthly during the school year to address existing school safety concerns and potential solutions. The discussion includes pedestrian and bicycle safety concerns around each school. This group is composed of representatives from the City Engineering Services Office, Laramie County Public Works, WYDOT, Cheyenne Police Department, Laramie County Sheriff's Department, Cheyenne Metropolitan Planning Organization, and various departments within LCSD #1.

Safety Programs

The following are examples of safety programs and activities taking place at LCSD #1 schools:

- Suggested walking route maps are modified by individual school Parent Teacher Organizations, produced, and distributed to parents at the beginning of the school year during open house events. These maps are also included in parent handbooks distributed at registration and open house events. School staff members bring the routes to the attention of students during the first week of school.
- Open houses and parent nights are offered as a venue for addressing parents' safety concerns including traffic and travel safety.
- DARE (Drug Abuse Resistance Education) officers provide bicycle safety training recommendations.
- The schools have access to district-run Safe & Drug-Free Schools and Character Counts programs.

Wellness Policy

LCSD #1 addresses student wellness in their Board Policies Chapter VIII, Section 15 -Health and Safety of Students (Student Physical Activity, Nutrition and Wellness):

"Laramie County School District Number One will establish and utilize a Student Wellness Committee. The Nutrition Services Program Administrator and the Health, Physical Education, Safe and Drug Free Schools Coordinator will co-chair this committee.

Physical education classes and physical activity opportunities will be available for all students.

The District will provide opportunities for staff development on physical activities that will enhance student academic achievement in the classroom.

Students (K-12) should strive to meet the 2005 Guidelines from NASPE:

- Students should accumulate at least 60 minutes, and up to several hours, of age appropriate physical activity on all, or most days of the week.
- Children should participate in several bouts of physical activity lasting 15 minutes or more each day.

- Children should participate each day in a variety of age-appropriate physical activities designed to achieve optimal health, wellness, fitness, and performance benefits.
- District will provide suggested methods of incorporating movement/activity into the classroom."

Wellness Programs

To address the district wellness policy, LCSD #1 administers a number of programs that promote health and wellness among students. Examples of wellness programs at LCSD #1 schools include:

- Annual Walk-A-Thom Fundraiser at Dildine Elementary School
- Before school walking/running program at Deming Elementary School
- Walking program at Sunrise Elementary School

Barriers to Active Transportation

Non-infrastructure Barriers

While the built environment is often the primary reason why students do not walk or bike to school, many non-infrastructure characteristics act as obstacles for active transportation. For example, a school may have a complete sidewalk network with thorough pedestrian safety engineering efforts, but if an important education, enforcement, encouragement, or policy component is missing, the numbers of students walking or biking will be lower than if a comprehensive effort to encourage active transportation was enacted. The non-infrastructure barriers discussed in this memorandum include:

- Parental perceptions about walking and biking
- Enforcement of traffic violations in the school zone
- Time limitations of school administration, teachers, and parents
- In-school programs that encourage walking and biking
- City and District policies related to pedestrian and bicycle safety
- District programs that manage student arrival/dismissal
- District programs that educate and encourage walking and bicycling

| Parental Perceptions about Walking and Biking | | |
|---|--|--|
| Primarily Affects | Potential pedestrians and cyclists | |
| Characterized By | • Weather | |
| | Age of students | |
| | Quality time with students | |
| | • Traffic | |
| | Distance | |
| | "Stranger danger" | |
| Associated With or Challenges Created | Parents decide if the student is ready or able to walk or bike | |
| | Critical mass of students walking or biking will lead to more parents allowing their children to walk and bike to school | |

The 246 teachers who participated in the 2009 Spring Student Travel Mode Survey and 27 participants of the June 2009 Cheyenne Metropolitan Area Safe Routes to School Plan and Pedestrian Plan Community Workshop identified reasons why more students are not walking and biking to school. Each parent or guardian has personal criteria they consider when determining whether or not an environment is considered safe or at what age their student is capable of walking and biking to school. Some of the barriers that parents cited as reasons why they do not allow their student to walk or bike are discussed below:

- Weather Parents may feel as though the weather is too extreme for their student to walk or bike, especially during Cheyenne's very cold and windy winters. In addition, students may not have adequate cold weather or rain gear for their trip to school.
- Age Children are smaller in stature than adults and therefore their visibility to motorists is reduced and their ability to see over obstacles in inhibited. Also, until the age of ten, children have a limited concept of road rules and why they need to exhibit safe behavior. Further, children have both limited cognitive ability and peripheral vision. These limitations increase the difficulty of accurately judging the speed of cars. Because of these and other limitations, parents are protective of their children and can be hesitant to allow them to walk or bike to school.
- Convenience/Quality Time Many parents drop their children off at school on their way to work. Because parents and guardians are busy, they cite the convenience of being able to do "double duty" and take their students to school on the way to work. Further, parents often report feeling that the time in the car on the way to school is quality time with their children.
- Traffic If the route to school is high-speed, high-volume, or without proper facilities, parents can be reluctant to allow students to walk or bike to school. Parents are often concerned that their student does not have a safe route that is separated from motor vehicle traffic.
- **Distance** Even though physical activity is an important component of a healthy lifestyle, parents may feel as though the trip to school is too far. Alternately, parents

- may choose to place their students in a non-neighborhood school and the distance to the school is beyond a walkable or bikeable distance.
- **Fear of Strangers/Abduction** Parents express fear of strangers and abduction as a reason why they do not allow their children to walk or bike to school.

| Time Limitations of School Administration, Teachers, and Parents | | | |
|--|---|--|--|
| Primarily Affects | • | Existing and potential pedestrians and cyclists | |
| Characterized By | • | School administration may not have enough time to focus on policy that encourages walking and biking | |
| | • | Teachers may not have enough time to integrate walking and biking into their classrooms or to volunteer to be a "school champion" – someone who supports and sustains the walking and biking efforts | |
| | • | Parents may not have enough time to walk or bike with their students or to volunteer for events that encourage walking and biking | |
| Associated With or Challenges Created | • | Little adult coordination of activities that educate and encourage students to walk and bike to school | |

Today's school administrators, teachers, and parents are busy, and they may have limited time for volunteering. Busy schedules make it more difficult for parents to walk and bicycle with their children to school or volunteer for SR2S activities. Time constraints can include a lack of time for anything outside of the required curriculum. The result is that school administrators may not prioritize policy that encourages walking and biking to school. Further, teachers may not have the time to coordinate encouragement or education programs that promote active transportation. The result is a need for adult supervisors and coordinators for Safe Routes to School activities.

| Enforcement of Traffic Violations in the School Zone | | |
|--|--|--|
| Primarily Affects | Existing and potential pedestrians and cyclists | |
| Characterized By | Speeding traffic | |
| | Motorists not yielding to pedestrians | |
| | Distracted drivers and unsafe motorist behavior | |
| Associated With or | Increased risk of conflicts for students who walk and bike | |
| Challenges Created | Can increase the risk of pedestrian and motorist crashes | |

Teachers surveyed in the planning process expressed concerns for the perceived lack of enforcement of traffic violations in School Zones and along suggested walking and biking routes to school. Police departments all over the country are facing reduced budgets and personnel. While a priority location for traffic enforcement, School Zones are numerous and resources must be spread thinly. Also, parents picking up or dropping off students cause much of the congestion near a school, and many of them may be violators of traffic laws in the School Zone. All of these factors contribute to inadequate enforcement of traffic

laws in the School Zone. Because of the lack of enforcement, parents may not feel as though students have a safe environment to walk or bike to school.

| City and District Policies that affect Pedestrian and Bicycle Safety | | |
|--|--|--|
| Primarily Affects | Existing and potential pedestrians and cyclists | |
| Characterized By | Policy that does not specifically encourage walking and biking | |
| Associated With or Challenges Created | A transportation system where the motor vehicle is the primary focus | |

The Project Team reviewed the following documents in order to identify policies and guidelines pertaining to pedestrians and bicycles:

- LCSD #1 School Transportation Policies
- PlanCheyenne: Cheyenne Area Transportation Master Plan
- 2007 City of Cheyenne Road, Street & Site Planning Design Standards
- Cheyenne Municipal Code
- Laramie County Comprehensive Plan

While many of these documents do not explicitly prohibit or encourage pedestrian and bicycle use in Cheyenne, they include specific policies and standards that affect the safety and experience of pedestrians and bicyclists.

LCSD #1 School Transportation Policies

There are currently no district-wide policies on pedestrian or bicycle safety, education, or promotion.

PlanCheyenne: Cheyenne Area Transportation Master Plan

The transportation component of PlanCheyenne, the Cheyenne Area Transportation Master Plan, recognizes the importance of addressing the safety and mobility needs of bicyclists and pedestrians. The plan assesses the needs of these road users and sets out a vision for creating a more balanced transportation system.

Transportation Master Plan - Chapter 4: Needs Assessment - Bicycle Needs

The bicycle is a healthy and viable alternative to the automobile for many trips. It can also play an important role in helping the city to reduce congestion, improve air quality, improve the overall health of Cheyenne Area citizens, and develop a more balanced transportation system. Cheyenne has recently indicated the importance of bicycle travel with the adoption of new bicycle-friendly street standards. These standards designate bike lanes on all roadways as they are built or re-built, where appropriate.

The plan discusses the needs of bicyclists in the following categories: safety and convenience, connections to recreational paths and trails, connections between destinations, route options, signage, bicycle parking, intermodal connections, and ancillary facilities, and well as potential future demand.

Transportation Master Plan - Chapter 4: Needs Assessment - Pedestrian Needs

Walking is an essential part of daily activities, whether it is trips to work, shop, school, or play. Often pedestrian facilities are overlooked or merely added onto street improvement projects. To preserve and enhance the quality of life in the urbanized areas of Cheyenne, consistent maintenance of the existing pedestrian system and additional facilities are needed.

Cheyenne's new street standards require detached sidewalks on all new roadways.

Whereas it is not critical for routes to schools to be picturesque and visually captivating, students have basic pedestrian needs, including a safe and secure continuous sidewalk with safe street crossings and direct connections to neighborhoods. ... Additionally, as new schools are built, walking routes should be established.

The pedestrian needs assessment emphasizes the need for pedestrian improvements in pedestrian districts, in mixed-use commercial activity centers, near schools, and along transit corridors.

Transportation Master Plan – Chapter 5: Transportation Vision Plan – Bicycle Vision Plan

As defined in the City's new street standards, all roadway improvements in the 2030 Roadway Vision Plan will include construction of separate bike facilities.

In addition to prioritizing separate bike facilities as part of all roadway improvements, the vision plan addresses connecting missing links, making system enhancements – including signage, parking, and ancillary facilities, and creating and distributing bicycle maps.

Transportation Master Plan – Chapter 5: Transportation Vision Plan – Pedestrian Vision Plan

As roadway facilities are improved and infill development occurs, improvements to the pedestrian facilities should be included in these efforts. Furthermore, as growth occurs in undeveloped areas, steps should be taken to ensure that development is planned to accommodate pedestrian travel.

This transportation plan does not propose installation of sidewalks throughout the City within all neighborhoods, as the pedestrian demand is not warranted and the cost for such installation would be high. Rather, this plan suggests that neighborhood self evaluations be proposed where specific connections between residential areas and important destinations, such as schools, parks, and commercial centers might warrant pedestrian improvements.

The Pedestrian Vision Plan emphasizes good pedestrian design and states that improvements are not needed in all areas. Sidewalks are prioritized where important connections exist, including links between neighborhoods and schools.

City of Chevenne Road, Street & Site Planning Design Standards

The road and street design standards provide guidance on pedestrian amenities for sidewalks, internal circulation patterns in larger planned sites and pedestrian friendly intersection treatments.

Chapter 7—Site Planning

7.4 PEDESTRIAN FLOWS

Development plans **should** include site amenities that enhance safety and convenience and promote walking or bicycling as alternative means of transportation. Site amenities may include bike racks, drinking fountains, canopies and benches.

8.5 SITE DESIGNS GENERAL CONNECTIVITY REQUIREMENTS

Safe and convenient pedestrian access from the development site **should** be provided to existing designated trails or Greenways located on or adjacent to the development site.

On-site connections should be made at points necessary to provide direct pedestrian travel from the development to major pedestrian destinations located within the adjacent neighborhood(s), including but not limited to parks, schools, commercial districts, and transit stops.

8.7 PEDESTRIAN CROSSINGS AT HIGH-USE PEDESTRIAN AREAS

The greater the number of lanes that a pedestrian must cross, the greater is the pedestrian's exposure to vehicles. In addition, wider streets tend to carry higher volumes of traffic and higher-speeds. Intersections crossing multiple lanes require pedestrian enhancements. If it is determined that the traffic demand warrants additional through or turn lanes, then pedestrian mobility should be evaluated to determine whether additional pedestrian enhancements should be required to offset the traffic impacts on the pedestrian. The following are key intersection street crossing design elements that should be considered in the guidelines for designing intersections.

Mid-block crossings should be provided where there is an existing or potential pedestrian demand to cross at higher volume roadways or streets where crossings are greater than 800 feet. Ideally, these crossings should be accommodated with a refuge island. Center crossing islands allow the pedestrian to deal with only one direction of traffic at a time and enable them to stop partway across the street and wait for an adequate gap in traffic before crossing the second half of the street.

These policies are intended to enhance the safety and convenience of walking and bicycling.

Chapter 8—Sidewalks

8.1 PREFACE

Sidewalks are integral to the transportation system. Sidewalks shall at least be provided along all streets used for pedestrian access to schools, parks, and shopping areas.

8.2 RESPONSIBILITIES

The builder on the lot is responsible for sidewalk construction. Where sidewalks are not directly related to a lot, the construction of sidewalks is the responsibility of the developer. A certificate of occupancy will not be issued until sidewalks required by the approved site plan are constructed and approved.

The 2007 City of Cheyenne Road, Street & Site Planning Design Standards prioritizes sidewalks as integral to the transportation system. The language indicates that sidewalks "shall at least be provided along all streets used for pedestrian access to schools, parks, and shopping areas." Further, the standards indicate that sidewalks "shall be provided for any portion of a site which abuts a roadway." Because sidewalks are constructed concurrently with site development, there is the potential for gaps in the sidewalk network. Sidewalk maintenance is the responsibility of the adjacent property owner, which can lead to variations in sidewalk quality and upkeep.

Chapter 11—Construction Zones

11.1 PREFACE

This Chapter establishes the minimum standards to be used for the protection of the public and of workers during periods when repair or construction necessitates the partial or complete closure of public streets.

Construction or repairs in the street often create hazardous conditions, which can result in traffic accidents if proper precautions are not taken. Good traffic control around work hazards in the street are deterrents to such accidents.

The average motorist understands standard traffic-control practices presented in the Manual on Uniform Traffic Control Devices (MUTCD). Control of traffic in construction areas should utilize and be based on the MUTCD. When situations of unusual difficulty are anticipated, the City Engineer or the Director of Public Works should be consulted before construction begins.

Because design standards specify that control of traffic in construction areas should be based on the MUTCD, the needs and control of pedestrians and bicyclists should be addressed in construction projects. The Road, Street & Site Planning Design Standards document does not explicitly address the needs and control of pedestrians and bicyclists with respect to construction projects.

The standards described above are in agreement with the 2002 Laramie County Road, Street, and Site Planning Design Standards.

Cheyenne Municipal Code - Chapter 10.80 BICYCLES

The Cheyenne Municipal Code bans bicycling on sidewalks within business districts and requires licenses. The municipal code does not address pedestrian behavior.

10.80.060 Riding on sidewalks

- A. No person shall ride a bicycle upon a sidewalk within a business district.
- B. Whenever any person is riding a bicycle upon a sidewalk, such person shall yield the right-of-way to any pedestrian and shall give audible signal before overtaking and passing such pedestrian. (2001 In-house code \int 28-229)

Municipal code 10.80.060 addresses bicyclist behavior but does not make any special considerations with respect to younger bicyclists. Young bicyclists are more likely to ride on sidewalks for safety and may be specifically directed by their parents, teachers, and other adults to ride only on the sidewalk.

10.80.090 License required

No person who resides within this city shall ride or propel a bicycle on any street or upon any public path set aside for the exclusive use of bicycles unless such bicycle has been licensed and a license plate is attached thereto as provided under this chapter. (2001 In-house code $\int 28-237$)

Municipal code 10.80.090 requires bikes to have licenses. Requiring a license can be a disincentive for bicycle use by children because of licensing fees and necessary paperwork.

Laramie County Comprehensive Plan

The Laramie County Comprehensive Plan addresses bicyclists and pedestrians in its Transportation Goals and Policies:

7.3 Transportation Goals and Policies

GOAL: To provide and maintain a convenient, safe and cost-effective transportation network throughout the County.

Policy 1

Promote and maintain an efficient and convenient transportation network including streets, roads, bike and pedestrian ways, and transit where appropriate.

Policy 8

Ensure that streets in residential areas are designed to discourage "through traffic" but allow sufficient connections with adjacent neighborhoods and with the regional road system.

These policies prioritize efficient movement and connectivity for all modes. Discouraging "through traffic" in residential areas can reduce auto traffic and improve safety for pedestrians and bicyclists.

| District Programs that Manage Student Arrival/Dismissal | | |
|---|--|--|
| Primarily Affects | Existing and potential motorists, pedestrians and cyclists | |
| Characterized By | • Lack of district programs that manage commotion that surrounds the beginning and end of the school day | |
| Associated With or Challenges Created | Miscommunication and chaos during the arrival/dismissal periods of the school day | |
| | Students can be endangered by chaos and driver behavior during arrival/dismissal, which may reduce walking and bicycling rates | |

LCSD #1 does not currently have any district-wide initiatives that manage safe student arrival and dismissal from school. Examples of programs in reduce congestion surrounding the school during these high traffic periods include:

- Student and parent safety patrol (to help students cross the street)
- Walking School Buses
- Bike Trains
- Neighborhood Watch programs
- Valet/escort services (to help students being dropped off cross the street)

These programs would encourage students to walk and bike more often to school and reduce congestion around the school during high traffic periods.

| District Programs that Educate and Encourage Walking and Bicycling | | |
|--|---|--|
| Primarily Affects | Existing and potential pedestrians and cyclists | |
| Characterized By | Lack of district programs that educate students about safe pedestrian and bicycle behavior Lack of district programs that encourage walking and biking to school | |
| Associated With or Challenges Created | A transportation system where the motor vehicle is the primary focus | |

LCSD #1 does not currently have any district-wide programs in place to educate students about pedestrian or bicycle safety. Safety education programs have been successfully implemented as components of Safe Routes to School programs across the country. Pedestrian education discusses why people walk, identifies the safest crossing locations, and considers why and how to communicate with motor vehicle drivers. Bicycle safety education may include in-classroom and on-bike training, in which students learn the rules of the road and other skills training.

Encouragement programs help create an environment where walking and bicycling to school is a fun and accepted form of transportation. Encouragement programs can include walking school buses, bike trains, Walk and Bike to School days, Walk across Cheyenne, or friendly competitions such as the Golden Sneaker Award.

Infrastructure Barriers

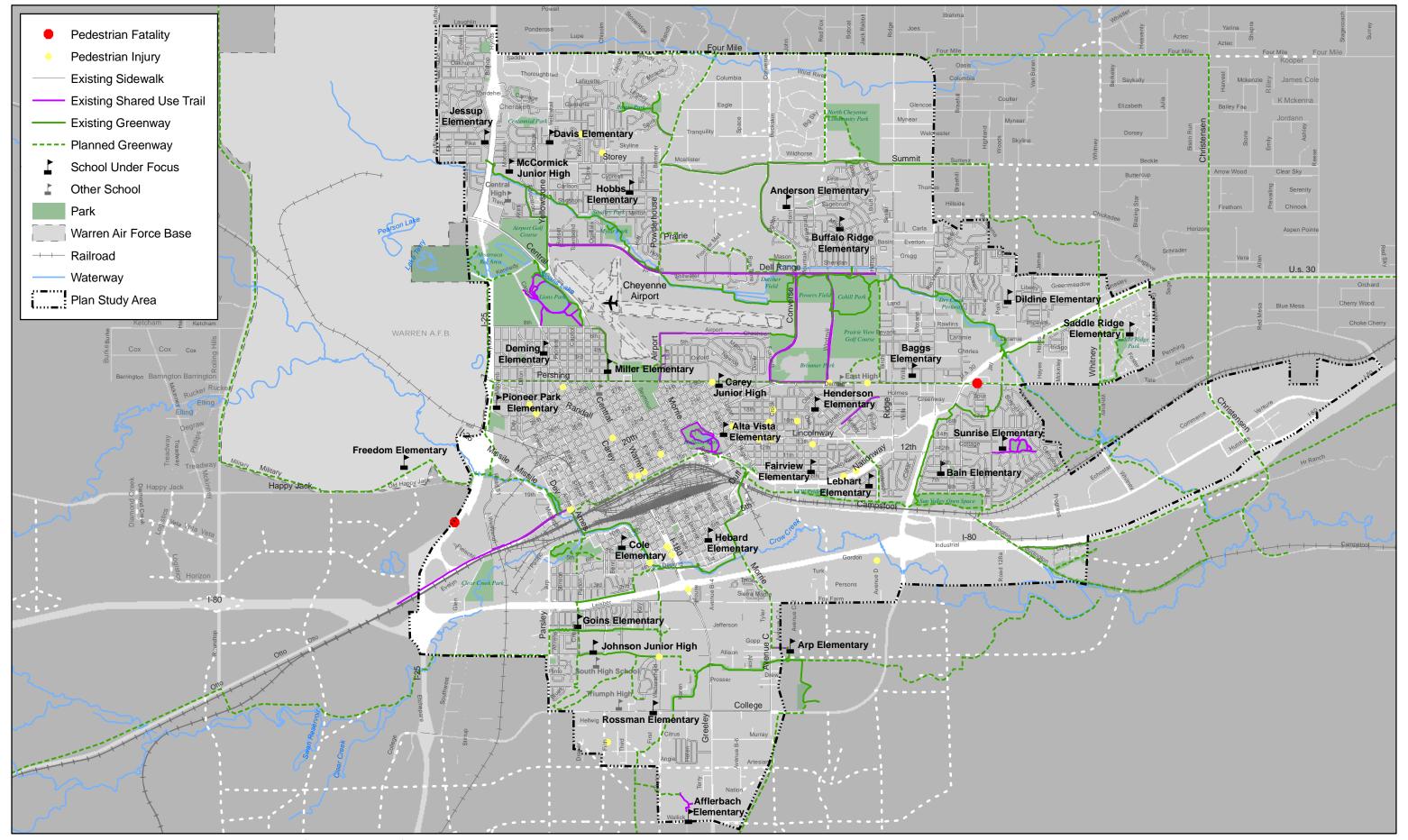
This section describes physical infrastructure barriers observed in LCSD #1. These barriers may be overcome or reduced through modifications to the physical environment (e.g., additions of signage, channelization of pedestrian traffic to mid-block crossings, or modification of pick-up and drop-off zones). This section defines the specific types of barriers and then presents an analysis of barriers affecting each of the 27 schools under focus.

The physical barriers discussed in the subsequent pages are defined based on the following categories:

- Traffic Crashes within Two Miles of the School Over the Last Three Years
- Missing or Substandard Walkways (Sidewalks and Paths)
- Lack of Safe Bike Routes to School
- Unsafe Street Crossings and Intersections
- A Major Roadway or Expressway Divides the School from Residential Areas
- Lack of Accessibility
- Distance to School is Too Far
- Bike Parking at School is Missing, Insufficient or Non-Secure
- Dangerous Driving and Speeding on Streets
- Drop-off and Pick-up Process Creates Congestion and Unsafe Behaviors

| Traffic Crashes within Two Miles of the School over the Last Three Years | | |
|--|---|--|
| Primarily Affects | Existing and potential cyclists and pedestrians | |
| | Motorists | |
| Characterized By | One or more fatal crashes within two miles of the school | |
| | Three or more non-fatal crashes within two miles of the school | |
| | Two or more crashes in the same location within two miles of the school | |
| Associated With or Challenges Created | Unsafe walking conditions | |
| | Problematic intersections or crossings | |
| | Parents do not encourage walking or biking due to traffic safety concerns | |

Traffic crashes (Map 2) usually occur at intersections, and several crashes often occur along the same street. Crashes involving pedestrians indicate locations where intersections, crossings, or other traffic conditions do not adequately provide for pedestrians or bicyclists. Children are particularly vulnerable at problem locations because they tend to make erratic or sudden movements and may dart across a street without ensuring their own safety.



Map 2 - Pedestrian Related Crashes (2005 - 2007)
Cheyenne Metropolitan Area

Safe Routes to School Plan

Source: Cheyenne - Lara Date: August 2010







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Areas where crashes have occurred can benefit from traffic calming or other treatments that clearly define pedestrian space to cross and provide good visibility and allow adequate time for the pedestrian to cross.

Certain caveats should be clearly understood when interpreting crash data. First, bicycle and pedestrian crashes are generally considered to be significantly under-reported worldwide, particularly for crashes that do not result in serious injury. In Cheyenne, crashes that resulted in less than \$1,000 worth of damage were not reported (changed from \$500 in July 1999). In general, many crashes involving pedestrians or bicyclists do not result in significant monetary damage, due to the lower vehicular costs and slower speeds that result in less traumatic crashes. Therefore, if a school area did not experience a crash over these three years it is incorrect to infer that people are not bicycling or walking or that there are no hazards at the school. Second, in absence of bicycle, pedestrian, and vehicle counts, there is no way to measure "exposure" to crashes. For example, consider two streets that experienced the same number of crashes but different levels of walking. The street with significant foot traffic is likely to be less dangerous than the street that experienced the same number of crashes despite having less pedestrian traffic.

| Missing or Substandard Walkways (Sidewalks and Paths) | | |
|---|---|--|
| Primarily Affects | • | Existing and Potential Pedestrians |
| Characterized By | • | Missing walkway |
| | • | Insufficient width (generally defined as less than five feet of clear space) |
| | • | Sidewalks attached adjacent to arterials |
| | • | Poor surface conditions (e.g., cracking, crumbling, or heaving) |
| | • | Narrow sidewalks with rollover curbs that serve as splash guards or parking space |
| | • | Insufficient drainage (e.g., walkways collect water during storm events, ponding water can freeze and create a slippery surface) |
| | • | Construction activity |
| Associated With or Challenges Created | • | Challenging travel conditions, especially for pedestrians with physical disabilities |
| | • | Deters walking by reducing the attractiveness, comfort and usability of facilities |
| | • | Can increase the risk of pedestrian and motorist crashes as pedestrians detour around walkway gaps or travel in the roadway itself |
| | • | Lower levels of walking activity |

Walkways most commonly consist of sidewalks and shared use paths, described below.

Sidewalks are typically concrete and separated from the roadway by a curb and gutter. Sidewalks are a common application in urban and suburban environments, but are less common in rural areas and environments where objections to the "urban" aesthetic of sidewalks often arise. In more rural areas pedestrian travel commonly occurs along the shoulder of the roadway, or on sidewalks or asphalt paths adjacent to the roadway.

The Through Passage Zone is the sidewalk area intended for pedestrian travel (shown in Figure 4). This zone should be entirely free of

minimum of four feet in constrained areas (not recommended within one mile of a school). In areas with significant pedestrian traffic such as downtown Chevenne, sidewalks should be at least six feet wide.

This width enables two pedestrians (including wheelchair users) to walk side-by-side or to pass each other comfortably and allows two pedestrians to pass a third pedestrian without leaving the sidewalk.

Alternatives to sidewalks in rural areas include pedestrian paths separated from the roadway by a borrow ditch (to serve drainage purposes) or traffic-calming measures on low-volume streets

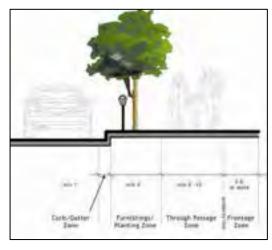


Figure 4. Zones in the sidewalk corridor

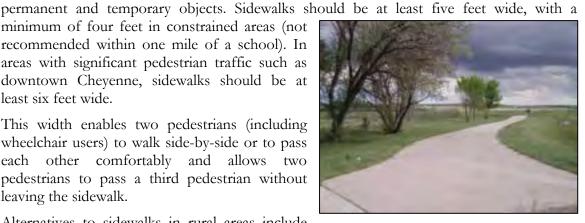


Figure 5. Chevenne's Greenway system contributes to a complete and cohesive pedestrian system in many areas

where pedestrians share the road with motorists. Shared use paths (also referred to as multiuse paths, sidepaths or Greenways) are often viewed as recreational facilities, but they can also serve an important function as a walking and bicycling corridor to school (Figure 5). Shared use paths serve both bicyclists and pedestrians and generally provide additional width over a standard sidewalk or pedestrian path. These facilities may be constructed adjacent to roads, through parks or open space areas, along creeks, or along linear corridors such as abandoned railroad lines.

Regardless of type, walkways constructed adjacent to roadways should have some type of vertical (e.g., curb or barrier) or horizontal (e.g., landscaped strip) buffer separating the path area from adjacent travel lanes. Shared use paths should have a minimum width of eight feet (if serving as a multi-use facility) or five feet if serving pedestrians only. Regional trails that accommodate significant non-motorized traffic and several user types (e.g., walking, bicycling, running, in-line skating, dog walking, etc.) should be at least 10 feet in width.

A complete and accessible sidewalk network is an important part of enabling students to walk and bike to school (Figure 6). The sidewalk becomes an essential component of the trip to school if a student's route is on a high-volume or fast-moving roadway. Teachers who participated in the planning process expressed concern about the impact of sidewalk obstructions on students' safety.

If a walkway is obstructed by overgrown vegetation or snow and ice, it becomes hazardous for students to walk on the sidewalk. People in wheelchairs are affected by even minor obstructions on a sidewalk (Figure 7). If the sidewalk is blocked, students may then be forced to walk in the road, increasing their chances of being involved in a crash with motor vehicle traffic. Many young students also ride bicycles on sidewalks instead of on a road or trail. Access to bicycling may also be affected if physical obstructions encroach on the usable area of the sidewalk. In Cheyenne, adjacent property owners are responsible for keeping sidewalks clear of vegetation, snow and ice.



Figure 6. A well-designed sidewalk provides sufficient pedestrian space, and amenities such as street trees, lights, trash cans, and a planter zone



Figure 7. Overgrown vegetation impedes pedestrian travel on sidewalks

Participants of the June 2009 Cheyenne Metropolitan Area Safe Routes to School Plan and Pedestrian Plan Community Workshop communicated that proper sidewalk maintenance was a way to encourage more walking and biking.

| Lack of Safe Bike Routes to School | | |
|---------------------------------------|--|--|
| Primarily Affects | Existing and potential bicyclists | |
| Characterized By | Missing walkway or bikeway | |
| | Higher-speed and volume streets without dedicated bicycle facilities (more than 25 mph or 3,000 ADT) shown on Maps 3 and 4 | |
| | • Insufficient width of shared facility (e.g., narrower than 5 foot minimum sidewalk width where cyclists sharing with pedestrians or 10 foot minimum shared use path width) | |
| | Poor surface conditions (e.g., cracking, crumbling, or heaving) | |
| | Insufficient drainage (e.g., walkways collect water during storm events and create pudding or pounding while freezing conditions can create slippery surfaces) | |
| | Low visibility | |
| Associated With or Challenges Created | • Challenging travel conditions, especially for less experienced cyclists and children | |
| | Increased risk of bicycle and motor vehicle crashes | |
| | Increased risk of bicycle and pedestrian conflicts | |
| | Lower levels of bicycling activity | |

Many children under the age of 16 are unfamiliar with operating any type of vehicle on a road and may be nervous about riding in a street with cars. Many younger children use sidewalks for riding to schools or parks, which is acceptable in areas where pedestrian volumes are low and driveway visibility is high. Where on-street parking and/or landscaping obscures drivers' visibility, sidewalk riders may be exposed to a higher incidence of crashes. Sidewalk riding also increases conflicts with pedestrians.

Older children (12 years or older) who consistently ride at speeds over ten miles per hour should be directed to ride on-street wherever



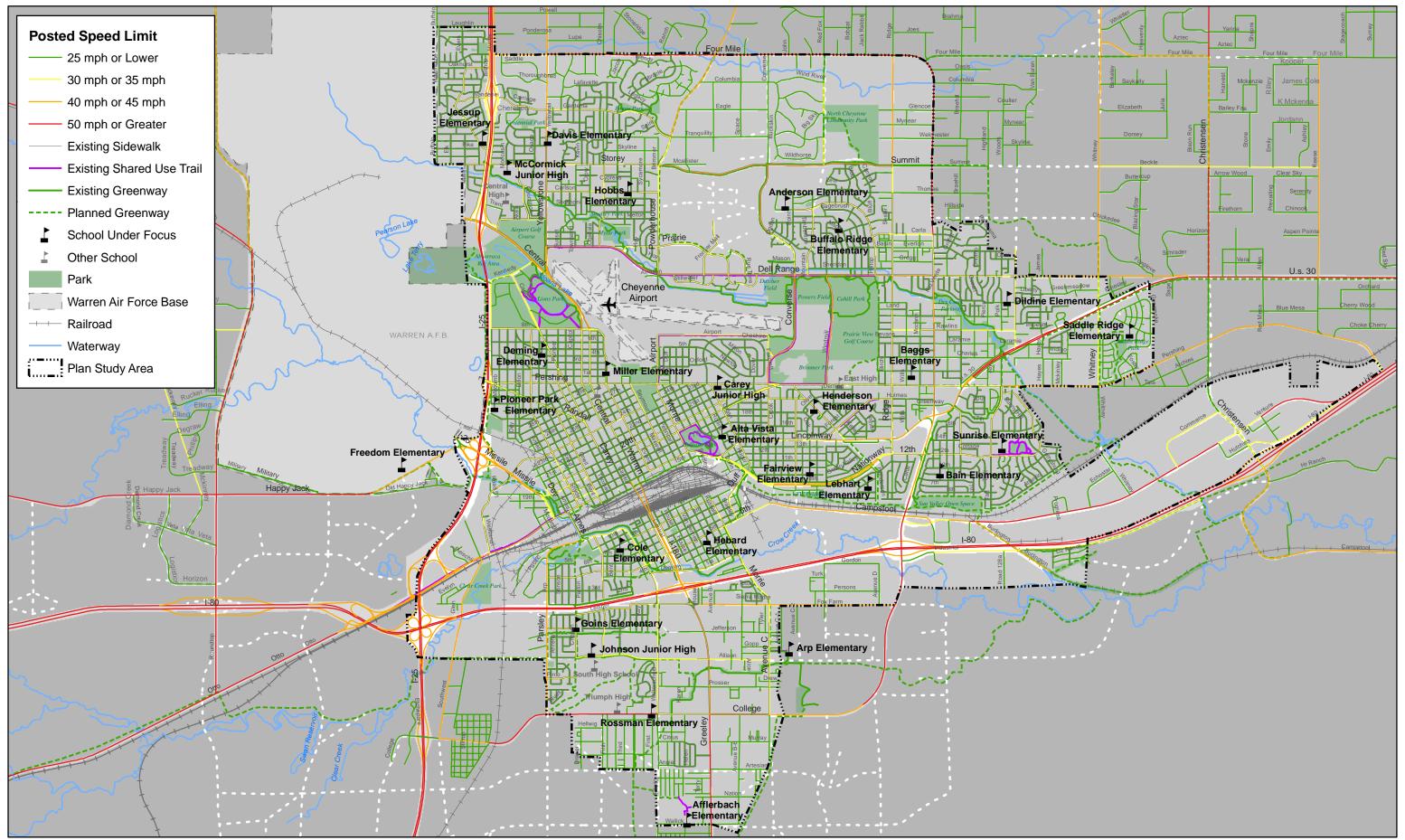
Figure 8. Younger bicyclists benefit from low traffic speeds and volumes

possible. On-street bicycle facilities appropriate for younger or inexperienced bicyclists include Bicycle Boulevards or bike routes on low-speed and low-volume streets (Figure 8). Streets should be clearly marked such that drivers are aware of bicyclists in the roadway, and protected crossings of larger roadways (e.g., arterials) should be provided. Children often ride the wrong way on-street in Cheyenne, indicating the need for safety education. This

behavior can lead to conflicts with drivers as well as encouraging unsafe bicycling habits later in life.

Student bicyclists will benefit from route markers, bike paths, bike lanes on low-speed streets, neighborhood routes, traffic calming, wider curb lanes, and educational programs. Casual bicyclists will also benefit from marked routes that lead to parks, schools, shopping areas, and other destinations. To encourage youth to ride, routes must not have substantial auto traffic volumes or speeds, and otherwise be safe enough for parents to allow youth to ride. An appropriate treatment is Bicycle Boulevards, which are lower speed and volume streets that are enhanced to promote bicycle travel through applications such as traffic calming and pavement markings are appropriate treatments at these locations.

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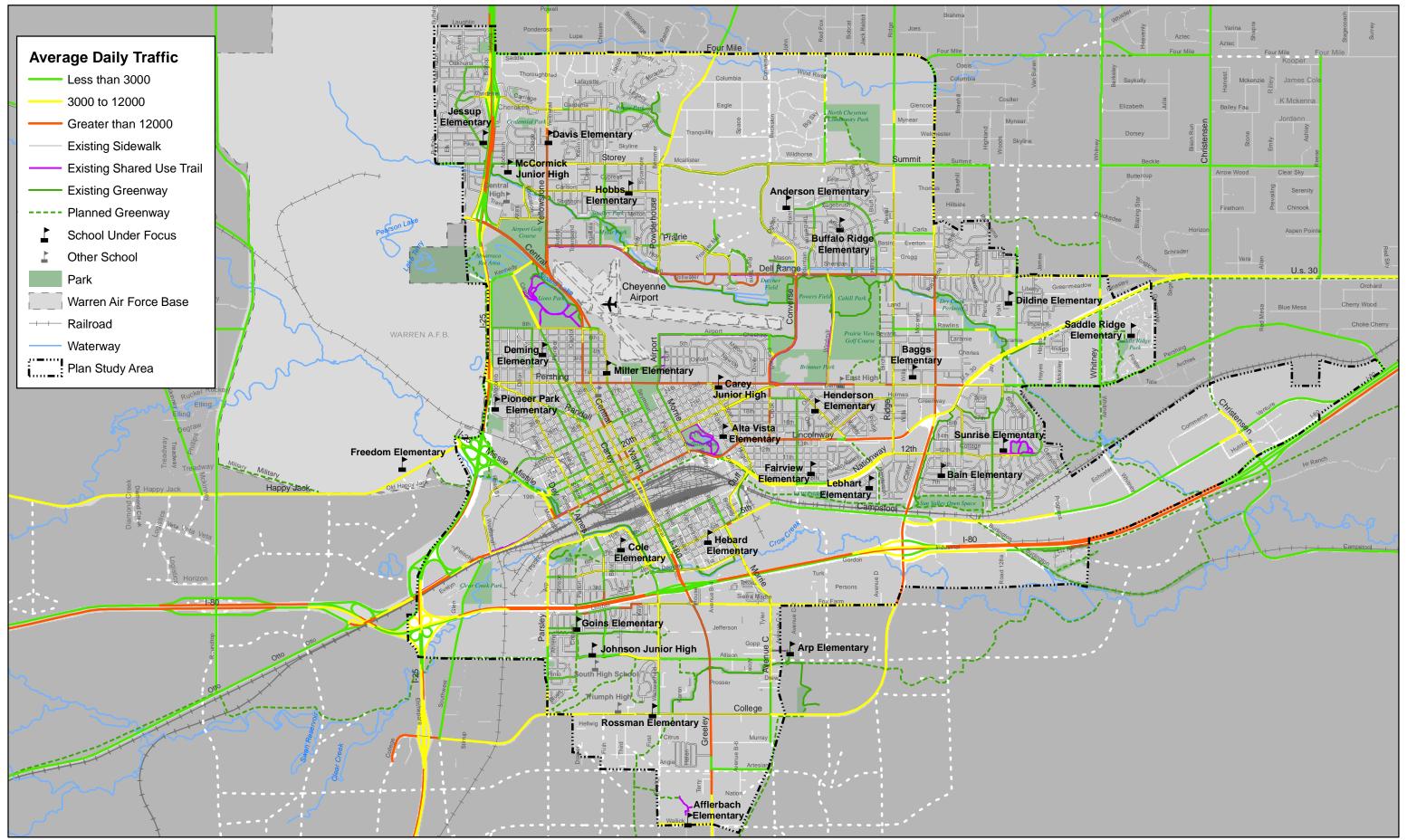
Map 3 - Posted Roadway Speed

Cheyenne Metropolitan Area
Safe Routes to School Plan
Source: Cheyenne - Laramie County Cooperative GIS Program
Date: August 2010





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Map 4 - Average Daily Roadway Traffic

Cheyenne Metropolitan Area
Safe Routes to School Plan
Source: Cheyenne - Laramie County Cooperative GIS Program
Date: August 2010



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| Unsafe Street Crossings and Intersections | | |
|---|---|--|
| Primarily Affects | Existing and potential pedestrians and cyclists | |
| Characterized By | Poor visibility | |
| | Higher-speed/volume roads | |
| | Insufficient or missing pedestrian crossing infrastructure (e.g., faded crosswalks, missing pedestrian signage) | |
| | Lack of accessibility provisions | |
| Associated With or Challenges Created | Discomfort during pedestrian or bicycle crossing | |
| | Increased risk of crashes and 'near misses' | |

Increasing the visibility of pedestrians and bicyclists at intersections and crossings is particularly crucial to student safety. Where drivers cannot see pedestrians or crossing treatments, they may not slow down to take a turn or to yield to a pedestrian in a walkway (see Figure 9). Younger students may run into traffic or otherwise disobey traffic control devices if they are not clear. Treatments specific to school routes should have high visibility crosswalks with pedestrian push buttons at signalized intersections (Figure 10). These can include in-pavement flashers, signage, warning flashers, and other treatments. Street corners should have ADA-accessible curb ramps.

School crosswalks denote the preferred location for children to cross the street. Crosswalks should be marked:

- At all intersections on established routes to school
- Where there is substantial conflict between motorists, bicyclists, and pedestrian movements
- Where students are encouraged to cross between intersections, or
- Where students would not otherwise recognize the proper place to cross



Figure 9. Faded crosswalks can be hazardous to pedestrians



Figure 10. Well-marked crosswalk with pedestrian push-button

The SLOW SCHOOL XING marking is commonly used in advance of uncontrolled school crosswalks. The MUTCD and the WYDOT Pedestrian and School Traffic Control Manual provide guidance on the use of crosswalks as well as stop lines, yield lines, curb markings, and other symbol markings.

Because pedestrians tend to follow the most direct route to their destinations, substantial demand for mid-block crossings may exist. Pedestrians are generally unwilling to walk more than 500 feet between intersections. By channeling pedestrians to a preferred crossing location, mid-block crosswalks can enhance pedestrian safety. Locations where a large number of pedestrians currently cross without a marked crossing especially benefit from a mid-block crossing treatment.

Appropriate locations for midblock crossings should be carefully selected, especially on multi-lane (four or more lanes) roads with heavy traffic volumes (generally greater than 12,000 ADT). Mid-block crossings can include pedestrian refuge islands, which allow a twostage crossing. Pedestrian refuge islands minimize pedestrian exposure at crossing by shortening the crossing distance and increasing the number of available gaps for crossing. Refuge islands also allow pedestrians to make a crossing in multiple stages by focusing on one direction of traffic at a time.

It is important to note that improper maintenance of sidewalks, crosswalks, and signals can be a hazard to those using the facilities. Because of the smaller percentage of users (in comparison to motorists), it is possible for the maintenance of these facilities to be less of a priority when a municipality is faced with restricted funds.

Cracked and broken sidewalks, faded pavement markings, and improperly timed signals that do not give pedestrians adequate crossing time are examples of improperly maintained infrastructure. Improperly maintained facilities can be particular barrier to students walking a biking to school. Participants of the June 2009 Cheyenne Metropolitan Area Safe Routes to School Plan and Pedestrian Plan Community Workshop communicated that proper maintenance of signals and crosswalks was a way to encourage more walking and biking.

| A Major Roadway or Expressway Divides the School from Residential Areas | | |
|---|--|--|
| Primarily Affects | Existing and potential pedestrians and cyclists | |
| Characterized By | • Presence of high-speed, multi-lane, or limited-access road bisecting the school enrollment boundaries | |
| Associated With or Challenges Created | May require significant out-of-direction travel to reach a safe crossing | |
| | Significant reduction or complete elimination of bicycle and pedestrian travel from the residential area | |
| | Increased risk of motor vehicle/pedestrian/cyclist collisions | |

Many barriers to walking or cycling to school in LCSD #1 have already been minimized by school catchment areas that are defined by large physical boundaries such as highways (e.g., Saddle Ridge Elementary) or by pairing elementary schools and busing children from one school to the other (e.g., Lebhart and Fairview Elementary Schools). Where this is not already the case, this type of catchment policy should be encouraged.



Figure 11. Bicycle/pedestrian overcrossing of I-180

Major roadways can be challenging for students to cross because of high speeds and motor vehicle volumes, few gaps in traffic, barriers (e.g., median barriers that make crossing physically impossible) and longer blocks between protected crossings. Nationway, I-180 and Greeley Highway are examples of major streets that act as barriers to walking or cycling.

Even where protected crossings exist, cyclists and pedestrians will likely have long wait times that interrupt their travel. These longer wait times could encourage younger students or those running late to disobey traffic guides, particularly where the guides are not clear. Grade-separated crossings can create safer crossing conditions but incur larger construction and maintenance costs. Grade-separated crossings (Figure 11) can also require significant out-of-direction travel, which can be a deterrent to walking and cycling to school.

| Lack of Accessibility | | |
|--|---|---|
| Primarily Affects | • | Students with disabilities, younger students |
| Characterized By | • | Walkways without smooth travel surfaces |
| | • | Walkways less than five feet wide |
| | • | Walkways lacking curb ramps at corners |
| | • | Walkways with a significant slope |
| | • | Driveways or curb ramps with a significant vertical travel distance (e.g., a driveway with a three inch lip would create a significant vertical challenge to a pedestrian with a physical impairment) |
| Associated With or Challenges Created | • | An area may be completely inaccessible, dependant on the accessibility limits and level of impairment among users |

People with mobility impairments range from those who use wheelchairs, crutches, canes, orthotics, and prosthetic devices, to those who have difficulty when walking long distances, on non-level surfaces, or on steep grades. Curb ramps are particularly important to people with mobility impairments (Figure 12). Prosthesis users often move slowly and can have difficulty with steep grades or cross slopes.

Children and many older adults may not suffer from mobility impairments, but should be given additional consideration based on their level of mental and physical capacity.

Design treatments that increase accessibility include curb ramps, slower motor vehicle travel speeds, a network of complete sidewalks and

Figure 12. Curb ramps with steep grades, and/or poor maintenance can render a sidewalk inaccessible to a pedestrian in a wheelchair

walkways, longer crossing times at signals, and enhanced signing to increase driver awareness.

| Distance to School is Too Far | | | |
|---------------------------------------|---|--|--|
| Primarily Affects | Existing and potential pedestrians and cyclists, particularly younger children. | | |
| Characterized By | Schools with large 'student catchment' areas (e.g., areas larger than students will generally walk to school) Magnet schools | | |
| | Wagnet schools | | |
| Associated With or Challenges Created | Decreased number of students walking or bicycling to school | | |
| | Fewer younger children walking or bicycling to school | | |
| | Increased potential for younger children to walk or bike without adequate parent supervision | | |

Distance is an important factor in school travel decisions; several surveys have found that parents most frequently attributed their reluctance to allow their students to walk or bike to the distance they live from the school.⁴ Several studies have found that the proportion of students who walk and bike to school decreases significantly for children who live further than one mile from school.

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⁴ Dellinger, A. M. & Staunton, C. E. (2002). Barriers to children walking and bicycling to school: United States 1999. Morbidity and Mortality Weekly, 51(32), 701-704.

| Bike Parking at School is Missing, Insufficient or Non-secure | | | | |
|---|---|---|--|--|
| Primarily Affects | • | Existing and potential cyclists | | |
| Characterized By | • | Insufficient number of bike racks | | |
| | • | Poor rack placement (e.g., far from building entrances) | | |
| | • | Poor quality or poorly designed racks that increase the potential of damage to the bicycle (e.g., "wheel bender" racks) | | |
| Associated With or Challenges Created | • | Increased risk of vandalism or theft | | |
| | • | Increased risk of bicycle damage | | |
| | • | Exposure to weather, which can cause rusting or other related | | |
| | | wear | | |
| | • | Less cycling activity | | |

Providing secure and convenient bicycle parking is one way to help encourage more bicycling to school among children. Attributes of good bike parking include:

- Protection from vandalism/theft
- Protection from damage to the bicycle
- Protection from weather
- Convenient to destination

While almost all schools in Cheyenne provide bicycle parking, many racks do not securely hold bicycles and can be difficult to use (Figure 13).



Figure 13. 'Wheel bender' bike rack at Carey Junior High School

Described below, several factors should be considered when determining bicycle parking needs:

- Amount: A sufficient amount of parking must be made available so that bicycles are not crowded.
- Location: The location must be convenient to the end destination, near main building entrances. An appropriate location for the parking site should be identified.
- Type of device: Many schools use "wheel bender" type racks, which only support the bicycle by the wheel and can damage the bicycle. The preferred bike rack design should keep the bike upright by supporting the frame, allow the bike to



Figure 14. 'Wave Rack' bicycle parking at Johnson Junior High School

be locked by the frame, and facilitate securing one or both. (see Figure 14).

Monitoring: A monitor could provide an additional level of security at the bike parking area. Another option would be to place bike parking in a visible location near school administrative offices or where a school staff member is present.

| Dangerous Driving and Speeding on Streets | | | |
|---|--|--|--|
| Target | Speeding and inattentive or erratic motorists | | |
| Characterized By | Presence of collector or arterial streets (e.g., streets designed for higher motor vehicle speeds and volumes) | | |
| | Neighborhood streets with excessive width | | |
| | Posted speeds greater than 25 mph | | |
| | Lack of traffic calming devices | | |
| Associated With or Challenges Created | Increased risk of traffic crashes involving pedestrians or bicyclists | | |
| | Reduced walking and biking due to traffic safety concerns | | |

Dangerous driving and speeding can lead to increased risk of collisions involving pedestrians and bicyclists. Speeding motorists may not see a pedestrian in time to stop to allow him to cross the street (see Figure 15). Other erratic driving behavior (e.g., eating, talking, or text messaging) can increase the risk for pedestrians. This is particularly true at intersections or where bicycle or pedestrian facilities are not adequate (e.g., if the sidewalk is blocked or does not exist, pedestrians may walk in the roadway).



Figure 15. Flashing warning lights and signage can remind drivers to watch for pedestrians and bicyclists in School Zones

| Drop-Off and Pick-Up Process Creates Congestion and Unsafe Behaviors | | | |
|--|---|--|--|
| Primarily Affects | • Existing and potential pedestrians and cyclists, motorists, buses and the general public | | |
| Characterized By | Significant traffic during peak times | | |
| | Considerable cross-traffic, stopping and pulling over | | |
| | Distracted drivers due to other vehicles and student pedestrian traffic | | |
| Associated With or Challenges Created | Can increase the risk of pedestrian and motorist crashes | | |
| | Roadway and sidewalk congestion | | |
| | Reduced air quality | | |

The majority of students in Cheyenne are driven or bussed to school. This creates substantial traffic congestion during drop-off and pick-up times. Drivers may move erratically as they find parking, and can be distracted by other vehicles and heavy pedestrian traffic. Schools should have well laid out student loading zones with clear crossing locations for students who walk, bike or are dropped-off farther away from school (Figure 16). Some schools in Cheyenne may consider designating a drop-off/pick-up area that is not directly in front of school to minimize traffic congestion and to increase the comfort and safety for students walking to the school. Newly constructed or reconstructed schools in Cheyenne



Figure 16. Signage directing student drop-off and pick-up can increase safety of students walking to school

generally separate student and bus loading zones to create an efficient one-way flow for both parent vehicles and buses.

Infrastructure Barriers Common at LCSD#1 Schools

While each school under focus faces infrastructure challenges unique to its location, several patterns emerged through the examination of existing conditions at each school under focus (Table 1). Common barriers include:

- **Bicycle parking.** Many schools have 'wheel bender' bicycle racks. This type of parking increases the potential risk of damage to bicycles as only the wheel is supported. Damage to the frame or wheel can occur if significant force or pressure is applied to the frame of the bike.
- Lights on flashing beacons are difficult to see. In many instances the amber colored flashing beacons used to alert motorists of crosswalks and School Zones are difficult to see in bright sunlight.
- Walkways are not accessible. Most sidewalks immediately surrounding school buildings meet ADA width requirements that recommend five feet of clear space.

- However, most sidewalks or walkways in neighborhoods surrounding the schools are narrower and present challenges for people with mobility impairments.
- Crashes within two miles of schools. Most schools surveyed experienced reported pedestrian related crashes between 2005 and 2007 but in many instance the crashes did not occur within one-half mile of the school. Research has shown that students living within one-half mile of school are more likely to walk or bicycle so crashes occurring further than one-half mile from the school are less likely to involve students traveling to and from school.
- School Zone Warning signs are absent from bus and student loading zones. The Wyoming Department of Transportation Pedestrian and School Traffic Control Manual protocol dictates that school areas abutting the road shall have advance warning signs posted in these areas.
- School Zones are not defined. No specific delineation of school zones exists, resulting in zones of different sizes around the district. This inconsistency can lead to confusion for motorists and law enforcement officials traveling through multiple areas, especially if school zone signs are not posted.

Table 1 summarizes engineering/infrastructure barriers observed at each school under focus, while the remainder of this document discusses details of school-specific conditions. These findings are based on field observations, feedback from the public, and discussions with the City of Cheyenne, Cheyenne Metropolitan Planning Organization and LCSD #1 staff. Each school summary contains a map showing the school, a one-half mile analysis boundary and depiction of existing conditions within the area. The one-half mile analysis boundary was selected based on the assumption that children are more likely to walk and bicycle within this area. Focusing improvements near schools will have the greatest chance of positively affecting the behavior of the greatest number of students.

Table 1. Summary of Infrastructure Barriers Observed at Schools Under Focus

| SCHOOL | Crashes within 2 Miles of School | Missing Walkways | No Safe Place to Bicycle | Difficult Crossings | Major Expressways/ Arterials | Walkways are Not Accessible | Distances to School Too Far | Missing or Insufficient Bicycle Parking | Dangerous Driving Speeds At Schools | Drop-off/ Pick-up Creates Congestion⁵ |
|--------------------------|-------------------------------------|---------------------|-----------------------------|------------------------|---------------------------------|--------------------------------|--------------------------------|--|--|--|
| Afflerbach Elementary | х | х | х | | x | х | х | х | | X |
| Alta Vista Elementary | x | х | х | | | х | х | x | x | Х |
| Anderson Elementary | х | х | | х | x | х | х | х | x | X |
| Arp Elementary | х | х | х | | x | | х | | x | Х |
| Baggs Elementary | х | х | | х | x | х | х | | x | |
| Bain Elementary | х | х | | | | х | х | х | х | Х |
| Buffalo Ridge Elementary | х | x | | | | х | | х | x | Х |
| Carey Junior High | х | х | | х | х | | х | | x | |
| Cole Elementary | х | x | | х | | х | х | х | x | Х |
| Davis Elementary | х | х | х | х | х | х | х | х | х | Х |
| Deming Elementary | x | х | | | х | х | х | х | x | |
| Dildine Elementary | х | х | | х | х | х | х | х | x | Х |
| Fairview Elementary | x | х | х | | | х | | x | | Х |
| Freedom Elementary | х | х | х | | | | х | | | |
| Goins Elementary | х | x | | | х | х | х | х | x | |
| Hebard Elementary | х | х | х | х | | х | х | х | х | |
| Henderson Elementary | х | x | | х | | х | | х | x | |
| Hobbs Elementary | х | х | | | х | х | х | х | x | Х |
| Jessup Elementary | x | х | | х | х | | х | х | x | Х |
| Johnson Junior High | х | х | | х | х | | х | х | x | Х |
| Lebhart Elementary | х | x | х | | х | | х | | x | |
| McCormick Junior High | х | х | | х | | | | х | | Х |
| Miller Elementary | х | | | х | х | х | х | х | х | |
| Pioneer Park Elementary | х | | | | | х | х | х | х | |
| Rossman Elementary | х | х | x | х | х | х | х | х | х | |
| Saddle Ridge Elementary | | | | | х | | х | | х | |
| Sunrise Elementary | х | х | | | | х | | | | X |

III 39 | Cheyenne Metropolitan Area Safe Routes to School Plan

| Afflerbach Eleme | ntary |
|---|---|
| Existing Walking Environment | An existing shared use trail provides access from neighborhoods north of the school. W Wallick Road has a sidewalk leading to Greeley Highway, which lacks sidewalks but has unpaved shoulders where pedestrians walk. Students that live east of Greeley Highway are bussed to the school, minimizing the number of students walking along this roadway. |
| Existing Bicycling Environment | An existing shared use trail provides access from neighborhoods north of the school. Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ⁶ | • Crashes within one-half mile of the school: 0 |
| | Crashes within two miles of the school: 2 |
| | • Crashes within the school catchment boundary: 0 |
| Dangerous Driving Speeds Around Schools | Greeley Highway has posted travel speeds of 55 mph. Students living east of the roadway are bussed to school, but the road still presents a danger for students walking in this vicinity. |
| Missing or Insufficient Walkways | • W Wallick Road has sidewalks in the vicinity of the school, and the north side sidewalk continues to Greeley Highway. No other streets within one-half mile of the school have sidewalks. |
| No Safe Place to Ride a Bicycle | While the school is connected to neighborhoods to the north and east via an existing shared use trail, few other safe ways provide bicycle access to the school. |
| Drop-off/ Pick-up Creates Congestion | Student and bus loading is accomplished through a single loop with buses using the inner area and parents using the outer. The key point of congestion is the driveway. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided. The number of spaces may not be sufficient for the number of students who might ride to school. |

⁶ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: The school is connected to neighborhoods to the north and east by a shared use path (Figure 17), which provides a safe and comfortable walking and bicycling environment. However, many residential streets completely lack sidewalks or formalized bicycling facilities, which can be necessary to facilitate younger children safely traveling through the neighborhood.

The school district routinely instructs students living east of Greeley Highway to use the bus rather than risk a twice-daily crossing.

The student drop-off and pick-up area is a single loop, with the inside lane dedicated to



Figure 17. Students utilizing the greenway system may encounter pathway flooding during the rainy season

buses and the outside for parents. There is typically congestion from parents dropping students off or picking them up, which blocks the buses from entering the area. The Principal also reports that parents often park in the crosswalk on W Wallick Road, blocking them from student access.

While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles.



| Alta Vista Element | ary |
|---|--|
| Existing Walking Environment | Most streets within a half-mile of the school have sidewalks. Several shared use paths provide routes through Holliday Park, connecting to existing sidewalks in the neighborhood. Advance School Warning signs are provided at the Logan Avenue crossing. |
| Existing Bicycling Environment | The shared use paths through Holliday Park provide bicycling routes for students. Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ⁷ | Crashes within one-half mile of the school: 6 |
| | Crashes within two miles of the school: 28 |
| | Crashes within the school catchment boundary: 7 |
| Distances to School are Too Far | Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include E. 19th Street, Logan Avenue, E. 20th Street, Lincolnway and Evans Avenue. |
| Missing or Insufficient Walkways | Most sidewalks are less than five feet wide, making it difficult for groups of students or parents and their children to walk side by side. |
| No Safe Place to Ride a Bicycle | • There are no paths or greenways in neighborhoods to the east of the school. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the eastern side of the school, near the parking lot and playground. The number of spaces may be insufficient for the number of students who ride to school. |
| Drop-off/ Pick-up Creates Congestion | A formalized student load zone was recently created on Rollins Avenue but parents who drive still use the access on 16th Street, which can interfere with bus traffic. |
| Walkways are Not Accessible | Walkways in the surrounding neighborhood are complete, but may not meet current ADA width standards. Older curb ramps may require reconstruction to meet current ADA standards. |

Discussion: Students walking or bicycling to Alta Vista Elementary face varying conditions depending on where they live in relation to the school. Students living to the east of the school will travel on sidewalks. However, the sidewalks are mostly narrower than five feet wide.

When reaching the school, students coming from the east must cross Logan Avenue, a busy collector with posted speeds of 30 mph. Crossing Logan Avenue is the primary challenge for students walking or bicycling to Alta Vista Elementary. Logan Avenue has few protected crossings

⁷ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

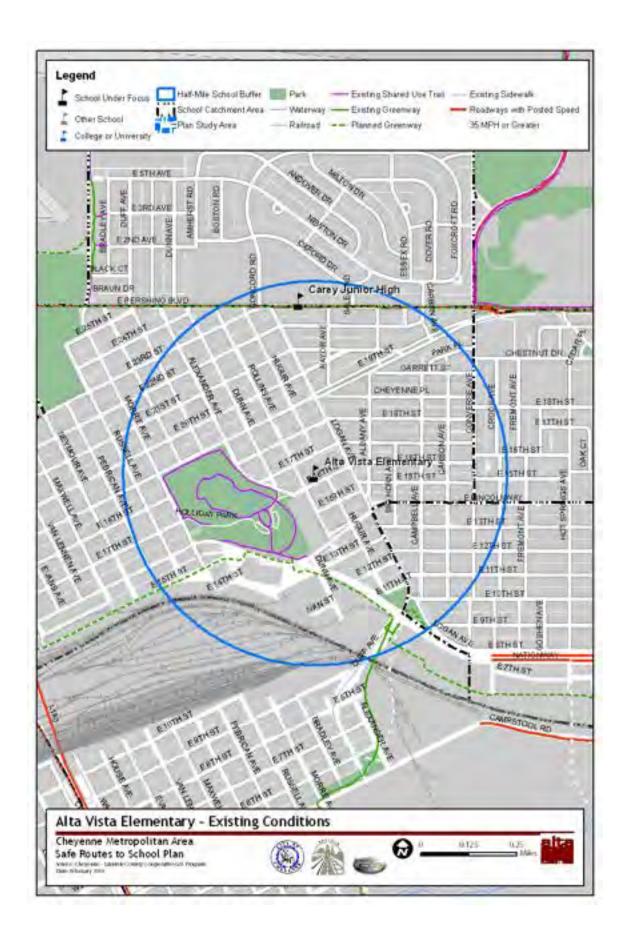
along this segment; a marked crossing is provided at 16th Street and at the signalized intersection at 18th Street, but most students walk to the north of the crosswalk on 16th Street. Many students cross wherever they can find a gap in traffic. A nearby daycare on the east side of Logan Avenue meets students on campus and crosses at 17th Street.

From the west, students experience better walking conditions, with typically wider sidewalks and no crossings of larger streets. Students coming from the west may use the shared use paths through Holliday Park (Figure 18) for part of their trip. Several low speed and low volume neighborhood streets near the school are suitable for bicycling. While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles.

Advance School Warning signs exist on the Logan Avenue, but student load zones and bus loading zones fronting the street lack appropriate signage. Parents often park in the fire zone and use the 16th Street access road, blocking those routes for students.



Figure 18. Students can use sidewalks or shared use paths through Holliday Park to avoid traveling to Alta Vista Elementary on higher-speed streets



| Anderson Elementa | ary |
|---|---|
| Existing Walking Environment | • The residential neighborhood to the south and east of the school has sidewalks on both sides of most streets. |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ⁸ | • Crashes within one-half mile of the school: 0 |
| | Crashes within two miles of the school: 6 |
| | • Crashes within the school catchment boundary: 0 |
| Distances to School are Too Far | Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Converse Avenue south of Ogden Road, Mountain Road and Plain View Road. |
| Major Expressways or Arterials Present | Converse Avenue creates a north/south crossing barrier separating residential land west of this roadway from the school. |
| | Storey Boulevard creates an east/west crossing barrier separating residential land north of this roadway from the school. |
| Missing or Insufficient Bicycle Parking | • Basic 'wheel bender' bicycle parking is provided on the west side of the school, near the main entrance. The number of spaces may not be sufficient for the number of students who might ride to school. |
| Drop-off/ Pick-up Creates Congestion | Drop-off creates more significant congestion than pick-up due to space constraints within the student load zone and the shorter time window. |
| Missing or Insufficient Walkways | • The residential neighborhood to the south and east of the school has sidewalks on both sides of most streets. However, nearly all of these sidewalks are less than five feet wide, impeding walking side by side. |
| Difficult Crossings | Storey Boulevard and Converse Avenue are high-speed streets that pose obstacles to students walking and biking to school from the north and west. |

 $^{^8}$ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Anderson Elementary students who walk to school from the south and east have sidewalks available on both sides of most streets. However, with the exception of sidewalks in the immediate vicinity of the school (Figure 19), nearly all of these sidewalks are narrow, impeding students' ability to walk side by side with their parents or with other children. The parking lot access lane also lacks pedestrian crossing treatments.

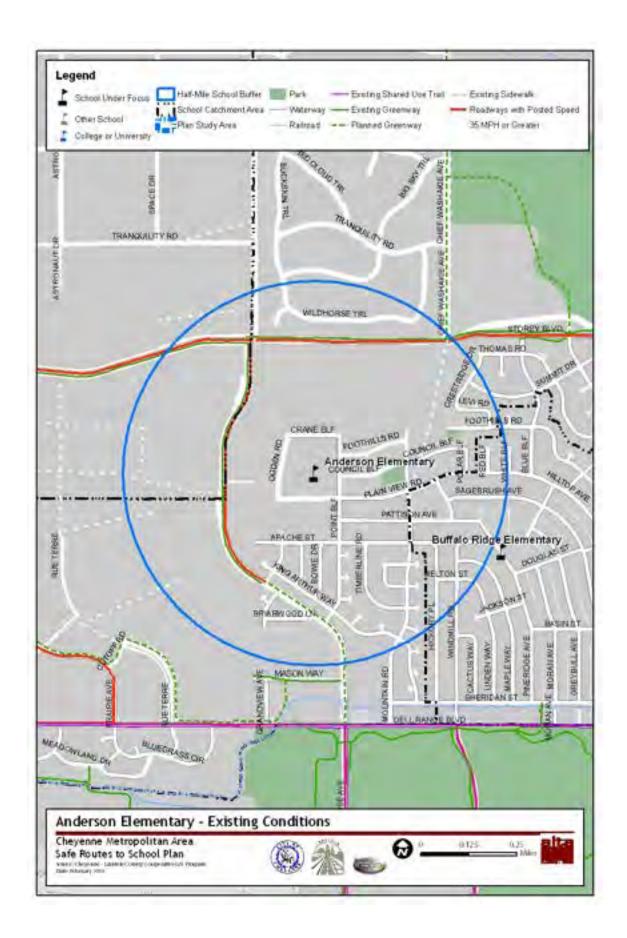
Several low-speed and low-volume neighborhood streets near the school are suitable for bicycling. While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles.



Figure 19. 'Wheel bender' bicycle parking at Anderson Elementary

Most residential development within the school catchment area is currently to the south and east and is characterized by the good pedestrian access described above. Students face significant challenges when crossing Storey Boulevard and Converse Avenue. The school's catchment area currently includes the Pointe Neighborhood, which is located several miles northwest of the school. This is a redistricting issue that may be resolved by the construction of a new elementary school that would serve the north portion of the Chevenne's urbanized area.

According to the school's Principal, the largest challenge inhibiting students from walking to school is the undeveloped land surrounding the school. There are few 'eyes on the street' through the area, leading to concerns about stranger danger. This is particularly problematic when students coming from the north take the shortest route through the area, under the Storey Boulevard underpass.



| Arp Elementary | |
|---|---|
| Existing Walking Environment | • Few roads in the area of Arp Elementary have sidewalks to accommodate pedestrian travel. A Greenway connects directly to the school, but does not provide many neighborhood routes. |
| Existing Bicycling Environment | The existing shared use path connects to the school but does not connect directly to many neighborhood roadways. Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ⁹ | • Crashes within one-half mile of the school: 0 |
| | Crashes within two miles of the school: 13 |
| | Crashes within the school catchment boundary: 2 |
| Distances to School are Too Far | Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph such as Avenue C may act as barriers to younger children. |
| 3010013 | East Fox Farm Road has a posted speed limit of 40 mph. |
| | College Drive has a posted speed limit of 40 mph. |
| Major Expressways or Arterials Present | • Fox Farm Road creates a north/south crossing barrier separating residential land north of this roadway from the school. |
| | • S. College Drive creates an east/west crossing barrier separating residential land east of this roadway from the school. |
| Missing or Insufficient Walkways | There are many roadways in this area that do not have sidewalks. |
| Drop-off/ Pick-up Creates Congestion | Student loading is a challenge as there is only one roadway in and out of the school. Parents who drive tend to drop students wherever they can find space and typically ignore designated zones. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the west side of the school, near the main entrance. The number of spaces may not be sufficient for the number of students who might ride to school. |
| No Safe Place to Ride a Bicycle | • Although a Greenway connects directly to the school, the trail does not connect to many residential areas in the school catchment area, meaning that few students are likely to be able to use the Greenway to get to school. The unincorporated area surrounding the school has limited roadway connectivity, which further exacerbates problem. |
| Difficult Crossings | • Fox Farm Road creates a north/south crossing barrier separating residential land north of this roadway from the school. |

⁹ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: All students walking or biking to Arp Elementary use Reiner Court. Parents park along the walkway on the street, forcing pedestrians to walk in the roadway. In addition, cars and buses tend to park in the crosswalks on school property. Parents drop students off where it is convenient to them, rather than at the designated area, creating confusing traffic patterns.

Surrounding neighborhoods have few sidewalks. Fox Farm Road is particularly challenging, due to lack of sidewalks and conflicts with adjacent traffic on the shoulders.

While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles (Figure 20).



Figure 20. 'Wheel bender' style bicycle parking at **Arp Elementary**

Many students in the school catchment area live further than a half mile away, increasing the difficulty of walking or biking to school. Fox Farm Road and College Drive are challenging crossings for students walking and biking, with posted speed limits of 40 mph. The school may be rebuilt adjacent to the existing building within the next five years.



| Baggs Elementary | l e e e e e e e e e e e e e e e e e e e |
|---|---|
| Existing Walking Environment | Most streets in the area of Baggs Elementary have sidewalks. Most of these sidewalks are less than five feet wide. |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ¹⁰ | Crashes within one-half mile of the school: 1 |
| | Crashes within two miles of the school: 14, including 1 fatality |
| | Crashes within the school catchment boundary: 1 |
| | • The reported fatality crash occurred along Pershing Boulevard, just east of U.S. 30 in February 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and snowy. |
| Distances to School are Too Far | Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Rawlins Street and Ridge Road south of Cheyenne Street. |
| | Pershing Boulevard and Ridge Road north of Cheyenne Street have posted speed limits of 35 mph. |
| | • N. College Drive and Dell Range Boulevard have posted speed limits of 40 mph. |
| Major Expressways or Arterials Present | Pershing Boulevard creates a north/south crossing barrier separating residential land south of this roadway from the school. |
| riesent | N. College Drive creates an east/west crossing barrier separating residential land east of this roadway from the school. |
| Missing or Insufficient | There many roads in the area are without sidewalks, and most of the sidewalks in place are less than five feet wide. |
| Walkways | McCann and Wills are unpaved and lacking sidewalks in the school area. |
| Walkways are Not Accessible | Walkways in the neighborhood are complete, but may not meet ADA width standards. Many corners have curb ramps but the slopes may exceed current ADA standards. |
| Difficult Crossings | Pershing Boulevard and N. College Drive present obstacles to students walking and biking to school. |

Discussion: Accessibility at the immediate school site of Baggs Elementary is excellent (Figure 21). A high-visibility crosswalk increases crossing safety to the school to the property, while wide sidewalks accommodate side-by-side walking. New separated areas for buses and parent drop-off are well-designed and have helped improve safety for students.

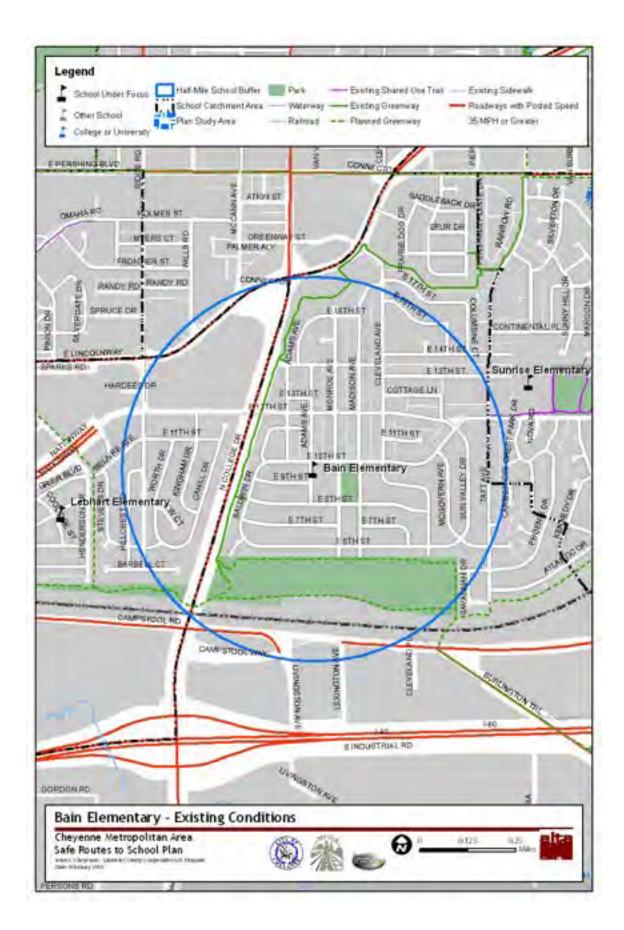
¹⁰ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

However, curb ramps with steep grades and cross slopes throughout the neighborhood create travel challenges for people with physical disabilities. In addition, higher-speed roadways in the area have incomplete or narrow sidewalks.

There are several difficult crossings and major arterial roadways located within close proximity to the school. N. College Drive and Pershing Boulevard are designated walking routes, but the crossing is quite difficult. The Principal reports that students do not often cross Pershing Boulevard or N. College Drive. Students from the mobile homes to the south carpool to school, while younger students going to the childcare center west of Ridge Road use a shuttle.



Figure 21. Baggs Elementary School has a pedestrian friendly environment that includes wide sidewalks, crosswalks, and curb ramps.



| Bain Elementary | |
|---|---|
| Existing Walking Environment | There is a complete network of sidewalks on streets in the surrounding neighborhood, although not all have sufficient width or accessibility. |
| Existing Bicycling Environment | • Most residential streets near the school have low automobile speeds and volumes, providing a safe cycling experience. |
| Reported Crashes ¹¹ | • Crashes within one-half mile of the school: 0 |
| | Crashes within two miles of the school: 13, including 1 fatality |
| | • Crashes within the school catchment boundary: 0 |
| | • The reported fatality crash occurred along Pershing Boulevard, just east of U.S. 30 in February 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and snowy. |
| Distances to School are Too Far | The school catchment area includes a number of residences that would require a student to walk or bike more than one-half mile to reach the school. Research suggests that students living within one- half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | • The catchment area for Bain Elementary contains predominantly low speed and low volume residential streets. 12th Street and Cleveland are the two streets with speed limits of 30 mph in the catchment area. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the southern side of the school on the playground. The number of spaces may not be sufficient for the number of students who might ride to school. |
| Drop-off/ Pick-up Creates Congestion | Student loading and unloading is chaotic as there is no designated pick-up/drop-off zone at this time. Parents utilizing Adams Avenue are not always respectful of other roadway users. |
| Walkways are Not Accessible | Walkways in the surrounding neighborhood are complete, but do not meet current ADA width standards. Many corners have older curb ramps that may have a maximum running slope of 8% or greater as well as a side slope that may be 2% or greater. Curb ramps with this running slope and side slope do not meet current ADA standards. |
| Missing or Insufficient Walkways | • The area around Bain Elementary has a complete sidewalk network, but nearly all sidewalks are less than five feet wide. |

¹¹ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Students traveling to Bain Elementary from the neighborhood south of the school experience fairly comfortable walking and cycling conditions, while students living to the north face greater challenges including sidewalk fragmentation narrower sidewalks. Although the area has a relatively complete sidewalk network, most sidewalks in the area are less than five feet wide.

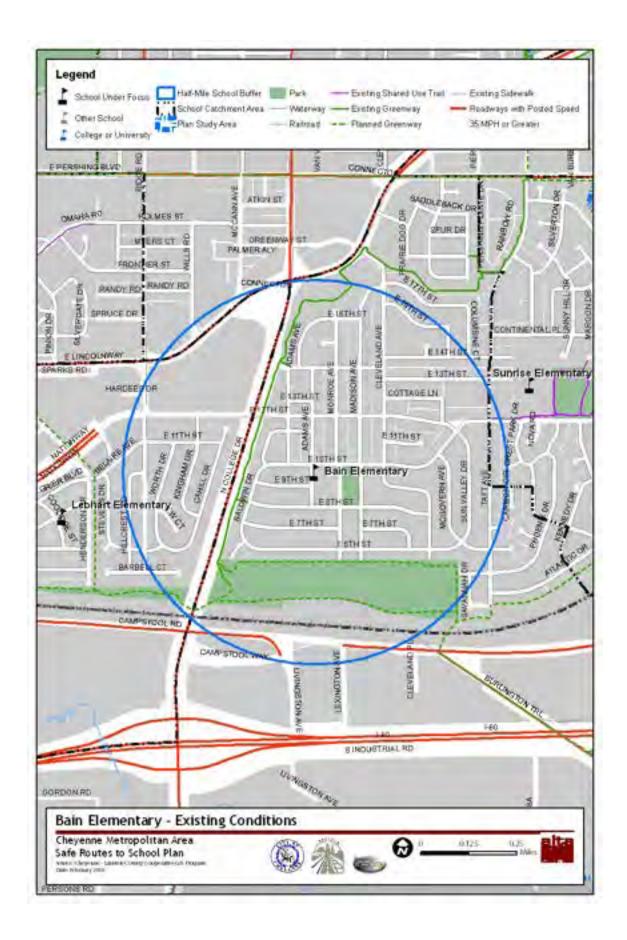
Students biking to school are able to use several bicycle lanes on 12th Street (Figure 22) and a shared use path along N College Drive. A number of lower traffic neighborhood streets surrounding the school provide good cycling connections. While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles.



Figure 22. Bike lanes, School Zone warning sings and pavement markings increase the safety of students using 12th Street to access Bain Elementary

The intersection of E Monroe Avenue and 12th Street was improved several years ago with curb extensions and other transportation enhancements, although it is still considered the largest issue for pedestrians and bicyclists accessing school. Strong community support exists for the addition of additional pedestrian enhancements at this location (e.g., flashing pedestrian beacons, or a pedestrian half signal). The area west of the school bounded by 10th Avenue on the north, Baldwin Drive on the west and 6th Street on the south is poorly lit, which can contribute to challenging travel conditions for students on their way to or from school.

Loading zones on the north side of the school are marked with Advance School Warning signs, but signage is not present near the student loading zone or bus loading zone on the west or south sides of the school. Substantial traffic on Adams Avenue is exacerbated by parents not yielding to pedestrians in the area, which could be mitigated by additional signage or advance warning.



| Buffalo Ridge Elem | entary | |
|---|---|--|
| Existing Walking Environment | A relatively complete sidewalk network exists near Buffalo Ridge Elementary, and few major streets impede pedestrian or bicycle travel. | |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. | |
| Reported Crashes ¹² | Crashes within one-half mile of the school: 0 Crashes within two miles of the school: 7, including 1 fatality Crashes within the school catchment boundary: 0 The reported fatality crash occurred along Pershing Boulevard, just east of U.S. 30 in February 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and snowy. | |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Jackson Street and Hilltop Avenue. | |
| Drop-off/ Pick-up Creates Congestion | • As the student load zone is not formally marked at this time, parents tend to drop students off wherever they can find access to the curb. | |
| Missing or Insufficient Walkways | The area around Buffalo Ridge Elementary has a complete sidewalk network, but nearly all sidewalks are less than five feet wide. | |

¹² Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Students walking and biking to Buffalo Ridge Elementary have a pleasant journey despite the presence of some barriers. Although the area has a relatively complete sidewalk network, most sidewalks in the area are less than five feet wide (Figure 23). Parents have not commented that walking or biking is a major concern during the principal's two years at this school.

A number of lower traffic neighborhood streets surrounding the school serve as comfortable bicycle connections.

An informal pick-up/drop-off area exists in the alley along the school's northeast side. There is substantial traffic in the school loading area, and bicyclists have to ride in the



Figure 23. Narrow sidewalks near Buffalo Ridge Elementary

travel lane to avoid parked cars. A new parking lot is under construction across the alley near the northwest corner of the school, and a new bus turnout is under construction on the southwest corner of the school. No markings currently designate a drop-off or pick-up location, although these modifications will likely alter pick-up and drop-off circulation patterns when the new school session begins.¹³ The principal reported that recently, school safety was dramatically improved by the closure of an alley north of the school.

III-59 | Cheyenne Metropolitan Area Safe Routes to School Plan

¹⁵ At the time of the Project Team's visit school was not in session, so observation of the affect of these new facilities was not possible.



| Carey Junior High | h School ¹⁴ |
|---|---|
| Existing Walking Environment | A relatively complete sidewalk network exists near Carey Junior High. |
| Existing Bicycling Environment | A relatively large proportion of students bicycle to school. Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ¹⁵ | Crashes within one-half mile of the school: 2 Crashes within two miles of the school: 27 |
| | Crashes within the school catchment boundary: 13 |
| Distances to School are Too Far | Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Pershing Boulevard and Ridge Road have posted speed limits of 35 mph. |
| SCHOOLS | Converse Avenue, Windmill Road, N. College Drive, Dell Range Boulevard, and Storey Boulevard have posted speed limits of 40 mph. as well as portions of Nationway and Lincolnway. |
| | U.S. 30 has a posted speed limit of 55 mph. |
| Major Expressways or Arterials Present | Roads that create potential north/south crossing barriers include Pershing Boulevard, U.S. 30, Nationway, Lincolnway, Dell Range Boulevard and Storey Boulevard. |
| | Roads that create potential east/west crossing barriers include Converse Avenue, Windmill Road, Ridge Road, and N. College Drive. |
| Missing or Insufficient Walkways | The area around Carey Junior High has a complete sidewalk network, but most of the sidewalks are less than five feet wide. |
| Missing or Insufficient Bicycle Parking | Covered 'wheel bender' bicycle parking exists on the north and east side of the school. |
| Difficult Crossings | Pershing Boulevard presents a difficult, high-speed crossing with the exception of the pedestrian signal directly adjacent to the school. |

A significant portion of this school's catchment area is outside the Study Area of this Safe Routes to School Plan.
 Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Students walking or bicycling to Carey Junior High face significant challenges from street crossings. Pershing Boulevard is a high-speed road directly adjacent to the school (Figure 24). Students frequently travel along Pershing Boulevard to afterschool activities to the east, near Prairie View Golf Course. Students also frequently cross Pershing Boulevard at uncontrolled locations where there are gaps in traffic, creating potential pedestrian/motor vehicle conflicts.

Dangerous intersections on Pershing are at Concord Road and Rayor Avenue; signalization at the latter may be less effective due to the infrequency of the signal change. A flashing "strobe" light may improve the crossing.



Figure 24. Warning signs, pavement markings and pedestrian actuated signals aid pedestrian crossings of Pershing Boulevard

The bicycle parking is covered to protect students' bicycles from the weather, but it is categorized as 'wheel bender' and can cause damage to bicycles. Low speed, low volume roadways near the school provide good connections for students riding to school.



| Cole Elementary | | |
|---|-----------------------|--|
| Existing Walking Environment | Ele | ile several high-speed roadways limit connectivity to Cole mentary, a pedestrian overpass provides safe access over I-80. ewalks are provided on most streets throughout the area. |
| Existing Bicycling Environment | | ny neighborhood streets near the school with lower traffic eds and volumes also create suitable cycling connections |
| Reported Crashes ¹⁶ | • Cra | shes within one-half mile of the school: 4 |
| | Cra | shes within two miles of the school: 26, including 1 fatality |
| | Cra | shes within the school catchment boundary: 4 |
| | ped | e reported fatality crash occurred along I-80, in July 2005. A estrian was hit while traveling along the roadway shoulder. Inditions were dark and clear with dry roadways. |
| Distances to School are Too Far | requests school their | e school catchment area includes a number of residences that aire students to walk or bike more than a half-mile to reach cool. Research suggests that students within one-half mile of r school are more likely to walk or bike to the school with atter frequency. |
| Dangerous Driving Speeds Around Schools | bar | her-speed roads with posted speed limits of 30 mph may act as riers to younger children. These roads include 7 th Street, ming Drive, 9 th Street, 5 th Street, and Central Avenue. |
| | • Sou | thwest Drive has a posted speed limit of 40 mph. |
| Missing or Insufficient Bicycle Parking | • Bic | ycle parking is difficult to find or does not exist. |
| Walkways are Not Accessible | but AD | Ikways in the immediate vicinity of the school are five feet wide, most sidewalks in the surrounding area do not meet current A width standards. Many curbs have older ramps that may not et current ADA standards. |
| Drop-off/ Pick-up Creates Congestion | crea | ffic through the student loading zone is typically fast and ites congestion due to vehicle volumes. Parents typically stop in middle of the roadway, which exacerbates congestion. |
| Missing or Insufficient Walkways | | e sidewalk network in the area is nearly complete, but there are missing links. Many of the sidewalks are less than five feet e. |
| Difficult Crossings | | ere are many difficult crossings in the area including I-80 and rby UP rail yards. |

¹⁶ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: There are sidewalks available on most of the streets in the area. However, the network is incomplete and most sidewalks are narrow, less than five feet wide due to the period during which they were constructed. In many places, sidewalks are in poor condition and damaged curbs are common.

Students walking or bicycling to Cole Elementary face challenges due to the high-speed roads and difficult crossings that characterize the area around the school. Although few students attending Cole Elementary live outside these barriers, the school is isolated by the rail yard to the north, Greeley Highway to the east, and I-80 to the south, though a pedestrian overpass improves accessibility (Figure 25).



Figure 25. Pedestrian overpass of I-180 improves pedestrian accessibility to Cole Elementary

Ongoing construction at Deming Drive and 9th Street complicates pedestrian access, and students are encouraged to avoid the intersection. Two students were in a crash on 9th Street in spring of 2009.

Many neighborhood streets near the school with lower traffic speeds and volumes create suitable cycling connections. Children riding to school face an increased potential of bicycle damage or loss due to the lack of formal bicycle parking racks. It is likely this school will be relocated in the next five to ten years.

Officially, student loading occurs on the south side of the school, where automobile speeds, congestion, and stopping in the center of the road create unsafe conditions for pedestrians and bicyclists. Parents drive in both directions on the one-way alley south of the school, creating further congestion. Another challenge is the informal drop-off occurring on the north side of the school on 9th Street and O'Neil Avenue. Children unloading on O'Neil Avenue and the north side of 9th Street are exposed to higher-speed traffic. Students walk across both sides of O'Neil Avenue due to the lack of crossing guard or marked crosswalk. Crosswalks or crossing guards are not present on this side of the school. Advance School Warning signs are posted at the crosswalk at Thomas Avenue, but are missing from the school loading zone at Bent Avenue.



| Davis Elementary | |
|---|---|
| Existing Walking Environment | Most streets in the area of Davis Elementary have complete sidewalks. Crosswalks at Montclair Drive and Yellowstone Road assist crossings. |
| Existing Bicycling Environment | Residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ¹⁷ | Crashes within one-half mile of the school: 2 |
| | Crashes within two miles of the school: 2 |
| | • Crashes within the school catchment boundary: 2 |
| Distances to School are Too Far | • The school catchment area includes a number of residences that would require a student to walk or bike more than one-half mile to reach the school. Research suggests that students living within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Vandehei Avenue, Storey Boulevard, Western Hills Boulevard, and Education Drive. Yellowstone Road has a posted speed limit of 40 mph. |
| Major Expressways or Arterials Present | Yellowstone Road creates an east/west crossing barrier separating residential land west of this roadway from the school. |
| Missing or Insufficient Walkways | • The sidewalk network in the area is nearly complete, but there are still missing links. Many of the sidewalks are less than five feet wide. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the east side of the school, near the parking lot. |
| Drop-off/ Pick-up Creates Congestion | Parents do not always utilize the designated student load zone on the south side of Davis Elementary and instead park and wait for students in the no parking area along Montclair Drive. |
| Difficult Crossings | • Yellowstone Road is an obstacle for students walking to the school from the west. |

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¹⁷ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Sidewalks exist throughout the area, although several of them are narrow and some sidewalk connections are missing. The City Engineer is considering moving the crosswalk along the west side of the school from its current mid-block locations to align with the intersection of Yellowstone Road and Montclair Drive.

Yellowstone Road, an arterial with a posted speed limit of 40 mph, bisects the school's catchment area and creates significant access challenges. Crosswalks near the school include pedestrian actuated signals in some locations. Some of these crosswalks are currently faded and difficult to see, although the crossing at Yellowstone Road is in good condition and frequently used. Many students who live west



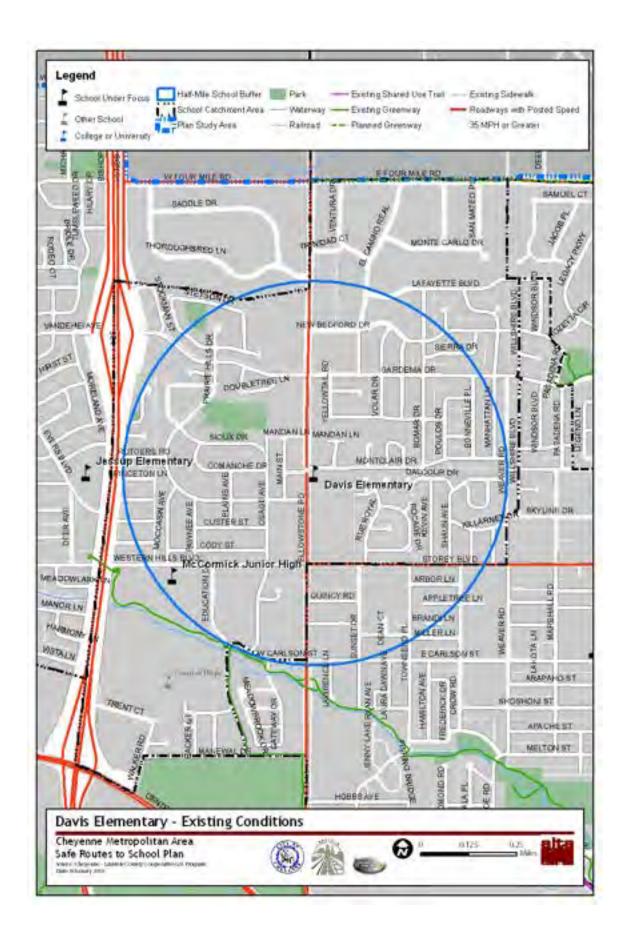
Figure 26. Pavement Markings and Advance School Warning Signs on Montclair Drive

of Davis Elementary are driven to the Quest parking lot south of the school and walk the remaining distance to the school.

Neighborhood streets with lower speed and traffic volumes provide suitable bicycle connections. While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles.

School zone pavement markings, signs and high visibility crosswalks are located on Montclair Drive (Figure 26), but Advance School Warning signs are not present near the student loading zone on the south side of the school. Children living east of the school have an easier time reaching the school by foot or bicycle as they do not have to cross Yellowstone Road.

The school Principal and teachers are trying to establish no parking zones on Montclair Drive, or to prohibit U-turns on Yellowstone Road. The Principal would also like to use in-street signage to supplement crossing guards on Montclair Drive. A crosswalk at Gardenia Drive and Bomar Drive would benefit students northeast of the school.



| Deming Elementary | y (Grades K-2) and Miller Elementary (Grades 3-6) |
|---|--|
| Existing Walking Environment | Sidewalks are mostly present near the schools, except to the southeast. |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ¹⁸ | Crashes within one-half mile of the schools: 1 |
| Ci asi les | Crashes within two miles of the schools: 26 |
| | • Crashes within the school catchment boundary: 0 |
| | The reported fatality crash occurred along I-25, in July 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and clear with dry roadways. |
| Distances to School are Too Far | Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with speed limits of 30 mph are barriers for younger children. Roads include Snyder Avenue, Pioneer Avenue, Carey Avenue, Central Avenue, Warren Avenue, and Evans Avenue. |
| | Pershing Boulevard has a speed limit of 35 mph. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the southeast side of Deming Elementary near the front entrance and on the east side of Miller Elementary in the playground. The number of spaces may not be sufficient for the number of students who might ride to school. |
| Walkways are Not Accessible | Walkways are complete, but do not meet ADA width standards. Many corners have curb ramps that may not meet current ADA standards due to their age. |
| Missing or Insufficient Walkways | Pershing Boulevard creates a north/south crossing barrier for Miller Elementary students, separating neighborhoods from the school. |
| Difficult Crossings | • Students traveling to Miller Elementary from the south must cross Pershing Boulevard, which is five lanes wide with higher traffic speeds. |

 $^{^{18}}$ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Sidewalks are mostly present near Deming and Miller Elementary schools. Several of these are less than five feet wide due to the period during which they were constructed (Figure 28). This condition is present primarily in the blocks near the school and west of Evans Street.

Many neighborhood streets with lower speeds and volumes provide good bicycle connections to both schools. While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles.

For students walking and biking from the southeast, high vehicle speeds on Pershing Boulevard present a crossing barrier. Median islands at West 5th Avenue and Carey Avenue as well as West 5th Avenue and Frontier Park Avenue may create confusing crossings and increase the likelihood of pedestrian/motor vehicle conflicts. Advance School Warning signs are not present in existing student and bus loading zones.

Students still frequently cross at a former crosswalk on the north leg of 2nd Avenue and Evans Avenue, rather than going one block north to the crosswalk at 3rd Avenue. Crosswalks near Deming Elementary generally include advance stop lines. While stop bars are optional, they can enhance the effectiveness of crosswalks by providing

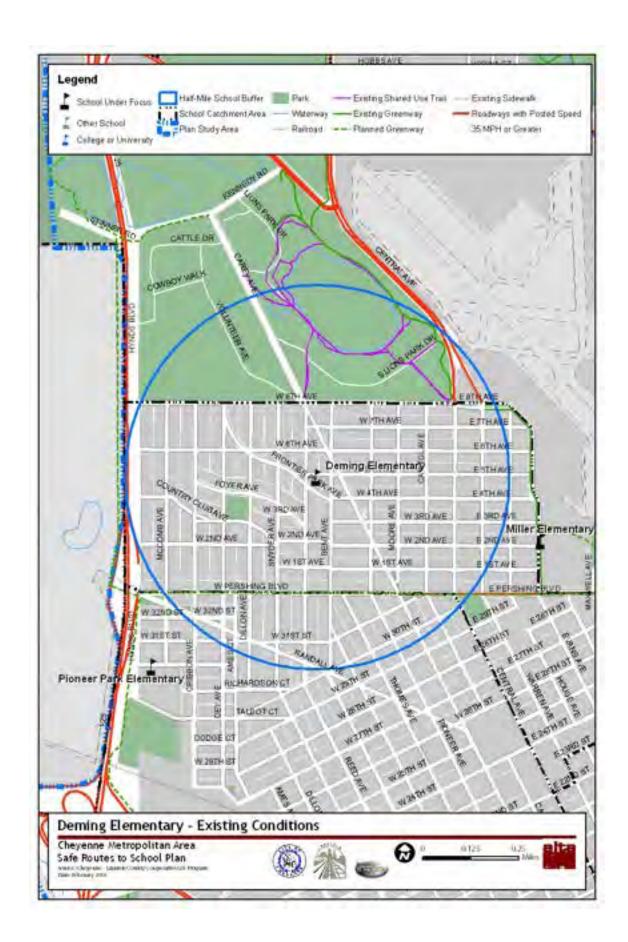


Figure 28. Narrow sidewalks without curb ramps characterize the area around Deming Elementary



Figure 27. A school crossing near Miller Elementary School has a stop line for southbound vehicles, enhancing pedestrian safety and comfort

additional visual cues to motorists (see Figure 27). Warning zone signs posted near Miller Elementary advise motorists approaching from the south that they are entering a school zone. School zone pavement markings were not observed by the Project Team.





| Dildine Elementary | |
|---|--|
| Existing Walking Environment | Most streets at Dildine Elementary have complete sidewalks with curb ramps at intersections. Dell Range has a flashing School Zone beacon. |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ¹⁹ | Crashes within one-half mile of the school: 0 |
| | Crashes within two miles of the school: 3, including 1 fatality |
| | Crashes within the school catchment boundary: 0 |
| | • The reported fatality crash occurred along Pershing Boulevard, just east of U.S. 30 in February 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and snowy. |
| Distances to School are Too Far | • Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph, such as Van Buren Avenue, may act as barriers to younger children. |
| 3010015 | Dell Range Boulevard has a posted speed limit of 45 mph. |
| Major Expressways or Arterials Present | Dell Range Boulevard creates a north/south crossing barrier separating residential land north of the roadway from the school. |
| Fresent | Van Buren Avenue creates an east/west crossing barrier separating residential land east of this roadway from the school. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the southeast side of the school on the playground. The number of spaces may not be sufficient for the number of students who might ride to school. |
| Walkways are Not Accessible | Most walkways in the area do not meet current ADA width standards. Curb ramps generally meet existing standards for running slope and side slope, but poor maintenance challenges access in many locations. |
| Drop-off/ Pick-up Creates Congestion | • Students are typically picked up in the horseshoe area north of the parking lot rather than the designated area to the along Polk Avenue. |
| Missing or Insufficient Walkways | The sidewalk network in the area is largely incomplete, and most existing sidewalks are less than five feet wide. |
| Difficult Crossings | Dell Range Boulevard presents a barrier for students traveling to the school from the north. |
| | Van Buren Avenue presents a barrier for students traveling to the school from the east. |

¹⁹ Crash data between 2005 and 2007 only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Students living east of Van Buren Avenue and north of Dell Range Boulevard may face significant challenges from high-speed roads and difficult crossings that characterize the area. Many sidewalks in the area are narrow, and some sidewalk connections are missing. Curb ramps exist in many locations but lack of maintenance can render them unusable or create hazardous travel conditions (Figure 29).

Students bicycling to school can use the greenway located to the southwest of the school. While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles.

The school's large student body (about 600 students) creates significant pick-up and drop-off congestion and competition for sidewalk space in the designated loading zones. A flashing school light is provided on Dell Range Boulevard, but not on Van Buren Avenue, resulting in faster speeds immediately by the school. In addition, the pick-up and drop-off area can be chaotic, due to students running across the parking lot to access the student loading area. School buses queue on Dildine



Figure 29. Some curb ramps near Dildine Elementary School are in poor condition

Road south of the school, which lacks sidewalks and other pedestrian treatments. In the future, this congestion will likely increase, as the school serves the growing semi-rural area to the northeast and most of these students do not live within walking distance of the school.



| Fairview Elemen | tary (Grades K-2) and Lebhart Elementary (Grades 3-6) |
|---|--|
| Existing Walking Environment | • The sidewalk network near Fairview Elementary is generally good, and access to the school grounds is adequate. |
| Existing Bicycling Environment | • Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported | Crashes within one-half mile of the schools: 5 |
| Crashes ²⁰ | Crashes within two miles of the schools: 24, including 1 fatality |
| | Crashes within the school catchment boundary: 5 |
| | • The reported fatality crash occurred along Pershing Boulevard, just east of U.S. 30 in February 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and snowy. |
| Distances to School are Too Far | Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Roads with speed limits of 30 mph act as barriers to younger children. These roads include Hot Springs Avenue, Ridge Road north of 12th Street, Nationway east of Mulberry Avenue and west of Crook Avenue. |
| | Lincolnway has a posted speed limit of 40 mph. |
| Major Expressways or Arterials Present | Nationway/Lincolnway creates a north/south crossing barrier. Children are bussed between the schools to minimize challenging roadway crossings. |
| Missing or Insufficient Bicycle Parking | • Wheel bender' bicycle parking is provided at Fairview Elementary on the eastern side of the school and on the southern side of Lebhart Elementary, both on the playground. The number of spaces may not be sufficient for the number of students who might ride to the schools. |
| Walkways are Not Accessible | Walkways in the surrounding neighborhood are complete, but do not meet current ADA width standards. |
| Drop-off/ Pick-up Creates Congestion | Many parents pick students up in the bus loading zone rather than the student loading zone. Double parking in the student load zone increases the number of potential conflicts. |
| Missing or Insufficient Walkways | • The sidewalk network in the area has some missing links and many of the sidewalks near the school are less than five feet wide. Sidewalks are old and crumbling in many locations. |
| No Safe Place to Ride a Bicycle | Nationway acts as a barrier to bicycle and pedestrian trips. |

 $^{^{20}}$ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: The sidewalk network around Lebhart Elementary is generally good, and access to the Fairview school grounds is adequate (Figure 30). However, sidewalks are often narrow and the

network is incomplete. Limited connectivity leads to long routes. Where sidewalks exist, many are deteriorating, producing uneven walkways.

Difficult crossings are minimized as students are bused across Nationaway to the school appropriate for their grade.

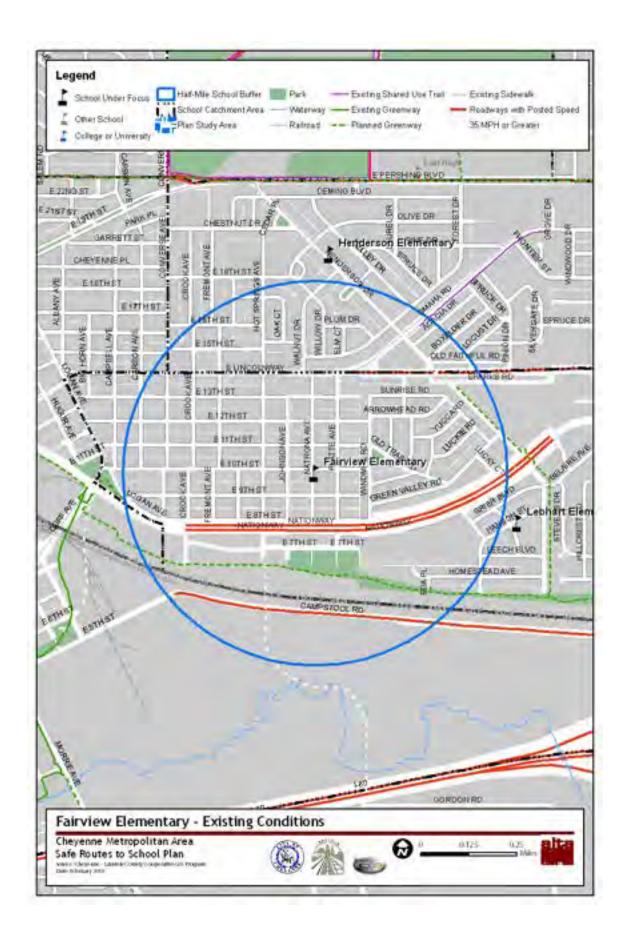
Neighborhood streets around the school are suitable for bicycle riding. While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles.

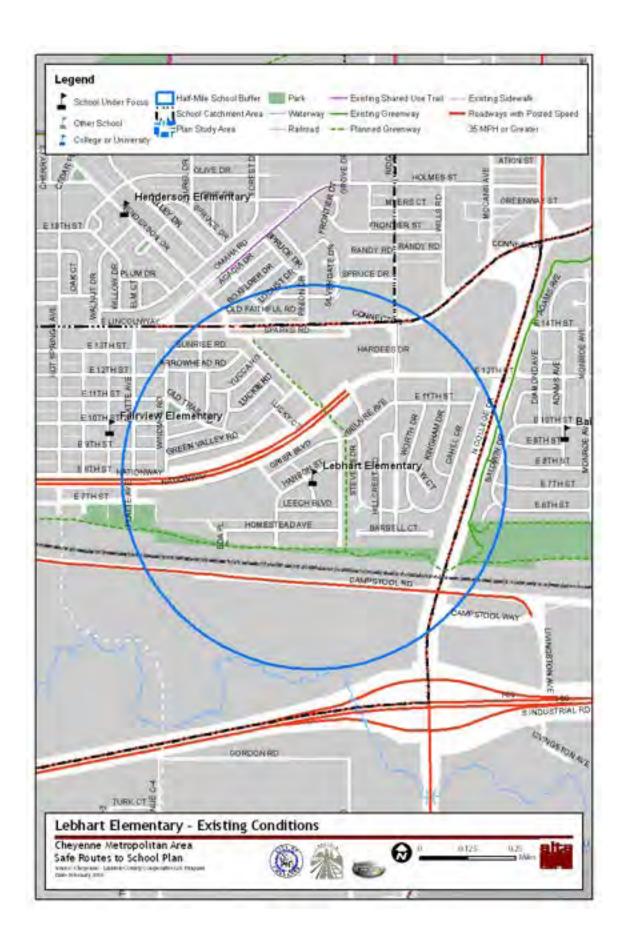
In the afternoon, parents park in the bus loading zone or double-park, requiring students to cross traffic.



Figure 30. Access to the school grounds at Fairview Elementary is generally adequate

Parents have lobbied to have a crosswalk painted across Henderson at the bridge that crosses the drainage. The crosswalk on the west side of Lebhart Elementary is signed with Advance School Warning signs, while the student loading and bus zones lack signage.





| Freedom Elementa | Freedom Elementary ²¹ | |
|--|---|--|
| Existing Walking Environment | The sidewalks around the immediate vicinity of the school meet current ADA standards. | |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. Wave racks are provided for students bicycling to school. | |
| Reported Crashes ²² | Crashes within one-half mile of the school: 0 | |
| | Crashes within two miles of the school: 7, including 1 fatality | |
| | Crashes within the school catchment boundary: 0 | |
| | The reported fatality crash occurred along I-25, in July 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and clear with dry roadways. | |
| Distances to School are Too Far | Many students travel from Warren Air Force Base, immediately north of the school. The school catchment area includes a number of residences that would require a student to walk or bike more than one-half mile to reach the school. Research suggests that students living within one-half mile of their school are more likely to walk or bike to the school with greater frequency. | |
| Missing or Insufficient Walkways | Walkways are not present along Happy Jack Road. | |
| No Safe Place to Ride a Bicycle | Happy Jack Road carries a great deal of freight and bus traffic. This roadway creates challenging traveling conditions for cyclists of all ages. | |

 ²¹ This analysis is limited to the publicly accessible areas south of the Warren Air Force Base Boundary.
 22 Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Traffic safety on Warren Air Force Base is excellent, and the sidewalks around the immediate vicinity of the school meet current ADA standards (Figure 31).

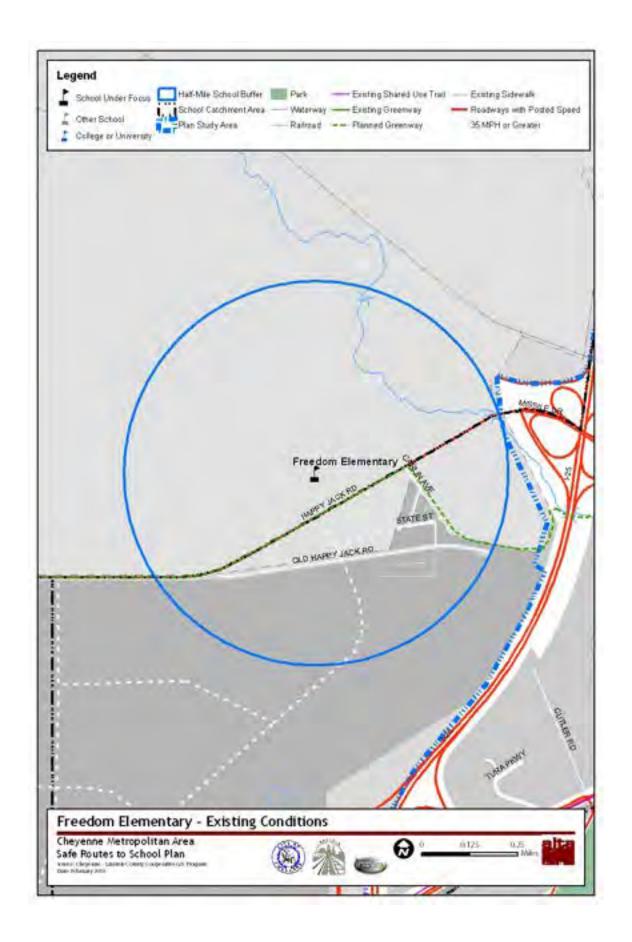
Students from Carlin Heights, northwest of Freedom Elementary, have existing sidewalks to walk on, although the gate into the base requires students to wait for access. However, high-speed roads and difficult crossings characterize the area outside the base, and few students arrive from off base by foot or car.

The City of Cheyenne does not have jurisdiction over roadways or pedestrian facilities on the Air Force Base - the Civil Engineering Squadron addresses infrastructure deficiencies on the base. Happy



Figure 31. Freedom Elementary has an accessible pedestrian campus and high quality bicycle parking

Jack Road and Old Happy Jack Road carry heavy truck traffic due to the location of the nearby City Shop and Laramie County School District Bus Barn. There are no marked crossings within the base, and double-parking by the school entrance can be an issue. Students that do bicycle to school will find adequate wave-rack style parking.



| Goins Elementary | |
|---|--|
| Existing Walking Environment | The sidewalk network in the area is complete. |
| Existing Bicycling Environment | Residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ²³ | • Crashes within one-half mile of the school: 0 |
| | • Crashes within two miles of the school: 16, including 1 fatality |
| | • Crashes within the school catchment boundary: 0 |
| | The reported fatality crash occurred along I-80, in July 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and clear with dry roadways. |
| Distances to School are Too Far | • The school catchment area includes a number of residences that would require a student to walk or bike more than one-half mile to reach the school. Research suggests that students living within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Cribbon Avenue, Jefferson Road, Snyder Avenue, Leisher Road, Fox Farm Road, and Allison Road. |
| | Parsley Boulevard has a posted speed limit of 40 mph. |
| Major Expressways or Arterials Present | • Parsley Boulevard creates an east/west crossing barrier separating residential land east of this roadway from the school. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the east side of the school. The number of spaces may not be sufficient for the number of students who might ride to school. |
| Walkways are Not Accessible | Walkways in the immediate vicinity of the school are five feet wide, but most sidewalks in the surrounding area do not meet current ADA width standards. Many curb ramps in the school's immediate vicinity may not meet current standards due to the period during which they were constructed. |
| Missing or Insufficient Walkways | • The sidewalk network in the area has some missing links and several of the sidewalks near the school are less than five feet wide. |

²³ Crash data between 2005 and 2007 only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: The sidewalk network in the area of Goins Elementary is complete, but most nearby sidewalks are less than five feet wide and walking routes are restricted by limited connectivity in the street network. There are local roadways available for students traveling to school by bicycle, as well as several Greenways and shared use paths. Students that do ride to school face the increased potential of bicycle damage if they use the designated bicycle parking.

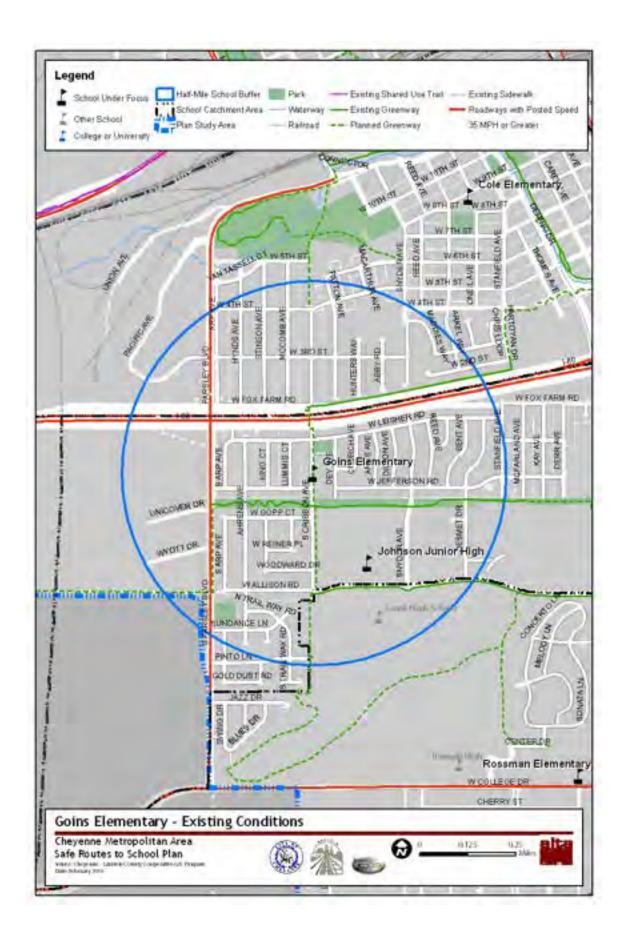
Advance School Warning signs are posted near crosswalks on Cribbon Avenue in both

directions and northbound only on Dey Avenue. The school bus and student loading zones lack advance warning signage (Figure 32).



Figure 32: The school bus and student load zones at Goins Elementary lack Advance Warning signage

Goins Elementary will expand by a building in 2011 will and construct a new schoolyard in place of Civitan Park. The new school is expected to alleviate safety concerns on campus, where a student was confronted last year in one of the mobile classrooms by a McCormick student. Parents have expressed desire for a flashing light on Cribbon Avenue (and potentially Dey Avenue), where traffic is heavy and fast and the presence of crossing guards is sporadic. Teachers keep an eye on the playground and bus areas during pick-up and drop-off.



| Hebard Elementary | |
|---|--|
| Existing Walking Environment | • The majority of streets around Hebard Elementary have sidewalks. However, the sidewalk network south of the school is fragmented and some walkways are narrow. |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ²⁴ | Crashes within one-half mile of the school: 3 |
| | • Crashes within two miles of the school: 27 |
| | • Crashes within the school catchment boundary: 0 |
| Distances to School are Too Far | • The school catchment area includes a number of residences that would require a student to walk or bike more than one-half mile to reach the school. Research suggests that students living within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Morrie Avenue, Duff Avenue, 9th Street, 5th Street and 1st Street. |
| | Campstool Road has a posted speed limit of 40 mph. |
| Missing or Insufficient Bicycle Parking | Bicycle parking is either difficult to find or does not exist. |
| Walkways are Not Accessible | Walkways in the immediate vicinity of the school are five feet wide, but most sidewalks in the surrounding area do not meet current ADA width standards. Most curb ramps in the school's immediate vicinity do meet current ADA standards for running slope or side slope. |
| Missing or Insufficient Walkways | Approximately half of the sidewalks in the area are less than five feet wide, and there are several missing links in the sidewalk network. |
| Difficult Crossings | Fifth Street and Morrie Avenue are challenging to cross. |

²⁴ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Sidewalks in the area vary in width, and some sidewalk connections are missing. Sidewalks north of the school are generally five feet wide, while some sidewalks south of the school are narrower (Figure 33). This is due in part to the period when they were constructed.

While several difficult crossings are nearby, they are outside of the bounds of the schools' catchment area, and students do not need to cross I-80, Greeley Highway, Campstool Road, or the rail yard to access the school. The major barriers to walking and bicycling to Hebard Elementary are 5th Street and Morrie Avenue.

Fifth Street is very busy, and the crossing is particularly hazardous. Morrie Avenue is also quite busy, although the Norris Viaduct Greenway opening may help mitigate unsafe conditions.

Advance School Warning signs are posted on 3rd Street, though the student and bus loading zones abutting the roadway lack this signage.



Figure 33. An incomplete sidewalk network can increase the challenge of walking to school



| Henderson Elementary | |
|---|--|
| Existing Walking Environment | Sidewalks in the area are narrow, but the network is fairly complete. |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience. |
| Reported Crashes ²⁵ | Crashes within one-half mile of the school: 5 |
| | Crashes within two miles of the school: 22, including 1 fatality |
| | Crashes within the school catchment boundary: 2 |
| | • The reported fatality crash occurred along Pershing Boulevard, just east of U.S. 30 in February 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and snowy. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Hot Springs Avenue, Henderson Drive, Omaha Road, and Chestnut Drive. Students who live northwest of the school may also have to travel on Pershing (speed limit of 35 mph) or 19th Street (speed limit of 30 mph). |
| Missing or Insufficient Walkways | • The sidewalk network is relatively complete, but most sidewalks in the area are less than five feet wide. The sidewalk is completely missing from the west side of Kelly Drive between Spruce Drive and Olive Drive on the northeast corner of the school property. |
| Difficult Crossings | Pershing Boulevard is a challenging crossing for students biking or walking to the school from the north and south. |
| Missing or Insufficient Bicycle Parking | • Basic 'wheel bender' bicycle parking is provided on the northeast side of the school near the parking lot. The number of spaces may not be sufficient for the number of students who might ride to school. |
| Walkways are Not Accessible | Walkways in the immediate vicinity of the school are five feet wide, but most sidewalks in the surrounding area do not meet current ADA width standards. Many corners have curb ramps that may not meet current ADA standards due to their age. |

²⁵ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Students walking to Henderson Elementary experience a generally good pedestrian environment, but they may face several challenges. The sidewalk network is fairly complete but some sidewalks are narrow.

While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles. Low speed and low volume neighborhood streets that are suitable for bicycling provide connections to the school.

Sidewalks in the area are narrow, and some sidewalk connections are missing. The midblock crossing of Henderson Drive at the school's main entrance does not have curb ramps (Figure 34). Advance School Warning signs are missing from roadside bus and student loading zones.



Figure 34. The mid-block crossing of Henderson Avenue lacks curb ramps, creating accessibility challenges for pedestrians with physical disabilities



| Hobbs Elementa | ry |
|---|--|
| Existing Walking Environment | • The sidewalk network in the area is generally complete, although most sidewalks are less than five feet wide. |
| Existing Bicycling Environment | • The Weaver Road Greenway passes near the school. Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ²⁶ | Crashes within one-half mile of the school: 1 Crashes within two miles of the school: 4 Crashes within the school catchment boundary: 0 |
| Distances to School are Too Far | The school catchment area includes a number of residences that would require a student to walk or bike more than one-half mile to reach the school. Research suggests that students living within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. High-speed streets within a mile of Hobbs Elementary include Carlson Street, Weaver Road, and Seminoe Road. Storey Boulevard has a posted speed limit of 40 mph. Powderhouse Road has a posted speed limit of 35 mph. Four Mile Road has a posted speed limit of 50 mph. |
| Major Expressways or Arterials Present | Storey Boulevard creates a north/south crossing barrier separating residential land north of this roadway from the school. Powderhouse Road creates an east/west crossing barrier separating residential land east of this roadway from the school. |
| Missing or Insufficient Walkways | The sidewalk network in the area has some missing links and many of the sidewalks near the school are less than five feet wide. |
| Walkways are Not Accessible | Narrow sidewalks do not meet current ADA width standards. |
| Drop-off/ Pick-up Creates Congestion | • The volume of parents dropping students off creates conflict. Only 200 of the 500 students are bussed. The heavy vehicle traffic increases the risk of collisions. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the southwest side of the schoolyard. The number of spaces may not be sufficient for the number of students who might ride to school. |
| Difficult Crossings | Storey Boulevard creates a barrier for students walking and biking to school. |

²⁶ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

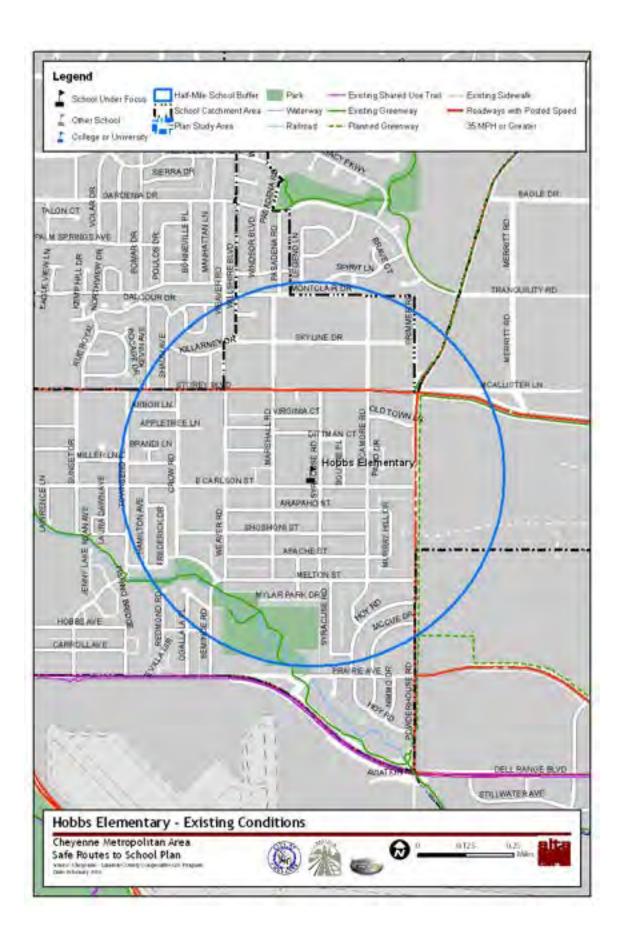
Discussion: Several high-speed roads restrict bicycle and pedestrian access to Elementary. The main entrance to the school is on the middle side of the building on the north side. The sidewalk network in the area is incomplete and most sidewalks are less than five feet wide (Figure 35). Of the 500 students who attend the school, 200 are bussed.

There are opportunities for children to use lower speed and volume neighborhood streets to access the school from the areas directly adjacent to the school via bicycle. Children bicycling to school may have difficulties parking their bicycle due to missing or difficult to find bicycle parking.



Figure 35. Narrow sidewalks near Hobbs Elementary

The parent drop-off area is quite congested, particularly by parents who park on Marshall Road and Carlson Street. There have been several nearcrashes between cars, pedestrians and buses. One student was hit on Carlson Street by a slow moving car that slid into the student. The school has hired people to manage the traffic during school start and release times.



| Jessup Elementa | ry ²⁷ |
|---|---|
| Existing Walking Environment | Most sidewalks are narrow and some sidewalk connections are missing. |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ²⁸ | Crashes within one-half mile of the school: 0 |
| Ol usiles | Crashes within two miles of the school: 2 |
| | Crashes within the school catchment boundary: 0 |
| Distances to School are Too Far | • The school catchment area includes a number of residences that would require a student to walk or bike more than one-half mile to reach the school. Research suggests that students living within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Evers Boulevard, Oakhurst Drive, and Vandehei Avenue. |
| | Bishop Boulevard has a posted speed limit of 45 mph. |
| | • I-25 has a posted speed limit of 65 mph and barriers to restrict access. |
| Major Expressways or Arterials Present | Bishop Boulevard creates an east/west crossing barrier separating residential land east of this roadway from the school. |
| Missing or Insufficient Walkways | • The sidewalk network in the area is nearly complete, but many sidewalks near the school are less than five feet wide. |
| Drop-off/ Pick-up Creates Congestion | The student load zone is congested due to limited space on Evers Boulevard. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the southwest side of the school near the front entrance. The number of spaces may not be sufficient for the number of students who might ride to school. |
| Walkways are Not Accessible | • The front entrance of the school is not accessible to individuals with physical disabilities. Curb ramps that are present are often cracked and do not meet current ADA standards. |

²⁷ A significant portion of this school's catchment area is outside of the pedestrian plan study area. For the purpose of this plan, only the area within the pedestrian plan study area was considered.

²⁸ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Conditions for walking and bicycling to Jessup Elementary vary significantly, depending on where students live. Students living to the east of I-25 face more challenging travel conditions than those living on the west side. Most sidewalks in both areas are narrow and some connections are missing. Generally, curb ramps do not meet current ADA standards for running or side slope.

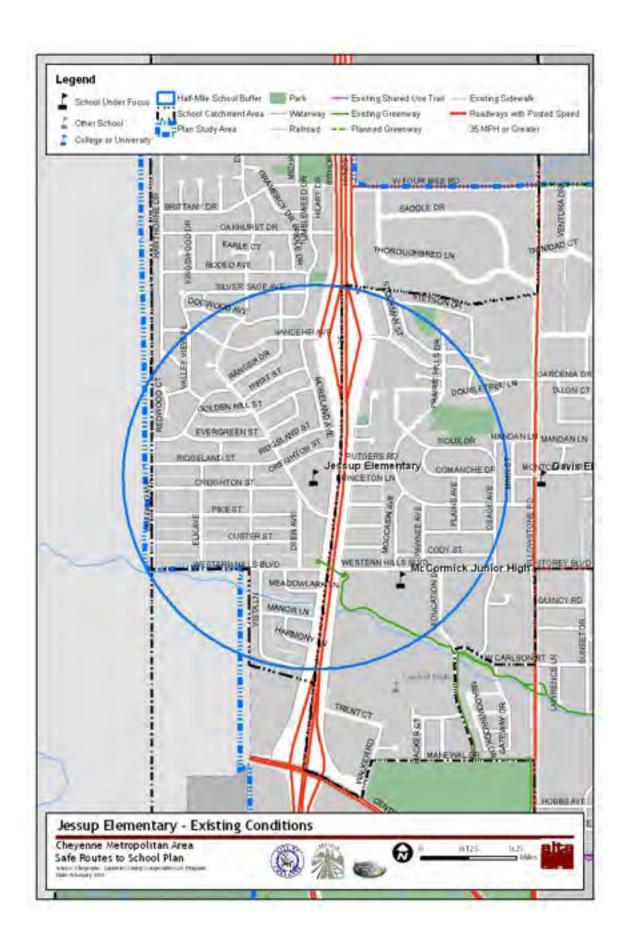
The lack of sidewalks on Bishop Boulevard north of the school is the largest impediment to walking and biking. As the most direct route, Bishop Boulevard receives substantial walking traffic, particularly from students coming from the residential area north of Vandehei Avenue. The shoulder is narrow to nonexistent, while the shoulder drops off steeply. The Principal would like to install another crosswalk with an advance warning beacon on the southern end of the school grounds, as many students travel from the residential area to the south. The intersection of Vandehei Avenue and Evers Boulevard is also busy, as motorists do not always look for pedestrians before proceeding on Vandehei Avenue.

A trail or signage directing cyclists and pedestrians to lower traffic routes could increase safety for students living north of the school. While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles (Figure 36).

The main entrance to the school is on Bishop Boulevard. The lack of parking on Bishop Boulevard increases congestion at the drop off on Evers Boulevard. Physically disabled individuals encounter accessibility difficulties when trying to enter the school via the front entrance. The school is scheduled for rebuilding in three years, which could result in an improved loading area.



Figure 36. Wheel bender style bicycle parking located near the front entrance to Jessup Elementary



| Johnson Junior I | High ²⁹ |
|---|--|
| Existing Walking Environment | Most streets near Johnson Junior High school have complete sidewalks. |
| Existing Bicycling Environment | • The Allison Road Greenway and a shared use path along I-80 provide bicycle connections to the school. Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ³⁰ | • Crashes within one-half mile of the school: 0 |
| Crasnes | Crashes within two miles of the school: 15, including 1 fatality |
| | Crashes within the school catchment boundary: 8 |
| | The reported fatality crash occurred along I-80, in July 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and clear with dry roadways. |
| Distances to School are Too Far | • Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | College Drive, Fox Farm Road, Parsley Boulevard, Greeley Highway, and Walterscheid Boulevard have posted speed limits of 40 mph or greater. |
| | • I-80 has a posted speed limit of 60 mph or greater. |
| Major Expressways or Arterials Present | College Drive creates a crossing barrier separating residential land north and east of this roadway from the school. |
| rresent | Fox Farm Road creates a north/south crossing barrier separating residential land north of this roadway from the school. |
| | I-80 creates a north/south crossing barrier separating residential land north this roadway from the school. |
| | Greeley Highway creates an east/west crossing barrier separating residential land east of this roadway from the school. |
| Drop-off/ Pick-up Creates Congestion | • Student loading can be problematic due to the volume of students and limited space in the student load zone. |
| Missing or Insufficient Walkways | • The sidewalk network in the area is nearly complete, but many of the sidewalks near the school are less than five feet wide. |
| Difficult Crossings | • There are higher-speed roads on all four sides of the school, with limited intersections at which to cross on bicycle or on foot. |

²⁹ A significant portion of this school's catchment area is outside of the pedestrian plan study area. For the purpose of this plan, only the area within the pedestrian plan study area was considered.

³⁰ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Traffic safety has not been identified as an issue for parents of students at Johnson

Junior High. Challenges for walking or bicycling include a less well-connected street grid, narrow sidewalks and a number of major expressways and arterials bisecting the school catchment area. Many students travel to the school from more than onehalf mile away, which discourages walking and biking trips.

Accessing College Drive and points south is difficult and often forces students to walk on the shoulder of busy roadways. Because there is no direct route to Johnson, car traffic pinches at Jefferson (near Goins Elementary) and where Fox Farm Road turns into Leisher Road. A priority for the future is to create a safe passage from the I-80 overpass to the school along Cribbon Avenue.



Figure 37. Greenways create safe and comfortable pedestrian walkways with few points of motor vehicle conflict

There are several pathways in the area, including a

Greenway (Figure 37) and a shared use path along I-80 that includes a bicycle/pedestrian overcrossing of the freeway. Additionally, a number of lower speed and volume local streets are suitable for bicycling.

The sidewalk network is nearly complete, though walking routes from several neighborhoods are long due to low roadway connectivity. With the opening of South High School, traffic through the area is anticipated to triple.



| McCormick Jun | ior High ³¹ |
|---|---|
| Existing Walking Environment | • Sidewalks directly adjacent to the school are wider than five feet, and most streets in the area provide sidewalks. A pedestrian overcrossing facilitates access over I-25, although it is not ADA-accessible. |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ³² | Crashes within one-half mile of the school: 0 Crashes within two miles of the school: 2 Crashes within the school catchment boundary: 13 |
| Distances to School are Too Far | • Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Bishop Boulevard has a posted speed limit of 45 mph or greater. Central Avenue, Dell Range Boulevard, and Yellowstone Road have posted speed limits of 40 mph. I-25 has a posted speed limit of 65 mph or greater. Pershing Boulevard, and Storey Boulevard, have posted speed limits of 35 mph or greater. |
| Major Expressways or Arterials Present | Pershing Boulevard creates a north/south crossing barrier separating residential land south of this roadway from the school. I-25 creates an east/west crossing barrier separating residential land west of this roadway from the school. Yellowstone Road creates an east/west crossing barrier separating residential land east of this roadway from the school. Storey Boulevard creates a north/south crossing barrier separating residential land north of this arterial from the school. |
| Missing or Insufficient Walkways | • The sidewalk network in the area is nearly complete, but many of the sidewalks near the school are less than five feet wide. |
| Drop-off/ Pick- up Creates Congestion | • The length student load zone does not provide adequate space for drop- off and pick-up based on the number of students attending the school. |
| Missing or Insufficient Bicycle Parking | Wheel bender' bicycle parking is provided on the north side of the school. The number of spaces may not be sufficient for all students who may ride to school. |
| Difficult Crossings | Yellowstone Road |

³¹ A significant portion of this school's catchment area is outside of the pedestrian plan study area. For the purpose of this plan, only the area within the pedestrian plan study area was considered.

³² Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Sidewalks adjacent to McCormick Junior High are wider than five feet, providing good access to the school. However, sidewalks in surrounding areas are narrow.

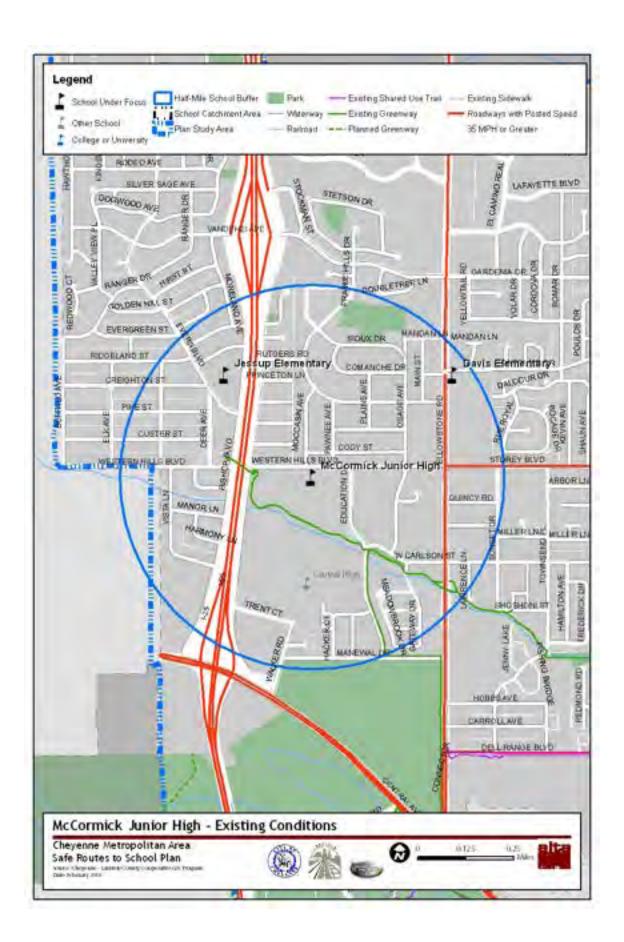
School Zone pavement markings exist, but are faded and difficult to see. The parent drive-through lane is challenging for all users, particularly as there is only is one drop-off space for 1,200 students. The Police Department has sent an officer at release time nearly every day to monitor the situation. In addition, the School Resource Officer has been present in an unmarked vehicle.

The crossing at Yellowstone Road is considered a challenging aspect of walking or biking from the east and west. With a posted speed limit of 40 mph, the street has marked crosswalks, which students do not always use. The crossing of I-25 is made easier by a pedestrian overcrossing; though accessing the facility is difficult for physically impaired pedestrians due to missing curb ramps on the south side of the facility. Another concern is Education Drive, particularly for students leaving athletic practice after school at the same time as Central High School releases its students. With strong parent involvement, the City installed a crosswalk at Education Drive and Western Hills Boulevard, which has improved the situation



Figure 38. 'Wheel Bender' bicycle parking at Johnson Junior High

Students walking or biking to the school from the north or south do not have as difficult crossings, but they are a small minority of the residences in the school catchment area. While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles (Figure 38).



| Pioneer Park Eler | Pioneer Park Elementary ³³ | |
|---|---|--|
| Existing Walking Environment | • The sidewalk network in the area is complete, and most sidewalks are wider than five feet. | |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. | |
| Reported Crashes ³⁴ | Crashes within one-half mile of the school: 2 | |
| | Crashes within two miles of the school: 12, including 1 fatality | |
| | Crashes within the school catchment boundary: 6 | |
| | The reported fatality crash occurred along I-25 in July 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and clear with dry roadways. | |
| Distances to School are Too Far | Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. | |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Snyder Avenue, Randall Avenue, and 24th Street. | |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the east side of the school on the playground. The number of spaces may not be sufficient for the number of students who might ride to school. | |
| Walkways are Not Accessible | • Walkways in the surrounding neighborhood are generally complete, but some do not meet current ADA width standards. Many corners have older curb ramps that do not meet current ADA standards due to their age. | |

³³ A significant portion of this school's catchment area is outside of the pedestrian plan study area. For the purpose of this plan, only the area within the pedestrian plan study area was considered.

³⁴ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Students walking or bicycling to Pioneer Park Elementary have a relatively easy time within one-half mile of the school. The sidewalk network in the area is complete, and most sidewalks are wider than five feet with a few exceptions (e.g., portions of Cribbon Avenue and Cosgriff Court west of McComb Avenue; Figure 39).

Students riding to school may experience a greater risk of bicycle damage if they choose to utilize the parking provided. While I-25 is nearby to the west, the school catchment area lies only to the east of the freeway, meaning no students need to cross the freeway to get to the school. No other higher-speed streets exist in either a one-half mile radius of the school or within the school catchment area.

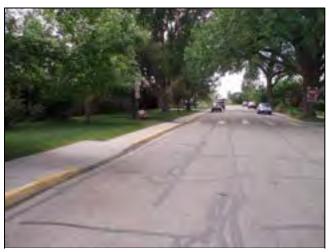


Figure 39. Varying sidewalk widths near Pioneer Park Elementary



| Rossman Elemer | ntary ³⁵ |
|---|---|
| Existing Walking Environment | • The sidewalk network is generally complete in the direct vicinity of Rossman Elementary and less complete in the neighborhood south of College Drive. The signalized intersection of Walterscheid Boulevard and College Drive provides a safe pedestrian crossing opportunity. |
| Existing Bicycling Environment | Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. |
| Reported Crashes ³⁶ | Crashes within one-half mile of the school: 1 Crashes within two miles of the school: 9 Crashes within the school catchment boundary: 2 |
| Distances to School are Too Far | • Some students live further than a half-mile from the school. Research suggests that students within one-half mile of their school are more likely to walk or bike to the school with greater frequency. |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Allison Road, College Drive east of Division Avenue and west of Greeley Highway. College Drive west of Division Avenue has a posted speed limit of 50 mph. Walterscheid Boulevard north of College Drive has a posted speed limit of 35 mph. |
| Major Expressways or Arterials Present | College Drive creates a north/south crossing barrier separating residential land south of this roadway from the school. Walterscheid Boulevard creates an east/west crossing barrier separating residential land east of this roadway from the school. |
| Missing or Insufficient Walkways | Sidewalks generally do not exist on roadways south of College Drive. |
| Missing or Insufficient Bicycle Parking | Basic 'wheel bender' bicycle parking is provided on the south side of the school, on the playground. The number of spaces may not be sufficient for the number of students who might ride to school. New bike racks will likely be installed once the school is rebuilt. |
| Walkways are Not Accessible | Unpaved walkways around the school are difficult for people with physical impairments. |
| No Safe Place to Ride a Bicycle | College Drive and Walterschied Boulevard provide direct connections to the school but high posted speeds make these roadways a barrier for young cyclists. |
| Difficult Crossings | College Drive and Walterscheid Boulevard are both higher-speed roads that pose obstacles to students walking or biking to school. |

This school is currently under construction and will be rebuilt in its current location
 Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Two higher-speed streets, W College Drive and Walterscheid Boulevard, are directly adjacent to Rossman Elementary on the south and east. These streets create barriers for students walking and bicycling to school. Because of the residential pattern in the school catchment area, few students can take a route to school that avoids these barriers.

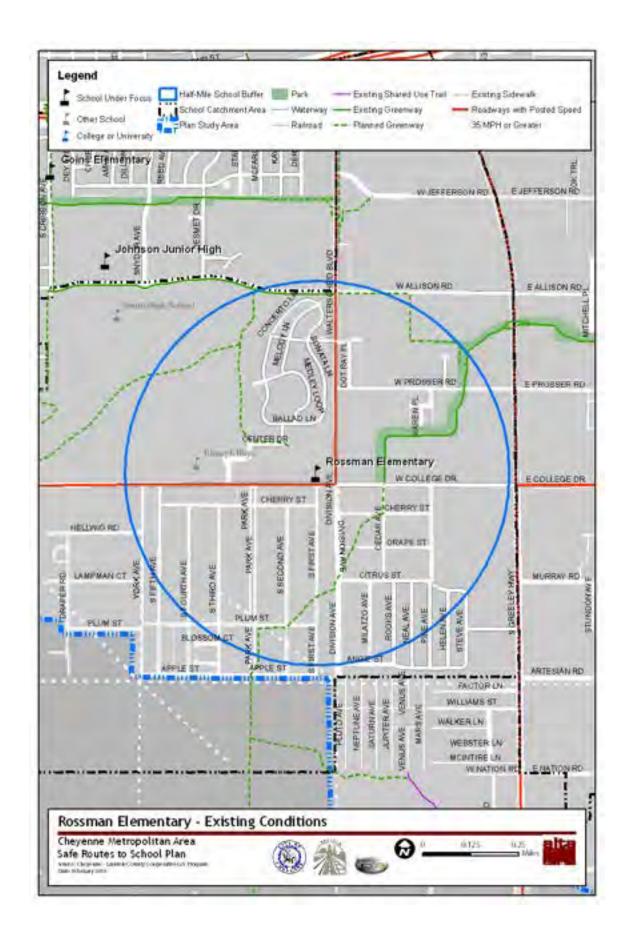
The signalized intersection of Walterscheid Boulevard and College Drive provides a safe pedestrian crossing opportunity (Figure 40). School Zone signs are not present on College Drive though warning signs exist along Walterscheid Boulevard. There is no adequate direct sidewalk between the school and neighborhood to the north. The Walterscheid Boulevard sidewalk ends at the school boundary.



Figure 40. The signalized intersection of College Drive and Walterscheid Boulevard increases crossing safety

While beneficial for locking bicycles during the day, the 'wheel bender' style of bike racks currently provided can damage students' bicycles.

Rossman Elementary is now twice its previous size, having incorporated students who previously attended Afflerbach Elementary.



| Saddle Ridge Elementary ³⁷ | | |
|---|---|--|
| Existing Walking Environment | The sidewalk network around Saddle Ridge Elementary will be completed as the surrounding roadways are developed and housing is constructed. | |
| Existing Bicycling Environment | • Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. | |
| Reported Crashes ³⁸ | Crashes within one-half mile of the school: 0 Crashes within two miles of the school: 0 Crashes within the school catchment boundary: 0 | |
| Distances to School Too Far | • The school catchment area includes a large rural area where students are bussed. The travel distance to school for these children is general greater than one-half mile. | |
| Dangerous Driving Speeds Around Schools | • U.S. 30 is a high-speed roadway near Saddle Ridge. Right now U.S. 30 is the boundary of the catchment area and crossing hazards are minimal. | |
| Major Expressways or Arterials Present | U.S. 30 has a posted speed limit of 55 miles per hour. | |

Discussion: Saddle Ridge Elementary accommodates students through an ADA compliant pedestrian environment and wave racks near the school entrance for bicycle parking (Figure 41). Student pick-up and dropoff is separated from the bus loop, minimizing conflicts during the morning and evening rush.

New construction around Saddle Ridge Elementary will gradually fill-in sidewalks in the subdivision (currently only a few houses have been built). The only higher speed roadway in the area is U.S. 30; currently this roadway serves as the school catchment boundary, minimizing any potential crossing conflicts.

Saddle Ridge Elementary serves many students in the surrounding rural area. Many of these



Figure 41. Saddle Ridge Elementary has an excellent pedestrian and bicycle environment on campus

students live more than one half mile away from the elementary school and will likely not walk due to the trip length.

³⁸ Crash data between 2005 and 2007 was only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

³⁷ This school is currently under construction and will be rebuilt in its current location



| Sunrise Elementary | | | |
|---|--|--|--|
| Existing Walking Environment | Recently constructed sidewalks within the immediate vicinity of the school offer good pedestrian accessibility, while the surrounding sidewalk network is relatively complete. | | |
| Existing Bicycling Environment | A Greenway to the northeast and a shared use path in the park to the east provide safe off-street cycling connections. Most residential streets in the area have low automobile speeds and volumes, providing a safe cycling experience for students. | | |
| Reported Crashes ³⁹ | • Crashes within one-half mile of the school: 0 | | |
| | Crashes within two miles of the school: 9, including 1 fatality | | |
| | • Crashes within the school catchment boundary: 0 | | |
| | The reported fatality crash occurred along Pershing Boulevard, just east of U.S. 30 in February 2005. A pedestrian was hit while traveling along the roadway shoulder. Conditions were dark and snowy. | | |
| Dangerous Driving Speeds Around Schools | Higher-speed roads with posted speed limits of 30 mph may act as barriers to younger children. These roads include Meadow Drive, Taft Avenue and East 12th Street. | | |
| Drop-off/ Pick-up Creates Congestion | Parents always attempt to park as close to the school as possible during the afternoon pick-up. Modifications made prior to the beginning of the 2009/2010 school year may help to alleviate some congestion. | | |
| Walkways are Not Accessible | Sidewalks are generally complete, but several do not meet current ADA width standards. Many corners have older curb ramps that do not meet current ADA standards. | | |
| Missing or Insufficient Walkways | • The sidewalk network in the area is nearly complete, but many of the sidewalks near the school are less than five feet wide. | | |

-

³⁹ Crash data between 2005 and 2007 only available within the City of Cheyenne political boundary and the area defined as the study area for the "Cheyenne Metropolitan Area Pedestrian Plan" (blue dashed boundary)

Discussion: Recently constructed sidewalks within the immediate vicinity of the school offer good pedestrian accessibility (Figure 42). Sidewalks further from the school are narrow in some locations and could increase the challenge students walking or biking to school.

Pershing Pointe houses numerous students who have to cross Taft Avenue to get to Sunrise Elementary. This crossing is particularly challenging due to high speeds and traffic volumes.

There are no higher-speed streets or difficult crossings in the area within the area. A Greenway to the northeast and a shared use path in the park to the east also provide cycling routes. Children that bicycle to school can park their bikes near the front entrance of the school.



Figure 42. Sunrise Elementary offers 'wave rack' style bicycle parking and excellent ADA accommodation on school grounds

Morning drop-off is relatively manageable because of staggered arrival times. However, the afternoon pick-up is very congested from 3:15 to 3:30 p.m. Parents attempt to park as close to the school entrance as possible. In 2009, the school re-signed the loop for pick-up and drop-off, restriped the crosswalks, and posted a 5 mph speed limit sign in the parking lot. It is undetermined what effects on traffic patterns, safety, and congestion these measures will have.





IV. Solutions

The following chapter describes district-wide and school-specific solutions to improve and encourage walking and bicycling for students in the Cheyenne Metropolitan Area. These recommended solutions were informed by a detailed public input process, data collection activities, and direct consultation with a number of stakeholder groups, including the City of Cheyenne, the Cheyenne Metropolitan Planning Organization, Laramie County School District (LCSD) #1, and school principals. The discussion organizes the proposed non-infrastructure related solutions into the following categories:

- Education Solutions
- Encouragement Solutions
- Policy and Enforcement Solutions
- Evaluation Solutions

Following the district-wide discussion of non-infrastructure related solutions, the plan outlines engineering tools that can help improve the walking and biking environment around each school. The final section of this chapter provides a summary of proposed infrastructure improvements and a planning level cost opinion for the 24 elementary schools and 3 junior high schools under focus in this Plan.

Education Solutions

The term "Safe Routes to School" refers to a variety of multi-disciplinary programs aimed at increasing the number of students walking and bicycling to school. Education programs are an essential component of a Safe Routes to School program. Education programs generally include outreach to students, parents or guardians, and motorists. Students are taught bicycle, pedestrian, and traffic safety skills. Parents, guardians and motorists receive information on transportation options and driving safely near schools.

The potential solutions presented here are organized by short-term, medium-term, and long-term recommendations. Each program has value, but some programs are easier to implement than others or need an existing network of interested parents and volunteers that are more readily available after the establishment of a SR2S program.

Short-Term Solutions: Programs That Should Be Implemented First

Safety Education

Pedestrian and bicycle safety education teaches children to understand traffic safety behaviors, laws and rules. Pedestrian safety education teaches children basic traffic safety rules, sign identification, and crossing decision-making tools. Pedestrian training is typically recommended for first- and second-graders, and teaches basic lessons such as "look left, right, and left again," "walk with your approved walking buddy," "stop, look, and listen," and "lean and peek around obstacles before crossing the street." Trained safety professionals can administer pedestrian safety in the classroom or gym class. Classroom teachers may use established pedestrian safety curriculum such as the Bicycle Transportation Alliance's curriculum (www.bta4bikes.org/at_work/pedsafetyeducation.php), WalkSafe (www.walksafe.us), the Teaching Children to Walk Safely as They Grow and Develop guide for

parents and caregivers (www.saferoutesinfo.org/guide/graduated walking/index.cfm), and Livable Streets Education (http://streetseducation.org/curriculum).

Bicycle safety training is normally appropriate beginning in or after the third grade and helps children understand that they have the same responsibilities as motorists to obey traffic laws. The League of American Bicyclists offers an extensive bicycle safety curriculum called Kids II. This seven-hour class is aimed at 5th and 6th grade students and teaches necessary bicycle riding skills and how to pick safe bicycling routes. The curriculum is designed to have a League Certified Instructor (LCI) teach the class.

Medium-Term Solutions: Programs That Should Be Implemented Second

Bicycle Rodeos

Bicycle Rodeos are family-friendly events that incorporate a bicycle safety check, helmet fitting, instruction about the rules of the road, and an obstacle course. Rodeos also provide an opportunity to check children's bikes and instruct them on proper helmet use. Adult volunteers can administer rodeos, or they may be offered through the local Police or Fire Department. In order to increase participation, bicycles rodeos can be incorporated into health fairs, back to school events, and Walk and Bike to School days.

School Zone Traffic Safety Campaign

A School Zone Traffic Safety Campaign creates awareness of students walking and bicycling to school. A safety campaign is an effective way to reach the general public and encourage drivers to slow down and look for students walking and biking to school.

A School Zone Traffic Safety Campaign uses signs and banners located near schools (for example, in windows of businesses, yards of people's homes, and print publications) to remind drivers to slow down and be careful in school zones. This campaign can be kicked off at the start of each school year or in conjunction with special events such as Walk and Bike to School Month (October).

Banners and signs can be effective tools to remind motorists about traffic safety in school zones. Large banners can be hung over or along roadways near schools with readable letters cautioning traffic to slow down, stop at stop signs, or watch for students in crosswalks with catch phrases such as:

- "Drive 25, Keep Kids Alive"
- "Give Our Kids a Brake"

Long-Term Solutions: Implemented After Short- And Medium-Term **Programs**

Bus Safety Campaign

Many schools use buses to transport students who live too far away to walk to school. School buses are large and restrict sight lines for drivers and pedestrians. It is often difficult for drivers and students to see each other around school buses. Schools can implement a bus safety campaign that reminds students and their parents about the importance of walking and riding cautiously around buses and to wave and communicate to the bus driver. The campaign can include flyers, letters sent home, newsletter articles, posters, and announcements for parents and students.

Encouragement Solutions

Encouragement programs focus on making walking and bicyling fun while increasing public awareness of the benefits of walking and biking to school. Encouragement events and activities help increase the number of students walking and biking to school. The activities often include a variety of special events and contests, outreach campaigns, and presentations to school and community groups. Encouragement programs can be used to educate parents, school personnel, students, and the community about the health and safety benefits of a successful Safe Routes to School program.

Encouragment programs do not need much funding, but their success depends on a school champion or group of volunteers for sustained support. The solutions in the encouragement section are organized by short-term, medium-term, and long-term recommendations.

Short-Term Solutions: Programs That Should Be Implemented First

Suggested Route to School Maps

Suggested Route to School maps show stop signs, signals, crosswalks, sidewalks, trails, overcrossings (or pedestrian bridges), and crossing guard locations around a school. These can be used by families to identify the best way to walk or bike to school.

LCSD #1 currently produces "Suggested Walking Routes" maps for elementary schools (). These maps should continue to be produced and distributed with regular updates. LCSD #1 and the Cheyenne MPO should also seek feedback on the routes from parents at the school.

Walk and Bike to School Day/Week/Month

Walk and Bike to School Day/Week/Month are special events encouraging students to try walking or bicycling to school. The most well-known of these is International Walk to School Day, a major annual event in October that attracts millions of participants in over 30 countries. LCSD #1 has participated in these activities, but there remains room for expansion of the events and exposure for students.



Figure 43: A suggested route map shows safe walking and bicycling routes and other helpful transportation information

Walk and Bike to School Days can be held yearly, monthly, or even weekly, depending on the level of support and participation from students, parents, and school and local officials. Some schools organize more frequent days – such as weekly Walking/Wheeling Wednesdays or Walk and Roll Fridays – to give people an opportunity to enjoy the event on a regular basis. Parents and other volunteers accompany the students, and staging areas can be designated along the route to school where groups can gather and walk or bike together. These events can be promoted through press

releases, articles in school newsletters, and posters and flyers for students to take home and circulate around the community.

Programs That Should Be Implemented Medium-Term Solutions: Second

Walking School Buses

Parents and guardians often cite distrust of strangers and the dangers of traffic as reasons why they do not allow their children to walk to school. Walking School Buses are a way to make sure that children have adult supervision as they walk to school. Walking School Buses are formed when a group of children walk together to school and are accompanied by one or two adults (usually parents or guardians of the children on the "bus"). As the walking school bus continues on the route to school, it picks students at designated meeting locations.

Walking school buses can be informal arrangements between neighbors with children attending the same school or official school-wide endeavours with trained volunteers and structured meeting points with a pick-up timetable⁴⁰.

Stop and Walk

This year-round campaign is designed to encourage parents who drive their children to school to stop several blocks from school, and walk the rest of the way. Not all students are able to walk or bike to school. They may live too far away from school to walk or their route to school be include hazardous traffic situations such as a major arterial road. This type of campaign is used to allow students who are unable to walk or bike to school a chance to participate in school walking programs. It also helps reduce traffic congestion within the school's immediate vicinity. The program can be included as a part of other encouragment activities such as the Golden Sneaker Award, Walk Across Wyoming, and the Mileage Club.

Long-Term Solutions: Implemented After Short- And Medium-Term **Programs**

Friendly Walking/Biking Competitions (Incentive Programs)

Contests and incentive programs reward students by tracking the number of times they walk, bike, carpool, or take transit to school. Contests can be individual, classroom competition, or interschool competitions. Local businesses may be willing to provide incentive prizes for these activities. Students and classrooms with the highest percentage of students walking, biking, or carpooling compete for prizes and "bragging rights." Small incentives such as shoelaces, stickers, and bike helmets can be used to increase participation. It can also be effective to



Figure 44: Example of a mileage club tally card

⁴⁰ Many walking school bus resources are available online, such as WalkingSchoolBus.org (www.walkingschoolbus.org) and the National Center for Safe Routes to School's Walking School Bus guide: www.saferoutesinfo.org/guide/walking school bus/index.cfm.

allow different grades and schools (high school vs. grade school vs. junior high school) to compete against each other in a mobility challenge.

Examples of Walking and Biking Competitions include:

On-campus walking clubs (mileage clubs) - Children are issued tally cards () to keep track of "points" for each time they walk, bike, bus or carpool to or from school. When they accrue a specified number of points, they earn a small prize and are entered in a raffle for a larger prize. At the end of the school year, there is a drawing for major prizes.

Pollution Punchcard - This year-round program is designed to encourage school children and their families to consider other options for getting to school such as biking, walking, carpooling, and public transportation. Every time a student walks, bikes, or carpools to school, a parent volunteer or school representative stamps the card. Students then receive a reward when the punch card is complete.

Walk and Bike Challenge Week/Month - This month-long encouragement event is generally held in conjunction with National Bike Month in May or with the state's annual bike celebration, such as Wyoming's Bike to Work Week in June. Students are asked to record the number of times they walk and bike during the program. The results are tallied and competing schools or classrooms compare results. Students who are unable to walk or bike to school can participate by either walking during a lunch or gym period, or by getting dropped off further away from the school and walking with their parents the last several blocks.

Golden Sneaker Award - Each class keeps track of the number of times the students walk, bike, carpool or take the bus to school and compiles these figures monthly. The class that has the most participation gets the Golden Sneaker Award. (The award can be created by taking a sneaker, mounting it to a board like a trophy, and spray painting it gold.)

Walk Across America/Wyoming - This is a year-round program designed to encourage school children to track the number of miles they walk throughout the year. Students will be taught how to track their own mileage and will also learn about places in the United States on their way. Teacher or volunteer support is necessary.

Each of these programs can use incentives to increase participation and reward the students for their efforts. Examples of incentives include:

- Shoelaces
- Pedometers
- Reflective zipper pulls
- Bicycle helmets

- Raffle tickets for a bicycle from a local bike shop
- Early dismissal
- Extra recess time
- Pizza parties

Back-to-School Blitz

Families typically set transportation habits during the first few weeks of the school year and many families are not aware of the many transportation options available to them. Because of this, most families will develop the habit of driving to school. A "Back to School Blitz" can be used at the beginning of the school year to promote walking, bicycling, transit, and carpooling as school transportation options.

The "Back to School Blitz" includes many of the other programs in this toolkit, including Suggested Route Maps, articles in school newsletters, and enforcement activity. Additional elements include:

A packet given to each family containing information about school transportation options, including:

- Cover letter signed by the principal encouraging parents to create transportation habits with students that promote physical activity, reduce congestion, increase school safety, and improve air quality
- School transportation maps (Figure 46) or suggested routes to school maps that include bicycling and walking routes, transit and school bus stops, drop-off and parking areas, and bike parking locations
- Pledge forms about not driving alone to school; entries go in raffle for a prize donated by local businesses

In addition to the packet, the following strategies can be included:

- Table at back-to-school night with materials and trained volunteers who can answer questions about transportation issues
- Article in first school newsletter about transportation options and resources
- Enforcement activities
- Strict enforcement of school parking policies during first month of school and throughout the year if possible

Bike Trains

A bicycle train is very similar to a walking school bus. Groups of students accompanied by adults can bicycle together on a pre-planned route to school. Routes can originate from a particular neighborhood or, in order to include children who live too far to bicycle, begin from a park, parking lot, or other meeting place. They may operate daily, weekly or monthly. Bike trains help address parents' concerns about traffic and personal safety while providing a chance for parents and children to socialize and be active.

Locally-Sponsored Bicycle and Walking Events

The State of Wyoming, Laramie County, and the City of Cheyenne sponsor a number of events that encourage residents to get out and get active. Such events include the Wyoming Fitness Council's Health and Fitness Day, Wyoming marathon races, and walks, runs, and rides for charity. Schools are encouraged to structure their encouragement activities around such special events. For example, over the course of a week, students could walk the distance of a marathon as part of a Walking across Wyoming program.

Policy and Enforcement Solutions

School and district policies can focus on methods to ensure that vehicle traffic, busing and transit, and walking and bicycling to school are conducted in the safest and most efficient way possible. Many of the identified policies focus on vehicle pick-up and drop-off activities. Implementing policies can often be very low cost, although they may involve a greater outlay of staff resources, and new procedures may take some time to gain acceptance.

Enforcement tools are aimed at ensuring compliance with traffic and parking laws in school zones. Enforcement activities help to reduce common poor driving behavior, such as speeding, failing to yield to pedestrians, turning illegally, parking illegally, and other violations. Enforcement strategies, in conjunction with education efforts, are intended to clearly demonstrate what is expected of motorists and to hold them accountable for the consequences of their actions. While most enforcement is the responsibility of police and other law enforcement, there are numerous complementary strategies that can be undertaken by school officials, crossing guards, parents, and volunteers.

The policy and enforcement solutions in this section are organized by short-term, medium-term, and long-term recommendations.

Short-Term Solutions: Programs That Should Be Implemented First

Dedicated Bus Zones

Establishing separate areas for vehicular and bus traffic can help improve traffic flows in the pick-up/drop-off area. Conflicts often occur when private vehicles and buses arrive at the same time and in the same location. Separating traffic often necessitates establishing an off-street bus zone, dedicated solely to buses. Private vehicles should not be allowed to load/unload in the bus zone. Bus zones need to be large enough to accommodate all buses that might be parking there at one time.

Most schools within LCSD #1 currently have dedicated bus zones. It is suggested that this policy be continued and expanded to include all schools with high numbers of bussed students.

Staggered Bell Times

Staggered bell times can help to disperse the traffic peak at schools with a large student population or when two or more schools are in close proximity to one another. For a single school application, students' start and end time should be grouped by grade levels. The start times of these groups should be at least 15 minutes apart. This allows motorists from the first group to leave the school or be completely out of the area by the time the second group arrives. With multiple schools, staggering bell times can be coordinated among two or more schools to ensure that numbers of motorists do not strain the transportation system.

Some schools within LCSD #1 currently have staggered bell times to alleviate busing constraints. It is suggested that this policy be continued and expanded to more schools, including elementary and junior high schools and schools with larger populations.

Parent Drop-off/Pick-up Operations

Creation of a parent drop-off/pick-up "loop" can help maximize capacity and safety and minimize delay in drop-off and pick-up operations. The loop can be either a dedicated lane just for pick-

up/drop-off or a portion of the larger parking lot that has been marked with cones to serve as the pick-up/drop-off loop. Having supervisors present can help ensure that loading/unloading moves forward smoothly, efficiently, and safely.

Some schools within LCSD #1 currently have drop-off/pick-up loops. LCSD #1 should work with schools and local jurisdictions to maintain this policy and expand it to include schools where pick-up and drop-off creates significant congestion due to the configuration of existing facilities.

School Safety Committee

Currently LCSD #1 has a School Safety Committee. This group is made up of representatives from the City Engineer's Office, Laramie County Public Works, WYDOT, Cheyenne Police Department, Laramie County Sheriff's Department, the Cheyenne MPO, and various departments within LCSD #1, including Planning and Transportation. This group meets monthly during the school year to discuss safety concerns that have arisen at the various schools and what measures can be taken to address them. Pedestrian and bicycle concerns are some of the most common topics of discussion.

It is suggested that LCSD #1 continue to utilize School Safety Committee as a means to coordinate school safety initiatives.

School Safety Patrols and Crossing Guards

School safety patrols are trained student volunteers responsible for enforcing drop-off and pick-up procedures. Student safety patrols may also assist with street crossings; they do not stop vehicular traffic, but rather look for openings and then direct students to cross. According to the National Safe Routes Clearinghouse, "student safety patrols [increase] safety for students and traffic flow efficiency for parents. Having a student safety patrol program at a school requires approval by the school and a committed teacher or parent volunteer to coordinate the student trainings and patrols."

Crossing guards are trained adults, paid or volunteer, who are legally empowered to stop traffic to assist students with crossing the street.

Currently some Cheyenne schools have parents and volunteers who support school staff during arrival and dismissal time. It is suggested that LCSD #1 continue to utilize parents and volunteers as support for arrival and dismissal but expand the program to create an official school safety patrol that includes parents, adult volunteers, and students.

Crosswalk Enforcement Actions

In a crosswalk enforcement action, the local police department targets motorists who fail to yield to pedestrians in a school crosswalk. A plain-clothes "decoy" police officer ventures into a crosswalk or crossing guard-monitored location, and motorists who do not yield are given a citation by a second officer stationed nearby. The police department or school district may alert the media to "crosswalk stings" to increase public awareness of the issue of crosswalk safety, and news cameras may accompany the police officers to report on the enforcement action.

It is suggested that LCSD #1 request SRO's to hold crosswalk enforcement actions at high priority locations.

School Parking Lot "Citations"

If on-site parking problems exist at a school, such as parents leaving vehicles unattended in loading zones, school staff may issue parking lot "citations" to educate parents about appropriate parking locations. These "citations" are actually warnings designed to look like police tickets and are intended to educate parents about how parking in improper zones can create safety hazards or disrupt traffic flow for other parents during the pick-up/drop-off period.

Other informal enforcement programs include posting "cell free zone" signs in the school parking lot where parents are asked not to use cell phones while driving during drop-off and pick-up. Drop-off and pick-up procedures can be sent home with students at the beginning of the year and after returning from school vacations.

It is suggested that LCSD #1 request that SROs issue parking lot citations after initial warnings have been issued.

Radar Trailer

Speed radar trailers can be used to enforce speed limit violations in known speeding problem areas. In areas with speeding problems, police set up an unmanned trailer that displays the speed of approaching motorists along with a speed limit sign. The Cheyenne Police Department currently uses speed radar trailers throughout the city.

Speed radar trailers can be used as both an educational and enforcement tool. By itself an unmanned trailer effectively educates motorists about their current speed compared to the speed limit. As an alternative enforcement measure, the police department may choose to station an officer near the trailer to issue citations to motorists exceeding the speed limit. Because they can be easily moved, radar trailers are often deployed on streets where local residents have complained about speeding problems. If frequently left in the same location without officer presence, motorists may learn that speeding in that location will not result in a citation and the strategy can lose its benefits. For that reason, radar trailers should be moved frequently.

Medium-Term Solutions: Programs That Should Be Implemented Second

Valet Drop-off

Valet drop-off is a technique to improve traffic flow within the drop-off and pick-up loop by assisting students into and out of vehicles. A "valet" is present at the pick-up/drop-off area to open car doors and assist students into and out of arriving vehicles, thereby improving traffic flow. The valet system eliminates the need for parents to get out of the vehicle to open the door for a child and remove bags or other items. The valet system is typically staffed by school staff or parent volunteers, who can quickly and efficiently move children into and out of vehicles and hold onto backpacks, umbrellas, and other items. Some schools use older grade students as valets, for example having 5th or 6th graders help younger students. However, student volunteers must get out of class early to prepare for pick-up. A valet system should be implemented at least for non-winter months.

A supplement to the valet system is a nameplate in the vehicle window that identifies what student needs to be picked up. This allows the valet to find students and bring them to arriving vehicles.

Platooning Drop-off/Pick-up System

In a platooning system, all vehicles are unloaded/loaded simultaneously, then proceed to the exit. If a vehicle unloads or loads more efficiently than the vehicle in front of it, the rear vehicle must wait for the lead vehicle to finish the unloading/loading, then follow it out of the loop. This tool is best used to control the inclination to always drop-off and pick-up students directly in front of the

school. Often additional curb loading is available downstream of the school and is severely underutilized, creating excess congestion and delay prior to entering the lot. At least two monitors are needed to effectively operate the vehicle platoon - one at the loop entrance to direct the maximum number of vehicles into the lot for a single cycle, and a second to ensure that the lead vehicle proceeds to the front-most loading stall. In some cases, drop-off/pick-up policies and procedures will need to be altered to allow this.

Neighborhood Speed Watch

In areas where speeding problems have been identified by residents, a Neighborhood Speed Watch can be used to warn motorists that they are exceeding the speed limit. A radar unit is loaned out to a designated neighborhood representative to record speed information about vehicles. The person operating the radar unit must record information, such as make, model, and license number of offending vehicles. This information is sent to the local law enforcement agency, which then sends a letter to the registered vehicle owner, informing them that the vehicle was seen on a specific street exceeding the legal speed limit. Letters are typically sent out to those driving at least five miles per hour over the speed limit. Although not a formal citation, the letter explains that local residents are concerned about safety for their families and encourages the motorist to drive within the speed limit.

Neighbors can be indentified through outreach, such as a letter or flyers. Yard signs can also be incorporated into the speed watch program. Participating neighbors post signs stating that children live in the neighborhood and it is necessary to slow down for their safety.

Speed Feedback Sign

A permanent speed radar sign can be used to display approaching vehicle speeds and speed limits on roadways near a school. The unit is a fixed speed limit sign with a built-in radar display unit that operates similar to a radar trailer.

Studies suggest that speed feedback signs are highly effective in slowing traffic, particularly near school zones, on residential streets, and around playgrounds⁴¹. Results also suggest that the effect is long-lasting. In an interview conducted by the same organization traffic engineers and other safety professionals ranked driver feedback signs as the most effective traffic calming method for school zones.

In order to maximize effectiveness for school settings, the radar display unit should be set to only activate during school commute hours. Roadways approaching the school site are the most appropriate location to display speeds, instead of streets along the school frontage that will likely have lower speeds due to pick-up/drop-off traffic.

Evaluation Solutions

Evaluation of the Safe Routes to School program is important to understand the effectiveness of the program, identify improvements that are needed, and ensure that the program can continue in the long-term. Evaluation can measure shift in travel behavior, changes in attitudes toward biking and walking, awareness of the Safe Routes to School program, grant money received, and projects completed.

⁴¹ http://www.stopspeeders.org/options.htm#Radar

The solutions in the evaluation section are organized by short-term, medium-term, and long-term recommendations.

Short-Term Solutions: Programs That Should Be Implemented First

School Site Audit

A School Site Audit, sometimes called a walking audit or walkabout, is an evaluation of pedestrian and bicycling conditions around the school. Typically school site audits are conducted by the local school group or task force on foot and should be conducted during regular school session and times of travel by walking the routes that students use to get to school. A site audit may also be conducted on bicycle in order to better evaluate bicycling conditions.

The goal of a site audit is to document conditions that may discourage walking and bicycling to school and to identify solutions to improve those conditions. The audit should involve an assessment of the built environment around a school (e.g., streets, sidewalks, pathways, crosswalks and intersections, bike routes, traffic controls), drop-off and pick-up operations (e.g., presence of designated loading areas), as well as behaviors of students, parents, and motorists that could contribute to unsafe conditions for bicyclists or pedestrians (e.g., speeding, jaywalking, failure to yield to pedestrians).

A School Site Audit checklist form sample asks for detailed information including:

- Student Drop-Off and Pick-Up Areas;
- Bus Loading Zones;
- Sidewalks and Bicycle Routes;
- Intersections Near the School Property;
- Sight Distance; and
- Traffic Signs, Speed Controls and Pavement Markings

The local school task force can use the School Site Audit checklist as a basis for conducting their walkabout⁴². Along with the checklist, an aerial map of the school area is helpful for the site audit. Aerial photos can be marked up with identified issues and suggested improvements.

Existing conditions maps can be extracted from this report to serve as a starting point for each school site audit.

Perform Annual Hand Tally and Parent Surveys

Since 2005, the federal Safe Routes to School program has set aside federal funding to help states, cities, towns, and schools increase the number of students walking and biking to school. One requirement of receiving this money is that all schools must perform hand tallies and parent surveys to track the effectiveness of the various programs across the country.

The Wyoming Department of Transportation (WYDOT) currently requires Safe Routes to School grantees to submit program evaluations semi-annually. The WYDOT requires data to be gathered using the National Center for Safe Routes to School Student In-Class Travel Tally and Parent Survey⁴³.

⁴² http://www.saferoutes.kv.gov/Evaluation&Data_Collection/School_Site_Audit.pdf

The National Center for Safe Routes to School provides the appropriate forms and related resources, including an online parent survey option: www.saferoutesinfo.org/guide/evaluation/index.cfm.

Medium-Term Solutions: Implemented After Short-Term Programs

Program Evaluation

There are many different education, encouragement, and enforcement programs that can be implemented to help increase the number of students walking and biking to school. Not every program is the correct fit for every school. It is important to evaluate programs in the context of the school environment prior to deciding what would be a good choice for a school. Once programs have been implemented, it is necessary determine whether or not it was a good choice for the school and what about the program worked and what did not work quite as well. Below are some suggested steps for proceeding with the program evaluation process.

Program evaluation can be administered by following these steps:

- Survey local traffic conditions and issues (much of this information can be found from the School Site Audit)
- Identify methods to implement programs
- Determine success benchmarks to evaluate the effectiveness of the program efforts
- Interview program administrators (teachers, volunteers) and participants (students) to discuss what worked and what did not

Engineering Tools

The environment near the school is often a deciding factor when a parent or guardian decides whether or not to let their child walk or bicycle to school. There are many engineering improvements that help improve pedestrian and bicyclist safety and comfort near schools (Figure 45). The engineering improvements encourage motorists to reduce speeds, increase visibility of students walking and biking, and make it easier for students to cross the street. While some engineering efforts may require a larger financial commitment, many tools are very cost effective. The City of Cheyenne's Public Works Department or contractors responsible for constructing engineering improvements. The following engineering improvements should be considered for



Figure 45. Example of a pedestrian refuge island

appropriateness and potential impact at each school. This document contains a basic description of the treatment and discusses several situations where it can improve the bicycle and pedestrian travel environment around schools. Detailed information on design and placement standards are contained in three documents. The 2009 MUTCD⁴⁴, 2003 WYDOT Pedestrian and School Traffic Control Manual (PSTCM), the 2007 Road, Street and Site Planning Design Standards (RSSPDS), Cheyenne's Neighborhood Traffic Management Program Manual (NTMP), and the 2010 Cheyenne Metropolitan Area Pedestrian Plan (CMAPP).

⁴⁴ Modifications mandated by the 2009 updated to the MUTCD are noted where applicable throughout the discussion of engineering tools.

Medians and Pedestrian Refuge Islands

Medians and pedestrian refuge islands are located at an intersection or in the middle of a block. Medians are curbed areas in the center of the roadway that reduce the roadway width and may reduce the speed of traffic. Pedestrian refuge islands (Figure 45) are medians with a cut-out ("refuge") for pedestrians. Pedestrian refuge islands are often used with a marked crosswalk and are at least four-feet wide. They improve pedestrian safety by creating a curb-protected location in the middle of the street. This allows the pedestrian to cross one direction of traffic at a time. These are best used on higher volume streets in conjunction with visibility crosswalks and signs.

In Cheyenne, median islands are allowed on local, collector and arterial roadways. More detail on medians and pedestrian refuge islands can be found in the NTMP and CMAPP.



Figure 46. Example of a speed table

Speed Tables, Speed Bumps and Speed Cushions

Speed tables (Figure 46), bumps and cushions slow vehicles by forcing them to travel over a raised surface (they are also known as "vertical deflection"). Speed tables are longer and wider than speed bumps. They are generally used on lower volume streets and may not be permitted or advised on larger or higher-volume streets. Speed bumps are included in Cheyenne's NTMP but are only in use at one location — on 16th Street near Alta Vista Elementary. Speed bumps can cause challenges during winter maintenance and should be designed and marked for easy recognition by snow plowing personnel. Additional



Figure 48. Paired chicanes create a pinch point that narrows roadway width and slows traffic

design guidance on these devices is available in the CMAPP.

Chicanes

Chicanes (Figure 47) consist of multiple extensions or roadside islands that create a serpentine path for autos. Motorists must reduce speed in order to effectively maneuver around the in-street barriers. Chicanes are mainly used on local streets near a school site. Chicanes can cause challenges during winter maintenance and should be designed and well marked for easy recognition by snow plowing personnel. Cheyenne allows chicanes on local and collector streets. More information on this treatment can be found in the CMAPP and NTMP.



Figure 47. Example of a Chicane

Pinch Points

Pinch points are very similar to chicanes. Chicanes are offset curb extensions, while pinch points are paired curb extensions or roadside islands used create a single auto lane. Pinch points slow traffic by reducing the width of the street. Pinch points are typically used on neighborhood streets. These devices would be appropriate for use on local and collector streets. More information is available in the CMAPP.

Traffic Circles

Traffic circles are in-street speed reduction devices found at residential intersections (Figure 49). They slow traffic by creating a "pinch point" for motorists, while turning vehicles must slow to make a sharper turn. Traffic circles can be used to visually enhance the street by incorporating plants or public art. Cheyenne allows traffic circles on local and collector streets. Additional information on this treatment is contained in the CMAPP and NTMP.

Single Lane Roundabouts

Roundabouts can be used at intersections as an alternative to stop signs or signals. They reduce the speed of traffic while maintaining traffic flow through an intersection. They can be used on low and high traffic volume roads. Roundabouts generally improve crossing conditions for pedestrians but can increase the difficulty of bicycling. It may be beneficial to carefully consider the impact that a roundabout will have on a school cycling route before completing the installation. More information on roundabouts is contained in the RSSPDS and CMAPP.

Reduced Corner/Turning Radius

Reducing the turning radius for right-hand turns means creating a tighter turning angle for the motorist (Figure 50). This reduces the speed at which a motorist can make a right turn. It also improves the visibility of the



Figure 49. Traffic circles are one method of creating a pinch point



Figure 50. Example of a reduced corner/turning radius

pedestrian to the motorists and increases the sight distance of the pedestrian. Detailed discussions of corner radii are available in the CMAPP and RSSPDS. While reducing the radii is appropriate in some locations, it can impact motor vehicle traffic by reducing the turning speed and throughput of the intersection.

School Area Signage (Includes High-Visibility Signs)

The 2009 MUTCD and the PSTCM provide guidance on the use of school area signs and markings (Figure 51). Key signs include the School Crosswalk Warning, School Speed Limit and School Advance Warning Assembly. The 2009 MUTCD stipulates that all new installations or retrofit school signs shall be high visibility signs.

Pavement Markings

Pavement markings (Figure 52) have important functions in a proper scheme of school area traffic control. In some cases, they are used to supplement the regulations or warnings provided by devices such as traffic signs or signals. In other instances, they are used alone and produce results that cannot be obtained by use of any other device.

Pavement markings can also serve as an effective means of conveying certain regulations, guidance, and warnings that could not otherwise be made clearly understandable. Pavement markings have limitations – they might not be clearly visible when wet or covered in snow, and might not be durable when subjected to heavy traffic. The "SCHOOL" marking, used in advance of uncontrolled crosswalks, is the most important school-specific pavement marking. The MUTCD, CMAPP and PSTCM also provide guidance on the use of stop lines, yield lines, curb markings, and other symbol markings.

Sidewalks

Sidewalks create a designated space for pedestrians, as well as bicyclists, who are legally allowed to ride on sidewalks outside the central business district of Cheyenne. A complete sidewalk network is an important component of the transportation system for students. An incomplete sidewalk network, narrow sidewalks, or sidewalks in disrepair are a hazard for students walking and biking and may force students to walk in the roadway. The CMAPP provides a comprehensive discussion of sidewalk related design issues while the RSSPDS details sidewalk and tree lawn widths and provides additional guidance on design features.



Figure 51. High visibility signage



Figure 52. School pavement markings



Figure 53. Physical separation from the roadway increases the comfort of the pedestrian environment

Trails and Greenways

Trails, pathways, and greenways are often viewed as recreational facilities, but they can serve an important function as walking and bicycling corridors to school. Multi-use pathways and Greenways are designed to serve both bicyclists and pedestrians and provide additional width over a standard sidewalk (Figure 54). Pathways may be constructed adjacent to roads, through parks or open space areas, along creeks, or along linear corridors, such as abandoned railroad lines. Regardless of the type, pathways constructed next to the road should have some type of buffer to separate the path area from the adjacent travel lane.

Greenways in Chevenne are maintained by the Parks Department and during snow are generally plowed before streets or sidewalks are cleared of snow. This provides an important connection for student travel. Generally, Cheyenne's Greenways are 10 – 12 feet wide paved multi-use facilities. Design

details can be found in the CMAPP and the Cheyenne Greenway Development Plan.



Figure 54. Cheyenne's Greenway system provides safe and comfortable travel routes to many schools

Curb Extensions/Bulbouts

Curb extensions (sometimes called curb bulbs or bulbouts), such as those on Capitol Avenue in Chevenne, have many benefits for pedestrians (Figure 55). They shorten the street crossing distance, provide additional pedestrian space at corners, allow pedestrians to see and be seen before entering the crosswalk, and simplify the placement of curb ramps. Chevenne allows curb extensions on local, collector and arterial roadways. Design details are available in the NTMP and CMAPP.

High-Visibility Crosswalk Striping

High-visibility striping makes crosswalks more noticable to motorists. Several different crosswalk striping patterns can be used - the most common types of crosswalk striping patterns are shown in Figure 56. The standard crosswalk striping pattern consists of two parallel lines, called the "transverse" or "standard" pattern. A number of "high-visibility" patterns are also in use, such as the ladder, zebra and continental patterns, which add bars for increased visibility.

Currently, Chevenne uses continental style crosswalk markings at all crosswalks located outside of the



Figure 55. Curb extensions reduce the required crossing distance at some designated school crossings

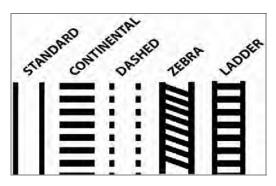


Figure 56. Crosswalk striping examples

downtown core. Crosswalks are restriped annually, in late spring. More information on crosswalk striping standards and accompanying signage is available in the CMAPP, the MUTCD and the PCTCM.

Pedestrian Countdown Signals

Pedestrian countdown signals (Figure 57), like those installed along principal such as Pershing Boulevard and Capitol Avenue give pedestrians information about how much time they have left to cross the street. Children are still learning the skills needed to be safe pedestrians. Without proper information, a flashing hand can confuse some child pedestrians, causing them to run in the crosswalk in order to complete the crossing before the signal changes. Countdown signals help children make decisions about whether or not to enter the crosswalk by telling them how much time they left have to cross the street. The 2009 MUTCD requires pedestrian countdown signals at all actuated crossings where the change interval is greater than seven seconds.

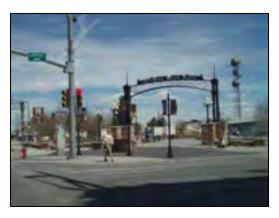


Figure 57. Countdown signals help pedestrians gauge how much time remains in the walk cycle.

Leading Pedestrian Interval

A Leading Pedestrian Interval (LPI) is an option that can be added to a traffic signal. An LPI activates the walk signal prior to releasing parallel vehicle traffic, particularly those attempting to make right or left turns. The 2009 MUTCD states that an LPI, if used, shall be at least 3 seconds in length.

Pedestrian-Only (Hybrid) Signals

One type of pedestrian-only signal is called a HAWK (High-intensity Activated crossWalk). It can be used at mid-block crossings with high pedestrian volumes or at intersections that do not already have a traffic signal. Pedestrians use a push button to activate the warning signal and motorists receive a flashing red light and then a solid red light. When motorists have a solid red light, pedestrians then see a white "walk" indication, letting them know they are allowed to cross the street (Figure 58). After pedestrians have finished crossing the street, motorists then receive a flashing red light that lets them know that they may proceed when it is safe to do so. The 2009 MUTCD contains placement guidance and warrants for HAWK signals.



Figure 58. HAWK signals, such as this one located in West Bloomfield Twp, Michigan) can improve crossing conditions at locations where a full signal is not needed

Stop Lines

Stop lines (Figure 59) are solid white painted lines several feet in advance of a crosswalk. Stop lines provide motorists with a visual cue indicating that they should stop behind the line. Stop bars are an optional addition to "Yield When Occupied" crosswalks in Cheyenne and should be installed at locations where extra visibility is needed, or at locations where motorists frequently fail to stop for pedestrians. Additional design guidance is available in the CMAPP and PSTCM. It should be noted that the 2009 MUTCD requires the use of a R1-5A series sign in when used with stop lines.

Bike lanes

Bike lanes (Figure 60) are a striped portion of the road that forms an area specifically for bicyclists. Bike lanes increase the visibility of bicycles to motorists by giving them a designated space on the road. Bike lanes are better suited for older and more experienced children who have learned the skills needed for bicycle handling, avoiding road hazards and following the rules of the road. Bike lane signing and marking design details are available in the 1999 AASHTO Guide for the Development of Bicycle Facilities.

Secure Bicycle Parking

Providing a secure and convenient location for bicycle parking is one way to help encourage more children to bicycle to school. Good bike parking is conveniently located (near the school entrance, for example), and protects bicycles from vandalism/theft, damage, and weather (Figure 61).

Short-term bicycle parking facilities include racks that permit the locking of the bicycle frame and at least one wheel to the rack and support the bicycle in a stable position without damage to wheels, frame or components.

Long-term bicycle parking facilities are intended to provide secure long-term bicycle storage. Long-term facilities protect the entire bicycle and its components and accessories against theft and against inclement weather, including snow and wind-driven rain.



Figure 59. Stop lines, or yield lines provide guidance for motorists about the desired stop location when a crosswalk is occupied.



Figure 60. Bike lanes delineate roadway space dedicated to cyclists.



Figure 61. Bike parking located near a building entrance can provide secure and safe bicycle parking for students.

Loop Detectors for Bikes

Where minor streets intersect major roads at signalized intersections, devices that detect cars (loop detectors or video detectors) on the minor approach do not always detect smaller objects, like bicycles. These devices can be calibrated to detect bicyclists as well as vehicles.

Loop detectors are used at intersections that are actuated by the presence of a vehicle in the roadway and allow for a bicycle to "trip" the signal and receive a green light. When cyclists position themselves over a loop detector, the detector uses a magnetic field to detect the metal in a bicycle. Video detectors are mounted on a traffic signal and detect bicycles over a larger area. Additional information on Loop Detectors is available in the 2009 MUTCD.

Human-Scale Lighting

Safe sidewalks are essential components of good pedestrian environments, and well-lit environments convey a feeling of comfort and safety, particularly at night (Figure 62). Lighting should illuminate the sidewalk and roadway crossings to increase pedestrian visibility. Lighting is also an important element for multi-use pathways, at underpasses and at other isolated locations. Lights should be low enough to the street to increase pedestrian visibility to road users and light their walking path. Additional details are available in the CMAPP and RSSPDS.

Grade-Separated Crossings

Occasionally, it may be necessary to raise or lower a pedestrian crossing above or below the street level (Figure 63). Due to their high cost, grade-separated crossings should only be considered when there are no safe and convenient alternative routes, such as at freeways, major highways, railways or waterways. Even in these cases, pedestrian-only grade-separated crossings should be built only after careful consideration. Those that require significant elevation change or require substantial out-of-direction travel may not be fully utilized. Grade-separated crossings may also feel unsafe because pedestrians are isolated from others. Additional details are available in the CMAPP.



Figure 62. Human scale lighting helps delineate pedestrian friendly environments by illuminating the sidewalk.



Figure 63. Grade separated crossings can provide connectivity over limited access roadways.

ADA Intersection Retrofit

Because of the time period when many neighborhoods in Cheyenne were constructed, the pedestrian environment does not always meet current specifications of the Americans with Disabilities Act (ADA). As intersections are reconstructed, the City is updating corners to meet current ADA standards⁴⁵. Additionally, Cheyenne currently has funding set aside to make annual

⁴⁵ http://www.access-board.gov/adaag/html/adaag.htm#4.7

ADA improvements at about 25 intersections. A localized and comprehensive ADA intersection retrofit along school walking routes could make it easier for physically impaired adults and children to reach school. Additional design guidance is available in the CMAPP.

Sidewalk Widening

Because of the time period when many neighborhoods in Cheyenne were constructed, the pedestrian environment does not always meet the current ADA specifications. In many neighborhoods, existing sidewalks provide less than the five feet clear space recommended by ADA. However, narrow sidewalks still provide most pedestrians with safe access to and from school. The City plans to widen sidewalks throughout the city as new construction and reconstruction of existing facilities occurs. In the meantime, several schools in Chevenne may benefit from sidewalk widening

in areas of high pedestrian traffic near schools and along designated pedestrian routes. The City does have the authority to require residents to construct or repair sidewalks that front on their property, though this measure is rarely used.

Wayfinding Signage

Many schools in Chevenne could benefit from the installation of wayfinding signage (Figure 64). This signage can help create the feeling of a "safe travel district" and create a unique identity around each school. These signs can help guide visitors along the preferred travel routes and provide additional reminders to motorists that they are near a school. Finally, wayfinding signs posted along greenways will help users determine the direction to each school connected to the system. Additional wayfinding signage recommendations are available in the 2009 MUTCD and the CMAPP.

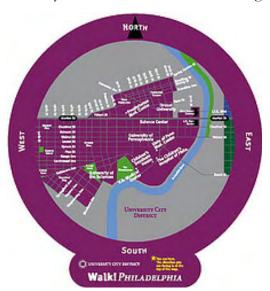


Figure 64. Wayfinding signage, such as this example from Philadelphia can help direct pedestrians to nearby schools and parks.

Cost Opinions

Table 2 summarizes planning-level cost opinions for the recommended Safe Routes to School infrastructure projects. While Table 2 shows the packaged cost for the complete suite of improvements recommended for each school, a detailed summary of the improvements and the associated costs are found in Appendix B.

Table 2. Preliminary School Improvement Cost Opinions

| School | Cost Opinion |
|---------------|--------------|
| Afflerbach | \$29,000 |
| Alta Vista | \$24,000 |
| Anderson | \$49,000 |
| Arp | \$348,000 |
| Baggs | \$126,000 |
| Bain | \$15,000 |
| Buffalo Ridge | \$56,000 |
| Carey | \$1,800 |
| Cole | \$91,000 |
| Davis | \$62,000 |
| Deming | \$10,000 |
| Dildine | \$173,000 |
| Fairview | \$24,000 |
| Freedom | \$3,200 |
| Goins | \$124,000 |
| Hebard | \$5,800 |
| Henderson | \$41,000 |
| Hobbs | \$46,000 |
| Jessup | \$66,000 |
| Johnson | \$143,000 |
| Lebhart | \$107,000 |
| McCormick | \$7,000 |
| Miller | \$15,000 |
| Pioneer Park | \$38,000 |
| Rossman | \$355,000 |
| Saddle Ridge | \$58,000 |
| Sunrise | \$6,300 |
| | |

Engineering Summary Solution Maps

The maps included in this section depict improvements in the following categories:

Intersection Improvements/Crosswalk Improvements. Intersection improvements are noted with a star on the map. Details of many intersection improvements are annotated on the map. Improvements called out by this plan may include adding pedestrian count down signals, striping a crosswalk, or adding curb ramps. If intersection improvements have not been specified, they should be detailed through a field visit and consultation with a City Engineer. A specific intersection improvement that is not called out in this plan is the retrofit of curb ramps to include truncated domes (tactile warning strips). The City of Cheyenne began installation of these devices in 2009; it is assumed that curb ramps do not have truncated domes unless explicitly called out in this plan.

Traffic Calming Improvements. Several streets around schools could benefit from traffic calming. Potential treatments are discussed in the "Engineering Tools" portion of this report as well as the Cheyenne Neighborhood Traffic Management Program Manual. Traffic calming improvements suggested at are generally targeted to improve student load/unload zones where parents park on the opposite side of the street and children may cross midblock, and locations where vehicles slow down at school zone signs but accelerate before leaving the school zone. Additional details on traffic calming improvements and their use in Cheyenne can be found in the City's Neighborhood Traffic Management Program manual. A field review and engineering review determine the type and installation details of any traffic devices.

Curb Extension Improvements. Several crosswalks already in place could benefit from curb extensions, which would increase the visibility of pedestrians, provide traffic calming along streets near schools, and shorten crossing distances for pedestrians. Curb extensions have been proposed on roadways where students would benefit from narrow crossings or in locations where higher speed traffic was noted as a concern by staff, the public, or the project team. Curb extensions should be installed in a manner that complies with the guidelines set for in Cheyenne's Neighborhood Traffic Management Program manual.

Bus Zone/Parent Drop-Off Zone Modification or Improvements. Improvements or modifications can include installation of zone notification signs (e.g., bus loading zone and no standing or stopping signs), or modifications to procedures (e.g., addition of an off-site pickup/drop-off location, designation of one way approach and traffic flow by providing instructions to parents via maps and hand-outs).

A number of schools in Cheyenne are currently under construction, or will be reconstructed within the next five to ten years. The City should continue the current design practice, which creates a separate bus and student load areas off the roadway when space allows. This practice can reduce the conflicts between parents picking up children, school buses, and through motor vehicle traffic. When separation and creation of off-street bus and student load zones is not possible, the on-street bus zones and student load zones should be designated on separate sides of the school. When possible, student load zones should be placed on streets with lower speed limits and both parents and students should receive instruction that crossing mid-block through these pick-up and drop-off zones can create additional safety hazards for all roadway users.

Priority Sidewalk Infill. Priority sidewalk infill refers to a portion of a missing sidewalk that should be prioritized for construction to create a complete sidewalk near a school or along a designated school walking route. Priority infill is shown primarily along existing recommended pedestrian walk routes. In some cases priority sidewalk infill was designated in bus zones or student load zones immediately surrounding the school.

Priority Greenway Connection. Priority greenway connections refer to a portion of greenway that would provide a safe connection to the school and should be prioritized. These connections are suggested walking routes, or close a critical gap that students can use as a pedestrian walking route.

Bicycle Parking Upgrade or Installation. Existing "wheel bender" racks should be replaced with staple racks or other types of bicycle racks that provide support for the tire and bike frame. Additional or existing racks can be placed in a covered, secure location to maximize the protection from whether and minimize the chances of theft or vandalism.

Sign Upgrade or Installation A proposed sign upgrade or improvement is denoted by an orange triangle. The details of the proposed sign upgrade are annotated on the map. Typical reasons for sign upgrade or installation include a missing sign (e.g., School Zone or STOP sign), an existing sign that is damaged or faded, or an existing sign that does not comply with MUTCD standards. It should be noted that all new or retrofit school crossing assemblies at all "yield when occupied" or "stop when occupied" crosswalks should include an R1-5 series sign located at the stop line or yield line to comply with the 2009 edition of the MUTCD. Crosswalk warning assemblies also require a W16-7P arrow placard.



POTENTIAL SCHOOL AREA IMPROVEMENTS

roposed Priority Improvements

- **★** Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- /Unloading Zone Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
 - Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Staff lot could be expanded to the north to reduce potential conflicts during load times.

Consider constructing additional driveway on Wallick Avenue to create flow path through current staff parking lot. Move student load zone to this location. May require staff policy that prohibits parking in this lot during pick-up and drop-off times.

Add "All Way" placards to existing stop signs

MUTCD Signage





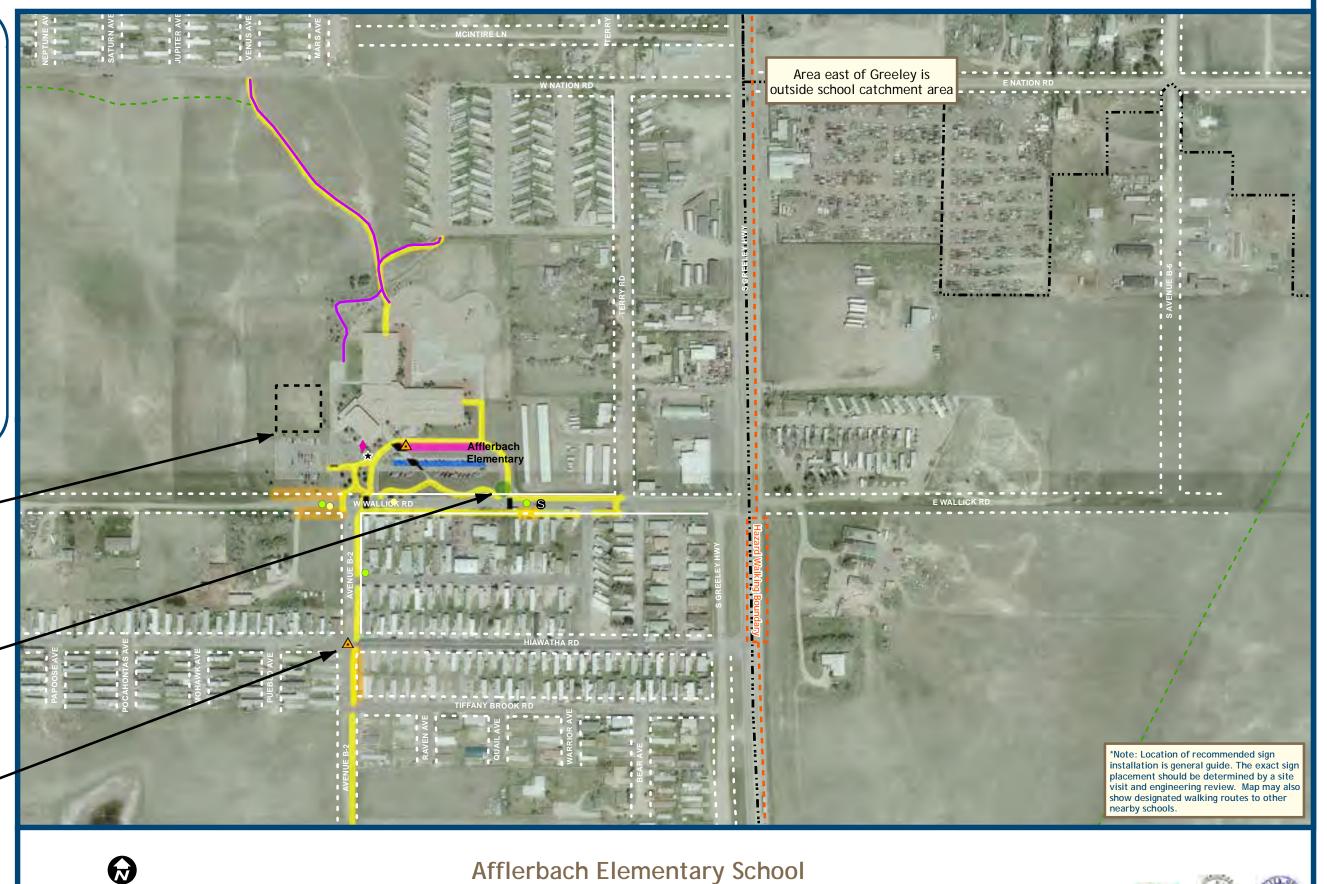






250

Feet















POTENTIAL SCHOOL AREA IMPROVEMENTS

Proposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign
 Improve Bus/Parent Loading
 /Unloading Zone
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
 - Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

The intersection of 18th Street and Morrie (not shown; to west of map extent) lacks a curb cut on the park side

Bus zone on 17th Street is for special needs students

Consider removing bus zone from south and west sides of building to improve traffic flow for all vehicles

Existing speed hump on 16th Street - add markings to enhance visibility

Add student loading zone signs

MUTCD Signage













Alta Vista Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan

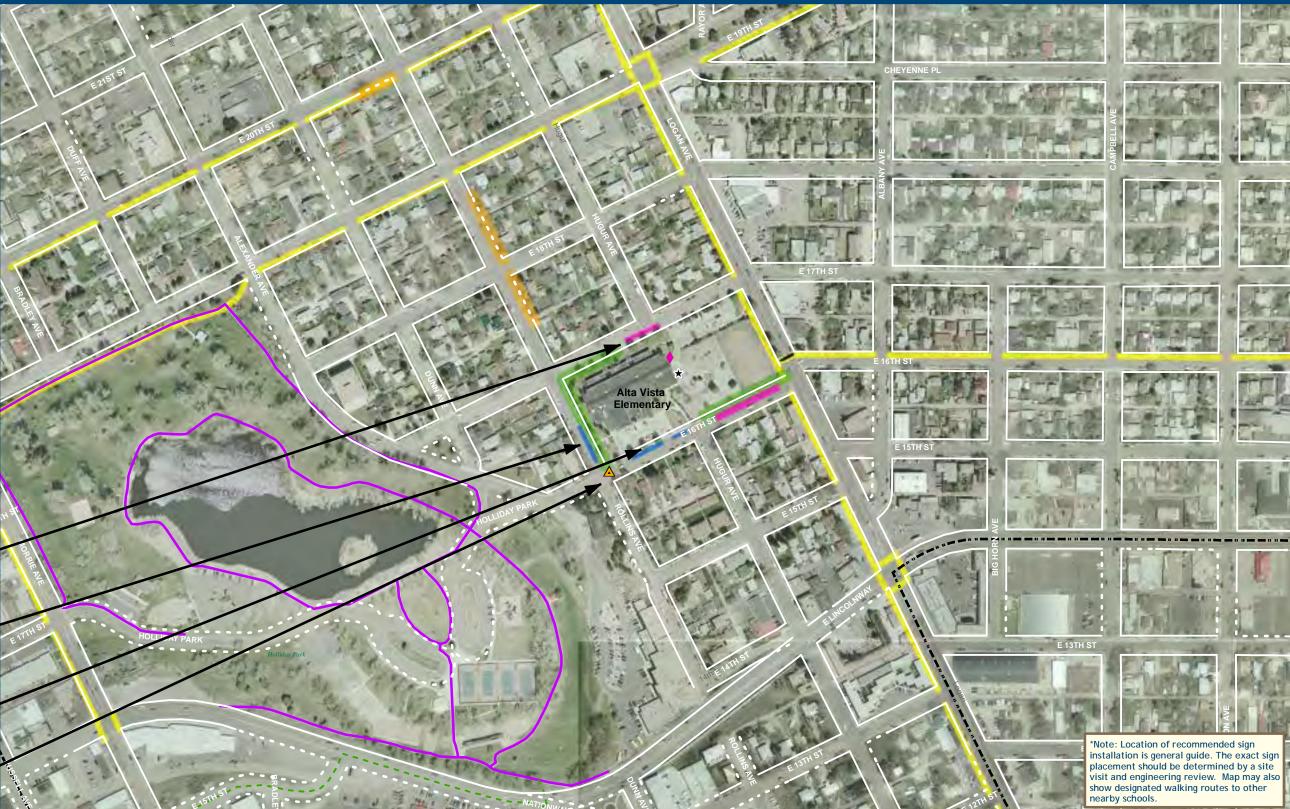














POTENTIAL SCHOOL AREA IMPROVEMENTS

roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Student load zone improvements: add new load zone on Crane, designate specific areas by grade or classroom

> Install Crosswalk Warning Assembly sign and School Speed Assembly sign

Install Crosswalk Warning Assembly sign

MUTCD Signage

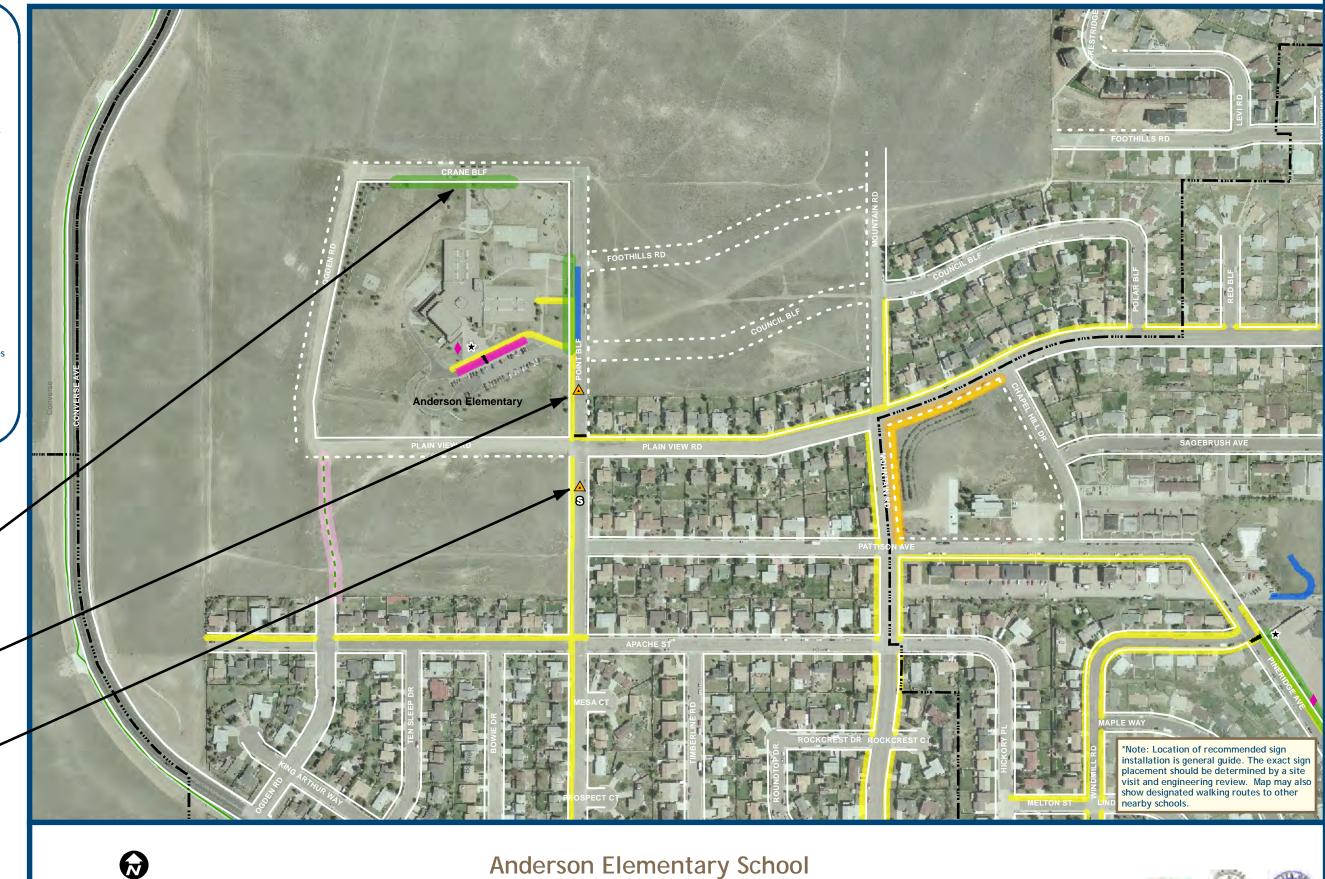














250 Feet

Anderson Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan











roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign
- Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Add Crosswalk Warning Assembly sign

Add School Zone sign

Connection between the school and Ave. C-2 is desirable. Would require property acquisition or easement.

Add ADA compliant curb ramp on west side of crossing

Add ADA compliant curb ramps

MUTCD Signage

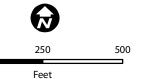












Arp Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan

Greenway is funded but not ye











*Note: Location of recommended sign installation is general guide. The exact sign placement should be determined by a site



roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading /Unloading Zone
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Replace non-MUTCD compliant "Delivery Only" sign

Install School Zone sign

McCann is unpaved from Pershing to Holmes. Priority infill extends to Lincolnway.

MUTCD Signage











250

















roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading /Unloading Zone
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Move bus loading zone from 8th Street to 10th Street Consider moving student load zone as necessary.

Student load zone improvements: add signage, assign students to north or south zone by grade or class

Evaluate and determine need for installation of stop signs and crosswalks at 8th and Monroe and 8th and Adams

MUTCD Signage



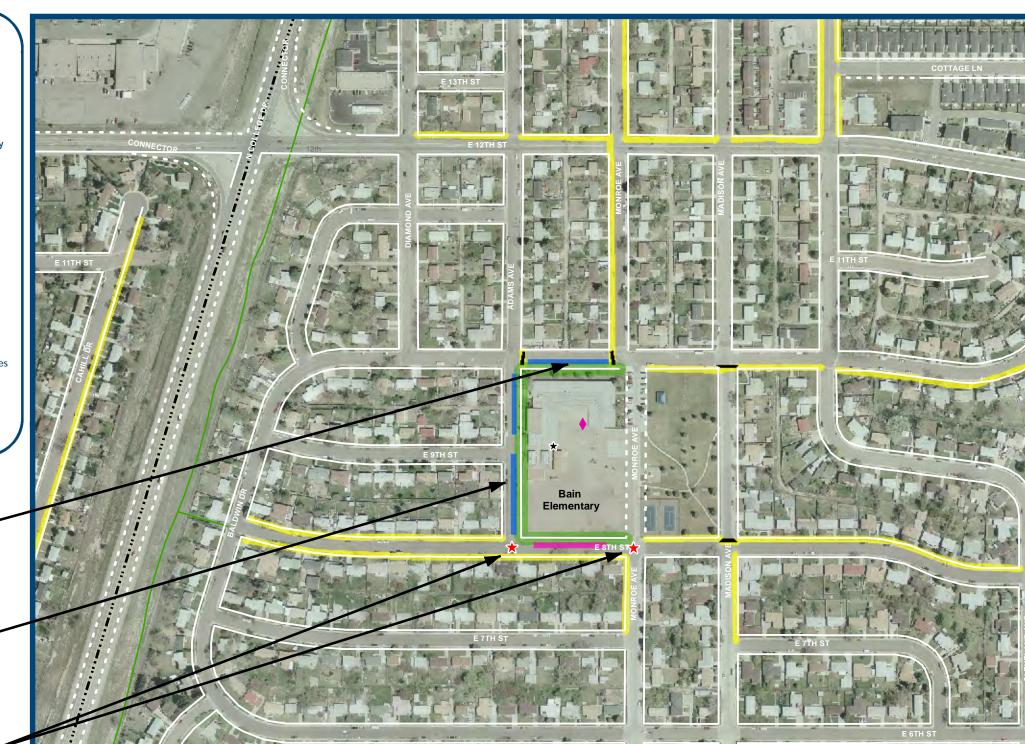
School Zone Sign













Bain Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan





nearby schools.



*Note: Location of recommended sign installation is general guide. The exact sign

placement should be determined by a site visit and engineering review. Map may also show designated walking routes to other







roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Evaluate walking route along Sunflower and possible crossing at Plainview

Add ADA compliant curb ramps and relocate crosswalk

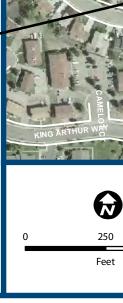
MUTCD Signage

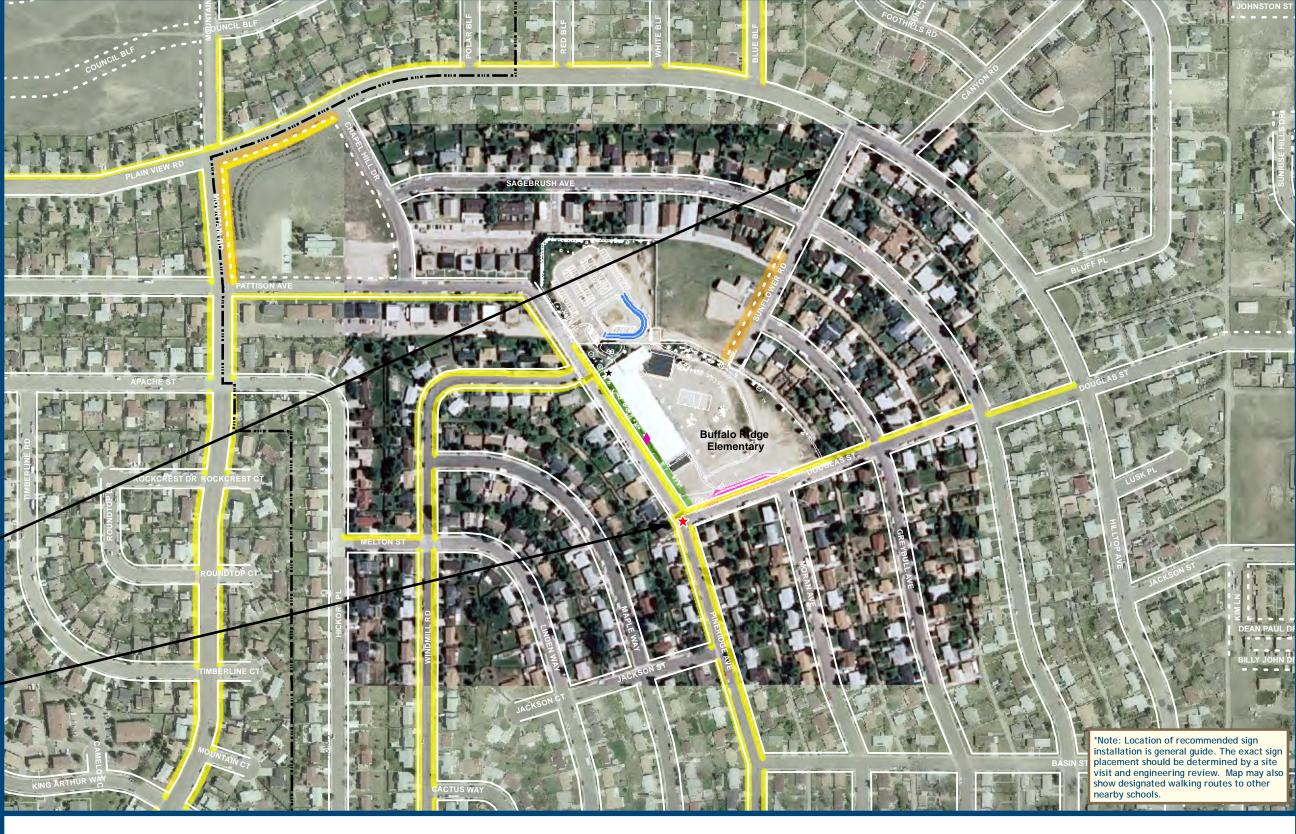


























roposed Priority Improvements

- **★** Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- /Unloading Zone Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*(JHS)
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Create opening in fence to improve student access from Durham Road

Remove old parking signs near bus loading zone

Synchronize signal controller at Rayor with signal at Logan

Carey Junior High campus will be relocated to East High School in the next 5 to 7 years

MUTCD Signage

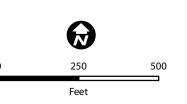












Carey Junior High School Cheyenne Metropolitan Area Safe Routes to School Plan







Note: Location of recommended sign

visit and engineering review.

nstallation is general guide. The exact sign placement should be determined by a site









roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- /Unloading Zone
- Install Traffic Calming --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Add curb cut on southeast corner of intersection to connect to existing crosswalk across Stanfield

Intersection improvements: curb cuts needed on all corners except southeast

Note: Evaluate one way traffic on 8th and O'Neil

Intersection improvements

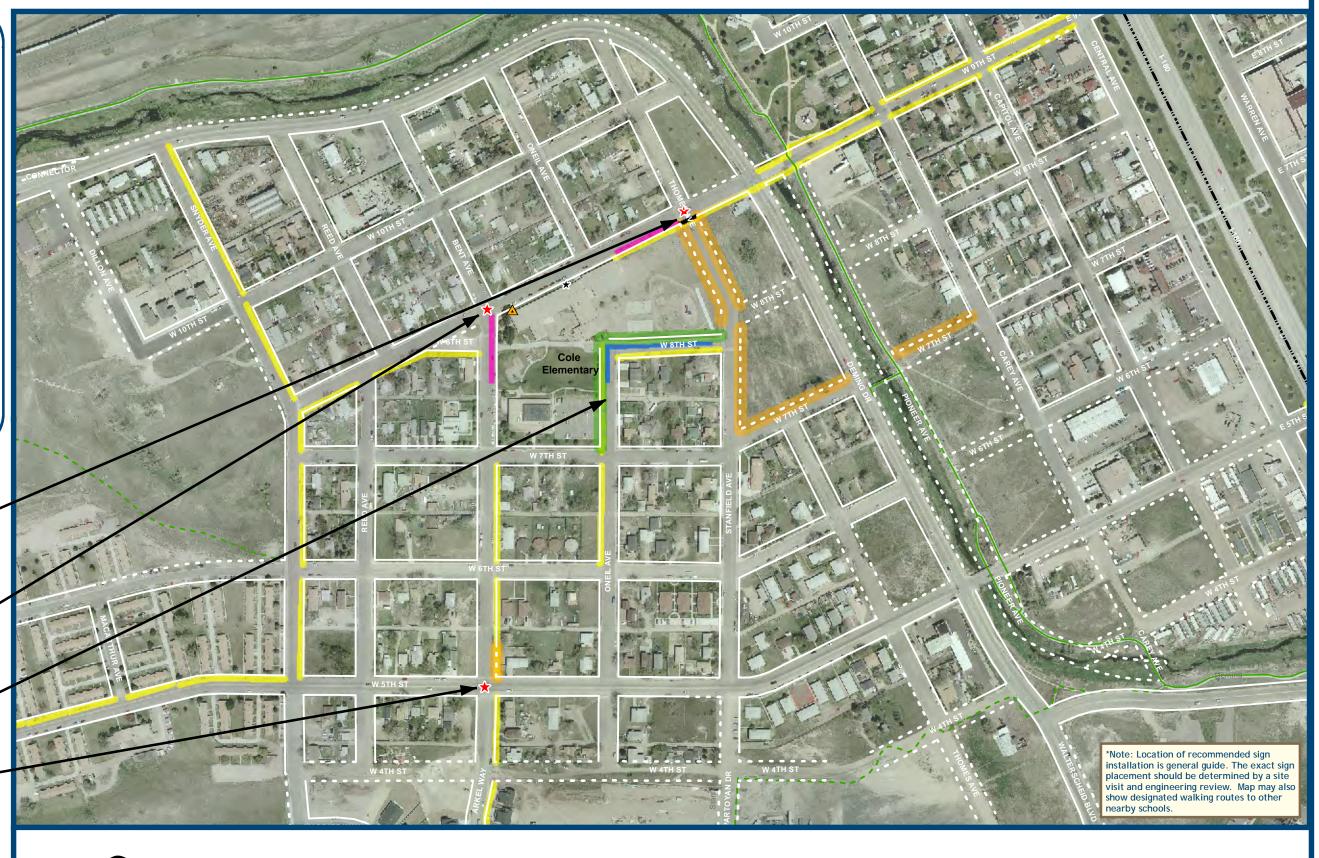
MUTCD Signage

























Proposed Priority Improvements

- Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign
 Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Replace non-MUTCD compliant "Signal Ahead" sign with compliant version

Signalized intersection at Yellowstone and Montclair; remove existing midblock crosswalk on Yellowstone

Install stop bar before crossing

Existing School Speed Assembly signs (30 MPH)

Existing School Speed Assembly signs

MUTCD Signage

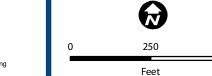


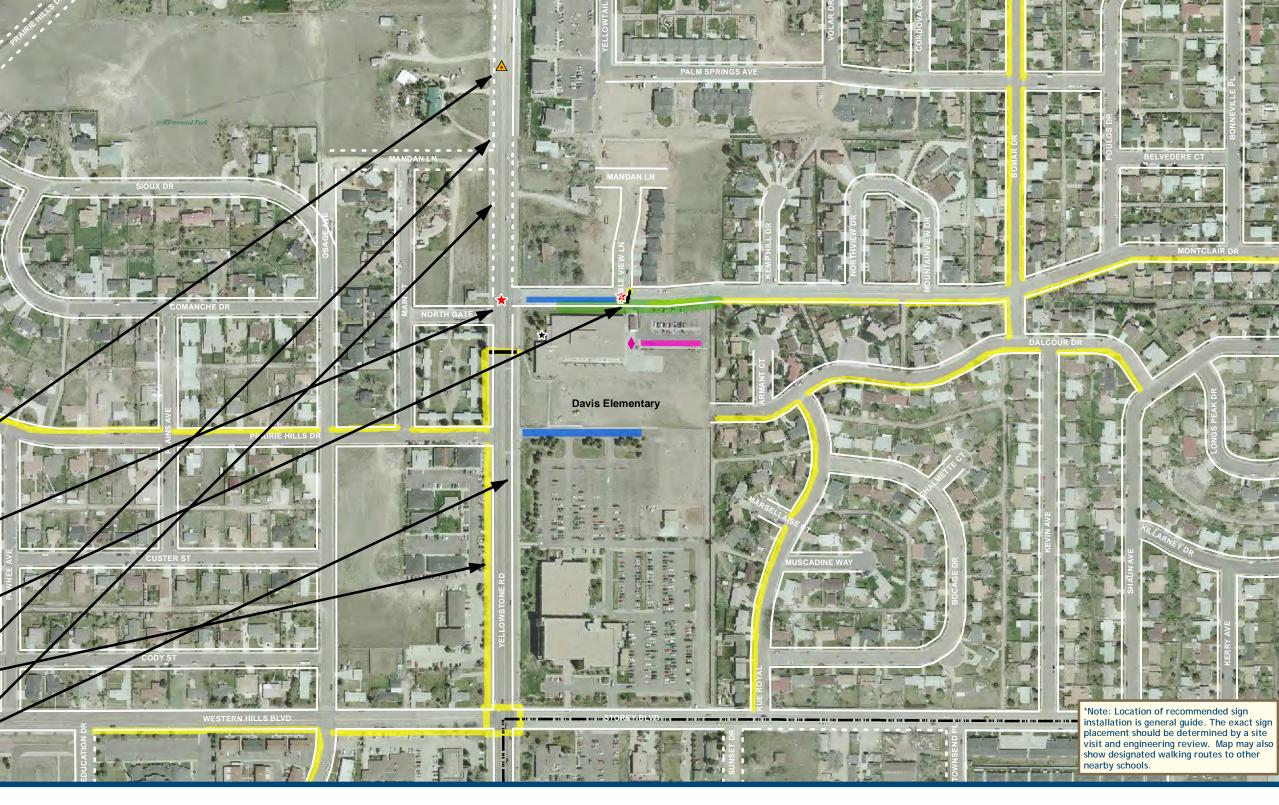












Davis Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan











roposed Priority Improvements

- G Install Curb Extensions
- Intersection Improvements
- Install or Upgrade Bike Parking
- # Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- (Improve Existing School Zone Sign
- Improve Bus/Parent Loading /Unloading Zone
- Install Traffic Calming --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- X Existing Bike Parking
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Deming Elementary has students in grades K-3. It is paired with Miller Elementary, which has students grades 4-6.

Install School Zone signs

Install Crosswalk Warning Assembly signs at Frontier Park crosswalks

Relocate bus zone to Frontier Park and move student load zone to 5th Avenue to ease congestion at southeast corner of school

MUTCD Signage



School Zone Sign









250

Feet



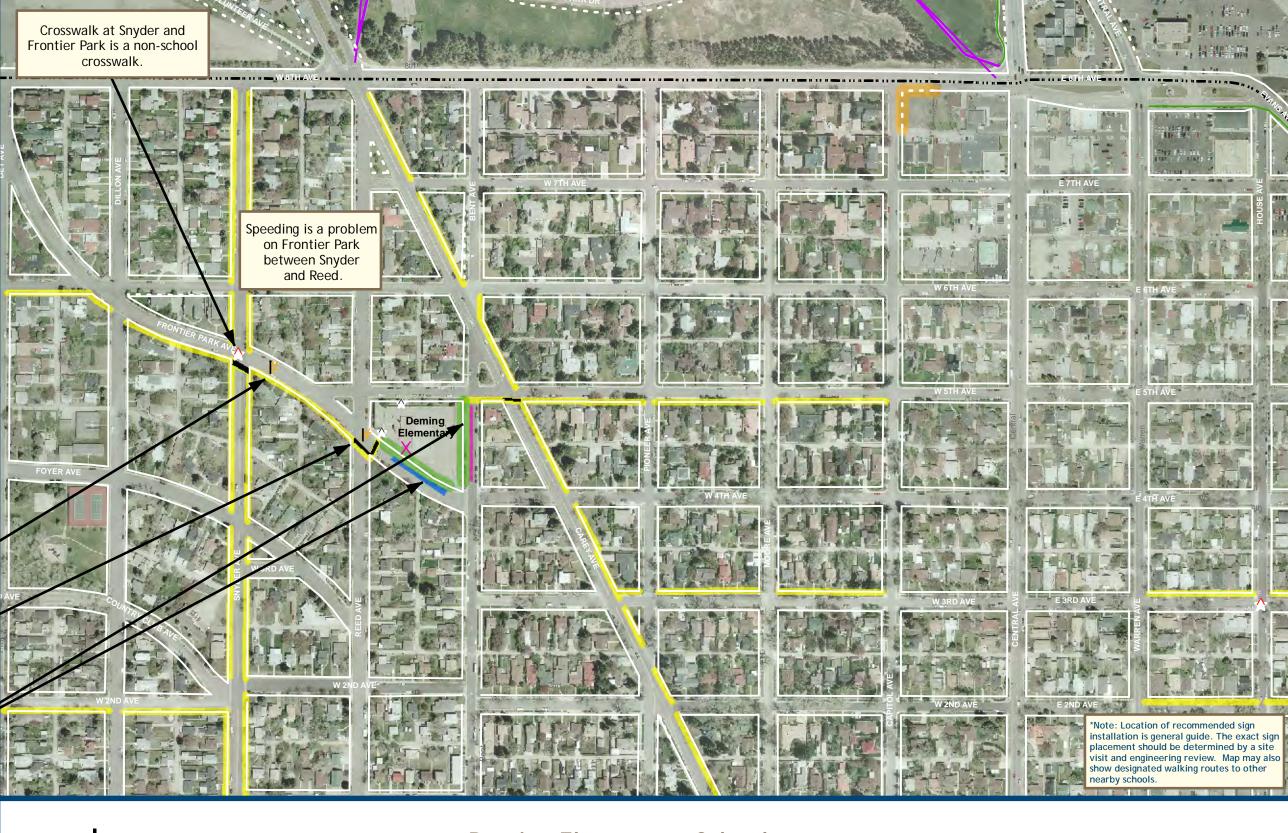
Deming Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan













roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- /Unloading Zone Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Miller Elementary has students in grades 4-6. It is paired with Deming Elementary, which has students in grades K-3.

Add stop control to intersection at House and 3rd Avenue

Add pedestrian countdown indicator to signals at intersection of Evans and Pershing

MUTCD Signage











250

















roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
 - Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Remove redundant School Zone sign on Dell Range, east of existing School Zone sign with flashing beacon near Connie

Install School Zone signs

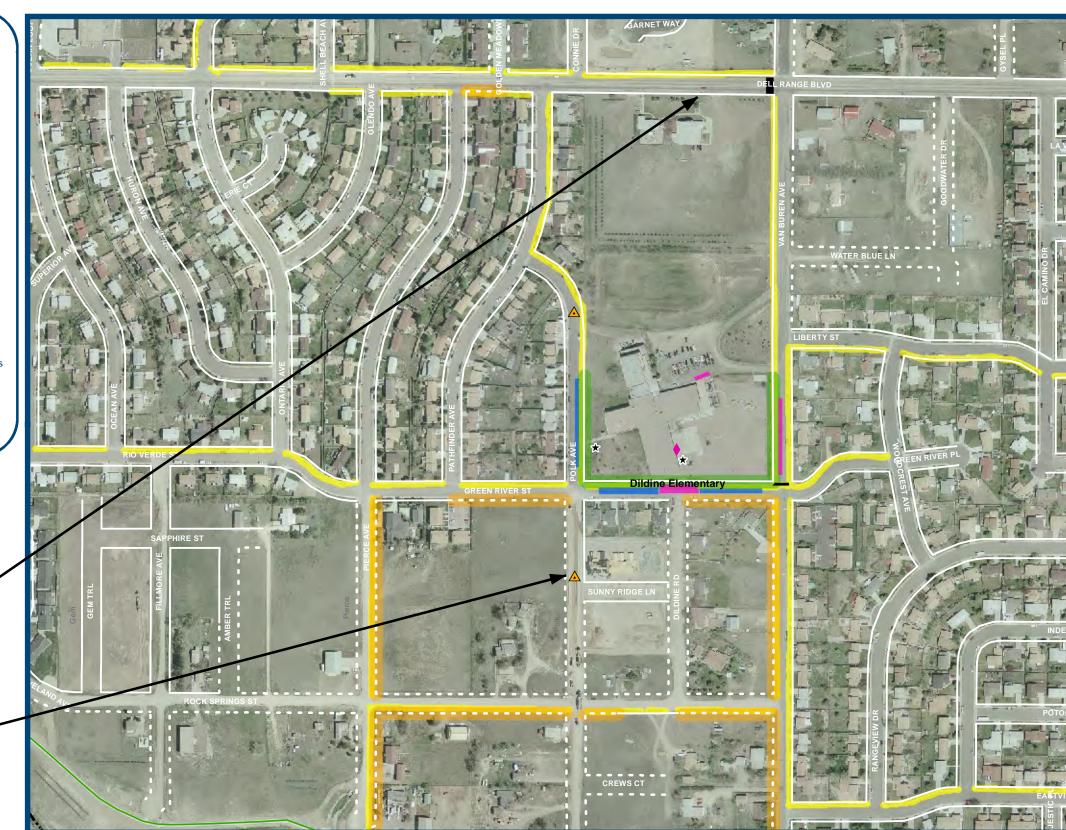
MUTCD Signage

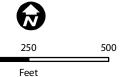












Dildine Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan





nearby schools.



installation is general guide. The exact sign placement should be determined by a site visit and engineering review. Map may also show designated walking routes to other





roposed Priority Improvements

- **★** Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign
- Improve Bus/Parent Loading /Unloading Zone
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Install ADA compliant curb ramp on southeast corner

Install ADA compliant curb ramp on east side of crosswalk

Install ADA compliant curb ramps on crossing approaches proximate to school

Fairview Elementary has students in grades K-2. It is paired with Lebhart Elementary, which has students in grades 3-6.

MUTCD Signage

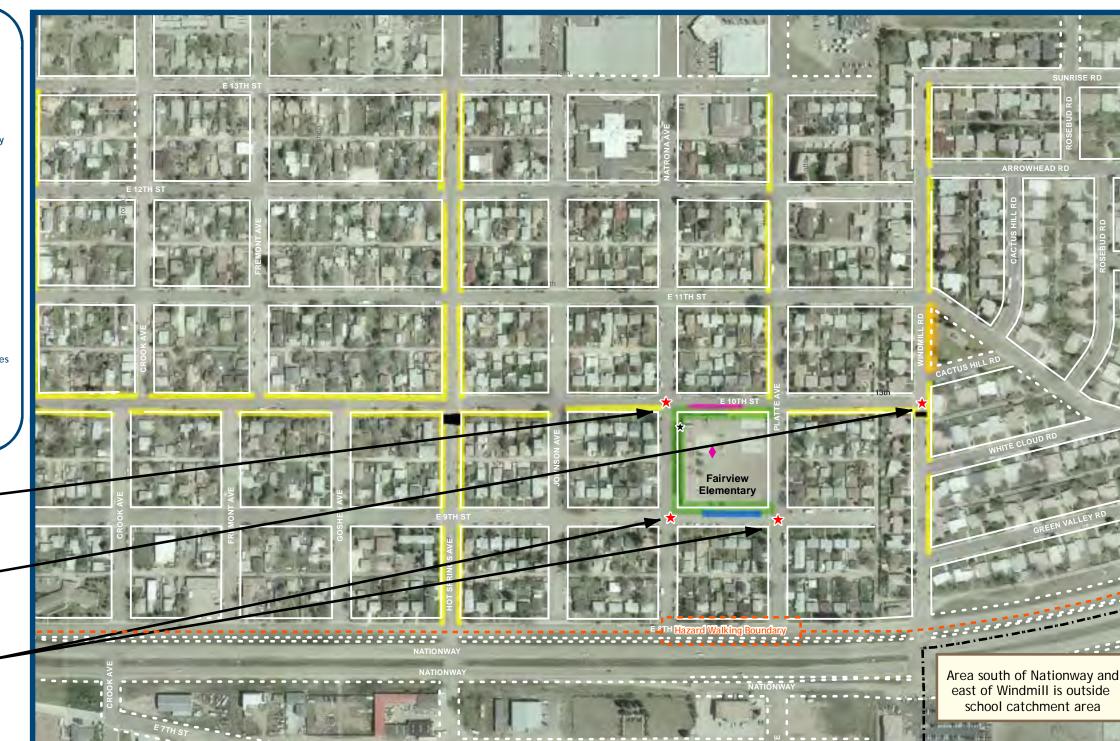


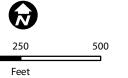
School Zone Sign











Fairview Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan





*Note: Location of recommended sign

installation is general guide. The exact sign placement should be determined by a site

visit and engineering review. Map may also show designated walking routes to other nearby schools.









roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign
- Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Install crosswalk

Consider relocating crosswalk to Hanson Street once the sidewalk along the east side of Henderson Drive has been installed.

Lebhart Elementary has students in grades 3-6. It is paired with Fairview Elementary, which has students in grades K-2.

MUTCD Signage



School Zone Sign













Feet

Lebhart Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan

Elementary















roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- /Unloading Zone Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
 - Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Freedom Elementary is located on Air Force property. Laramie County School District #1 has only a minimal ability to make changes. The gate between the school and base is locked at all times except school start and dismissal. Only Air Force base personnel have keys to the gate. Children on base not in the nearby residential area are bussed to the interior gate. Children off base are bussed to the front door.

Flip "One Way" sign to correspond to driveway entry

Remove faded parking stall paint from no parking zone. Retouch red curb paint.

Install stop sign

MUTCD Signage



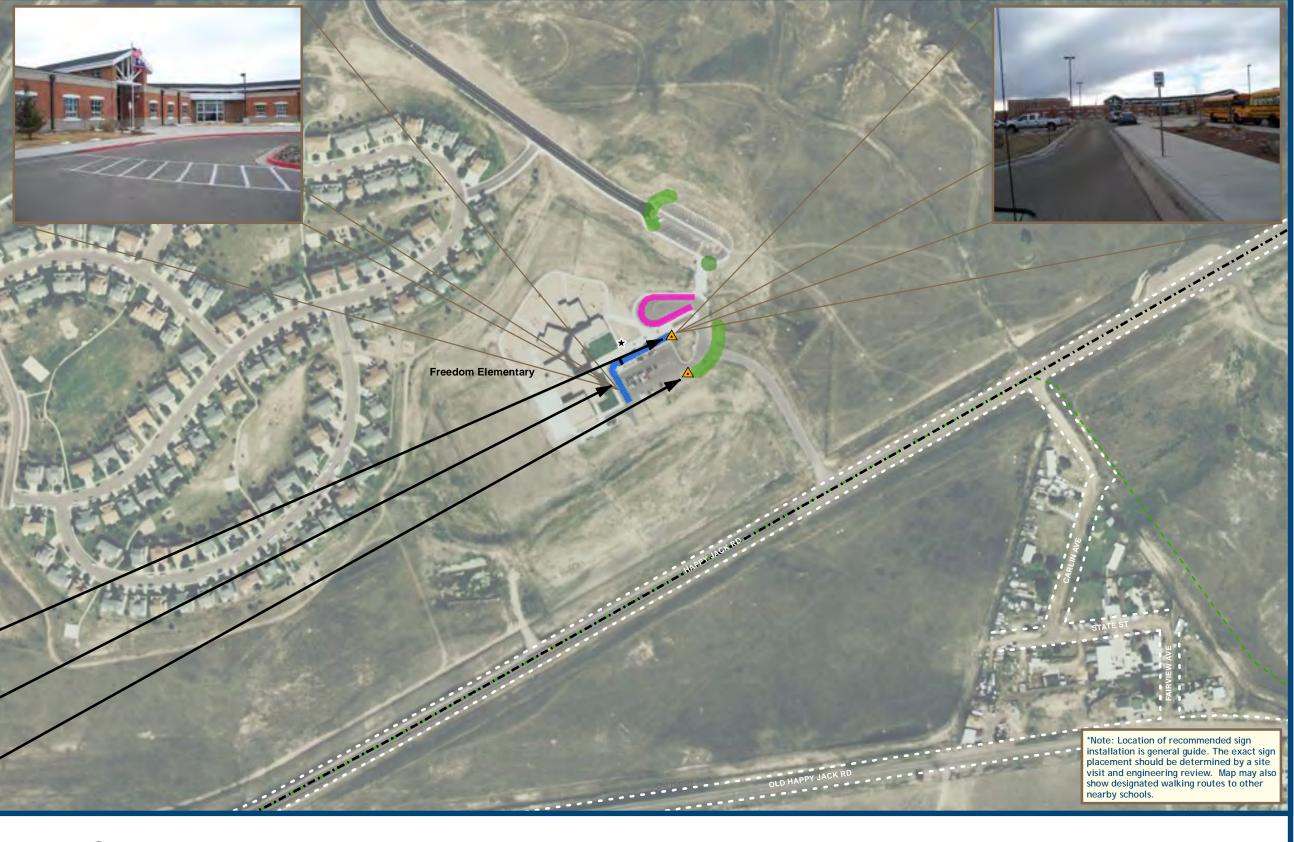


























roposed Priority Improvements

- **★** Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading /Unloading Zone
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Next year, Goins Elementary will be rebuilt as a two story building in what is currently Civitan Park. A school yard and parking lot will be located to the south. Note: Traffic issues relating to Jefferson Junior High School should be addressed during the site plan review for the new Goins Elementary School building.

> Install ADA compliant curb ramp on west side of crosswalk

Install ADA compliant curb ramps at intersection of Jefferson and Snyder

MUTCD Signage



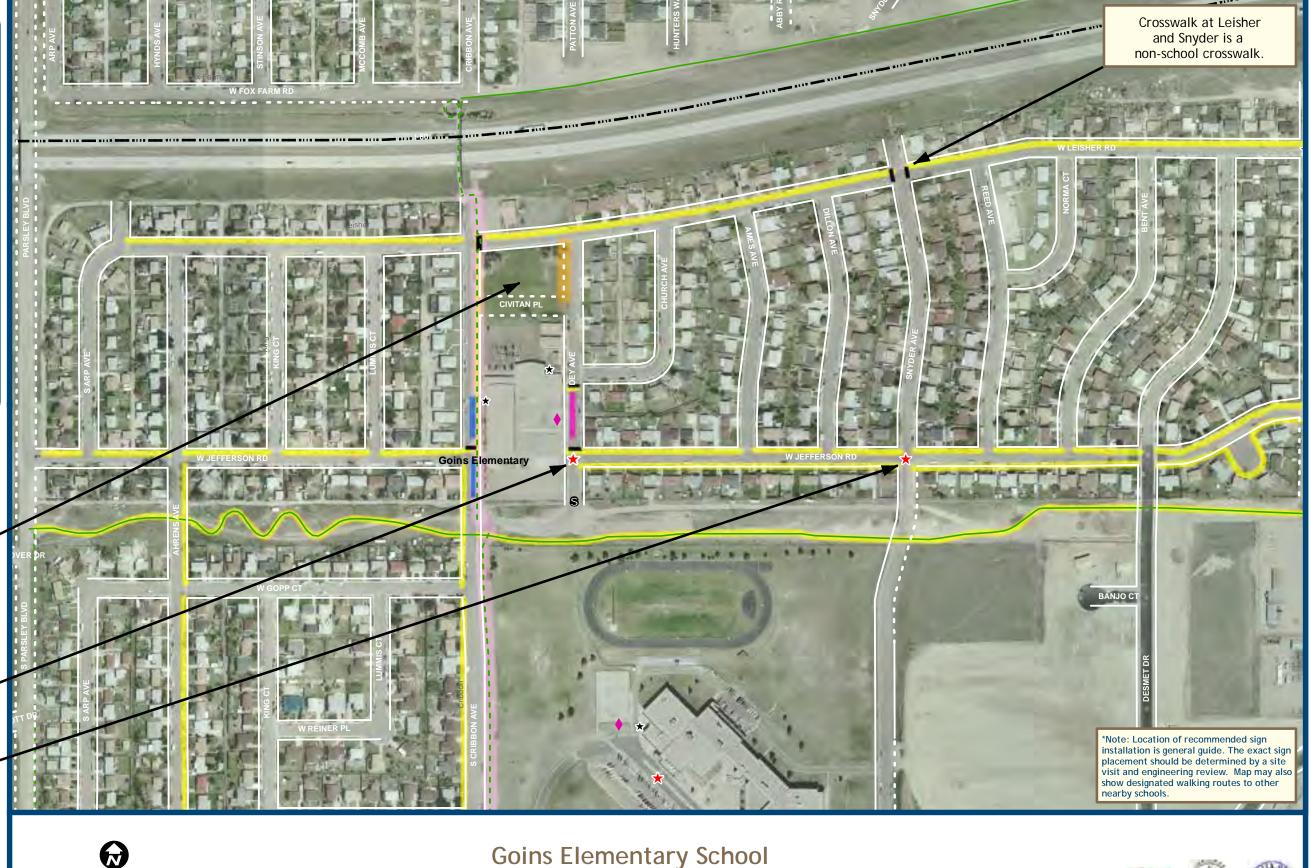








250

















roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
 /Unloading Zone
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Install pedestrian countdown signal at 5th and Morrie

MUTCD Signage



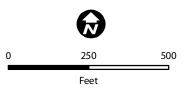












Hebard Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan

Hebard Elementary















Proposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
 Sign
- Improve Existing School Zone SignImprove Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
 - Bus Zone
- Exising School Crosswalk
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Bus zone/student load zone improvements: remove parent drop-off zone to reduce school bus conflicts

Consider curb extensions or or pedestrian refuge island to reduce required crossing distance

MUTCD Signage



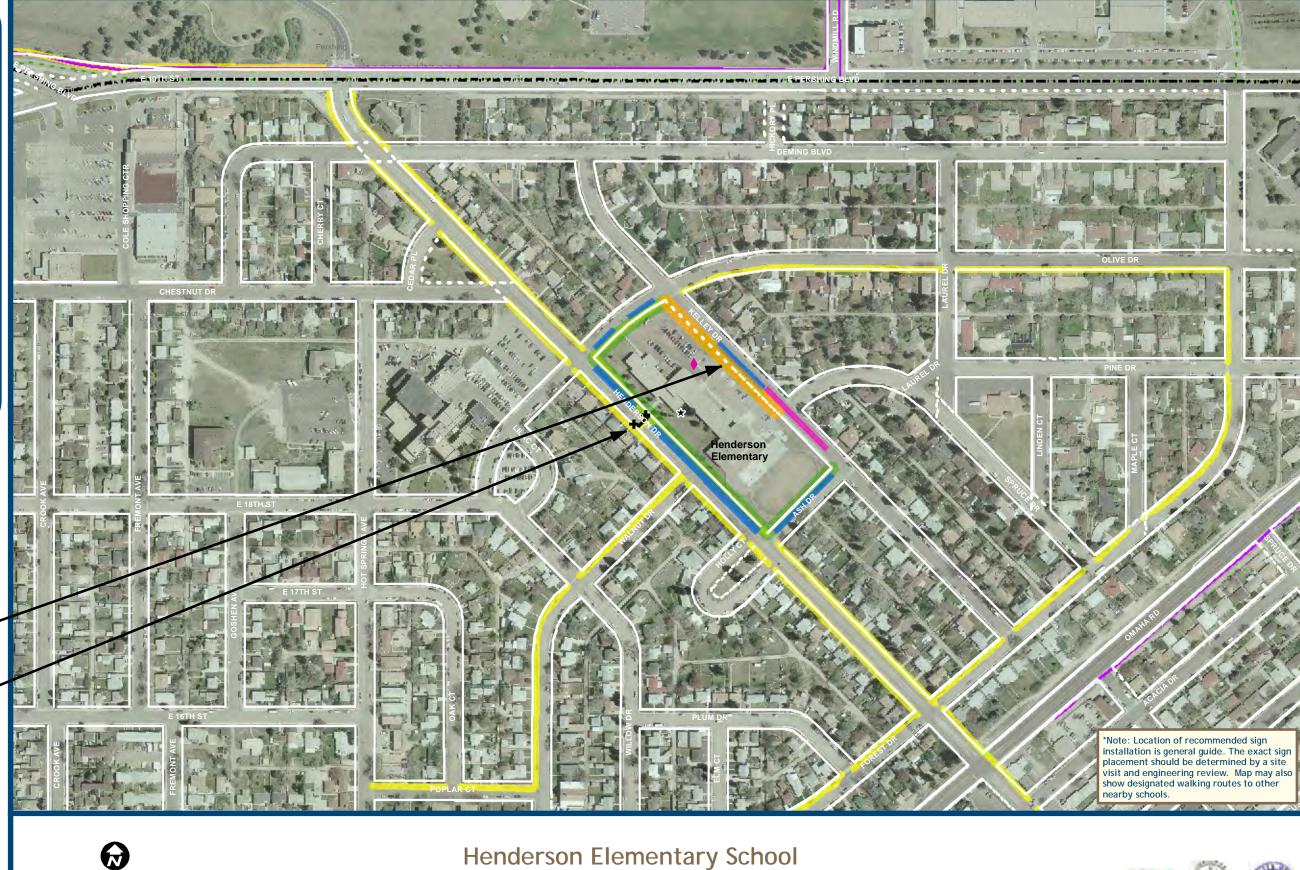
School Zone Sign













250

Feet

Henderson Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan













roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- /Unloading Zone Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Bus zone/student load zone improvements: move bus zone to Syracuse and parent dropoff area to parking lot. The principal of Hobbs Elementary recommends monitoring the school yard west of the school building for students who take the bus.

> "No U-turn" signs exist on Carlson.

Restripe crosswalk to align with existing curb ramps.

MUTCD Signage















Hobbs *Note: Location of recommended sign installation is general guide. The exact sign placement should be determined by a site visit and engineering review. Map may also show designated walking routes to other



Hobbs Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan













roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Move sign to stop bar, add "Stop when occupied" sign to crosswalk

Intersection improvements

Extend sidewalk cut-out to accomodate traffic from multiple school buses

"No U-turn" signs exist on Bishop.

MUTCD Signage

















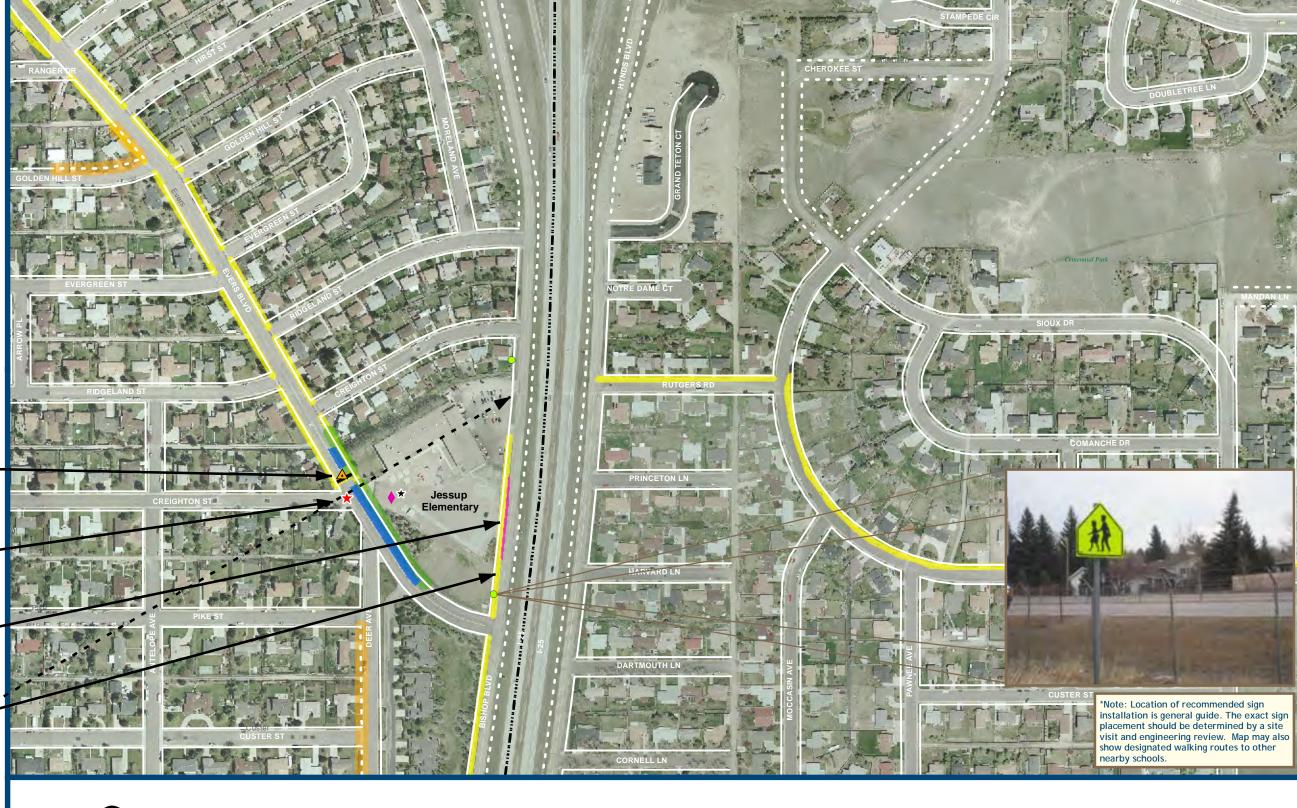
Jessup Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan













roposed Priority Improvements

G Install Curb Extensions

Intersection Improvements

Install or Upgrade Bike Parking

Sign Improvements*

S Install "School" Pavement Stencil

Improve Existing Crosswalk Warning Assembly Sign

Improve Existing School Speed Assembly

(Improve Existing School Zone Sign Improve Bus/Parent Loading /Unloading Zone

Install Traffic Calming

--- Priority Greenway Connection

Priority Sidewalk Infill

Existing School Facilities

X Existing Bike Parking

Bus Zone **Exising School Crosswalk**

Student Load Zone

Designated School Walking Route*(JHS)

School Catchment Area

Other Existing and Proposed Pedestrian Facilities

Planned Greenway

---- Existing Greenway

Existing Shared Use Trail

Existing Sidewalk

Missing Sidewalk

Install ADA compliant curb ramp on north side of crosswalk

MUTCD Signage



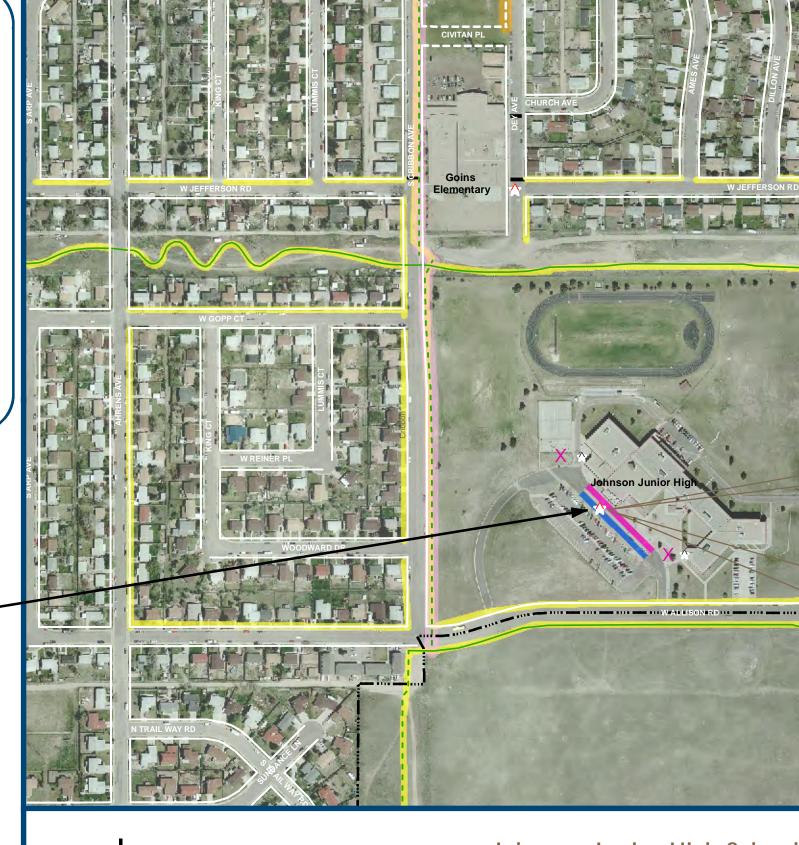






250

Feet



Note: Location of recommended sign installation is general guide. The exact sign placement should be determined by a site visit and engineering review.

These recommended improvements include 300' of priority sidewalk infill between Allision Road and Concerto Lane that is not shown on



Johnson Junior High School Cheyenne Metropolitan Area Safe Routes to School Plan











roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
 - Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route* (JHS)
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Consider upgrading greenway crosswalk to a trail crossing in accordance with the MUTCD.







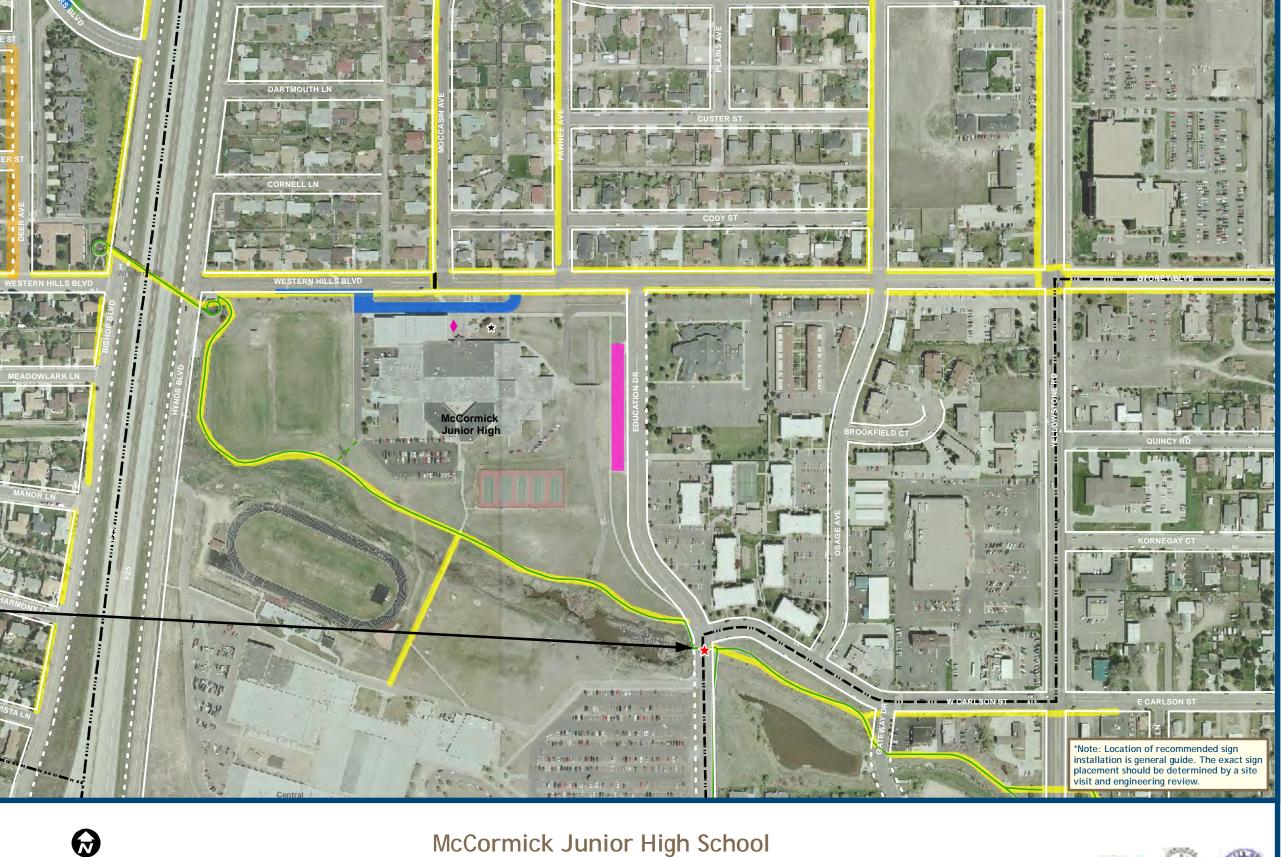






250 Feet





McCormick Junior High School Cheyenne Metropolitan Area Safe Routes to School Plan











roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Modify parking signs to correct conflicting messages

Intersection improvements

Intersection improvements

Note: Pioneer Park is home to the Trailblazers magnet program.

MUTCD Signage















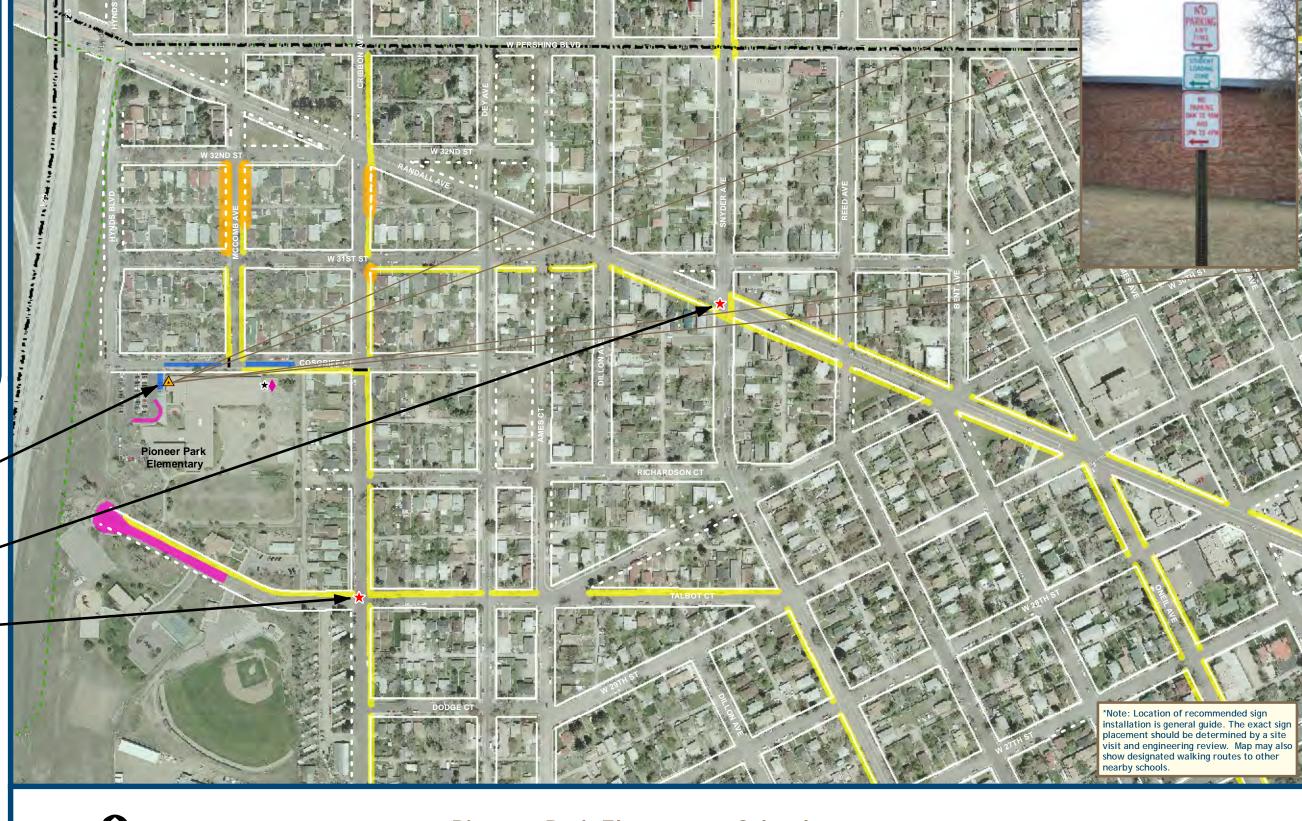
Pioneer Park Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan













roposed Priority Improvements

- **★** Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading /Unloading Zone
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
- Bus Zone **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- ---- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Replace non-MUTCD compliant stop sign at parking lot driveway to Walterscheid.

Consider installing pedestrian countdown signal indicators. Countdown signal timing must be incorporated with the larger highway corridor when implemented on state highways. Pedestrian countdown indicators at College and Walterscheid must be coordinated with signal timing at College and S. Greeley Highway. Engineering review necessary.

MUTCD Signage



School Zone Sign













 Θ

250

Feet









*Note: Location of recommended sign

installation is general guide. The exact sign

placement should be determined by a site visit and engineering review. Map may also

show designated walking routes to other nearby schools.







roposed Priority Improvements

- ♣ Install Curb Extensions
- ★ Intersection Improvements
- **★** Install or Upgrade Bike Parking
- ▲ Sign Improvements*
- S Install "School" Pavement Stencil
- Improve Existing Crosswalk Warning Assembly Sign
- Improve Existing School Speed Assembly
- Improve Existing School Zone Sign Improve Bus/Parent Loading
- Install Traffic Calming
- --- Priority Greenway Connection
- Priority Sidewalk Infill

Existing School Facilities

- Existing Bike Parking
 - Bus Zone
- **Exising School Crosswalk**
- Student Load Zone
- Designated School Walking Route*
- School Catchment Area

Other Existing and Proposed Pedestrian Facilities

- - Planned Greenway
- Existing Greenway
- Existing Shared Use Trail
- Existing Sidewalk
- Missing Sidewalk

Note: US 30 should be a permanent barrier to students walking to school. LCSD #1' long-range plan should be to use US 30 as (preferably) a district boundary or a bussing barrier.

Until Countryside Avenue is constructed, school buses must make unprotected left turn at Saddle Ridge and US 30. Future improvements will likely include a traffic signal at Whitney Road and US 30. When the signal is built, buses will enter US 30 from Whitney Road.

Intersection improvements

MUTCD Signage



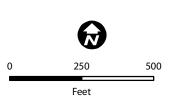






















roposed Priority Improvements

G Install Curb Extensions

Intersection Improvements

Install or Upgrade Bike Parking

Sign Improvements*

S Install "School" Pavement Stencil

Improve Existing Crosswalk Warning Assembly Sign

Improve Existing School Speed Assembly

(Improve Existing School Zone Sign Improve Bus/Parent Loading /Unloading Zone

Install Traffic Calming

--- Priority Greenway Connection

Priority Sidewalk Infill

Existing School Facilities

X Existing Bike Parking

Exising School Crosswalk

Student Load Zone

Designated School Walking Route*

School Catchment Area

Other Existing and Proposed Pedestrian Facilities

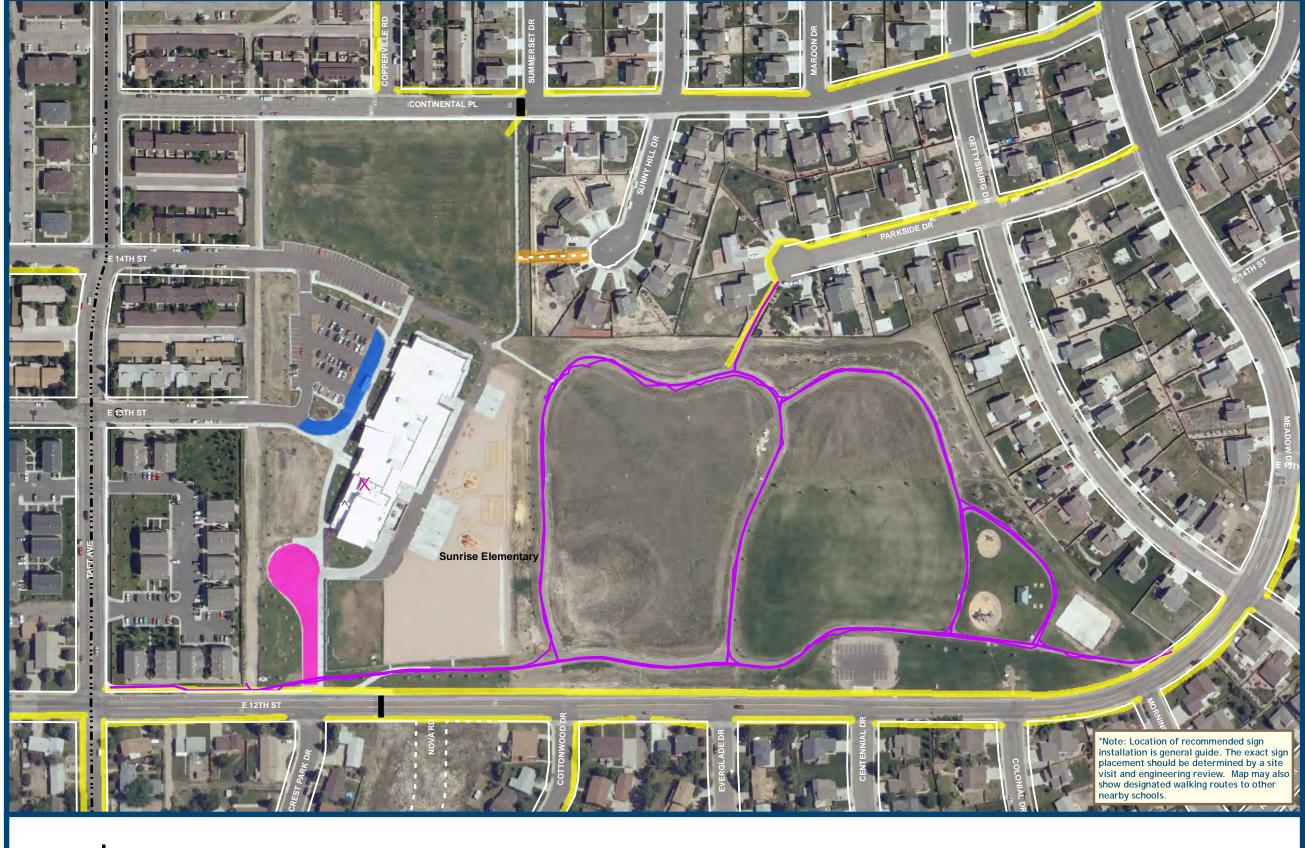
Planned Greenway

---- Existing Greenway

Existing Shared Use Trail

Existing Sidewalk

Missing Sidewalk



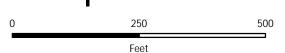
MUTCD Signage











Sunrise Elementary School Cheyenne Metropolitan Area Safe Routes to School Plan











V. Action Plan

The following action plan is designed to guide the Safe Routes to School Team and all of the associated agencies and schools in implementing the recommended strategies.

Next Steps

With this Safe Routes to School Plan as a starting point and guide, there are a number of immediate steps that can be taken to launch the Cheyenne Metropolitan Area SR2S program. First, a Safe Routes to School Team should be convened to prioritize goals, assign responsibilities, and implement the Plan. Additional funding opportunities should also be sought out, such as local foundation grants, business sponsorships, and in-kind donations from parents, individual schools, and the district. A kick-off event or ceremony can help to launch the program publicly to engage parents, students, and the general community.

Convene a Safe Routes to School Team

A Safe Routes to School Team should plan, coordinate, and implement the recommendations set forth in this document. Not only does a Team need to be designated for completing the *School Travel Team*, a Safe Routes to School Team can prioritize specific goals for the Safe Routes to School program and distribute the responsibility of coordinating and implementing recommendations in this plan.

The Team should include a diverse combination of individuals and groups with a vested interest in improving safety and encouraging walking and bicycling to school. The Safe Routes to School Team should be composed of planners, engineers, law enforcement officers, local officials, school district staff and administrators, school faculty and staff, and/or stakeholders from the following agencies and groups:

- The City of Cheyenne
- Laramie County
- LCSD #1 District Office
- LCSD #1 School Safety Committee
- School staff
- School PTOs
- Parents and students
- Other stakeholders, such as health organizations, bicycle/pedestrian advocates, or neighbors

Apply for Safe Routes to School Funding

WYDOT's Safe Routes to School funding program provides funding for both non-infrastructure projects and infrastructure projects. Non-Infrastructure funds are designated for implementing Safe Routes to School plans and programs at schools or within school districts. Infrastructure funds are intended for implementing infrastructure improvements within a two-mile radius of target schools.

For more information on federal funding through WYDOT, contact the Wyoming Safe Routes to School Coordinator:

Sara Janes Safe Routes to School Coordinator Systems Planning, Wyoming Department of Transportation 5300 Bishop Boulevard, Cheyenne, WY 82009-3340

Phone: (307) 777-3938

Email: sara.janes@dot.state.wy.us

Seek out Additional Funding Sources

Many Safe Routes to School programs gather funding from a variety of sources, including state and federal Safe Routes to School funds, other grant programs, local sponsorships, PTAs or PTOs, and in-kind donations. Organizations with similar goals or ideals, such as public health, public safety, and/or walking/bicycling advocacy groups may also have resources available.

Host a Kick-off Event or Ceremony

A kick-off event, such as International Walk and Bike to School Day, or a ground-breaking ceremony for an infrastructure project, can raise awareness and build support for the Safe Routes to School program. This can connect the SR2S Team to newly-identified funding sources as well as parents, school staff and faculty who are interested in joining the effort. A public event can also draw the attention of local media, who can inform and engage the community at large.

Summary of Recommended Non-Infrastructure Improvements

Table 3 summarizes the proposed Safe Routes to School non-infrastructure solutions, including the likely impact of each program, a recommended implementation timeline, and the suggested responsible parties.

Table 3. Non-Infrastructure Implementation Matrix, Cheyenne Metropolitan Area Safe Routes to School Plan

| | Table 5. Non | iiii asti actu | i c impiciniem | | <u> </u> | A opolital A | ea Safe Routes to Schoo | i i idil |
|---------------|--|---------------------------|---------------------------------------|------------------------|----------|---|--|--|
| | STRATEGY | Adult Time Limitations | School Zone Traffic Enforcement | Traffic Bicycle Safety | | District Walking/ Bicycling Programs | TIMEFRAME | RESPONSIBLE PARTIES |
| | Safety Education | • | • | 0 | 0 | • | Short-term | SR2S Team |
| ion | Bicycle Rodeos | • | 0 | 0 | 0 | • | Medium-term | SR2S Team |
| Education | School Zone Traffic Safety Campaign | • | • | • | • | • | Medium-term | SR2S Team, Local law enforcement |
| | Bus Safety Campaign | • | 0 | • | • | 0 | Long-term | SR2S Team |
| | Suggested Route to School Maps | • | 0 | • | • | • | Continue and expand this program in the short-term | Local government agencies, LCSD #1 |
| | Walk and Bike to School Event | 0 | 0 | 0 | • | • | Continue and expand this program in the short-term | SR2S Team, Individual schools, LCSD #1 |
| | Walking School Buses | • | 0 | 0 | • | • | Medium-term | SR2S Team, Individual schools, LCSD #1 |
| ment | Stop and Walk | • | 0 | 0 | • | • | Medium-term | SR2S Team, Individual schools |
| Encouragement | Friendly Walking/ Biking Competitions | 0 | 0 | 0 | • | • | Long-term | SR2S Team, Individual schools |
| Enco | Back-to-School Blitz | • | • | 0 | ⊙ ⊙ Long | | Long-term | SR2S Team, LCSD #1, Individual schools |
| | Bike Trains | • | 0 | 0 | • | • | Long-term | SR2S Team, Individual schools |
| | Locally Sponsored Walking and Bicycling Events | • | 0 | 0 | 0 | • | Long-term | SR2S Team, LCSD #1, Individual schools, Local government agencies |
| u | School Site Audit | 0 | 0 | • | • | 0 | Short-term | SR2S Team, LCSD #1, Individual schools |
| Evaluation | Program Evaluation | 0 | 0 | • | 0 | • | Long-term | SR2S Team, Individual schools |
| Ē | Perform Annual Hand Tallies and Parent Surveys | 0 | • | • | • | • | Short-term | SR2S Team, Individual schools |

| | Dedicated Bus Zones | • | • | • | • | 0 | Continue and expand this policy in the short-term | Individual schools, LCSD #1, Local government agencies |
|------------------------|--|---|---|---|---|---|--|---|
| | Staggered Bell Times | • | • | • | • | 0 | Continue and expand this policy in the short-term | SR2S Team, Individual schools, LCSD #1 |
| | Parent Drop-off/Pick-up Operations | 0 | • | • | • | 0 | Short-term | SR2S Team, Individual schools |
| | School Safety Committee | • | • | • | • | • | Continue this policy | Local government agencies, LCSD #1, SR2S Team |
| | School Safety Patrols and Crossing Guards | • | • | • | • | • | Continue and expand this program in the short-term | SR2S Team, LCSD #1, Individual schools |
| Policy and Enforcement | Crosswalk Enforcement Activities | • | • | 0 | 0 | • | Short-term | SR2S Team, Local law enforcement, Individual schools |
| and Enfc | School Parking Lot "Citations" | 0 | • | 0 | 0 | 0 | Short-term | SR2S Team, Local law enforcement, Individual schools |
| Policy | Radar Trailer | • | • | 0 | 0 | 0 | Short-term | SR2S Team, Local law enforcement |
| | Valet Drop-off | • | • | • | • | 0 | Medium-term | SR2S Team, Individual schools |
| | Platooning Drop-off/Pick- up System | • | • | • | • | 0 | Medium-term | SR2S Team, Individual schools, Local government agencies |
| | Neighborhood Speed Watch | • | • | 0 | 0 | 0 | Medium-term | SR2S Team, Local law enforcement, Individual schools, Community partners |
| | Speed Feedback Sign | • | • | 0 | 0 | 0 | Medium-term | SR2S Team, Local law enforcement, Individual schools |

| Likely Impact Key | |
|----------------------------------|---|
| Low impact or behavior change | 0 |
| Medium impact on behavior change | • |
| High impact on behavior change | • |

Appendix A: Glossary

Active Transportation – Traveling to work or school in a self-powered manner, such as walking or bicycling, an important concept linking transportation and healthy living. Also referred to as "active travel" or "physically active transportation" or sometimes "active commute."

Bicycle Boulevard – Low traffic streets that prioritize bicycle traffic. Cars and bicycles share the roadway on most Bicycle Boulevards, and because motorists expect to see bicyclists, they are more likely to travel with caution. Bicycle Boulevards are less costly than paths or trails.

Bike Train – A group of students who bike to school together with at least one parent or other adult. A bike train can be as informal as few parents getting together to bike with their children or as organized as a school- or district-wide campaign to coordinate routes by neighborhood.

Golden Sneaker Award – A trophy, usually a sneaker spray-painted gold, that is given to the classroom with the most students walking and bicycling. In Marin County, CA, the trophy is awarded to a different classroom each month and miles walked and biked during non-school activities are also tallied.

Hazard Busing – The use of school buses to transport children short distances from home to school to avoid unsafe road crossings, lack of sidewalks, and other hazards.

In-pavement Flasher (IPF) – A device mounted in the street pavement adjacent to crosswalk markings designed to alert motorists of pedestrians. The device's default state is unlit, but it emits a flashing yellow light while the pedestrian crossing is in use.

Overcrossing – A bridge or span designed for pedestrians and/or bicyclists. These bridges generally span freeways, high traffic streets, or other difficult to cross obstacles.

Pedestrian Refuge Island – Areas within an intersection or between traffic lanes, often at a higher grade, where pedestrians may safely wait until vehicular traffic clears.

School Champion – An individual or group identified to sustain walking and bicycling programs or encouragement efforts at a school. This could be a parent, local volunteer, faculty or staff member, or an active student group.

Walking School Bus – A group of students walking to school together with at least one parent or other adult. A walking school bus can be as informal as few parents getting together to walk with their children or as organized as a school- or district-wide campaign to coordinate "buses" by neighborhood. Generally, the "bus" stops at designated locations where children can join at prearranged times.

Warning Flashers – Flashing beacons warning motorists that pedestrians are crossing the roadway.

Appendix B: Detailed Cost Opinion

| | | | | | | | | | Intersect | ion Imp | rovement | is ⁷ | | | | | | |
|---------------------|---|--|---|--|-----------------------------------|------------------------------|--|---|---|---|-----------------|--|--------------------|-----------|------------------------|----------|--------------|-------------|
| School | Priority Greenway Connection ⁸ | Priority Sidewalk Infill ^{2, 9} | Bus Loading/Parent Drop-Off Zone Improvements ¹ | Sign Installation or Replacement ¹⁰ | "School" Pavement Marking Stencil | Secure, Covered Bike Parking | Intersection Improvements, General ⁵ | Curb Ramp with Tactile Warning Strip ¹¹ | Stop Bar Installation (preformed thermoplastic) | High-Visibility Crosswalks (preformed thermal plastic) | Curb Extensions | Pedestrian Countdown Signal ⁴ | Pedestrian Signal³ | Subtotal | Engineering /Design | | Mobilization | Contingency |
| Cost | \$70 | \$30 | \$1,000 | \$300 | \$250 | \$600 | \$3,890 | \$1,500 | \$225 | \$30 | \$6,000 | \$2,400 | \$40,000 | | | | | |
| Unit | LF | LF | Y=1/N=0 | EA | EA | EA | EA | EA | EA | LF | EA | EA INT | EA | | 7% | 9% | 10% | 20% |
| Afflerbach | 0 | 520 | 1 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$19,550 | \$1,369 | \$1,760 | \$1,955 | \$3,910 |
| Alta Vista | 0 | 490 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$16,600 | \$1,162 | \$1,494 | \$1,660 | \$3,320 |
| Anderson | 442 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$33,390 | \$2,337 | \$3,005 | \$3,339 | \$6,678 |
| Arp | 2,066 | 2,743 | 1 | 7 | 2 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | \$238,610 | \$16,703 | \$21,475 | \$23,861 | \$47,722 |
| Baggs | 0 | 2,856 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$86,580 | \$6,061 | \$7,792 | \$8,658 | \$17,316 |
| Bain | 0 | 0 | 1 | 6 | 0 | 1 | 0 | 0 | 0 | 240 | 0 | 0 | 0 | \$10,600 | \$742 | \$954 | \$1,060 | \$2,120 |
| Buffalo Ridge | 0 | 1,091 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 42 | 0 | 0 | 0 | \$38,590 | \$2,701 | \$3,473 | \$3,859 | \$7,718 |
| Carey | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$1,200 | \$84 | \$108 | \$120 | \$240 |
| Cole | 0 | 1,675 | 1 | 1 | 0 | 1 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | \$62,040 | \$4,343 | \$5,584 | \$6,204 | \$12,408 |
| Davis | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | \$42,125 | \$2,949 | \$3,791 | \$4,213 | \$8,425 |
| Deming | 0 | 0 | 1 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | \$6,690 | \$468 | \$602 | \$669 | \$1,338 |
| Dildine | 0 | 3,859 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$118,570 | \$8,300 | \$10,671 | \$11,857 | \$23,714 |
| Fairview | 0 | 186 | 1 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | \$16,180 | \$1,133 | \$1,456 | \$1,618 | \$3,236 |
| Freedom | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$2,200 | \$154 | \$198 | \$220 | \$440 |
| Goins | 1,012 | 164 | 0 | 0 | 1 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | \$84,710 | \$5,930 | \$7,624 | \$8,471 | \$16,942 |
| Hebard | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | \$4,000 | \$280 | \$360 | \$400 | \$800 |
| Henderson | 0 | 493 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | \$28,390 | \$1,987 | \$2,555 | \$2,839 | \$5,678 |
| Hobbs | 0 | 966 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | \$31,780 | \$2,225 | \$2,860 | \$3,178 | \$6,356 |
| Jessup ⁶ | 0 | 1,082 | 1 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | \$45,150 | \$3,161 | \$4,064 | \$4,515 | \$9,030 |
| Johnson | 1,334 | 64 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | \$98,000 | \$6,860 | \$8,820 | \$9,800 | \$19,600 |
| Lebhart | 665 | 791 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 78 | 0 | 0 | 0 | \$73,220 | \$5,125 | \$6,590 | \$7,322 | \$14,644 |
| McCormick | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | \$4,790 | \$335 | \$431 | \$479 | \$958 |
| Miller | 0 | 215 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | \$10,350 | \$725 | \$932 | \$1,035 | \$2,070 |
| Pioneer Park | 0 | 582 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | \$26,140 | \$1,830 | \$2,353 | \$2,614 | \$5,228 |
| Rossman | 0 | 8,003 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | \$243,390 | \$17,037 | \$21,905 | \$24,339 | \$48,678 |
| Saddle Ridge | 0 | 919 | 0 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | \$39,560 | \$2,769 | \$3,560 | \$3,956 | \$7,912 |
| Sunrise | 0 | 124 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$4,320 | \$302 | \$389 | \$432 | \$864 |

Assumes basic cost for signs, materials (e.g., paint) that may be necessary to make modifications

² Assumes 5 foot sidewalk width with new curb and gutter

³ Assumes pedestrian hybrid signal as proposed in the 2009 MUTCD Update

⁴ Assumes 8 pedestrian signal indicators per intersection

⁵ Assumes full cost of improvements depicted in Figures 12 - 15 of the WYDOT Pedestrian and School Traffic Control Manual

⁶ Extension of school bus pull-out at Jessup Elementary is dependent on further enginnering review pending finalized extent and design.

 $^{^{7}}$ Any signal timing modifications proposed in this plan are not included in cost estimates

⁸ Same as "10' Greenway Construction" improvement in Pedestrian Plan cost estimates

⁹ Same as "Sidewalk Infill - 5' Wide, including Curb & Gutter" improvement in Pedestrian Plan cost estimates

¹⁰ Same as "Warning Sign" improvement in Pedestrian Plan cost estimates

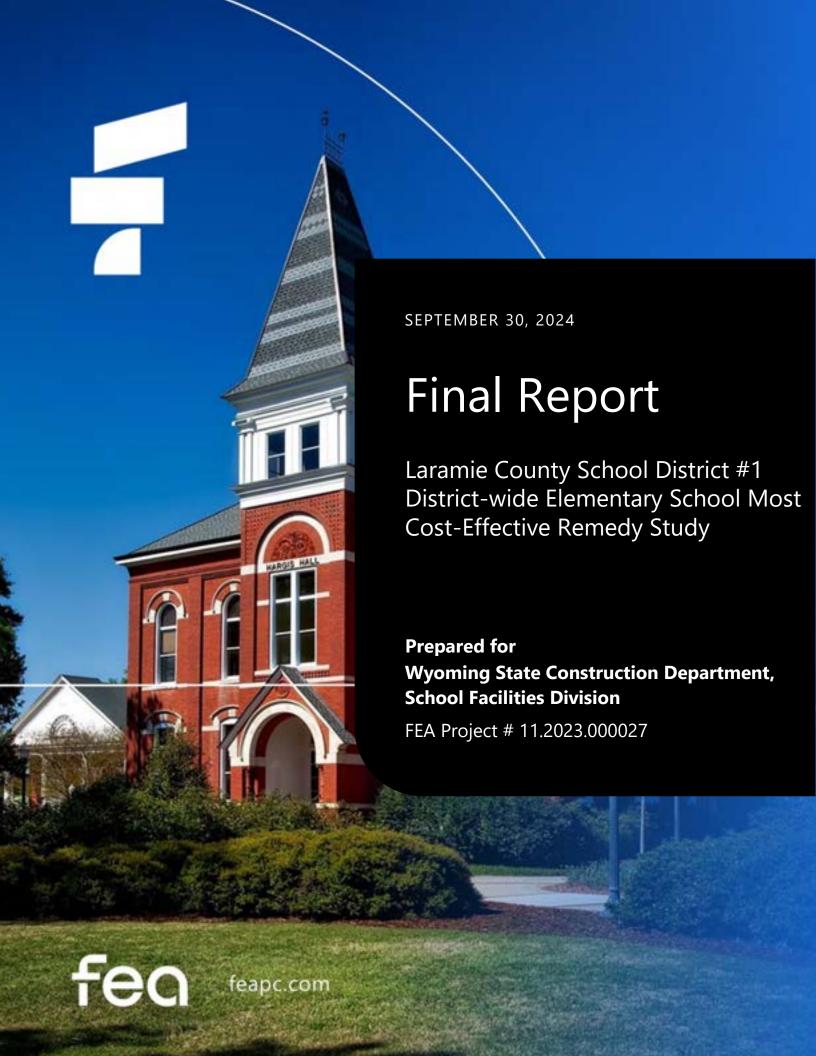
¹¹ Same as "Remove & Replace Curb Cut w/ADA Ramp" improvement in Pedestrian Plan cost estimates



CHEYENNE METROPOLITAN PLANNING ORGANIZATION



Appendix E: Elementary School Most Cost-Effective Remedy Study





September 30, 2024

Shelby Carlson, P.E.
School Facilities Division Administrator
Wyoming State Construction Department, School Facilities Division
700 West 21st Street
Cheyenne, WY 82009
shelby.carlson@wyo.gov

SUBJECT: Laramie County School District #1 District-wide Elementary School Most

Cost-Effective Remedy Study

District-wide Elementary School Study

Wyoming State Construction Department, School Facilities Division

FEA Project No: 11.2023.000027

Dear Shelby,

FEA is honored to provide this report of the Laramie County School District #1 District-wide Elementary School Study. Our services have been provided in accordance with Attachment B – Scope of Services to our contract with the State Construction Department, School Facilities Division, which was executed on January 16, 2024.

This report presents an overview of our work and a review of our findings and conclusions based on interviews, meetings, site visits, workshops, and analyses completed during this most cost-effective remedy study.

Please reach out to Rich Merrill should you have any questions regarding this report. Following feedback from the State and Laramie County School District #1, FEA will issue report revisions if deemed appropriate. We look forward to continuing to work with you to complete this project.

Best regards,

FEA

Rich Merrill, PE, DBIA, FMP

wate Rmill

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| Glossary | ••••• |
|-------------------|-------|
| Glossary of Terms | |





Executive Summary

Introduction

The School Facilities Division (SFD) of the Wyoming State Construction Department (SCD) engaged FEA to conduct a comprehensive study to determine the Most Cost-Effective Remedy (MCER) for addressing critical capacity and condition needs of the Laramie County School District No. 1 (the District) elementary school facilities. Seven buildings were identified as part of the MCER study, each of which was identifies with either a building need due to condition or capacity. These buildings are shown in Table 1: Building Needs, below:

| Triad | School Name (| Current Configuration) | Identified Building Need | | | | | | |
|---------|---------------|------------------------|---------------------------------|--|--|--|--|--|--|
| South | Arp | (K-6) | Capacity | | | | | | |
| South | Sunrise | (K-6) | Capacity | | | | | | |
| Central | Hobbs | (K-4) | Condition | | | | | | |
| Central | Jessup | (K-4) | Condition | | | | | | |
| Central | Miller | (4-6) | Condition | | | | | | |
| East | Buffalo Ridge | (K-4) | Condition | | | | | | |
| East | Saddle Ridge | (K-4) | Capacity | | | | | | |

Table 1: Building Needs

Addressing Building Needs

Building needs associated with capacity were addressed through a combination of construction and non-construction actions, including grade reconfigurations, boundary adjustments, additions to current schools, and new construction. Building needs associated with condition were addressed through a combination of continued application of major maintenance, elimination through consolidation, and capital construction.

Addressing capacity needs required making enrollment projections over the period of the MCER study and evaluating the existing school capacities against projected enrollments. Multiple enrollment projection models were created and back tested for accuracy, including those explicitly referred to in Wyoming School Facilities Commission (SFC) Rule Chapter 8, Section 4(a)(i-iii), SFC Enrollment Projection Methodology. The models are explained further in this report with additional information provided in Appendix A02, Enrollment Projections. These models proved to be divergent in their projections of enrollment over the study period, with models projecting either decline or growth after applying the error rates associated with the models. Therefore, it was determined current enrollment would be applied when identifying actions to address capacity within the context of this MCER study.

Identification and Refinement of Potential Remedies

After analyzing the District's condition and capacity needs, six key themes were used to guide the development of 18 potential remedies. Identification and refinement of the potential





remedies was a collaboration between FEA, SCD, and the District. Remedies included addressing facilities on a building-by-building basis, returning to a K-6 configuration, implementing 4-6 configurations, fully executing the District's long-term strategy of a K-4/5-6 configuration across three Triads, or hybrid approaches to incorporate the best features of various potential remedies. A feasibility analysis was conducted to assess the practicality of these potential remedies, considering the extent of their alignment with the District's long-term goal of implementing a 5-6 grade configuration and State objectives. This process led to a reduction in the list of potential remedies from 18 to 12. The 12 potential remedies were further reduced through a facilitated process referred to as Choosing by Advantages (CBA).

Looking at cost and benefits (e.g., conducting a cost-benefit analysis) is important when identifying the most cost-effective remedy. FEA used the CBA process to systematically evaluate and compare the benefits and costs of various potential remedies. The structured CBA decision-making approach requires a cooperative review of these remedies and prioritizes the advantages of each potential remedy before considering costs, ensuring transparency and objectivity in the selection process. Conducted in Cheyenne, Wyoming, from July 9-11, 2024, the CBA workshop was facilitated by FEA and included representatives from the District and the SFD. The evaluation revealed that potential remedies focusing on fewer, larger elementary schools provided the greatest overall advantages, while other solutions were less advantageous. Rough order of magnitude (ROM) costs were compared to benefits (as quantified by the total Advantage Score from the CBA workshop) for all potential remedies, from which three potential remedies were advanced for further evaluation and analysis.

Evaluation and Analysis of Potential Remedies

The three potential remedies advanced through the CBA workshop were subsequently evaluated for feasibility through a separate, in-person joint workshop of the SFD and District facilitated by FEA. The workshop prioritized the actions associated with each of these potential remedies. Timing and schedules for the actions associated with each potential remedy were estimated for funding, procurement, design, bidding and construction. With all actions laid out (in time) for the three potential remedies, a fourth, hybrid potential remedy was introduced and scheduled during the workshop. And finally, a fifth potential remedy, which was a variation of the fourth potential remedy, was introduced and scheduled immediately following this workshop.

With an estimated timeline of actions associated with each of the five potential remedies, a more detailed cost analysis was completed. The analysis identified life cycle costs for all buildings over a 20-year period and calculated the present value of those costs. Table 2: Cost





and Benefit, below, shows a summary of the costs and benefits (Advantage Score) of each potential remedy.

| POTENTIAL REMEDY | PRESENT VALUE | ADVANTAGE SCORE |
|------------------|-----------------|-----------------|
| 1 | \$3,021,431,014 | 642 |
| 2 | \$3,022,138,963 | 788 |
| 3 | \$3,025,032,862 | 734 |
| 4 | \$3,011,287,064 | 788 |
| 5 | \$3,030,413,495 | 788 |

Table 2: Costs and Benefits

The relationship between the cost (present value) and the benefit (Advantage Score) for each remedy is illustrated in Figure 1: Cost-Benefit Comparison, below.

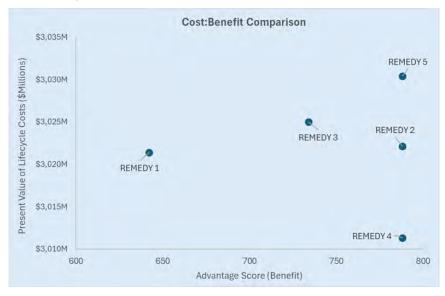


Figure 1: Cost-Benefit Comparison

The purpose of a cost-benefit analysis is to understand the tradeoff between benefit received (as measured by advantage on the horizontal axis) and cost required to achieve the benefit (as measured by present value of life cycle costs on the vertical axis). Figure 1: Cost-Benefit Comparison chart depicts the analysis of all five potential remedies. Remedy 4 provides the greatest benefit for the least cost. **Therefore, Remedy 4 is considered the Most Cost-Effective Remedy.**

Summary of the Most Cost-Effective Remedy

To address the District's identified condition and capacity building needs, implementation of the MCER takes place in two phases: Phase 1 (2024-2030) and Phase 2 (2031-2035). Actions executed during these phases, including construction, reconfigurations, and taking schools offline in the South, Central, and East Triads. For the purposes of the MCER study, offline is meant to indicate buildings have been modeled to be removed from use for educational





purposes and an allowance for the cost of demolition has been included in the present value analysis. School attendance boundaries will be adjusted within Triads but not across Triads or Districts. Upon completion of these actions, the condition and capacity needs are anticipated to be resolved, reducing the State's block grant and major maintenance (sustainment) costs, and lowering the average age of District buildings by about 21 years. Details of building needs associated with schools, timing of major actions included in the MCER, timing of funding requests, modeled grade configuration of each school, modeled enrollment by school, and modeled capacity by school are shown in Figure 2: MCER Summary on the next page.





| | | SCHOOLS | 2023-24 ENROLLMENT | MODELED ENROLLMENT | MODELED CAPACITY | MODELED GRADE | | | Phase 2 | | | | | | | | | |
|---------|-------------|-----------------|-----------------------|-----------------------|---------------------|------------------|-----|----|---------|-------------|------|-----|-----|-----|------------|-----|-----|-----|
| | | | EI III O EEI III II | | CAI AGITT | CONFIG. | '24 | 25 | '26 | *27 | '28 | '29 | '30 | *31 | '32 | '33 | '34 | 135 |
| SOUTH | • | Arp | 292 | 509 | 550 | K-4 | • | | | | lack | | | | | | | |
| | \psi | Sunrise | 319 | 230 | 265 | K-4 | | | | \triangle | | | | | | | | |
| | | Afflerbach | 325 | 227 | 376 | K-4 | | | | \triangle | | | | | | | | |
| | | Cole | 144 | 203 | 267 | K-4 | | | | | | | • | | | | • | |
| | | Goins | 291 | 206 | 301 | K-4 | | | | \triangle | | | | | | | | |
| | | Rossman | 290 | 205 | 292 | K-4 | | | | | | | | | | | | |
| | | New South 5-6 | 0 | 587 | 650 | 5-6 | • | | | | | | | | | | | |
| | | Hebard | 111 | 0 | | | | | | | | 0 | | | | | | |
| | | Bain | 222 | 0 | | | | | | | | 0 | | | | | | |
| | | Fairview | 87 | 0 | | | | | | | | 0 | | | | | | |
| | | Lebhart | 86 | 0 | | | | | | | | 0 | | | | | | |
| CENTRAL | | Hobbs | 209** | 312 | 356 | K-4 | | | • | | | | | | | | | |
| | | Jessup | 123** | 0 | | | | | | 0 | | | | | | | | |
| | * | Miller | 69 | 0 | | | | 0 | | | | | | | | | | |
| | | Davis | 222** | 271 | 298 | K-4 | | | | 0 | | | | | | | | |
| | | Pioneer Park | 363 | 267 | 356 | K-4 | | | | Δ | | | | | | | | |
| | | Prairie Wind | 306** | 380 | 420 | K-4 | | | | 0 | | | | | | | | |
| | | Clawson | 4 | 4 | 16 | K-6 | | | | | | | | | | | | |
| | | Gilchrist | 122 | 122 | 132 | K-6 | | | | | | | | | | | | |
| | | Willadsen | 5 | 5 | 32 | K-6 | | | | | | | | | | | | |
| | | Freedom | 316 | 316 | 343 | K-6 | | | | | | | | | | | | |
| | | Coyote Ridge | 425* | 569 | 652 | 5-6 | | | | | | | | • | | | | 0 |
| | | Deming | 82 | 0 | | | | | 0 | | | | | | | | | |
| EAST | • | Buffalo Ridge | 170 | 170 | 232 | K-4 | | | | | | | | | | | | |
| | | Saddle Ridge | 353 | 225 | 250 | K-4 | | | | | | | | | \bigcirc | | | |
| | | Alta Vista | 213 | 249 | 260 | K-4 | | | | | | | | | Δ | | | |
| | | Anderson | 298 | 298 | 322 | K-4 | | | | | | | | | | | | |
| | | Baggs | 290 | 287 | 290 | K-4 | | | | | | | | | Δ | | | |
| | | Dildine | 300 | 300 | 342 | K-4 | | | | | | | | | | | | |
| | | Saddle Ridge II | 0 | 128 | 250 | K-4 | | | | | • | | | | | | | |
| | | Meadowlark | 485 | 724 | 800 | 5-6 | | F | | Т | | • | | | | 0 | | |
| | | Henderson | 272 | 0 | | | | | | | | | | | | 0 | | |

 $^{^{*}}$ Enrollment number includes students moved from Hobbs, Jessup, Davis, and Prairie Wind beginning in the 2024/2025 school year.

^{**} Enrollment number excludes students moved to Coyote Ridge beginning in the 2024/2025 school year. The end state of each school is shown for this MCER.



Figure 2: MCER Summary



1. Introduction

The School Facilities Division (SFD) of the Wyoming State Construction Department (SCD) is conducting a comprehensive study to determine the Most Cost-Effective Remedy (MCER) for addressing critical capacity and condition needs of the Laramie County School District No. 1 (the District) elementary school facilities. This report is prepared in compliance with Wyoming Statute 21-15-117 (b) and the School Facilities Commission (SFC) Rules, as outlined in SFC Rules Chapter 8, Section 5. These rules require school districts across the state of Wyoming to ensure their facilities meet statewide adequacy standards and address both current and future needs related to building capacity, condition, and adequacy, so the facilities do not impede the school districts' ability to deliver quality educational services.

1.1 Purpose of the Study

The purpose of this study is to identify the MCER to resolve the District's elementary school capacity and condition needs. As required in SFC Rules Chapter 8, Section 5(a)(i-ii), this study evaluates schools with a projected enrollment exceeding 100% of capacity and schools with a projected Facility Condition Index (FCI) exceeding 0.3 within 5 years as reported in the 2023 SCD Annual Report. By considering the elementary schools collectively, this study identifies the most cost-effective remedy to meet the identified "school building and facility needs to deliver quality education services and to meet adequacy standards" in accordance with SFC Rules Chapter 8, Section 5(c).

Pursuant to SFC Rules Chapter 8, Section 5(b)(iii), the SFD "may consider needs related to multiple buildings in a single study, including building needs that may not qualify for a study under the (capacity or condition) thresholds" previously mentioned. Due to the number of buildings in the District identified as exceeding the thresholds of SFC Rules Chapter 8, Section 5(a)(i-ii), the SFD commissioned this study requiring all elementary school facilities in the District to be considered collectively. In considering the District as a whole, the SFD also required this MCER to specifically identify actions to address needs for the following schools:

For capacity, Arp Elementary School,

Saddle Ridge Elementary School, Sunrise Elementary School; and

For condition, Buffalo Ridge Elementary School,

Hobbs Elementary School,

Jessup Elementary School, and

Miller Elementary School.

No schools were identified by the District as inadequate to deliver required educational services per SFC Rules Chapter 3, Section 8.



Needs vary across these schools and, depending on the nature and breadth of these needs, actions required to address those needs can range from simple and lower cost to complex and higher cost. Building renovation, addition, replacement, new construction, or any combination of these are considered construction alternatives (referred to as actions within a remedy). In some cases, remedies may include non-construction alternatives (or actions) such as making changes to grade configuration in schools, making attendance boundary adjustments, or applying available major maintenance funds to sustain facilities. Non-construction alternatives may also include taking schools offline where that is required to deliver the most cost-effective remedy. For the purposes of the MCER study, offline is meant to indicate buildings have been modeled to be removed from use for educational purposes and an allowance for the cost of demolition has been included in the present value analysis.

As agreed with the SFD and District, there were four elementary schools that were not considered in this district-wide MCER study. Due to their rural locations, it was agreed that Clawson, Gilchrist, and Willadsen would not effectively contribute to meeting the needs of the seven schools identified for this study. Similarly, due to its current and projected enrollments compared to capacity and the community served by Freedom Elementary (F.E Warren Air Force Base), it was agreed that Freedom would also not effectively contribute to meeting the needs of the schools identified for this study.

1.2 What is Covered in the Report

This report presents a background of what drove the need for a MCER study, and why this study was commissioned by the SFD. A brief explanation about the contracted scope of work is provided along with the methodology/approach that was used to study this district-wide portfolio of elementary schools. A district-wide study is then provided addressing seven schools identified with building needs while explaining the process used to determine the most cost-effective remedy.

This study consisted of three phases:

Phase 1: The first phase focused on identifying and evaluating potential remedies. More than 20 potential remedies have been explored, with all potential remedies review jointly be FEA, SFD and the District. Various construction and non-construction approaches were grouped thematically into six categories. A joint exercise was completed to ensure a thorough evaluation of potential actions for the schools and to identify which potential remedies should be studied further in Phase 2.

Phase 2: A Choosing by Advantages (CBA) workshop was held to evaluate the actions associated with each potential remedy. Actions were identified and evaluated at each school and included a combination of new construction, replacement, renovation, grade reconfiguration, attendance boundary adjustments, building additions, and/or no action. Factors were applied to help determine which potential remedy provided the highest benefit, and costs were then considered to make an initial cost-benefit comparison between potential remedies. Three potential remedies were identified to be studied further as a result of the CBA workshop.



Phase 3: MCER development occurred during this phase that involved prioritizing potential remedies, establishing funding and timing, performing a financial analysis, and making a more detailed cost benefit analysis. Block grant and major maintenance funding was modeled, construction cost estimates were developed, and a present value analysis was completed for all potential remedies. Results from Phase 3 were used to perform a deep dive into the financial modeling of the remedy and its long-term impact to the student education.

The report includes a detailed explanation of the selected remedy, including the cost, life span, and capacity considerations. This explanation is supported by a summary of the potential remedies evaluated and reasons for accepting or rejecting each. Based on the approval of this selected remedy, this study also provides its implementation plan and the timeline.

By the conclusion of this report, the SFD will provide the District and the SFC a clear recommendation for the MCER. This MCER will include the actions required to address the building needs of the original seven schools included in FEA's contracted task order, align with the State's adequacy standards, and provide a sustainable, long-term solution for the District's facility needs. The MCER will also balance cost, efficiency, and educational outcomes while addressing both current and future enrollment projections.



2. Background and Rationale

An evaluation of the adequacy of school buildings and facilities and prioritization of these buildings is conducted by the SFC annually. The SFC also develops an annual schedule for building condition needs and one for building capacities. Based on the results of these evaluations, the SFC ensures the adoption of the most cost-effective method of remediation.

As the District, in this case, and the State, for all school districts, also contend with aging school facilities and infrastructure, it is often necessary to review their conditions to identify what might impede the delivery of quality educational services. As such, SFC Rules Chapter 8, Section 5(a)(ii), requires the SFD to conduct a MCER study for any school building or facility that has a Facility Condition Index (FCI) score exceeding 0.3. Three elementary school buildings in the District were identified and included in this study.

This MCER study was requested due to three schools identified as having a capacity need and four schools having a condition need. These studies are authorized by the SFD of the Wyoming SCD acting on behalf of the SFC.

The three elementary schools listed in the task order with a projected capacity need (student enrollment exceeding 100% of capacity) as reported in the SCD 2023 Annual Report are:

Arp Elementary School (134.90% of capacity)

Saddle Ridge Elementary School (126.00% of capacity)

Sunrise Elementary School (108.30% of capacity)

And the four elementary schools identified in the task order with a projected condition need (an FCI exceeding 0.3 within 5 years) as reported in the SCD 2023 Annual Report are:

Hobbs Elementary School (5-year FCI = 0.464)

Buffalo Ridge Elementary School (5-year FCI = 0.357)

Jessup Elementary School (5-year FCI = 0.349)

Miller Elementary School (5-year FCI = 0.281) Note: The 5-year FCI for Miller is projected at 0.296 in 2028 based on the 2023 condition assessment data. However, the 10-year FCI (within the period of this study) is projected at 0.385.

Instead of performing individual MCER studies for each of these seven schools, the SFD anticipated that the broader approach of a district-wide study would offer a more effective long-term remedy. This information outlines a concurred direction for the District and SFD to follow for current needs and projected future needs. Annual planning meetings between the District and SFD should include a discussion about verifying how this MCER still reflects the current state of the District's enrollment and building conditions.

With 25% of the elementary schools represented in these seven schools, a possibility offered itself to a long-term plan for elementary school configurations and factors determining the



sequence of future capital construction funding requests. To manage the view of the District's portfolio in one study, the SFD and District will have the opportunity to concur on what is needed in the near future (the next 5 years) and in the long run. This approach will allow the District a long-term facility and financial strategy to ensure district-wide student education needs are met. An additional benefit for having this long-term plan is that it allows for MCER amendments, thereby reducing or eliminating the need for yearly District MCER studies. This MCER study also solidifies the direction and makes affordable adaptations to any changes in the educational programs.



3. Scope of Work

Scope and Objectives

With a primary objective to determine the MCER for the District-wide elementary school portfolio, it was necessary for the State to understand the capacity and condition of all District elementary schools, as well as the financial implications of all potential remedies. Understanding that the MCER could involve a combination of construction and non-construction remedies, it was necessary to evaluate multiple actions for each potential, district-wide remedy.

Considering a wide range of potential remedies involves making decisions that take into account feasibility, cost, benefit, and effectiveness. The evaluation requires potential remedies do not impede the District's ability to meet statewide adequacy standards or to deliver the prescribed statewide educational program. The evaluation of potential remedies to determine which is most cost-effective also requires review of total costs to the State, including: anticipated capital construction costs (first-time costs); ongoing operational costs (via the block grant); long-term sustainment costs (major maintenance payments), and disposition costs (e.g., transfer, demolition, etc. costs). As these costs can vary over time, depending on the anticipated implementation strategy and schedule for any particular remedy, identifying the *least-cost* remedy requires analysis of the present value of life cycle costs. Determining the *most cost-effective* remedy further requires the evaluation of both costs and benefits.

FEA was engaged by the SCD to evaluate possible remedies, including construction and non-construction solutions, and the associated financial implications in determining the most cost-effective remedy for District school facilities. This MCER study was to consider all elementary schools in the District, a total of 30, in developing district-wide potential remedies. Elementary schools identified with a capacity need included Arp, Saddle Ridge, and Sunrise, and the schools identified with a condition need included Buffalo Ridge, Hobbs, Jessup, and Miller. Any potential district-wide remedy was required to provide individual remedies for these seven schools. As individual school remedies could impact several schools, potential cost-effective remedies required a district-wide solution instead of individual school remedies.

Accordingly, FEA was contracted to conduct a district-wide MCER study for all 30 elementary schools to evaluate the long-term needs and impacts of potential remedies across the portfolio based on the data and information available at the time of the study. The following is a summary of the tasks included in the study:

- Study preparation Identifying/familiarizing with SFC rules
- Data collection Review of existing data
- Project overview Identify background information for basis of analysis
- Educational specifications/Program of spaces Review of the District's educational specifications
- Site analysis Assessment of potential sites
- Identification of potential remedies determine types of remedies available



- Analysis of potential remedies Collaboration about the potential remedies with the District and SCD
- Anticipated most cost-effective remedy Summary of costs, schedules, and priorities
- Most Cost-Effective Remedy Meetings with SCD, District, Board of Trustees, and Commission

There were additional subtasks associated within each task, which collectively provided means for determining the MCER. As the main purpose of the study is to determine the most cost-effective remedy, there could be numerous ideas related to this District portfolio. To address this type of portfolio, there were known or established District practices that helped focus the study and keep the possible number of potential remedies manageable. Two such practices involved 1) maintaining the current direction of transitioning to a 5-6 school for grade level advancement throughout the District, and 2) to retain the current Triad boundaries.



4. Methodology

Phase 1 – Information Gathering

This phase involved a comprehensive effort to gather and analyze data to inform the development of potential remedies. The data collection and analysis aimed to address both capacity and condition needs across the District. A brief summary of the remedy identification process, feasibility analysis, and preparation for the CBA workshop can be found in this section. Further information regarding the potential remedy development process leading up to the CBA workshop can be found in Appendix A01, CBA Workshop Summary Report.

4.1 Data Collection and Site Visits

The FEA team conducted a kickoff meeting to collect information and data from the District and to converse about the current state of the elementary schools, learn how the schools function, and understand how the District viewed the capital construction plan. These meetings allowed us to identify documents needed, begin theme development, learn about the Triad boundaries and school configuration, and the challenges of school facility management. The information gathering continued throughout the project, but this initial data gathering was critical to the process and allowed the District an opportunity to share the approach previously used for providing the required educational space.

This initial kickoff meeting allowed us to align the stakeholders' expectations through common terminology and share viewpoints about this MCER study that were important to them. The collection of information included information shared about the District's plan for the South Triad, previous MCER studies, attendance boundary maps, potential new sites, master plan, and planned property disposition.

Site visits to the seven schools identified with needs were conducted, to familiarize ourselves with the buildings. Physical inspections of the buildings clarified what the documentation was conveying or not conveying. Any gaps of information deemed necessary for this study were identified and requested. Some data gaps included site plans showing all the property encumbrances, sewer maintenance records for issues reported during the visit, and observation reports of the assessments performed by the SCD. During the site visits, our team was able to observe the typical classrooms and record observations about the space being used as educational or non-educational purposes.

4.2 Establishment of Themes

After collecting and analyzing the data, the FEA team identified the following six themes for addressing the District's condition and capacity needs.

- 1. Address Individual Sites Only
- 2. Keep Current Mixed Configurations
- 3. Full 5-6 Implementation (Two 5-6 Schools per Triad)



- 4. Full 5-6 Implementation (One 5-6 School per Triad)
- 5. Full 4-6 Implementation (Two 4-6 Schools per Triad)
- 6. Eliminate 5-6 Schools, Transition Entirely to K-6

These themes served as guiding principles for developing potential remedies. Each theme represented a different approach to addressing the identified building needs. Some focused on building new schools, reconfiguring grades, or addressing specific capacity issues.

4.3 Development of Potential Remedies

Based on the identified themes, the team outlined 17 potential remedies aimed at addressing both condition and capacity needs. Examples of the potential remedies included returning to a K-6 configuration or reconfiguring the grades into a K-3 and 4-6 configuration. Another potential remedy considered was to leave the facilities as-is and address issues on a building-by-building basis. The team also considered maintaining the District's current 5-6 configuration, which had been previously acknowledged by the SFD when new construction was authorized.

In addition to these potential remedies, the District's potential remedy (bringing the total potential remedies to 18) defined as right-sized, modern school facilities that addressed District program needs, adequate capacity, and acceptable condition. A total of 18 potential remedies were initially identified by FEA, SCD, and the District.

4.4 Feasibility Analysis and Reduction of Remedies

After identifying the initial 18 potential remedies, the team conducted a high-level feasibility analysis to determine which of these remedies were practical and actionable. This analysis also considered whether the potential remedy aligned with both the District's long-term strategy and the State's objectives. For example, potential remedies such as the K-6 configuration and K-3 and 4-6 configuration were determined to not meet the District's 5-6 grade configuration model, which has been adopted. In fact, these alternate configuration strategies would be a reversal of the District's long-term strategy, which had been partially implemented in two of the three Triads. The feasibility analysis allowed the team to reduce the list of potential remedies from 18 to 12. Additional information can be found in Appendix A01, CBA Workshop Summary Report.

4.5 Preparation for the CBA Workshop

Before advancing to Phase 2, the team consolidated potential remedies further based on outcome similarities. Potential remedies that would yield similar outcomes were merged, bringing the total number of potential remedies down to seven. Potential remedies that focused on meeting minimum adequacy requirements, maintaining smaller neighborhood schools, and providing fewer, larger schools were common among a number of them, which allowed for the merge. These seven potential remedies were further analyzed during the CBA workshop.



Phase 2 – Choosing by Advantages

The CBA process is a structured decision-making methodology that focuses on evaluating options based on their benefits (advantages) first and then evaluating the costs. A significant benefit of this process is the open and transparent decision-making process to document the most important factors when comparing potential remedies and their relative advantages. The CBA process was central to evaluating and ranking the potential remedies based on both benefits and costs to identify the potential most cost-effective remedies.

4.6 Intent of the CBA Process

The purpose of the CBA workshop was to help decision makers objectively evaluate and compare the advantages and costs of the identified potential remedies. By systematically prioritizing the advantages, the CBA process aimed to ensure that the chosen remedy(s) provided the highest overall value and aligned with the studies' goals and criteria. The goal was to identify remedies that offered the best results from a cost-benefit perspective.

The CBA workshop was conducted in Cheyenne, Wyoming from July 9th to July 11th, 2024. The workshop was facilitated by FEA and participated by the District and SCD representatives. The full list of attendees is available in Appendix A01, CBA Workshop Summary Report.

4.7 Evaluation of the Potential Remedies

To evaluate each of the potential remedies, workshop participants were asked to summarize their attributes, identify the advantages of each potential remedy, and determine the importance of each advantage. The advantages were evaluated using factors that were identified by the participants. These factors allowed the participants to begin to evaluate the benefits (e.g., improved capacity, better utilization of space, alignment with District strategy) that a particular potential remedy might provide. The result was a combination of all factors showing which potential remedies provided the greatest overall advantage.

The evaluation of advantages highlighted that the potential remedies that focused on fewer larger elementary schools provided the highest overall advantage while the non-construction focus provided the lowest overall advantage.

4.8 Introduction of Costs

The cost evaluation included a rough order of magnitude (ROM) cost estimate for each potential remedy. The ROM cost estimates focused on anticipated construction activities that might be associated with an action assigned to a school for each potential remedy. A cost-to-benefit (advantage) ratio of each potential remedy was calculated and graphed to highlight the remedies that offered the best results considering both their advantages and their costs.

4.9 Final Selection of Remedies

After completing the cost-benefit analysis, the team identified three potential remedies that were closely grouped in terms of both their relative advantages and their costs. These three



potential remedies represented the best possible balance between costs and benefits, and they were advanced for further analysis. These potential remedies included:

- **Potential Remedy 1.** Upgrades for current District program, keep smaller neighborhood elementary schools (identified as Remedy 4b in CBA workshop)
- Potential Remedy 2. Construction with fewer larger elementary schools (identified as Remedy 4c in CBA workshop)
- **Potential Remedy 3.** Right-sized, modern school facilities that address District program needs, adequate capacity, and acceptable condition (identified as Remedy LAR01 in CBA workshop)

A detailed summary of the full CBA process conducted in the workshop with details on each potential remedy and the findings can be found in Appendix A01, CBA Workshop Summary Report.

Phase 3 – Identifying the MCER

4.10 Prioritization of Remedies

The three potential remedies identified in the CBA workshop as most advantageous were further analyzed for costs, estimating timing, and practical execution. This step was critical in deciding the sequence in which the potential remedies would be implemented, ensuring efficiency, minimizing disruption, and addressing both immediate and long-term needs.

The first task for the analysis was to arrange the three potential remedies identified during the CBA in a priority order. This prioritization was based on multiple practical considerations such as the necessity for new construction to address capacity or condition of the existing facilities, reconfiguration of school grade structures to both address capacity and optimize facility footprint, and movement of students to implement the remedy. Key elements influencing the prioritization included:

- Construction or Replacement Needs: A crucial factor in this evaluation was
 determining which buildings required immediate construction or replacement. These
 decisions were driven by a combination of capacity limitations, building condition, and
 completion of the District's long-term strategic objectives. For instance, schools facing
 critical overcrowding or those with facilities in poor condition were prioritized for
 construction to ensure a timely solution to both capacity and condition challenges.
- **Student Movement and Reconfiguration:** Another vital component of the remedy execution plan involved assessing how student populations would be relocated or redistributed within the District. Moving students between schools was not only necessary to alleviate overcrowding but also played a key role in aligning the District with the targeted grade configurations. This included planning around the introduction of new grade structures and consolidating students to maximize the use of existing and newly constructed facilities. Optimizing the building footprint was critical in determining the most cost-effective remedy.



The resulting roadmap established a phased approach to execution, providing a logical and structured implementation plan. This roadmap enabled decisionmakers to visualize the progression of each potential remedy, ensuring that construction and reconfigurations would proceed in a manner that minimized disruption to both the educational process and the District's operational flow. This step was essential to ensuring the potential remedies not only resolved current issues but also provided a sustainable framework for the District's future condition and capacity needs.

By prioritizing these potential remedies, a clear path forward was developed, allowing for an efficient allocation of resources and a streamlined execution of the District's long-term facility plan.

4.11 Funding and Timing Considerations

Once the prioritization of potential remedies was established, the next critical task was for the team to evaluate each potential remedy based on funding availability and the optimal timing for execution. These considerations were essential for ensuring that the identified remedies could be implemented without delays or disruptions due to financial constraints.

Each potential remedy underwent a detailed analysis to determine when the SFD anticipated they could be funded based on assumptions of timing funding requests. Some of the remedies were eligible for immediate funding, meaning that they could be initiated as soon as the MCER study was approved by the District's Board of Trustees and accepted by the SFC. These remedies addressed urgent capacity and condition needs, which made their prompt execution a priority. Other remedies, however, required more long-term financial planning and necessitated future funding requests to ensure resources would be available in subsequent years. This distinction helped guide the development of a comprehensive funding strategy that aligned with both immediate needs and long-term District goals.

To coordinate the sequence of actions with funding availability, a remedy execution calendar was created. This calendar laid out a timeline for each phase of the remedy implementation, specifying when funding would need to be requested and allocated. The calendar was an essential tool for ensuring that:

- Remedies could be carried out in an optimal sequence, aligning with the District's capacity, construction schedules, and operational needs.
- Funding requests could be submitted at appropriate intervals, securing financial resources in time to avoid delays in the overall implementation process.

This strategic alignment of funding and timing allows for a seamless progression from planning to execution. By ensuring that the right financial resources are available at the right time, the District can move forward with the selected remedy efficiently, while maximizing long-term benefits and minimizing interruptions to educational services. This approach also allows the District and State to remain focused on a long-term capital strategy, which can then be reviewed on a yearly basis over the course of implementation.



Special Note on remedy Identification. While working through the prioritization of the potential remedies (the three identified during the CBA process), one additional potential remedy (i.e., Remedy 4) was identified. After each of the three CBA remedies were prioritized and arranged for execution over time, it became apparent that a hybrid of the three potential remedies would provide certain logistical advantages that could not be realized by the original three. This hybrid remedy was, therefore, also prioritized and arranged for execution over time in the same manner during the prioritization and scheduling workshop. Furthermore, shortly after the conclusion of this workshop, the District suggested one additional potential remedy (Remedy 5) as a slight adjustment to Remedy 4. The adjustment affected the combined actions for three buildings in the East Triad, with no other modifications. Upon review by the State and FEA, it was agreed that both additional remedies offered advantages similar to the most advantageous of the three remedies identified during the CBA workshop. Therefore, the two additional remedies, making five potential remedies in total, would be included in the final analysis to identify the MCER.

4.12 Financial Analysis

The financial analysis conducted in this phase was comprehensive, evaluating projected costs to the State that would be associated with the implementation of each remedy. The purpose was to ensure that the MCER could be identified based on a detailed breakdown of first-time costs, ongoing operational costs, and ongoing major maintenance costs over a 20-year financial projection period. Identifying a MCER also required balancing new building with consolidation of existing buildings and removing some buildings from inventory. Removal of buildings from inventory has a significant impact on ongoing block grant and major maintenance funding.

Based on the requirements of the MCER process, the potential remedy that met the needs (condition and capacity) of the study, compared favorably on a cost-benefit basis, and resulted in the least cost would be identified as the Most Cost-Effective Remedy, or MCER.

First-time Costs

The financial analysis began by identifying the first-time costs for each potential remedy. This included costs for construction, renovation, demolition, and any associated actions required to implement that remedy. A third-party cost estimator was engaged to develop these estimates, ensuring that all first-time costs were accounted for.

Additionally, the financial analysis considered the need for swing space—temporary accommodations for students and staff during construction or renovation. However, most remedies were designed to utilize existing swing space within the District, or they allowed for new facilities to be constructed on current sites without the need to vacate old buildings. As such, swing space costs were only included if necessary.

Ongoing Operational Costs

The next step was to evaluate the ongoing operational costs for each potential remedy. This included costs for day-to-day school operations such as staffing, utilities, and other recurring



expenses. The financial analysis also assessed major maintenance costs, which would be necessary to continue to sustain the facilities over time.

A key part of the operational cost evaluation was understanding how changes in school configurations and enrollments—a precursor to Average Daily Membership (ADM)—would impact the Wyoming School Foundation Program guarantee, or *block grant*. The analysis reviewed how the execution of each remedy would affect the state-provided block grant funding—which is calculated based on school configuration and ADM. For example, if a remedy involved replacing a large building with a smaller one of lesser ADM, the block grant funding would decrease accordingly. Conversely, if a school with higher projected enrollment was built, block grant funding would increase.

The movement, or redistribution of students, across multiple schools was also considered to ensure that funding allocations matched the modeled enrollment as each remedy was implemented. Each remedy was examined by comparing the beginning state (current grade configuration, building capacity, and funding levels) with the end state (after the remedy's completion). This allowed projection of how much the State would allocate for ongoing operational costs based on the final school configurations.

Ongoing Major Maintenance Costs

To quantify ongoing major maintenance costs, the analysis followed a similar process. Major maintenance funding, which was calculated based on the allowable square footage of each building and for the District as a whole, was projected forward. As the size of buildings changed or buildings were constructed, replaced, consolidated, or taken offline, the major maintenance funding amounts were re-calculated accordingly. The goal was to determine how much major maintenance funding would be required with each remedy based on the portfolio of facilities in place in each year of the study period.

4.13 Present Value Calculation

To provide a long-term financial outlook, costs were projected over a 20-year period, factoring in both the near-term costs of implementation and the long-term ongoing sustainment costs. This included inflating costs to reflect the year they would be incurred and then discounting them back to present value to ensure a consistent basis for comparing remedies.

Finally, all projected costs—both first-time and ongoing—were combined into a present value (PV) calculation for each remedy. This allowed for a properly-indexed (to 2024 dollars), side-by-side comparison of the total costs of each remedy, adjusted for the timing of when those costs would occur.

The remedy with the lowest present value was identified as the MCER, representing the least long-term cost to the State over the 20-year period. This approach ensured that both immediate financial impacts and long-term sustainment were considered in identifying the MCER.

This structured financial analysis ensured that each remedy was evaluated holistically, providing a clear understanding of the financial implications for both the District and the State.



4.14 Cost Benefit Analysis

After the prioritization, funding and timing analysis, and additional financial analysis, an additional cost-benefit analysis was performed. This analysis was performed on the three potential remedies from the CBA workshop plus the two additional remedies that were identified during or as a result of the prioritization process. Given that the hybrid remedies included the most advantageous elements from the three CBA workshop remedies in an innovative approach, the advantages of the hybrid remedies were assumed to be at least the same as the highest of the three CBA remedies. Therefore, no further analysis of the advantages of the hybrid remedies was necessary.

After calculating the present value for each remedy, the total costs were aggregated. This involved summing up the present value of all cash flows associated with each action, including construction, renovations, and ongoing operational and maintenance costs, for all buildings involved. For buildings identified to be taken offline, ongoing operational and maintenance costs were included until the year after going offline, at which time a demolition cost was assumed (anticipated to be the highest cost to the State for the disposition of the building). Even in cases where a building required no immediate action, its projected operational costs were included to ensure a complete financial picture.

Once the present value was calculated for each remedy, the results were compared with the advantage analysis from the CBA workshop. These Advantage Scores were used as a proxy for the benefit each potential remedy would provide. The goal was to create a cost-benefit comparison, where the cost was derived from the present value calculation and the benefit was represented by the Advantage Scores.

This comparison allowed for a direct evaluation of how much benefit each potential remedy would provide relative to its cost; those that offered the greatest benefit for the least cost were prioritized. This process ensured the final recommendation was not only most favorable (incurring least cost) financially, but it also offered the greatest benefit to the District in addressing the District's capacity needs, condition needs, and long-term facility strategy.

By aligning the cost-benefit ratio for each potential remedy, the one that provided the best overall value could be identified, confirming it as the MCER. This thorough and methodical approach ensured that both immediate financial considerations and long-term benefits were fully accounted for in the final decision-making process.



5. Interpretation of Findings

This section details the key analytical components of the study and interprets these analyses, as necessary. Conclusions as a result of these analyses and interpretations are explained insofar as they impacted further analysis or decisions of the study. However, general conclusions and recommendations are provided in Section 6. Conclusions and Recommendations.

5.1 Enrollment Analysis

Multiple enrollment projection models were created and back tested for accuracy, including those explicitly referred to in Chapter 8 Section 4(a)(i-iii), SFC Enrollment Projection Methodology, per W.S. § 21-15-116(a). Most models forecasted a decline in District enrollment over the study period. These model forecasts are shown in Figure 3: Enrollment Projection Models, below. It also indicates model projections of enrollment are divergent over time.

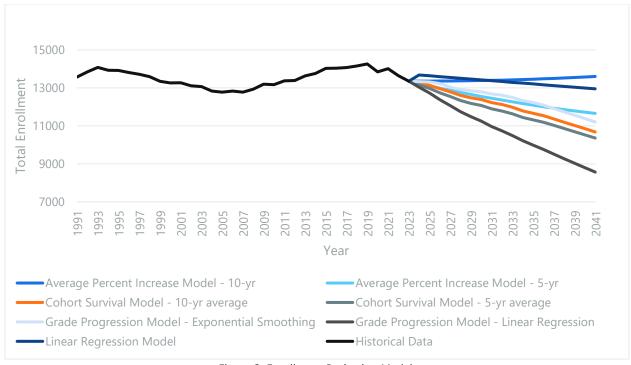


Figure 3: Enrollment Projection Models

When taking an average of model projections (mean model) and applying the back-tested historical error rate to the mean model we can visualize a potential range of outcomes. This is shown in Figure 4: Projection of Mean Model with Estimated Error Range, where the line represents historical and projected enrollment and the colored bands surrounding the line represent the historical error rate of the portion of the line representing the mean model's enrollment projection.



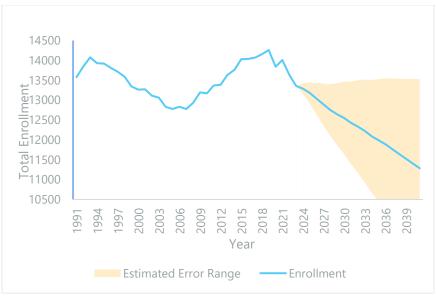


Figure 4: Projection of Mean Model with Estimated Error Range

It would be reasonable to conclude, given the back-tested error rates on projections, that enrollment would not decline indefinitely. Moreover, the cyclical nature of enrollment over the past 30 years requires the consideration of a broader historical context where enrollment has both grown and declined. To apply this, an auto-regressive moving average (ARMA) was created to supplement the required models. The ARMA model incorporates additional historical data per Section 4(d) of the SFC Enrollment Projection Methodology and forecasts a period of decline before increasing toward the District's average historic enrollment.

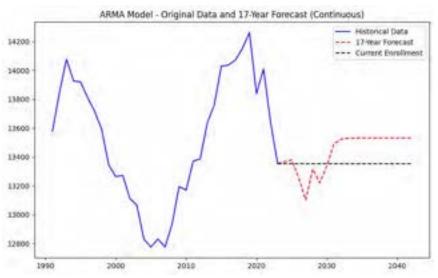


Figure 5: Auto-Regressive Moving Average (ARMA) Model

Figure 5: Auto-Regressive Moving Average (ARMA) Model depicts the ARMA model. Historical enrollment is represented with the blue line, the model's projected enrollment is represented



with the red dotted line and the continuation of the most recent enrollment level is represented with the black dotted line.

For the purposes of the study, the largest risk to relying on any single enrollment projection method would be the under-building of capacity as a result of using near-term declines to project long-term enrollment. Because it is less burdensome to reduce capacity than adding it, and models are divergent in their projections of enrollment over the study period, the decision was made to base the MCER enrollment projections on the most recent enrollment data. Analysis of various models depict disparate forecasts of enrollment. For more information regarding the specific models evaluated, refer to Appendix A02, Enrollment Projections.

5.2 Review of Condition Data

To understand the impact of conditions, FEA reviewed the projected conditions for each school building in the District included in this study relative to timing of planned actions of the MCER, with particular attention paid to the school buildings requiring actions to address condition needs. The following is a brief review of condition buildings included in this MCER study and how those buildings are anticipated to be treated as the MCER is executed.

In some cases, it may be possible to avoid significant major maintenance expenditures if projected expenditures can be deferred until the planned action is completed. Potential cost avoidance is included in the individual building summaries that follow. It is also expected that utility costs will be eliminated once any buildings taken offline are transferred or demolished, which will be a savings to the District.

Taking buildings offline will also provide commensurate savings to the State, in both block grant funding and major maintenance funding attributed to those buildings once the buildings go offline. The cost savings to the State for reductions in block grant funding and major maintenance funding are considered in the present value financial analysis. The action of taking some buildings offline, along with other life cycle cost reductions, is a critical part of the MCER.



• **Buffalo Ridge Elementary School** – Buffalo Ridge was originally constructed in 1959, is 33,040 gross square feet, and is located on a 7.53-acre site in Cheyenne, Wyoming. The building is configured as a K-4 and was at 73.3% capacity based on October 2023 enrollment data. The 5-year FCI for Buffalo Ridge was projected at 0.357 by 2028 based on the 2023 condition assessment data, as shown below in Figure 6: Ridge Elementary School FCI Analysis Graph. However, the building was renovated in 2022, and the District confirmed some of the needs identified in the 2023 assessment would be remedied through commissioning of mechanical systems and there were no other known, short-term needs. The District was confident they could manage conditions at Buffalo Ridge through application of major maintenance funds for the duration of this MCER study (through 2036).

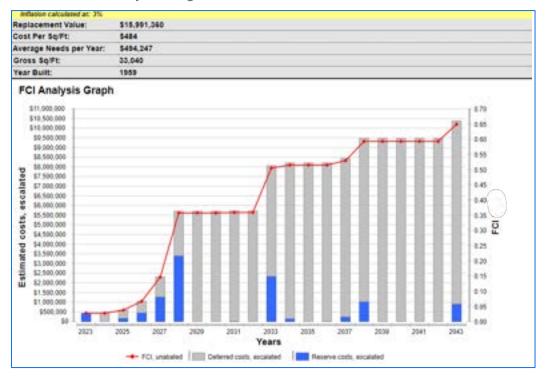


Figure 6: Buffalo Ridge Elementary School FCI Analysis Graph Source: SFD 2023 FCI Analysis Report (assetworks.com)



• Hobbs Elementary School – Hobbs was originally constructed in 1959, is 41,708 gross square feet, and is located on a 9.22-acre site in Cheyenne, Wyoming. The building was configured as a K-6 and was at 98.7% capacity based on October 2023 enrollment data. However, the school was reconfigured as a K-4 for the 2024/25 school year with the opening of Coyote Ridge, which reduced the capacity to 67%. The 5-year FCI for Hobbs is projected at 0.464 in 2028 based on the 2023 condition assessment data, which is the same FCI projected over the period of 2028 to 2030, as shown below in Figure 7: Hobbs Elementary School FCI Analysis Graph. The MCER anticipates Hobbs being replaced in 2030. The District was confident they could manage conditions at Hobbs through application of major maintenance funds until the replacement school goes online. However, to the extent major maintenance can be deferred, there is potential for the District to manage up to \$9.3M of cost avoidance over the 5-year period from 2024-2028 based on projections from the 2023 condition assessment data. This would allow any unused funds (due to avoidance) to be reallocated to other major maintenance needs across the District.

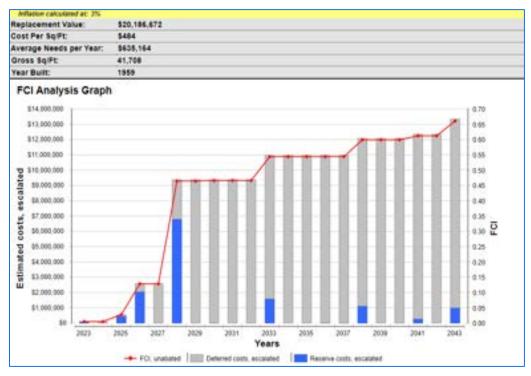


Figure 7: Hobbs Elementary School FCI Analysis Graph Source: SFD 2023 FCI Analysis Report (assetworks.com)



• **Jessup Elementary School** – Jessup was originally constructed in 1961, is 31,710 gross square feet, and is located on a 5.5-acre site in Cheyenne, Wyoming. The building was configured as a K-6 and was at 83.1% capacity based on October 2023 enrollment data. However, the school has been reconfigured as a K-4 for the 2024/25 school year with the opening of Coyote Ridge, which reduced the capacity at Jessup to 48.4%. The 5-year FCI for Jessup is projected at 0.349 in 2028 based on the 2023 condition assessment data, as shown below in Figure 8: Jessup Elementary School FCI Analysis Graph. The MCER anticipates Jessup being taken offline in 2027, prior to significant major maintenance funds being expended. Taking Jessup offline before 2028 could result in a potential cost avoidance of up to \$5.3M based on projections from the 2023 condition assessment data. This would allow any unused funds (due to avoidance) to be reallocated to other major maintenance needs across the District.

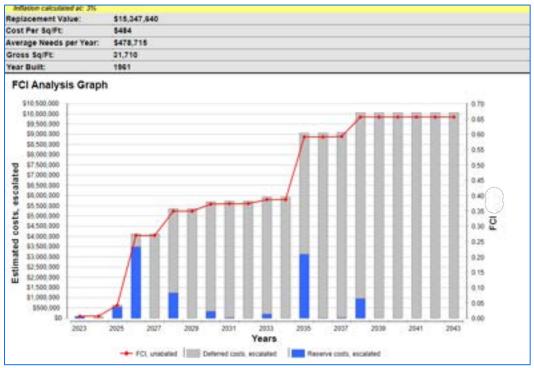


Figure 8: Jessup Elementary School FCI Analysis Graph Source: SFD 2023 FCI Analysis Report (assetworks.com)



• Miller Elementary School – Miller was originally constructed in 1965, is 12,777 gross square feet, and is located on an 8.04-acre site in Cheyenne, Wyoming. The building is configured as a 4-6 and was at 71.9% capacity based on October 2023 enrollment data. The 5-year FCI for Miller is projected at 0.296 in 2028 based on the 2023 condition assessment data. However, the 10-year FCI is projected at 0.385, as shown below in Figure 9: Miller Elementary School FCI Analysis Graph. The MCER anticipates Miller being taken offline in 2025, prior to significant major maintenance funds being expended. Taking Miller offline prior to 2028 could result in a potential cost avoidance of up to \$1.8M based on projections from the 2023 condition assessment data. This would allow any unused funds (due to avoidance) to be reallocated to other major maintenance needs across the District.

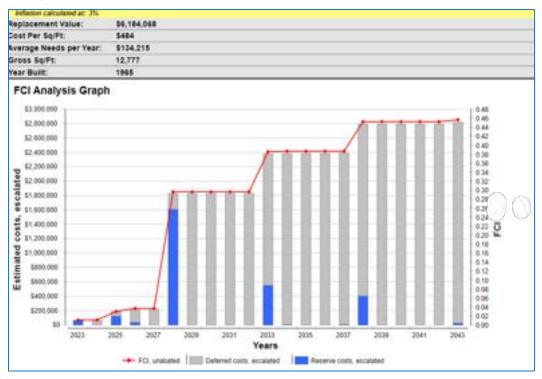


Figure 9: Miller Elementary School FCI Analysis Graph Source: SFD 2023 FCI Analysis Report (assetworks.com)



5.3 Financial Analysis for Determination of MCER

The determination of the MCER is based on an analysis of the present value of costs over a 20-year period. A 20-year period was determined to be sufficiently long to allow capturing the impact of life cycle cost associated with the actions taken in the execution of a potential remedy.

The present value analysis considers the costs to the State over the analysis period (20 years). It includes the following:

- 1. First-time costs include the capital cost of new construction, replacement, or renovation. These are the capital costs requested in the SCD's proposed budget. If approved, these are the capital costs funded by the State. First-time costs are inflated to the year of planned construction as anticipated in each remedy. FEA engaged a third-party professional cost estimator to provide detailed cost estimates for anticipated capital construction activities. To estimate related site development costs, FEA developed test-fit site plans, which are attached in Appendix A06, Site Diagrams.
- 2. Future operational costs are based on the District's calculation of block grant funding as adjusted to reflect the execution of remedy actions. The District utilized the Wyoming Department of Education block grant funding model (and calculation tool) for these calculations. Future block grant funding is then substituted for current block grant funding when there is a change based on a remedy action. For example, if a school is constructed and students move between school, block grant funding will change based on the schools in service, the anticipated distribution of students to those schools, and the assumed ADM at each school based on student movements. For schools anticipated to be taken offline, those schools are assumed to receive no block grant funding once the school goes offline. For the purposes of this analysis, future ADM is based on projected enrollment.
- 3. Ongoing major maintenance costs are estimated by applying the State's methodology for calculation of annual major maintenance payments. The annual major maintenance payments are based on schools assumed to be in service in any given year as a remedy is executed, and the enrollment assumed for each of the schools in service. Allowable square footages (and resultant funding) are therefore adjusted as schools are introduced, modified (e.g., via addition), or removed from service.
- 4. Demolition costs are assumed for each school anticipated to be taken offline. Although the final disposition will be determined as the time to take a school offline approaches, the SCD indicated that demolition should be assumed for all buildings anticipated to be taken offline.

To calculate the present value of each remedy, the cashflows (costs at points in time) for each of the above costs are projected based on the timing of remedy actions and the schools in service at any point in time. The analysis was extended over a 20-year period to extend beyond the completion date of any construction forecast for any potential remedy and coincide with a common federal and State agency planning period. Cashflows are projected for every school, for



each cost type (first-time, ongoing operational, ongoing major maintenance, and demolition), for each year over the 20-year period. Each cashflow was inflated to the appropriate future year and then discounted back to present.

The inflation rate used for the present value analysis is 4.6%, which represents the annualized inflation rate from January 2006 to January 2024, based on U.S. Bureau of Labor Statistics (BLS), Producer Price Index data for new school building construction, not seasonally adjusted. This is represented in BLS data Series ID PCU236222236222; https://data.bls.gov/timeseries/pcu236222236222.

The discount factor used to discount future values back to present is 5.6%, which represents the annualized return over the last 10 years of the Common School Permanent Land Fund as provided by Wyoming State Treasurer's Office as of July 31, 2024. The ten-year rate was selected because the period is greater than the period between this study and the final year of funding allocation required to fund the activities in the proposed MCER.

In addition to the present value analysis, FEA considered both benefits and costs. Benefits were determined via the CBA process previously described, where the Advantage Scores for each remedy represent a quantification of benefit. The table below, Table 3: Advantage Scores, provides a summary of the present value analysis of the five potential remedies and the associated Advantage Scores. A table in Appendix A04, Present Value Analysis provides additional detail of the analysis.

| POTENTIAL REMEDY | PRESENT VALUE | ADVANTAGE SCORE |
|------------------|-----------------|-----------------|
| 1 | \$3,021,431,014 | 642 |
| 2 | \$3,022,138,963 | 788 |
| 3 | \$3,025,032,862 | 734 |
| 4 | \$3,011,287,064 | 788 |
| 5 | \$3,030,413,495 | 788 |

Table 3: Advantage Scores



6. Conclusion and Recommendations

6.1 Summary of MCER

Determining the MCER involved three distinct elements of work: the CBA workshop, the prioritization and scheduling workshop, and the financial analysis.

The establishing priorities workshop was a structured interactive workshop facilitated by FEA on August 27, 2024, at the offices of the SCD. The workshop included representatives from the District and the SFD. The workshop focused on analyzing the actions proposed for each remedy to determine an order of priorities in accomplishing the actions. Representatives from the District and the SFD collaborated in developing a priority-based approach for each potential remedy based on the seven schools with identified building need for the study, overlaying the District's priorities, prospective timing of funding, and other local economic factors.

The first step of this process utilized the outline of actions for each potential remedy from the CBA workshop. Each remedy was laid out using building blocks representing each school building, and placing the 'buildings' from left to right, in line, or groups, indicating what action could happen first with dependencies and projected milestones. After each potential remedy was laid out in order of priorities, a schedule was established with projected milestones relative to anticipated funding and local economic factors that should be considered. These local economic factors included concerns about having multiple major capital improvement projects underway at the same time and the ability to find qualified contractors to perform the work.

A hybrid potential remedy (Remedy 4) was developed after the three potential remedy concept schedules were established. The outcome of the CBA workshop and prioritization workshop identified Remedy 4 as the preferred remedy. Remedy 5 was considered as a variation of Remedy 4. Remedy 5 differs from Remedy 4 only in the configuration and size of two schools in the East Triad.

A financial analysis of the five potential remedies was completed next and produced a present value of the costs associated with each. Figure 10: Cost-Benefit Analysis illustrates the cost-benefit relationship of the five potential remedies. The sum of present values of the cashflows associated with each remedy action represents the cost of each potential remedy in the chart, and the CBA Advantage Score represents the benefit of each potential remedy. The MCER is deemed to be the remedy that provides the greatest benefit at the least cost. As indicated in Figure 10, Remedy 4 satisfies both—it is both the most advantageous of the potential remedies and the least cost.



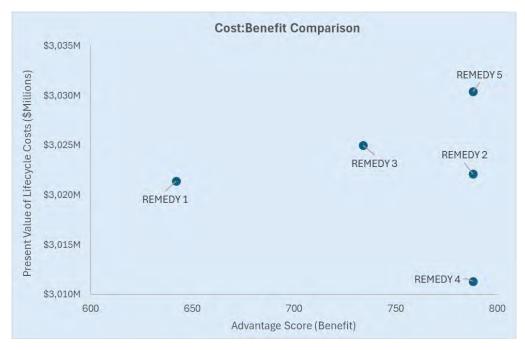


Figure 10: Cost-Benefit Analysis

The result of the two workshops allowed narrowing potential remedies through evaluation of feasibility, advantages, and costs. The financial analysis that followed **identified Remedy 4 as the Most Cost-Effective Remedy, or MCER.**

Figure 11: Most Cost-Effective Remedy Infographic represents a summary of the MCER (i.e., Remedy 4). Appendix A03, Most Cost-Effective Remedy (MCER) Details provides a detailed description of the MCER with justifications for how the remedy actions were prioritized.

PHASE 1 (2024-2030): Utilizes existing appropriated funding to make the most significant impact across the District and impacts the largest number of elementary schools. This Phase addresses six of the seven schools with identified building need for the MCER: Arp, Buffalo Ridge, Hobbs, Jessup, Miller, and Sunrise.

PHASE 2 (2031-2035): Requires future funding requests for design and construction. These requests have been planned to stagger projects to alleviate local economic factors, including concerns about having multiple major capital improvement projects underway at the same time and the ability to find qualified contractors to perform the work. This Phase addresses one of the seven schools with identified building need for the MCER: Saddle Ridge. While Saddle Ridge is currently shown as a capacity need, the District will manage this until the actions required for the East Triad can be implemented in Phase 2.

While school boundaries will be adjusted within Triads, no changes will occur across Triads or Districts. Upon completion of these actions, the condition and capacity needs will have been resolved, reducing the State's block grant and major maintenance (sustainment) costs and lowering the average age of District buildings by about 21 years. Details of timing of major activities, building needs associated with schools, timing of funding requests, modeled grade



configuration of each school, modeled enrollment by school, and modeled capacity by school are shown in Figure 11: Most Cost-Effective Remedy Infographic.

| | | SCHOOLS | 2023-24 ENROLLMENT | MODELED ENPOLLMENT | MODELED | MODELED GRADE | | Phase 1 | | | | | | | Phase 2 | | | |
|---------|-------------|-----------------|-----------------------|-----------------------|---------|------------------|-----|---------|-----|-----|-----|-----|-----|-----|-------------|-----|-----|-----|
| | | | ENROLLMENT | ENROLLMENT | CONFIG. | | '24 | '25 | '26 | *27 | '28 | '29 | '30 | ,21 | '32 | '33 | '34 | '35 |
| SOUTH | • | Arp | 292 | 509 | 550 | K-4 | •- | | | | • | Т | | | | | | |
| | \psi | Sunrise | 319 | 230 | 265 | K-4 | | | | Δ | | | | | | | | |
| | | Afflerbach | 325 | 227 | 376 | K-4 | | | | Δ | | | | | | | | |
| | | Cole | 144 | 203 | 267 | K-4 | | | | | | | • | | | | | |
| | | Goins | 291 | 206 | 301 | K-4 | | | | Δ | | | | | | | | |
| | | Rossman | 290 | 205 | 292 | K-4 | | | | Δ | | | | | | | | |
| | | New South 5-6 | 0 | 587 | 650 | 5-6 | •- | | | | | | | | | | | |
| | | Hebard | 111 | 0 | | | | | | | | 0 | | | | | | |
| | | Bain | 222 | 0 | | | | | | | | 0 | | | | | | |
| | | Fairview | 87 | 0 | | | | | | | | 0 | | | | | | |
| | | Lebhart | 86 | 0 | | | | | | | | 0 | | | | | | |
| CENTRAL | | Hobbs | 209** | 312 | 356 | K-4 | | | • | | | | | | | | | |
| | * | Jessup | 123** | 0 | | | | | | 0 | | | | | | | | |
| | * | Miller | 69 | 0 | | | | 0 | | | | | | | | | | |
| | | Davis | 222** | 271 | 298 | K-4 | | | | 0 | | | | | | | | |
| | | Pioneer Park | 363 | 267 | 356 | K-4 | | | | Δ | | | | | | | | |
| | | Prairie Wind | 306** | 380 | 420 | K-4 | | | | 0 | | | | | | | | |
| | | Clawson | 4 | 4 | 16 | K-6 | | | | | | | | | | | | |
| | | Gilchrist | 122 | 122 | 132 | K-6 | | | | | | | | | | | | |
| | | Willadsen | 5 | 5 | 32 | K-6 | | | | | | | | | | | | |
| | | Freedom | 316 | 316 | 343 | K-6 | | | | | | | | | | | | |
| | | Coyote Ridge | 425* | 569 | 652 | 5-6 | | | | | | | | • | | | | 0 |
| | | Deming | 82 | 0 | | | | | 0 | | | | | | | | | |
| EAST | * | Buffalo Ridge | 170 | 170 | 232 | K-4 | | | | | | Ţ | | | | | | |
| | \phi | Saddle Ridge | 353 | 225 | 250 | K-4 | | | | | | | | | \bigcirc | | | |
| | | Alta Vista | 213 | 249 | 260 | K-4 | | | | | | | | | Δ | | | |
| | | Anderson | 298 | 298 | 322 | K-4 | | | | | | | | | | | | |
| | | Baggs | 290 | 287 | 290 | K-4 | | | | | | | | | \triangle | | | |
| | | Dildine | 300 | 300 | 342 | K-4 | | | | | | | | | | | | |
| | | Saddle Ridge II | 0 | 128 | 250 | K-4 | | | | | • | | | | | | | |
| | | Meadowlark | 485 | 724 | 800 | 5-6 | | | | | | • | | | | 0 | | |
| | | Henderson | 272 | 0 | | | | | | | | | | | | 0 | | |

 $^{^* \}quad \text{Enrollment number includes students moved from Hobbs, Jessup, Davis, and Prairie Wind beginning in the 2024/2025 school year.} \\$

^{**} Enrollment number excludes students moved to Coyote Ridge beginning in the 2024/2025 school year. The end state of each school is shown for this MCER.



Figure 11: Most Cost-Effective Remedy Infographic



7. Appendices

A01 CBA Workshop Summary Report

A01.1 Introduction

Most Cost-Effective Remedy (MCER) studies are required on most public school facility projects that are funded by the State of Wyoming through the School Facilities Commission (SFC) and the School Facilities Division (SFD) of the State Construction Department (SCD). These studies are specifically for the purpose of identifying the most cost-effective method of remediation of school building and facility needs in order to deliver quality education and comply with statewide adequacy standards. These studies are ordered based on a facility condition index of 0.3 or higher, or a school capacity exceeding 100%, or other circumstances identified by SCD. The size and scope of these studies can vary widely depending on the issue and the potential remedies to explore. MCER studies focus on the solution to facility needs by examining, analyzing, and identifying the best way to provide the necessary functions in consideration of education and financial interests for the school districts and the State of Wyoming.

FEA's contract included a scope of work involving ten tasks to complete a typical MCER study. The choosing By Advantages (CBA) process aligns with *Task 7.0 – analysis of remedy option of the scope of work*. This MCER study is focused on Laramie County Schol District Number 1 (the District) Elementary Schools. The first phase of this MCER study involved broad identification of many potential remedies. FEA was tasked with studying seven elementary schools requiring remedies for condition (four schools) and capacity (three schools) needs. In addition, FEA was asked to consider the seven schools and their needs in the context of the whole district. To do so, FEA looked at:

- Remedies to address the individual needs of the seven specific schools only
- Remedies to address the individual needs of the seven specific schools while also considering the programmatic needs in a minimalistic approach across all schools throughout the District
- Remedies to address the individual needs of the seven specific schools while also considering the programmatic needs in a broader approach across all schools throughout the District
- Remedies to address the individual needs of the seven specific schools while also considering the longer-term district plan to transition to separate schools for grades K-4 and 5-6 throughout the District.

In addition to the eleven remedies developed by FEA, the District developed one remedy that was defined as right sized, modern school facilities that address district program needs, adequate capacity, and acceptable condition. The initial identification of potential remedies conducted by FEA, SCD, and the District defined six themes, with a total of 18 remedies, as



shown in Table 1(see Appendix A01, Appendix B – Details of Each Remedy for details on each remedy).

| MCER | THEME | | POTEN | ITIAL REMEDY |
|------|-------|---|---------|---|
| 23 | 1 | Address Individual Sites Only | 1a | Focus on Minimum Adequacy Requirements |
| 123 | 1 | Address Individual Sites Only | 12: | Upgrades for Current District Program Delivery |
| | | | | Focus on Non-Construction Alternatives to meet Minimum |
| ES | 2 | Keep Current Mixed Configurations | 24 | Adequacy Requirements |
| | | | | Upgrades for Current District Program, Keep Smaller |
| ES - | 2 | Keep Current Mixed Configurations | 26 | Neighborhood Elementary Schools |
| | | | | Upgrades for Current District Program, Fewer Larger Elementary |
| 122 | 2 | Keep Current Mixed Configurations | 25 | Schools |
| | | | | Focus on Non-Construction Alternatives to meet Minimum |
| ES | 3 | Full 5-6 Implementation (Two 5-6 Schools per Triad) | 3a | Adequacy Requirements |
| | | | | Upgrades for Current District Program, Keep Smaller |
| 85 | 3 | Full 5-6 Implementation (Two 5-6 Schools per Triast, One Larger, One Smaller) | 35 | Neighborhood Elementary Schools |
| | | | | Upgrades for Current District Program, Fewer Larger Elementary |
| 53 | 3 | Full 5-6 Implementation (Two 5-6 Schools per Triact One Larger, One Smaller) | 30 | Schools |
| | | | | Focus on Non-Construction Alternatives to meet Minimum |
| E5 | 4 | Full 5-6 Implementation (One 5-6 School per Triad) | At : | Adequity Requirements |
| | 10 | | | Upgrades for Current District Program, Keep Smaller |
| 15 | 1 | Full 5-6 Implementation (One 5-6 School per Triad) | 46 | Neighborhood Elementary Schools |
| 13 | 3 | Full 5-6 Implementation (One 5-6 School per Triait) | 44 | Construction, Tend to Fewer Larger Elementary Schools |
| | | F. St. & Section contains West & & Fabruary on Total | V A DOG | Right Sized, Modern School facilities that address District Program Needs, Adequate Capacity, and Acceptable Condition |
| 62 | - | Full 5-6 Implementation (One 5-6 School per Triad) | DANCI | Focus on Non-Construction Attenuatives to meet Minimum. |
| 00 | - | Full 4-6 terplementation (Two 4-6 Schools per Triad) | 56 | Adequacy Requirements |
| 5.2 | - | THE R R REPRESENTATION CHANGES AND SECURISED. | 34 | Upgrades for Current District Program, Keep Smaller |
| es : | 4 | Full 4-6 Implementation (Two 4-6 Schools per Triad) | 56 | Neighborhood Elementary Schoots |
| | | The T-1 dispersion of the T-1 delicated per tribut. | - | Upgrades for Current District Program, Fewer Larger Elementary |
| 22 | 4 | Full 4-6 Implementation (Two 4-6 Schools per Triad) | 56 | Schools |
| _ | | | | Focus on Non-Construction Alternatives to meet Minimum |
| ES | 6 | Eliminate 5-6 Schools, Transition Entirely to K-6 | 64 | Adequacy Requirements |
| pi- | * | | 10-12 | Upgrades for Current District Program, Keep Smaller |
| 23 | 6 | Eliminate 5-6 Schools, Transition Entirely to K-6 | 65 | Neighborhood Elementary Schools |
| | * | | | Upgrades for Current District Program, Fewer Larger Elementary |
| es. | 6 | Eliminate 5-6 Schools, Transition Entirely to K-6 | 60 | Schools |

Table 1 – Initial Potential Remedies

Initial Reduction of Remedies

The themes provided a structure for identifying and organizing various remedies that could potentially be evaluated further for each type of action needed for the remedy. Within each theme, remedies were categorized from less intervention to more intervention (typically *a* thru *c*) as part of the remedy.

Although the initial effort identified a lengthy list of possible remedies, initial review and discussion with District and SCD representatives allowed an initial reduction of the remedies. During the first phase of this study, the remedies were narrowed from 18 to 12 by analyzing the District's vision and education program goals through a series of meetings and presentations. Through this process, themes 5 and 6, as shown in Table 1 and their related remedies, were eliminated.

Theme 5 covered the potential transition to a K-3 & 4-6 grade configuration throughout the District. This theme was considered due to the similarities of the restricted capacity for grades K-3 (based on a 16:1 student-teacher ratio, or 50 square feet per student) versus the restricted capacity for grades 4-6 (based on a 25:1 student-teacher ratio, or 40 square feet per student). However, this theme fell short of the District's overall program goals and would be a step backward from the District's long-term vision of implementing the 5-6 grade configuration



throughout the District. Furthermore, this theme was deemed impractical as existing K-6 schools would need to be renovated to accommodate appropriate program needs and spaces of the reconfigured grade levels. For this reason, the remedies within Theme 5 were eliminated from further evaluation.

Theme 6 covered the elimination of the 5-6 configuration and transition to K-6 configuration throughout the District. This was considered due to the number of schools in the District already being a K-6 configuration, and the idea that it might be easier to transition all elementary schools to this grade configuration. However, this theme was also eliminated since eliminating the 5-6 grade configuration also falls short of the District's education program goals and would be a step backward from the District's long-term vision of implementing the 5-6 grade configuration throughout the District. As of the time of this study, the 5-6 configuration had already been implemented in the District's East Triad, where about two-thirds of the 5-6 students attend Meadowlark Elementary School. Many of the Central Triad 5-6 students were also scheduled to begin attending Coyote Ridge Elementary School in the upcoming 2024-2025 academic year. Eliminating the 5-6 configuration would also require significant renovation of the two 5-6 schools recently constructed (Meadowlark ES and Coyote Ridge ES) to accommodate the needs of the K-4 grade levels. It was also reported that standard test scores for this age group have risen with students at Meadowlark, and that students are transitioning better from the 5-6 school to the seventh grade (contained in the existing 7-8 junior high schools). Therefore, it was deemed more beneficial, and less disruptive to students, parents, and staff to extend the 5-6 configuration to the South Triad rather than eliminate the 5-6 configuration throughout the District. For this reason, the remedies within Theme 6 were eliminated from further evaluation.

This report presents a summary of the workshop conducted to determine the MCER for the Laramie County 01 Elementary School Study. The CBA workshop was conducted in Cheyenne, Wyoming from July 9th to July 11th, 2024. The workshop was facilitated by FEA, with District and SCD representatives participating. The full list of attendees can be found in the attendance sheet in Appendix A01, Appendix A – Attendance.

The workshop had three main objectives, which were to:

- Differentiate between the proposed remedies
- Compare remedies by focusing on the advantages, and
- Identify one or more remedies considered the most advantageous for final analysis



A01.2 Choosing by Advantages Process Overview

The CBA process is a structured decision-making methodology that focuses on evaluating options based on their advantages first and then evaluating the costs. A significant benefit of this process is the open and transparent decision-making process to document the most important factors when comparing remedies and the relative advantages of each remedy for each factor. Our workshop encouraged participation from everyone and allowed the group to reach consensus on the various items throughout the process. The process involved five main steps:



rigure 1 – Overview of CBA process

This method helped decision-makers objectively compare different remedies by highlighting the specific benefits of each one. By systematically prioritizing these advantages, the CBA aimed to ensure that the chosen remedy(s) provided the highest overall value and aligned with the stakeholders' goals and criteria.

During the stage setting step, after we introduced the workshop objectives and the MCER study objectives, a stakeholder analysis was conducted to facilitate a conversation around who would be affected by the outcomes of each remedy, and what interests each stakeholder would have. The final activity of the stage setting step was to identify the factors that would be used to analyze each remedy with and the criteria with which the factor would be judged.

The innovation step began on the second day of the workshop, which was devoted to evaluating each remedy, by assigning attributes for each of the agreed upon factors. This involved scoring each factor for each remedy to determine which remedy provided the greatest advantage.

The decision-making step began on the third day where we compared the advantages of the remedies against each other. The next step in the process was to rank the factors based on their level of importance and to assign each factor an importance value from 1 to 100. With all the information collected, an advantage score could be calculated for each remedy. Finally, rough order of magnitude cost estimates were introduced to compare costs to benefits.

After reviewing the advantage scores and cost estimates, the reconsideration stage allowed for additional discussion on remedies, opportunities for improvement within remedies, and next steps.



A01.3 Stakeholder Analysis

Stakeholder analysis is a process of identifying people or groups that a project will impact and identifying what their interests are related to the project. These interests could include how a project impacts them, what their desired outcomes are, and their desired features of a project. A brainstorming session was held during the workshop to develop a stakeholder list and what the impacts might be on the identified stakeholders. The group generated the following list of stakeholders with possible considerations of factors expected to be important to each stakeholder:

- **Students** Safety / environment / playgrounds / staying with current friend group
- Parents Location / neighborhood / safety / Environment / Parking / Environment /
 Quality of Education / Performance / Teachers or Staff / Necessities (meals and other
 aspects)
- Citizens/Community Change in traffic patterns / cost / economic impacts / safety or security / Appearance of School / character of building / Equity between triads / Equity across the state
- Teachers/Other with certifications Environment / different learning environments / technology / ability to have diverse teaching spaces / Comfort / Class size / parking / access / location / RR / safety or security
- Support Staff (maintenance, etc.)/District Modernization of buildings / Ease of Maintenance / Quantity of Staff / Quality of Staff / Cost / Ease of tracking costs / Nutrition / Space allocation / Safety and security / ability to attract teachers
- Principals / Admin Staff Environment / different learning environments / technology / ability to have diverse teaching spaces / Comfort / Class size / parking / access / location / RR / safety or security / Line of sight / ease of hiring staff / Modernization / Support functions locations / Functionality / Ease of operations / Cost funding for staff / EIP space allocation / retention and recurrent of staff
- Board of trustees Equity / stakeholders / modernization and new schools / adjust to new teach trends / serve constituents within budget constraints
- **Statewide Community** Equity across the state / value / program sustainability / efficiency of operations / cost / availability of funds
- Legislators Equity across the state / value / program sustainability / efficiency of operations / cost / availability of funds / serve constituents or stakeholders / balance over and underfunding / revenue and expenditure balance / ROI (return on investment) / Policies / Maintain local control while meeting statewide standards / comparison to rest of the nation / where do we rank in capacity and condition comparted to national averages
- **Superintendent** Ease of operations / recruitment of new teachers / programing / test scores, college placement (performance) / Cost or budget / resource management /



- facility maintenance / Like principals in some ways / WDE standards / meeting expectation from staff and community
- School Commission/School Facilities (SCD) Condition / Capacity / suitability / Equity statewide / Budget / Like legislators or superintendents / Major maintenance / policies at statewide level / safety and security / Modernization / life cycle cost / tracking data / reporting requirements / funding
- **Wyoming Department of Education (WDE)** Block grants / teaching standards / delivering education programs / can building meet required curriculum / Ability to meet requirements / equity / can district meet state standards / what is national standards
- **Local government** where is school / impacts on infrastructure / availability of local utilities to meet demand by new schools / economic impacts / safety or security / work staff / impacts on local community from increase population to do work / AHJ
- Emergency Personal (Police, Fire, First Responders) Location / Access / Safety / Distance / Building Code / Construction
- **PTA/Groups** Triad / School location / Legacy / School Quality / Safety / Comfortable body text This information was taken and used to create a word cloud as shown in Figure 2 below. This graphic shows the prominence of the words that were most common in the stakeholder perspective list. The most prevalent words were safety, staff, cost, equity, security, ability, environment, standards, modernization, and location. The attendees were reminded of the stakeholder list and interests throughout the workshop.



Figure 2 – Word cloud of stakeholder interests



A01.4 Summary of Remedies

During the first day of the workshop, the themes and potential remedies were reviewed to ensure that all participants understood what was being proposed. Four themes, with a total of 12 potential remedies, were discussed during the workshop as shown in Table 2.

| ACER | THEM | E | POTEN | ITIAL REMEDY |
|------|------|--|-------|---|
| 5 | 1 | Address Individual Sites Only | 18 | Focus on Minimum Adequacy Requirements |
| 5 | 1 | Address Individual Sites Only | 1b | Upgrades for Current District Program Delivery |
| s | 2 | Keep Current Mixed Configurations | 2a | Focus on Non-Construction Alternatives to meet Minimum Adequacy Requirements |
| s | 2 | Keep Current Mixed Configurations | 2ь | Upgrades for Current District Program, Keep Smaller Neighborhood Elementary Schools |
| 5 | 2 | Keep Current Mixed Configurations | 2c | Upgrades for Current District Program, Fewer Larger Elementary Schools |
| 5 | 3 | Full 5-6 Implementation (Two 5-6 Schools per Triad) | 3и | Focus on Non-Construction Alternatives to meet Minimum Adequacy Requirements |
| 5 | 3. | Full 5-6 Implementation (Two 5-6 Schools per Triad; One Larger, One Smaller) | 3b | Upgrades for Current District Program, Keep Smaller Neighborhood Elementary Schools |
| s | 3 | Full 5-6 Implementation (Two 5-6 Schools per Triad: One Larger, One Smaller) | 3с | Upgrades for Current District Program, Fewer Larger Elementary Schools |
| s | 4 | Full 5-6 Implementation (One S-6 School per Triad) | 4n | Focus on Non-Construction Alternatives to meet Minimum Adequacy Requirements |
| s | 4 | Full 5-6 Implementation (One 5-6 School per Triad) | 4b | Upgrades for Current District Program, Keep Smaller Neighborhood Elementary Schools |
| 5 | 4 | Full 5-6 Implementation (One 5-6 School per Triad) | 4c | Construction, Tend to Fewer Larger Elementary Schools |
| 5 | 4 | full 5-6 Implementation (One 5-6 School per Triad) | LAR01 | Right Sized, Modern School facilities that address District Program Needs. Adequate Capacity, and Acceptable Condition |

Table 2 – Potential Remedies at Start of Workshop

Each theme included multiple remedies with different areas of focus. In Themes 2 through 4, the "a" remedies focused on meeting minimum adequacy requirements; the "b" remedies focused on maintaining smaller neighborhood schools; and the "c" remedies focused on providing fewer, larger schools. This identification of different areas of focus was intentional to generate open and transparent thoughts and conversations for the MCER study.

Initial evaluation was performed for the following potential remedies:

- 1a 7 elementary schools with focus on adequacy standards
- 1b 7 elementary schools with upgrades for current district programs
- 2a 30 elementary schools with non-construction with current configurations and minimum adequacy requirements
- 2b 30 elementary schools with upgrades to district program with current configurations and smaller neighborhood elementary schools
- 2c 30 elementary schools with upgrades to district program with current configuration and fewer neighborhood elementary schools
- 3a 32 school with non-construction with minimum adequacy standards and two 5-6 schools per triad
- 3b 34 schools with upgrades to district program with two 5-6 schools per triad and smaller neighborhood elementary schools
- 3c 34 schools with upgrades to district program with two 5-6 schools per triad and fewer larger neighborhood elementary schools



- 4a 30 schools with non-construction with minimum adequacy standards and one 5-6 school per triad
- 4b 31 schools with upgrades to district program with one 5-6 school per triad and smaller neighborhoods elementary schools
- 4c 31 elementary schools with upgrades to district program with one 5-6 school per triad and fewer larger neighborhood elementary schools
- LAR01 30 elementary schools from information provided by the District on 4.12.2024

Refinement of Remedies

An analysis conducted by FEA revealed the outcomes of several remedies were similar in nature. FEA reviewed an initial set of criteria as shown in Table 3 to analyze the remedies for how well the outcomes addressed the criteria. The degree to which the criteria would be addressed ranged from "fully address," shown with a darker blue, to "won't address," shown with the lightest blue (see Figure 3). The progression of darker to lighter is a simple method of graphically displaying the results of the analysis.

| Fully Address | Mostly Address | Partially Address | Somewhat Address | Won't Address |
|---------------|----------------|-------------------|------------------|---------------|

Figure 3 – Color coding analysis results

This high-level view allowed for a conclusion that the areas of focus for remedies a, b, and c resulted in identical outcomes across Themes 2, 3, and 4. Participants agreed to focus on fewer remedies based on the overlapping results. Even though 1a and 1b had results limited to either "somewhat address" and "won't address," these remedies were chosen for further evaluation because they specifically focused on the individual schools that triggered the capacity or condition for a MCER study. Table 3 summarizes the refinement analysis.

| | | Potential Remedy | | | | | | | | | | |
|-----------------------|----|------------------|----|----|----|----|----|----|----|----|----|-------|
| | 1A | 1B | 2A | 3A | 4A | 2B | 3B | 4B | 2C | 3C | 4C | LAR01 |
| CRITERIA | | | | | | | | | | | | |
| Adequacy Standards | | | | | | | | | | | | |
| Condition | | | | | | | | | | | | |
| Capacity | | | | | | | | | | | | |
| Property Restrictions | | | | | | | | | | | | |
| Program Delivery | | | | | | | | | | | | |
| Critical Special | | | | | | | | | | | | |
| Programs | | | | | | | | | | | | |
| Transportation | | | | | | | | | | | | |
| Summary | | | | | | | | | | | | |

Table 3 – Refinement analysis results

This process allowed the group to conclude that 4 of the potential remedies (2a, 2b, 3a, and 3b) should not be fully analyzed. Remedy 3c was also removed from further analysis because it did not align with the District's stated vision and goals.



Based on the analysis offered by FEA, with feedback from the SCD and the District, concurrence was reached to include the remedies that met the minimum requirements set forward by the MCER (1a and 1b), the remedies that provided a broad range of solutions (4a, 4b, 2c and 4c), and the District-identified remedy (LAR01). This analysis resulted in seven potential remedies to be analyzed through the full CBA process.

A01.5 Defining Factors

The next step in the CBA workshop was to define the factors that would be used to evaluate the advantages of the remedies. The process required the group's concurrence for each factor to be included. The workshop participants brainstormed factors and came to consensus that the 14 factors summarized in Table 4 would be used for the evaluation.

| Factor | Definition | Measurement | Criteria |
|--|---|------------------------------------|----------------------------|
| Security | The ability to provide a more secure learning environment | Improvement in security | More improvement is better |
| Site Improvements | The ability to meet requirements related to certain site features | Degree meets site requirements | Higher is better |
| Accessibility | The ability to meet the ADA and provide an accessible learning environment | Degree in addressing | Higher is better |
| Building Code | The ability to bring buildings into compliance with modern building codes | Advancement toward current code | Higher is better |
| Space Adequacy & Utilization | The ability to provide adequate education space | Degree in addressing | Higher is better |
| Program Disruption | The degree to which a remedy will cause disruptions to the learning environment | Degree in disruption | Less is better |
| Student Environment | The ability to improve learning environment and conditions for students | Improvement in condition | More is better |
| Condition | The ability to improve district wide building condition | Improvement in condition | More is better |
| Special Needs Students | The ability to provide accommodations for special needs students | Ability to meet accommodations | More is better |
| Grade Configuration | The ability to address the District's grade configuration policy | Addressing Strategy | Yes is better |
| Boundary Adjustment & Transportation | Whether or not the remedy required a boundary change that is capacity driven | Capacity driven Boundary Change | No is better |
| Operational Efficiency | Whether or not the remedy increases or decreases the total number of schools within the District | Number of Schools | Fewer is better |
| Capacity | Whether or not the remedy provides that most schools are near 90% capacity | 90% capacity | Closest to 90% is best |
| Modernization | To what degree does the remedy provide for a modernized educational environment with improved technology. | % of SF | Higher is better |



Table 4 – Factors information

The factors reflect elements of the remedies where there are performance differences that are important for the decision on the remedies. Participants identified attributes—the defining characteristics, qualities, or consequences—of each factor, and the measurement that would be used for each of the attributes. The group also determined the criteria for each to describe how the attribute would be judged. Extensive discussion took place regarding each factor's measurement in order to understand its impact on the decision-making process.

A01.6 Evaluation of the Remedies

Remedy evaluation relied on group consensus to define the scoring values and apply scoring to the type of action (see *Factor Scoring* below) within each remedy. Evaluating each action per school within the remedies for each factor via group consensus provided transparency for the decision-making process.

Factor Scoring

The evaluation process involved the group reaching consensus on what values to assign to each factor for each remedy. For nine of the factors, a scoring system was agreed to. Scores were applied based on the outcomes of the remedies. Table 5 summarizes the outcomes that are part of the remedies.

| Outcome (Action) | Definition |
|---------------------|--|
| No Action | No change associated |
| Disposal | Remove building from inventory funded by the state |
| Boundary Adjustment | Attendance boundary change |
| Space Improvements | Refresh building finishes |
| Full Renovation | Change building layout, replacement of building systems |
| Addition | Add building area by increase the overall square footage |
| Reconfiguration | Change of grade assignment at the school |
| Replacement | Entire demolition and replacement of the school |
| New Construction | New building on a new site |

Table 5 – Actions and definitions

At this stage of the process, nine of the factors were assigned numerical scores aligning with the factor criteria. Table 6 summarizes the numerical scoring process. To emphasize the importance of this decision-making process, the attribute values for all factors and actions were developed through group consensus.



| Factor | Security | Site Improvements | Accessibility | Building Code | Space Adequacy & Utilization | Program Disruption | Student Environment | Condition | Special Needs Students |
|------------------------|-------------------------|--------------------------------------|-------------------------|---------------------------------------|---------------------------------|------------------------|------------------------|--------------------------|---------------------------------------|
| Measurement | Improvement in Security | Degree Meets Site Requirements | Degree in Addressing | Advancement Toward Current Code | Degree in Addressing | Level of Disruption | Improvement in Comfort | Improvement in Condition | Ability to meet Accommodati ons |
| Criteria | Higher is better | Higher is better | Higher is better | Higher is better | Higher is better | Lower is better | More is better | More is better | More is better |
| Type of Action | | | | | | | | | |
| No Action | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Disposal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Boundary Adjustment | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0.5 |
| Space Improvements | 0 | 0 | 0.5 | 0.5 | 1 | 1 | 1 | 1 | 1.5 |
| Full Renovation | 1 | 0 | 1.5 | 1.5 | 1 | 3 | 1.5 | 1.5 | 1.5 |
| Addition | 0.5 | 0 | 0 | 0.5 | 0.5 | 1 | 1 | 1 | 1 |
| Reconfiguratio n | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Replacement | 2 | 2 | 2 | 2 | 2 | Range (0-3) | 2 | 2 | 2 |
| New Construction | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 2 |

Table 6 – Numerical scoring to assign attributes



The remaining five factors (Table 7) were evaluated based on the outcomes of the entire remedy versus evaluating each school's impact. For example, the operational efficiency was based on the number of schools remaining with the remedy. And the fewer number of schools remaining with the remedy was better as it implied fewer schools would require fewer resources to operate.

| Factor | Grade Configuration | Boundary Adjustment & Transportation | Operational Efficiency | Modernization | Capacity |
|-------------|------------------------|--------------------------------------|---------------------------|------------------|-----------------------------|
| Measurement | Addressing strategy | Capacity driven boundary change | Number of schools | % of SF | 90% capacity |
| Criteria | Yes is better | No is better | Fewer is better | Higher is better | Closest to 90 is best |

Table 7 – Criteria for assigning attributes

The CBA process produced over 2,000 data points that were assigned by consensus and aggregated for evaluation. Table 8 summarizes the attributes for each factor for each remedy based on the scoring.

| | | | 4 | Assigned Attribute | 1 | | | |
|--------------------------------------|-----------|-----------|-----------|--------------------|-----------|-----------|--------------|--|
| | Remedy 1a | Remedy 1b | Remedy 4a | Remedy 45 | Remedy 2c | Remedy 4c | Remedy LAR01 | |
| Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Security | 5.5 | 9.0 | 4.5 | 15.0 | 11.0 | 14.5 | 13.0 | |
| Site Improvements | 0.0 | 6.0 | 0.0 | 12.0 | 8.0 | 10.0 | 10.0 | |
| Accessibility | 6.0 | 9.0 | 45 | 15.5 | 11.0 | 13.5 | 11.5 | |
| Building Code | 7.5 | 10.5 | 6.0 | 16.5 | 12.0 | 16.0 | 13.0 | |
| Space Adequacy & Utilization | 5.5 | 9.5 | 4.5 | 15.5 | 11.0 | 15.5 | 12.5 | |
| Program Disruption | 15.0 | 13.0 | 18.0 | 25.0 | 17.0 | 24.0 | 15.0 | |
| Student Environment | 9.0 | 12.0 | 7.5 | 17.5 | 13.0 | 19.0 | 15.5 | |
| Condition | 9.0 | 12.0 | 15.5 | 23.5 | 27.0 | 33.0 | 29.5 | |
| Special Needs Students | 9.0 | 12.0 | 17.0 | 26.0 | 28.0 | 35.0 | 31.0 | |
| Grade Configuration | 0 | 0 | 0 | 1 | 0 | 1 | 1 | |
| Boundary Adjustment & Transportation | 1 | 1 | 0 | 0 | 1 | 10 | 1 | |
| Operational Efficiency | 30 | 30 | 26 | 28 | 24 | 24 | 25 | |
| Capacity | 82.0% | 82.0% | 79.0% | 79.4% | 88.0% | 83.5% | 84.3% | |
| Modernization (technology) | 22.0% | 23.0% | 33.0% | 45.0% | 28.0% | 58.0% | 44.0% | |

Table 8- Assigned attributes

Relative Advantages

At this point in the CBA process, the relative advantages were determined for each factor. The first step was to find the lowest value for each factor for each of the remedies. The next step in the process is to determine the advantage of each remedy relative to the other remedies. To do



this, the group identified the difference between each of the other advantage scores and the lowest value, providing the relative advantage of each to the lowest value. The relative advantages for each factor are summarized in Table 9.

Using the security factor as an example, the relative advantage is shown in the following table. The difference between Remedy 1a and Remedy 4a is 1.0, and the difference between Remedy 4c and Remedy 4a is 11.0. Across the line for security the values for the differences are recorded and the highest relative advantage is highlighted green, and the lowest relative advantage is highlighted red.

| | | | | Relative Advantage | es | | |
|--------------------------------------|-----------|-----------|-----------|--------------------|-----------|-----------|--------------|
| 3 | Remedy 1a | Remedy 1b | Remedy 4a | Remedy 4b | Remedy 2c | Remedy 4c | Remody LAR01 |
| Description | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Security | 1.0 | 4.5 | 0.0 | 10.5 | 6.5 | 10.0 | 8.5 |
| Site Improvements | 0.0 | 6.0 | 0.0 | 12.0 | 8.0 | 10.0 | 10.0 |
| Accessibility | 1.5 | 4.5 | 0.0 | 11.0 | 6.5 | 9.0 | 7.0 |
| Building Code | 1.5 | 4.5 | 0.0 | 10.5 | 6.0 | 10.0 | 7.0 |
| Space Adequacy & Utilization | 1,0 | 5.0 | 0.0 | 11.0 | 6.5 | 11.0 | 8.0 |
| Program Disruption | 2.0 | 0.0 | 5.0 | 12.0 | 4.0 | 11.0 | 2.0 |
| Student Environment | 1.5 | 4.5 | 0.0 | 10.0 | 5.5 | 11.5 | 8.0 |
| Condition | 0.0 | 3.0 | 6.5 | 14.5 | 18.0 | 24.0 | 20.5 |
| Special Needs Students | 0.0 | 3.0 | 8.0 | 17.0 | 19.0 | 26.0 | 22.0 |
| Grade Configuration | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 1,0 | 1.0 |
| Boundary Adjustment & Transportation | 1.0 | 1.0 | 0.0 | 0.0 | 1.0 | 1.0 | 1.0 |
| Operational Efficiency | 6.0 | 6.0 | 2.0 | 4.0 | 0.0 | 0.0 | 1.0 |
| Capacity | 8.00% | 8.00% | 11.00% | 10.65% | 2.00% | 6.55% | 5.73% |
| Modernization (technology) | 0% | 1% | 11% | 23% | 6% | 36% | 22% |

Table 9 – Relative Advantages

Advantage Importance Score

The paramount advantage, the advantage that has the most importance, was determined by consensus of the group. In making this determination, the group considered the reason for the studies, the magnitude of the advantage, and the magnitude of the associated attributes. This effort began with ranking the factors, keeping the advantages in mind, in order of importance from 1 (highest) to 14 (lowest). A weight of 100 was assigned to the highest-ranking factor, which also established the paramount advantage. No other factor can have more weight than the paramount advantage. A consensus was reached for the advantage in the space adequacy & utilization factor to be the paramount advantage. This is summarized in Table 10.

This step in the CBA process establishes the importance of the advantages and weighs all advantages. This process was highly transparent and informative for all participants. Although reaching consensus did take thorough discussions, participants agreed the final weights and relative importance were appropriate and justifiable.

| Factor | Importance Score |
|-------------------|------------------|
| Security | 20 |
| Site Improvements | 55 |



| Factor | Importance Score |
|--------------------------------------|------------------|
| Accessibility | 34 |
| Building Code | 30 |
| Space Adequacy & Utilization | 100 |
| Program Disruption | 15 |
| Student Environment | 80 |
| Condition | 99 |
| Special Needs Students | 90 |
| Grade Configuration | 90 |
| Boundary Adjustment & Transportation | 50 |
| Operational Efficiency | 85 |
| Capacity | 99 |
| Modernization (technology) | 93 |

Table 10 – Importance score

Review of Advantages

The final step of determining the benefits for remedies is summarized in Table 11. Potential remedy 4c was determined during the workshop to provide the most overall advantage and potential remedy 4a to provide the least overall advantage. This outcome highlighted that the remedies that focused on fewer larger elementary schools provided highest overall advantage while the non-construction focus provided the lowest overall advantage. These results helped inform the CBA process when reviewing the overall scores.



Table 11 – Weighted Advantage Scoring



Another consideration was to proceed with the single remedy with the overall highest benefit (Remedy 4c) and not proceed with the other remedies with the next highest overall benefit scores (Remedies LAR01 and 4b). However, it was agreed that discontinuing the evaluation of Remedy LAR01 and Remedy 4b without comparing costs would be premature.

Cost Evaluation

The cost evaluation started by developing rough order of magnitude (ROM) cost estimates for each remedy. The ROM cost estimates focused on anticipated construction activities that might be associated with an action assigned to a school for each remedy. Some remedies involved more actions than others, and as a reminder, the (a) remedies were focused on non-construction activities. With that focus, ROM cost estimates for (a) remedies were expected to be lower. Conversely, compared to the (a) remedies, the (c) remedies involved a higher amount of construction activities and thus were expected to have higher ROM cost estimates.

Assumptions made for cost evaluation included:

- ROM dollar-per-square-foot (\$/SF) costs for anticipated activities applied to the affected building area;
- the costs only included direct cost of construction and <u>did not include</u> design fees, permit fees, swing space, construction observation, commissioning, purchase of land, purchase and installation of furniture fixtures and equipment (FF&E), or life cycle costs;
- if a mixture of actions (addition and renovation) was anticipated, the \$/SF for each activity was based on the type of action and the affected area (SF) and not a single, combined cost for all actions; and
- ROM costs were based on the activities occurring in the 2nd quarter of 2024 without inflation to a projected timeline.

Table 12 shows the ROM cost estimates for each remedy.

| | Remedy 1a | Remedy 1b | Remedy 4a | Remedy 4b | Remedy 2c | Remedy 4c | Remedy LAR01 |
|------|--------------|--------------|---------------|---------------|---------------|---------------|-----------------|
| Cost | \$66,000,000 | \$88,000,000 | \$106,000,000 | \$238,000,000 | \$128,000,000 | \$248,000,000 | \$228,000,000 |

Table 12 – Rough order of Magnitude Cost Summary

Comparison of Advantage to Cost

An important principle of the CBA process is that advantages are scored first, and those scores are independent of cost. This is to allow the identification of the most advantageous solution(s) without the influence of cost. Costs are then introduced and compared to benefits (advantages). At this stage, costs included were first-time, capital costs (e.g., construction, renovation, demolition) only. Life cycle costs will be introduced later in the study.



When charting the costs vs. benefits, a clear distinction for 4b, 4c, and LAR01 was apparent, with those remedies having significantly higher advantages. In other words, these are the remedies that best meet the MCER project needs, most fully satisfy the decision factors identified by the CBA participants and are designed to address the long-term objectives of the stakeholders. As expected, higher costs were associated with higher advantages.



Figure 4 – Benefit vs. Cost

Potential remedies1a, 1b, 2c, and 4a provided much lower advantage at a much lower initial cost. However, this was based on looking at each remedy independently and as determined in the CBA workshop.



Next steps

The remedies with the higher advantage more closely align with the direction to address the district-wide education program. The CBA workshop participants were able to reach consensus that the three remedies with the highest advantages are close enough together that all three should be evaluated further. The comparison informs us about the next steps needed and where refinement for remedy needs to be made. With the long-term strategy of delivering quality education for students, the CBA process allowed the group to come to consensus on relative advantages and identify potential remedies that address buildings' adequacy, condition, and capacity.

The three potential remedies chosen for further analysis (4b, 4c, LAR01) will be further analyzed in the next step. This involves performing site visits to verify room-by-room type and use for each building, and develop the scope of work for renovations, replacements, additions, new construction, and replacement of buildings. Observations will be recorded about specific condition and capacity needs at the buildings included in each remedy in order to include the appropriate activities to address those needs in the anticipated scopes of work.

Complete cost estimates will be developed for each school where construction activities are anticipated for each remedy. The cost estimates are intended to include the scope of work required to meet the needs identified for each building in order to provide a turnkey building and site, including design, permitting, inspection and testing services, swing space, demolition, construction, and FF&E allowance.

Sequencing and timing accompanying each building's action will be outlined in cooperation with the SCD and district, with FEA facilitating discussion. This will allow for the estimation of inflated construction costs as well as life cycle costs. It was acknowledged that this process might identify the MCER as a hybrid of the three potential remedies identified by this CBA process. If that is the case, the hybrid remedy scope and cost will be defined and developed for presentation to SCD.

Through this process, the determination of the MCER will be provided at the end of the next phase of the study.



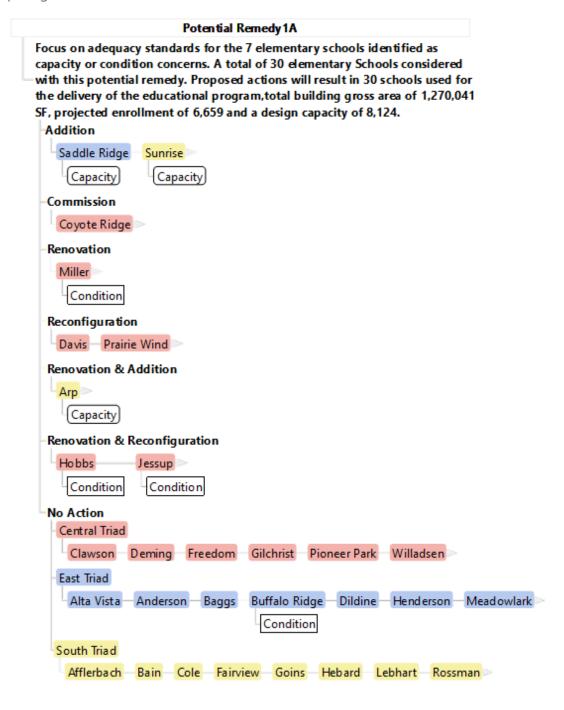
A01 - Appendix A - Attendance Sheet

| Choosing by Advant | ages Workshop July 9 to July | 11 | | - | | |
|-------------------------------------|--|-----------------------------|--------------------|------------|------|--|
| LAR01 ES MCER Stud Sign-in Sheet | | | | | | |
| Name | Title | Email address | Attended (initial) | | | |
| | | | 7/9 | 7/10 | 7/11 | |
| Dr. Stephen Newton | | stephen.newton@laramie1.org | | | | |
| Andy Knapp | Exec. Oractor of Support Operations | andy.knapp@laramie1.org | / | / | / | |
| Shannon Fertig | PLANNING MOMINISTE | sbannon.fertig@laramie1.org | ~ | / | V | |
| Vicky Bonds | PLANNER | vicki.bonds@laramie1.org | V | / | 1 | |
| Del McOmie | DIRECTOR | delbert.mcomie@wyo.gov | tru | CASternon) | / | |
| Shelby Carlson | | shelby.carlson@wyo.gov | | | | |
| John Rexius | P.M Supervisor | john,rexius@wyo.gov | | V | ~ | |
| Michael Bernett | MICHAELTERNETT | michael.bernett@wyo.gov | / | V | V | |
| Amber Leach | Planner | amber.leach@wyo.gov | 1 | / | / | |
| Jessica Gilfilian | | jessica.gilfilian1@wyo.gov | | | | |
| Courtney Muir | | courtney.muir1@wyo.gov | 1000 | | | |
| Bill Small | PRINCIPAL | small@feapc.com • | / | V | / | |
| Maureen Roskoski | Vice President | maureen.roskoski@feapc.com | / | X | V | |
| Daniel Besmer | Scribe/Registered Enrincer | daniel.besmer@feapc.com | / | X | X | |
| Rich Merrill | Project Manager | rich.merrill@feapc.com | 2A1 | pm | p. | |
| Paul Riley | PRESIDENT ALCHER | pvriley@mca.design | es | 1 | / | |



A01 - Appendix B - Potential Remedy Details

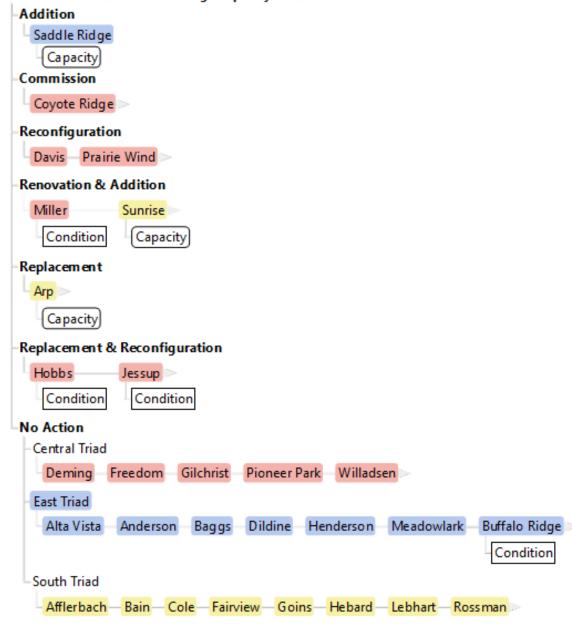
Note: The following notes and figures are products of the CBA workshop held on July 9-11, 2024. FEA facilitated the daily work sessions, with District and SFD representatives present and participating.



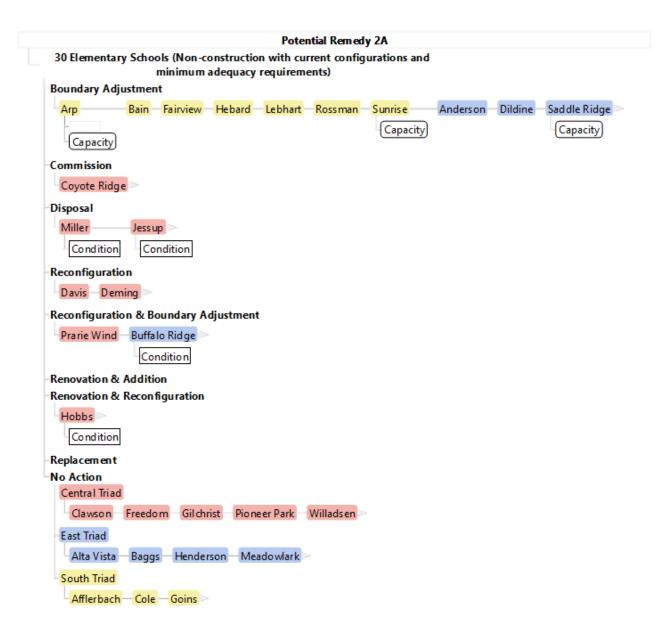


Potential Remedy 1B

Upgrades to district program for the 7 elementary schools identified as capacity or condition concerns. A total of 30 elementary Schools considered with this potential remedy. Proposed actions will result in 30 schools used for the delivery of the educational program, total building gross area of 1,276,302 SF, projected enrollment of 6,659 and a design capacity of 8,124.







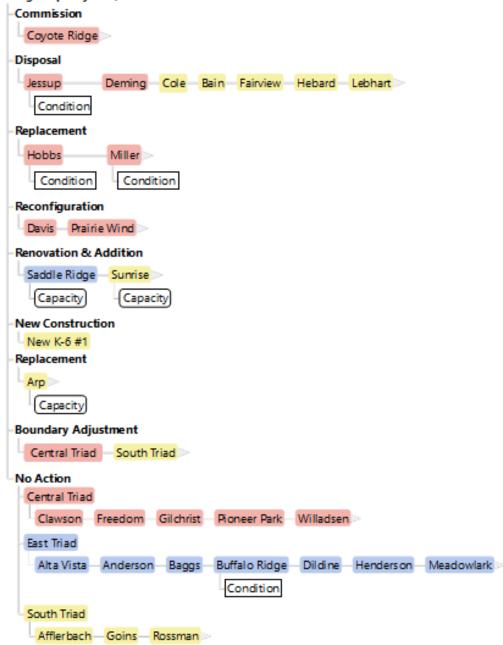


Remedy 2B 30 Elementary Schools (Upgrades to district program with current configuration and smaller neighborhood elementary schools) **Boundary Adjustment** Commission Coyote Ridge -> Disposal Reconfiguration Davis - Prarie Wind -Reconfiguration & Boundary Adjustment Renovation & Addition Miller Saddle Ridge Sunrise -Condition Capacity Capacity Renovation & Boundary Adjustment Replacement Arp Buffalo Ridge Hobbs Jessup -Condition Condition Capacity Condition No Action Central Triad Clawson Deming Freedom Gilchrist Pioneer Park Willadsen East Triad Anderson Alta Vista Baggs -Dildine Henderson Meadowlark South Triad Afflerbach Cole-Goins-Fairview -Hebard Lebhart Rossman -



Potential Remedy 2C

Upgrades to district program with current configuration and fewer larger elementrary schools A total of 30 elementary Schools considered with this potential remedy. Proposed actions will result in 24 schools used for the delivery of the educational program total building gross area of 1,159,817 SF, projected enrollment of 6,659 and a design capacity of 7,589.





Potential Remedy 3A 32 Schools (Non-construction with minimum adequacy standards and two 5-6 schools per triad) Boundary Adjustment Saddle Ridge - Anderson - Dildine -Capacity Commission Coyote Ridge Disposal Lebhart - Buffalo Ridge Miller Condition Condition Condition New Construction New 5-6 #1 - New 5-6 #2 Reconfiguration Bain Cole Fairview Goins Hebard Rossman Davis Deming Prarie Wind Pioneer Park Reconfiguration & Boundary Adjustment Baggs — Alta Vista — Henderson III Renovation & Addition & Reconfiguration Sunrise (Capacity Renovation & Boundary Adjustment Renovation & Reconfiguration Afflerbach - Arp Capacity Renovate Hobbs Condition Replacement Replacement & Boundary Adjustment No Action Central Triad Clawson Freedom Glichrist Willadsen East Triad Meadowlark South Triad



Potential Remedy 3B

34 Schools (Upgrades to district program with two 5-6 schools per triad and smaller neighborhood elementary schools) **Boundary Adjustment** Saddle Ridge (Capacity) Commission Coyote Ridge Disposal Fairview — Hebard — Miller Condition New Construction New 5-6 #1 — New 5-6 #2 — New 5-6 #3 — New 5-6 #4 Reconfiguration Davis Prarie Wind Goins Rossman Deming Pioneer Park Afflerbach Reconfiguration & Boundary Adjustment Baggs Renovation & Addition & Reconfiguration Sunrise Capacity Renovation & Boundary Adjustment Dildine Renovation & Reconfiguration Bain Space Improvements Henderson > Replacement Arp Cole Lebhart Hobbs Capacity Condition Condition Replacement & Boundary Adjustment Buffalo Ridge Condition No Action Central Triad Clawson Freedom Gilchrist Willadsen East Triad Meadowlark Alta Vista Anderson South Triad



Potential Remedy 3C

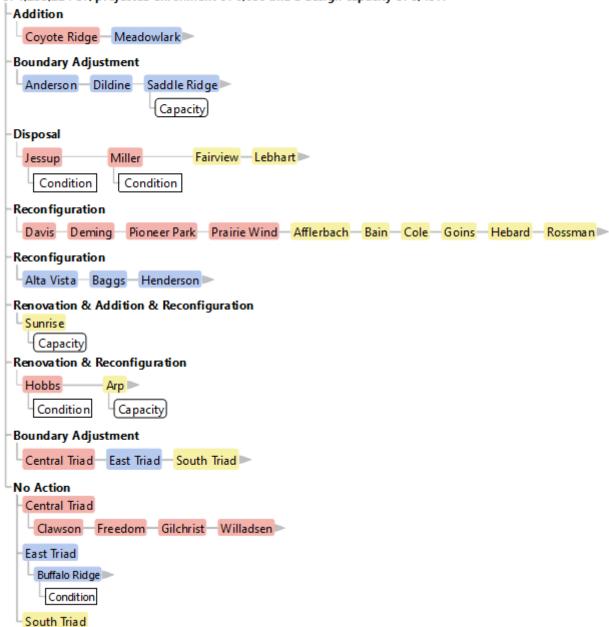
34 Schools (Upgrades to district program with two 5-6 schools per triad and fewer larger neighborhood elementary schools)

```
Boundary Adjustment
Commission
 Coyote Ridge
Disposal
Bain Fairview Hebard Lebhart
                                 Buffalo Ridge
                                               Henderson-
                                                          Deming
                                                                                Miller -
                                    Condition
                                                                     Condition
                                                                                 Condition
New Construction
New 5-6 #1 New 5-6 #2 New 5-6 #3 New 5-6 #4
Reconfiguration
Afflerbach Goins Rossman Sunrise
                                         Alta Vista Baggs Davis Prarie Wind
                               Capacity
Reconfiguration & Boundary Adjustment
Renovation & Addition
 Dildine Saddle Ridge
            Capacity
Renovation & Boundary Adjustment
Renovation & Reconfiguration
Pioneer Park
Space Improvements
Replacement
Arp Cole Hobbs
              Condition
Replacement & Boundary Adjustment
No Action
 Central Triad
   Clawson Freedom Gilchrist Willadsen
 East Triad
   Anderson - Meadowlark
 South Triad
```



Potential Remedy 4A

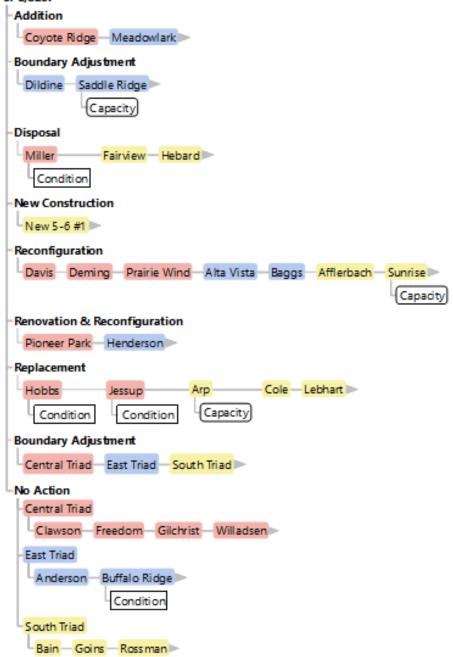
Non-construction focus to meet minimum adequacy standards with one 5-6 school per triad. A total of 30 elementary Schools considered with this potential remedy. Proposed actions will result in 26 schools used for the delivery of the educational program, total building gross area of 1,235,224 SF, projected enrollment of 6,659 and a design capacity of 8,457.





Potential Remedy 4B

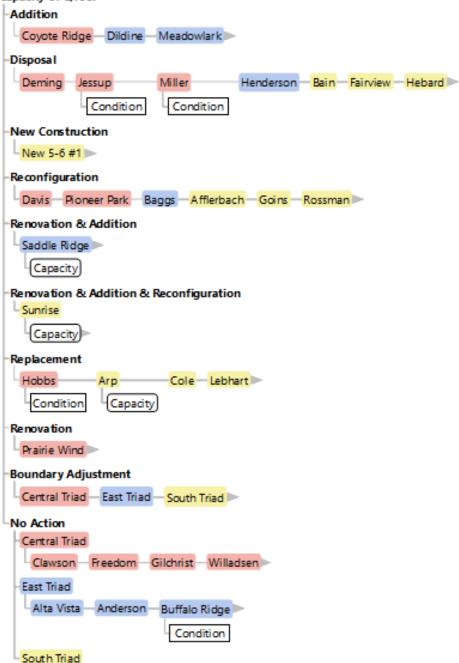
Upgrades to district program with one 5-6 school per triad and smaller neighborhood elementary schools. A total of 31 elementary Schools considered with this potential remedy. Proposed actions will result in 25 schools used for the delivery of the educational program, total building gross area of 1,335,336 SF, projected enrollment of 6,659 and a design capacity of 8,820.





Potential Remedy 4C

Upgrades to district program with one 5-6 school per triad and fewer larger neighborhood elementary schools. A total of 31 elementary Schools considered with this potential remedy. Proposed actions will result in 23 schools used for the delivery of the educational program, total building gross area of 1,302,637 SF, projected enrollment of 6,659 and a design capacity of 8,795.





Potential Remedy LAR01 32 Elementary Schools (Provided by Laramie County School District #1 on 4.12.2024) 25 schools remain Addition Coyote Ridge Meadowlark Disposal (offline) Deming Jessup Miller-Bain - Fairview - Hebard - Lebhart > Condition Condition New Construction New Saddle Ridge II - New 5-6 #1 Reconfiguration Davis Prarie Wind Alta Vista Baggs Afflerbach Goins Rossman Renovation & Addition & Reconfiguration Saddle Ridge - Sunrise -(Capacity) (Capacity) Replacement & Reconfiguration Hobbs Arp-Cole Condition Capacity **Boundary Adjustment** Central Triad - East Triad - South Triad > No Action Central Triad Clawson Freedom - Glichrist - Pioneer Park - Willadsen -East Triad Anderson Buffalo Ridge - Dildine - Henderson > Condition South Triad



A02 Enrollment Projections

A02.1 Summary

Enrollment was projected using various methods across different time periods of historical data. Multiple enrollment projection models were created and back-tested for accuracy, including those explicitly referred to in Chapter 8 Section 4(a)(i-iii), SFC Enrollment Projection Methodology, per W.S. § 21-15-116(a). It would not be reasonable to conclude, given the back-tested error rates on projections, that enrollment would decline indefinitely. Said differently, the back-testing of these models meant the possibility of moderate growth over the study period could not be eliminated.

Moreover, the cyclical nature of enrollment over the past 30 years requires the consideration of a broader historical context where enrollment has both grown and declined. To account for this, an Auto-Regressive Moving Average (ARMA) model was created to supplement the required models. The ARMA model incorporates additional historical data per Section 4(d) of the SFC Enrollment Projection Methodology and forecasts a period of decline before increasing toward the District's average historic enrollment.

In the short term, all models demonstrate comparable Mean Absolute Percentage Error (MAPE). Over the long term, linear models show higher-than-average errors, and projections become more divergent, generally trending downward. Selecting one model over another does not offer a particularly conservative approach.

For the purposes of the study, near-term declines used to project long-term enrollment risk under-building capacity. Since reducing capacity is less burdensome than adding it, and models diverge in their enrollment projections over the study period, it is recommended the Most Cost-Effective Remedy enrollment projections use the most recent enrollment data.

A02.2 Methodology Overview

FEA has applied several different forecasting methods to study how school enrollment for the District changes over time. The data sources utilized include the U.S. Census, the American Community Survey Population 1-Year Estimates, and the Wyoming Department of Education, all of which provided detailed information on population and school enrollment. A statistical technique was used to estimate kindergarten enrollment numbers, and several tests were run to establish the accuracy and reliability of the model. All analyses were done using Python's statismodels and SciPy Stats libraries, which are tools for working with data and performing statistical calculations.

This report presents projected enrollment totals for Laramie County School District 1 from 2024 to 2041. The following methods were applied to the school district's historical enrollment data to generate the projections:

Linear Regression



- Grade Progression: Exponential Smoothing versus Linear Regression
- Average Percentage Increase
- Cohort Survival Rate
- Auto-Regressive Moving Average (ARMA)

Linear Regression Model

A linear regression model fits a straight line that best matches the relationship between to variables through a set of data points. This line helps predict one value (e.g., enrollment) based on another variable (e.g., year). By using this model, an estimate of the number of students can be developed to show change over time and predict future enrollment based on past trends. The line shows the general pattern of how enrollment might increase or decrease in the coming years, but it does not provide much nuance. For this study, historical enrollment data was used to calculate the line of best fit between time (independent variable) and student enrollment (dependent variable). In other words, a forecast using a linear regression can be used to predict future enrollment based on only past enrollment.

Average Percentage Increase Model

This model uses the average percentage increase year over year to forecast future enrollment. The historical average percentage was calculated using the following formula:

Historical Average Percentage by Grade =
$$average\left(\frac{E_T-E_{T-1}}{E_{T-1}}\times 100\right)$$

where E_T = enrollment at year T and E_{T-1} = enrollment at year T -1 (previous year).

The calculated historical average percentage was then used to predict future enrollment by multiplying the percentage with the prior year's enrollment.

Projected Enrollment by Grade = Historical Average Percentage $\times E_{T-1}$

Cohort Survival Model

This model is based on the progression of students from one grade to the next. The grade progression rate, also known as the survival rate, is calculated using the following formula:

cohort survival rate =
$$\frac{E_T \text{ at } Grade_X}{E_{T-1} \text{ at } Grade_{X-1}}$$

where E_T = enrollment at year T at grade X and,

 E_{T-1} = enrollment at year T-1 (previous year) and previous grade (X-1).

To calculate the historical survival rate, the progression ratio of students advancing from one grade to the next was determined using data from 1991 to 2023. Projected enrollment was then



calculated by applying both a 5-year and 10-year average survival rate to the 2023 enrollment totals for each grade. Future enrollment for both models was projected by multiplying the average survival rate by the previous year's enrollment for the prior grade:

Projected Enrollment at $Grade_X = Cohort Survival Rate \times E_{T-1}$ at $Grade_{X-1}$

Due to the unique nature of kindergarten enrollment, a different methodology was required. A kindergarten enrollment model was developed by analyzing county and school district population estimates generated from the American Community Survey (ACS) 1-Year Estimates and the United States Census.

The ACS 1-Year Estimates from 2009 to 2022 provided population estimates by school districts across the United States. Specifically, the estimated populations of children aged 0-4 and 5-9 within Laramie County School District 1 were used to establish a correlation with historical kindergarten enrollment for that district.

Additionally, U.S. Census population estimates, available at the county level from 2000 to 2023, were incorporated into the model. To refine the projections, birth data from 2009 to 2022 were also analyzed to further correlate birth trends with historical kindergarten enrollment within the District.

To test the correlation between the population estimates and the kindergarten enrollment, an Ordinary Least Squares (OLS) model was created. OLS is a method used in statistics to find the best-fitting line through a set of data points. It is used in linear regression to determine the relationship between the outcome one wants to predict, and the factors used to make the prediction.

The model showed that kindergarten enrollment variance is largely explained by the population of children aged 0-4 and the number of births, with an R-squared of 95.3%, indicating a strong fit, and a statistically significant p-value of 2.77e-06. Kindergarten enrollment rates were projected using single exponential smoothing and linear regression by applying the enrollment rate (kindergarten enrollment divided by the number of 0-4-year-olds in the District) to the projected population in each age group for each forecast year.

Grade Progression Model

The grade progression model shares similarities with the cohort survival rate model, as both are based on the progression of students from one grade to the next. However, the grade progression model generates projected enrollment using single exponential smoothing, which places greater emphasis on more recent data, with the influence of older data diminishing exponentially over time. The rate at which the weight of older observations declines is determined by a smoothing constant, which is automatically generated by the model and ranges between 0 and 1.

Unlike other methods, single exponential smoothing creates one forecast that applies to all years in the prediction period. This method works best for data that stays steady over time, like



the grade progression trends in Laramie County School District 1, as shown in the graph below. As a result, the percentage of change was assumed to stay the same throughout the projection period. For comparison, a linear regression model, which looks at how grade progression changes over time, was also used.

Kindergarten enrollment was estimated using the same OLS model described in the cohort survival model section.

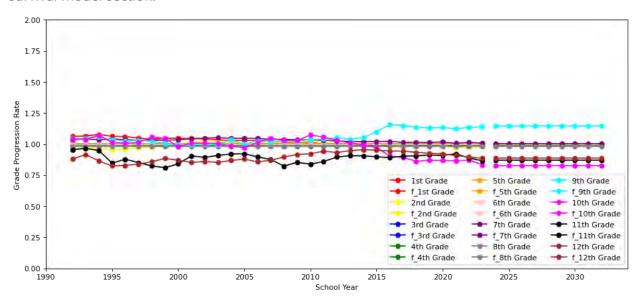


Figure 1: Cohort Survival Rates 1st to 12th Grade



Auto-Regressive Moving Average (ARMA) Model

After the prior models were created, analyzed, and interpreted, it was determined an Auto-Regressive Moving Average (ARMA) model should also be fit to the District level data. An ARMS model is a time series forecasting method that accounts for both the historical data and the inherent cyclical patterns in enrollment. The model is designed to capture the relationship between current enrollment and both its past values (auto-regressive component) and the moving averages of past errors (moving average component). This makes it especially useful for projecting future enrollment based on historical seasonality, where periods of increased enrollment tend to follow periods of decreased enrollment.

A02.3 Data Sources

- Historical Enrollment Data
 - Stat 2 School District Enrollment and Staffing Data Wyoming Department of Education (Retrieved July 24th, 2024)
- Population and Birth Rates Estimates
 - o U.S. Census Data Population Estimates by County
 - Accessed through the Census FTP site
 - Data was filtered for Laramie County, WY
 - Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Population Change for States and Counties: April 1, 2000, to July 1, 2009
 - Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Population Change for States and Counties: April 1, 2010, to July 1, 2020
 - Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Population Change for States and Counties: April 1, 2020, to July 1, 2023
 - o ACS Population 1-Year Estimates
 - American Community Survey 1-Year Data (2009-2022)
 - Table: B01001 Sex by Age
 - Retrieved by year and school district through the Census API
 - Example url:
 https://api.census.gov/data/{year}/acs/acs5?get=NAME,B01001_00
 1E,B01001_003E,B01001_027E,B01001_004E,B01001_028E&for=sch
 ool%20district%20(unified):*&in=state:{state}&key={api_key}"



A02.4 Model Accuracy

A 5-year and 10-year historical analysis was conducted to evaluate the accuracy of enrollment forecasts using various models, including the Linear Regression Model, Average Percent Increase Model, the Cohort Survival Model, the Grade Progression Models (Exponential Smoothing and Linear Regression), and the mean of all the models combined.

Each model was run using the available historical enrollment data from 2006 to 2023 to generate forecasts for the next 5 years. The forecasted values were then used to calculate the Mean Absolute Percentage Error (MAPE) using the following formula:

$$MAPE = \frac{1}{n} \sum_{i=1}^{n} \left| \frac{A_i - F_i}{A_i} \right| \times 100$$

where:

- n is the number of observations (data points).
- A_i is the actual value at observation i.
- F_i is the forecasted value at observation i.
- |.| denotes the absolute value.

MAPE is expressed as a percentage, and it measures the accuracy of a forecasting method by averaging the absolute percentage errors over all observations. Lower MAPE values indicate better forecasting accuracy.

Key findings:

- Higher MAPE (Less Accurate Models): Models like the Average Percent Increase Model –
 10 Year and Linear Regression Model consistently have higher MAPE values, ranging
 from 1.7% in year 1 to 8.8% in year 5 of the projections, meaning they are less accurate
 in predicting enrollment compared to other models.
- Lower MAPE (More Accurate Models): Models like the Cohort Survival Model 5 Year Average, Average Percent Increase Model 5 Year, Grade Progression Models, and the mean of all models show lower MAPE values, ranging from approximately 0.6% to 6.7%, indicating higher accuracy in predictions.



Performance Over Time: As time progresses (from Year 1 to Year 5), there is a general
increase in MAPE for most models, indicating that the prediction accuracy tends to
decline over time. This trend is typical as the uncertainty in projections generally
increases the further out the forecast extends.

Implications for findings:

- Model Selection: When choosing a model for enrollment forecasting, one should consider models with consistently lower MAPE values for more accurate predictions. The Cohort Survival Models and Grade Progression Models are better performers in this case.
- Forecast Horizon: The increase in MAPE over time suggests that predictions become less reliable as the forecast horizon extends. Policymakers and planners should take this into account and possibly rely on short-term forecasts for more critical decision-making, while long-term forecasts should be interpreted with greater caution.
- Model Averaging: Using the mean of all models as a benchmark might provide a balanced approach, offering a middle-ground accuracy level and reducing the impact of any single model's outlier errors.



A02.5 Projections

The methodology used to create the models presented below assumes that the variables influencing school enrollment in Laramie County School District 1 will behave in a manner consistent with historical patterns. These methods implicitly account for the effects of population changes such as births, deaths, net migration, student grade retention, transfers to other school systems, graduation rates, and dropout rates.

Projections by Model

Figure 2 below depicts total enrollment in Laramie County School District 1 over time, from 1991 to 2041, showing both historical data (from 1991 to 2023) and forecasted values from several statistical models (from 2024 to 2041).

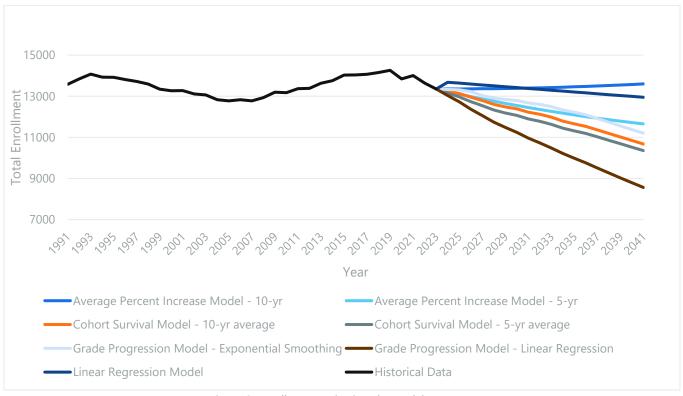


Figure 2: Enrollment Projections by Model

In the short term, all models show a comparable average percentage error (MAPE). Over the long term, the linear models show above average errors. However, models are divergent in their projections over extended periods. It is not particularly conservative to choose one model over another.

Historical Data (1991-2023):

• The black solid line represents the historical enrollment data.



- We can observe several trends:
 - o A peak around 1993, followed by a steady decline until around 2010.
 - After 2010, enrollment gradually increased until approximately 2019, where it peaked again before declining slightly until 2023.

Forecast Models (2024-2041):

Starting in 2024, various forecasting models project future enrollment. Each line corresponds to a different model:

1. Average Percent Increase Model - 10 Year (blue):

- This model uses the average percentage increase over the last 10 years to forecast future enrollment.
- o It projects a gradual increase in enrollment at a slow rate.

2. Average Percent Increase Model - 5 Year (light blue):

- o Like the 10-year average percent model but using data from the last 5 years.
- o It projects a decrease in enrollment similar to the Cohort Survival Model.

3. Cohort Survival Model - 10 Year Average (orange):

- This model tracks the year-over-year survival of cohorts (students progressing from one grade to the next) using a 10-year historical average.
- o It projects a moderate decline in enrollment over time.

4. Cohort Survival Model - 5 Year Average (dark gray):

- o This model also tracks cohort progression but based on the most recent 5 years.
- It projects a slightly steeper decline compared to the 10-year cohort survival model.

5. **Grade Progression Model - Exponential Smoothing** (blue gray):

- This model uses exponential smoothing to predict future enrollment by assigning greater weight to more recent data, allowing the model to respond more sensitively to recent changes in trends.
- The gray line represents a forecast that smooths out fluctuations from the historical data while still showing a gradual decline in enrollment over the forecast period.
- The decline is moderate, indicating that while the model expects enrollment to decrease, it anticipates this happening at a more controlled and steadier pace compared to models like the cohort survival or linear regression models, which show sharper drops.

6. **Grade Progression Model - Linear Regression** (brown):

- o This model uses linear regression on grade progression data to predict future enrollment
- o It shows a more significant decline compared to other models, indicating a sharp drop in enrollment over time.

7. **Linear Regression Model** (dark blue):

o This model fits a linear trend to the historical data to project future enrollment.



 Like the grade progression linear regression model, it predicts a decline in enrollment but at a slower rate than the Grade Progression Model – Linear Regression.

8. ARMA Model

Additionally, if you use an Auto-Regressive Moving Average model to account for the historical seasonality of the data (periods of increased enrollment follow periods of decreased enrollment) as shown below in Figure 03 we're seeing an increase in enrollment over the near term followed by a period converging on the District's average enrollment.

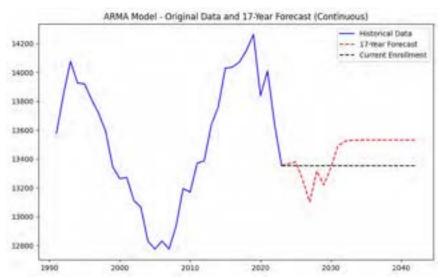


Figure 3: Auto-Regressive Moving Average (ARMA) Model

Overall Average Projections

Most models forecast an average decline in enrollment over the projection period (2024-2041) for schools in Laramie County School District 1 at various rates. The projected mean is shown on the chart below (blue line inside the shaded area), which shows a decrease in enrollment of approximately 115 students per year. The main projection line shows a gradual decline in enrollment numbers, suggesting that, if current trends continue, total enrollment may decrease to levels below 12,000 students by 2041. The shaded area around the projected line, known as the mean absolute error, represents the range of possible outcomes. The upper bound of this area suggests that, under more optimistic conditions, total enrollment could remain closer to current levels, potentially stabilizing at around 13,000 to 14,000 students by 2041. Conversely, the lower bound indicates a more pessimistic scenario where enrollment could decrease more sharply.



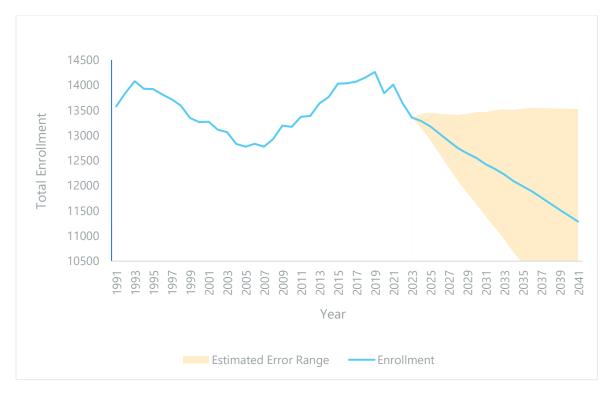


Figure 4: Mean Model Projection with Estimated Error Range

The summary table of value for the mean model, displayed in Figure 4, is include at the end of this report in the "District-wide" section of the Enrollment Estimates. It includes the values for both the projection and the historically projected MAPE. Incidentally, the model that deviates the least from the mean projection is the "Grade Projection Model – Exponential Smoothing". The following table displays the deviation from the mean of all models by model.

| Percen | Percent deviation from mean by model: Overall | | | | | | | | |
|--------|---|------------|----------|----------|-------------|-------------|------------|--|--|
| Year | Average | Average | Cohort | Cohort | Grade | Grade | Linear | | |
| | Percent | Percent | Survival | Survival | Progression | Progression | Regression | | |
| | Increase | Increase | Model - | Model - | Model - | Model - | Model | | |
| | Model - | Model - 5- | 10-yr | 5-yr | Exponential | Linear | | | |
| | 10-yr | yr | average | average | Smoothing | Regression | | | |
| 2024 | 0.5% | -0.4% | -0.3% | -1.0% | 0.3% | -1.9% | 2.9% | | |
| 2025 | 1.3% | -0.6% | -0.3% | -1.6% | 1.0% | -3.4% | 3.5% | | |
| 2026 | 2.5% | -0.4% | -0.6% | -2.2% | 1.5% | -5.1% | 4.3% | | |
| 2027 | 3.7% | -0.1% | -0.8% | -2.7% | 1.1% | -6.4% | 5.1% | | |
| 2028 | 4.9% | 0.1% | -1.1% | -3.3% | 1.3% | -7.9% | 6.0% | | |
| 2029 | 5.8% | 0.1% | -1.3% | -3.6% | 1.6% | -9.2% | 6.5% | | |
| 2030 | 6.7% | 0.0% | -1.3% | -3.8% | 1.9% | -10.4% | 7.0% | | |
| 2031 | 7.8% | 0.2% | -1.6% | -4.3% | 2.0% | -11.8% | 7.7% | | |



| 2032 | 8.7% | 0.2% | -1.7% | -4.5% | 2.2% | -13.0% | 8.1% |
|------|-------|------|-------|-------|-------|--------|-------|
| 2033 | 9.8% | 0.3% | -2.0% | -4.9% | 2.2% | -14.2% | 8.7% |
| 2034 | 11.1% | 0.7% | -2.5% | -5.4% | 2.0% | -15.5% | 9.6% |
| 2035 | 12.2% | 0.8% | -2.8% | -5.6% | 1.9% | -16.7% | 10.1% |
| 2036 | 13.4% | 1.0% | -3.0% | -5.9% | 1.7% | -17.9% | 10.7% |
| 2037 | 14.7% | 1.4% | -3.4% | -6.3% | 1.3% | -19.2% | 11.5% |
| 2038 | 16.1% | 1.8% | -3.9% | -6.8% | 0.8% | -20.4% | 12.3% |
| 2039 | 17.6% | 2.3% | -4.4% | -7.2% | 0.3% | -21.7% | 13.1% |
| 2040 | 19.0% | 2.8% | -4.9% | -7.7% | -0.2% | -22.9% | 13.9% |
| 2041 | 20.5% | 3.3% | -5.4% | -8.2% | -0.7% | -24.1% | 14.7% |

Table 1: Percent Deviation from Mean by Model

Elementary School Projections

Most models forecast a slight decline in elementary school enrollment over the projection period (2024-2041) for schools in Laramie County School District 1 at various rates. The projected mean is shown on the chart below (blue line inside the shaded area) which shows a decline of approximately 88 students per year. The main projection line shows a gradual decline in enrollment numbers, suggesting that, if current trends continue, total enrollment may decrease to levels below 3,300 students by 2041. The shaded area around the projected line, known as the mean absolute error, represents the range of possible outcomes. The upper bound of this area suggests that, under more optimistic conditions, total enrollment in elementary schools could remain closer to current levels, potentially stabilizing at around 7,000 to 8,000 students by 2041. Conversely, the lower bound indicates a more pessimistic scenario where enrollment could decrease more sharply.

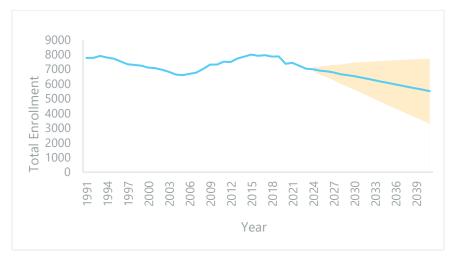


Figure 5: Mean Model Projected Enrollment for Elementary



The models that deviate the least from the mean projection are the "Cohort Survival Models".

| Percer | nt deviation f | rom mean by | model: Ele | mentary Sc | hools | | |
|--------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|---------------------------------|---------------------------------|-------------------------------|
| Year | Average Percent Increase | Average Percent Increase | Cohort Survival Model - | Cohort Survival Model - | Grade Progression Model - | Grade Progression Model - | Linear Regression Model |
| | Model - 10-yr | Model - 5- yr | 10-yr average | 5-yr average | Exponential Smoothing | Linear Regression | |
| 2024 | -0.3% | -1.5% | 0.2% | -0.2% | 0.9% | -0.5% | 1.4% |
| 2025 | 0.2% | -2.3% | 0.4% | -0.2% | 1.7% | -0.9% | 1.2% |
| 2026 | 0.2% | -3.6% | 1.0% | 0.1% | 2.8% | -0.9% | 0.4% |
| 2027 | 0.6% | -4.5% | 1.2% | 0.1% | 3.6% | -1.2% | 0.1% |
| 2028 | 1.6% | -4.8% | 0.9% | -0.2% | 4.0% | -1.7% | 0.2% |
| 2029 | 1.8% | -5.8% | 1.2% | 0.1% | 4.7% | -1.8% | -0.2% |
| 2030 | 2.1% | -6.8% | 1.6% | 0.6% | 5.2% | -1.8% | -0.8% |
| 2031 | 2.8% | -7.3% | 1.7% | 0.6% | 5.2% | -2.0% | -1.0% |
| 2032 | 3.6% | -7.8% | 1.7% | 0.7% | 5.3% | -2.3% | -1.1% |
| 2033 | 4.4% | -8.3% | 1.7% | 0.7% | 5.3% | -2.6% | -1.2% |
| 2034 | 5.2% | -8.7% | 1.8% | 0.7% | 5.3% | -2.9% | -1.4% |
| 2035 | 6.1% | -9.2% | 1.8% | 0.7% | 5.3% | -3.3% | -1.5% |
| 2036 | 7.0% | -9.6% | 1.8% | 0.7% | 5.3% | -3.6% | -1.7% |
| 2037 | 7.9% | -10.0% | 1.8% | 0.7% | 5.3% | -3.9% | -1.9% |
| 2038 | 8.9% | -10.4% | 1.8% | 0.7% | 5.3% | -4.2% | -2.1% |
| 2039 | 9.9% | -10.7% | 1.8% | 0.7% | 5.3% | -4.6% | -2.3% |
| 2040 | 10.9% | -11.0% | 1.8% | 0.6% | 5.3% | -4.9% | -2.6% |
| 2041 | 11.9% | -11.3% | 1.7% | 0.6% | 5.3% | -5.3% | -2.8% |

Table 2: Percent Deviation from Mean by Model: Elementary Schools

Middle School Projections

Most models forecast a slight decline in middle school enrollment over the projection period (2024-2041) for schools in Laramie County School District 1 at various rates. The projected mean is shown on the chart below (blue line inside the shaded area) which shows a decline of approximately 10 students per year. The main projection line shows a relatively stable enrollment trend for middle schools with only a slight decline expected in the years leading up to 2041. Enrollment numbers are expected to remain close to current levels, hovering around 2,000 students. The shaded area around the projection line represents the mean percent error. The upper bound of the shaded area suggests that, under more optimistic conditions, total enrollment could remain stable or even experience a slight increase, maintaining numbers above



2,000 students. Conversely, the lower bound of the shaded area indicates a scenario where enrollment could dip slightly below the expected levels, although not drastically.

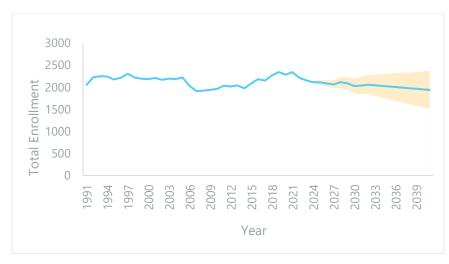


Figure 6: Mean Model Projection for Middle School

The models that deviate the least from the mean projection is the "Average Percent Increase Model - 5-yr".

| Percent d | leviation from m | nean by mode | l: Middle Sch | ools | | | |
|-----------|------------------|--------------|---------------|------------|------------|------------|-----------|
| Year | Average | Average | Cohort | Cohort | Grade | Grade | Linear |
| | Percent | Percent | Survival | Survival | Progressio | Progressio | Regressio |
| | Increase | Increase | Model - | Model - 5- | n Model - | n Model - | n Model |
| | Model - | Model - 5- | 10-yr | yr average | Exponenti | Linear | |
| | 10-yr | yr | average | | al | Regressio | |
| | | | | | Smoothing | n | |
| 2024 | 2.8% | 1.3% | -3.4% | -3.8% | -2.9% | -4.2% | 10.2% |
| 2025 | 3.6% | 0.5% | -3.5% | -4.5% | -1.6% | -5.9% | 11.3% |
| 2026 | 5.5% | 0.9% | -4.2% | -5.7% | -2.0% | -8.2% | 13.8% |
| 2027 | 7.5% | 1.3% | -5.1% | -6.7% | -2.9% | -10.2% | 16.1% |
| 2028 | 5.6% | -1.9% | -2.8% | -5.0% | -0.5% | -10.0% | 14.5% |
| 2029 | 7.6% | -1.4% | -3.5% | -6.5% | -0.8% | -12.3% | 17.0% |
| 2030 | 11.6% | 0.9% | -6.7% | -9.6% | -2.1% | -15.9% | 21.7% |
| 2031 | 11.6% | -0.4% | -6.5% | -9.4% | -0.4% | -16.9% | 22.0% |
| 2032 | 11.4% | -1.8% | -5.8% | -8.7% | 0.3% | -17.3% | 22.1% |
| 2033 | 12.9% | -1.8% | -6.5% | -9.4% | -0.4% | -18.9% | 24.0% |
| 2034 | 14.5% | -1.6% | -7.1% | -10.1% | -1.1% | -20.5% | 26.0% |
| 2035 | 16.0% | -1.5% | -7.8% | -10.8% | -1.8% | -22.0% | 28.0% |



| 2036 | 17.6% | -1.4% | -8.5% | -11.4% | -2.6% | -23.6% | 29.9% |
|------|-------|-------|--------|--------|-------|--------|-------|
| 2037 | 19.2% | -1.2% | -9.3% | -12.1% | -3.4% | -25.2% | 32.0% |
| 2038 | 20.8% | -1.0% | -10.1% | -12.9% | -4.2% | -26.6% | 34.0% |
| 2039 | 22.4% | -0.8% | -10.9% | -13.6% | -5.0% | -28.2% | 36.1% |
| 2040 | 24.0% | -0.6% | -11.7% | -14.3% | -5.8% | -29.7% | 38.2% |
| 2041 | 25.6% | -0.4% | -12.4% | -15.2% | -6.6% | -31.2% | 40.2% |

Table 3: Percent Deviation from Mean by Model: Middle Schools

High School Projections

Most models forecast a slight decline in high school enrollment over the projection period (2024-2041) for schools in Laramie County School District 1 at various rates. The projected mean is shown on the chart below (gray line) which shows a decline of approximately 17 students per year. The main projection line indicates a slight decline in enrollment numbers in high schools, suggesting that by 2041, total enrollment may see a modest decrease. However, the decline is minimal, and the numbers are expected to remain relatively stable, hovering around 4,000 students. The shaded area around the projection line represents the mean percent error, which shows the range within which the actual enrollment figures are likely to fall. The upper bound of this area suggests that, under more favorable conditions, enrollment could remain slightly above 4,000 students.

The lower bound, on the other hand, indicates that enrollment could potentially dip below 4,000 students but not significantly so.

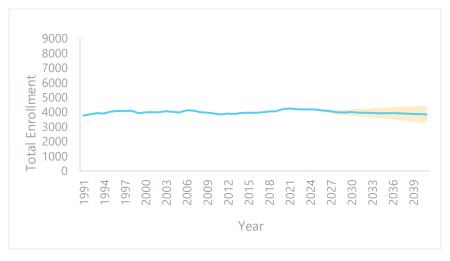


Figure 7: Mean Model Projections for High School

The models that deviate the least from the mean projection are the "Grade Projection Model – Exponential Smoothing".



| Percent | deviation fron | n mean by mod | lel: High Sch | iools | | | |
|---------|---|--|--|---------------------------------------|---|--|-------------------------------|
| Year | Average Percent Increase Model - 10- | Average Percent Increase Model - 5-yr | Cohort Survival Model - 10-yr | Cohort Survival Model - 5-yr | Grade Progressio n Model - Exponential | Grade Progressio n Model - Linear | Linear Regression Model |
| | yr | | average | average | Smoothing | Regression | |
| 2024 | 0.6% | 0.5% | 0.2% | -1.1% | 0.9% | -3.1% | 2.0% |
| 2025 | 2.0% | 1.8% | 0.1% | -2.3% | 1.3% | -6.2% | 3.3% |
| 2026 | 4.8% | 4.4% | -1.4% | -4.4% | 1.0% | -10.5% | 5.9% |
| 2027 | 6.9% | 6.4% | -1.8% | -5.3% | -1.0% | -13.1% | 7.9% |
| 2028 | 10.1% | 9.4% | -3.6% | -7.5% | -2.1% | -17.1% | 11.0% |
| 2029 | 11.5% | 10.6% | -4.2% | -8.3% | -2.2% | -19.7% | 12.2% |
| 2030 | 11.7% | 10.6% | -3.3% | -8.0% | -1.4% | -21.7% | 12.2% |
| 2031 | 13.9% | 12.7% | -4.4% | -9.5% | -1.9% | -24.9% | 14.3% |
| 2032 | 15.5% | 14.1% | -5.1% | -10.6% | -1.6% | -27.8% | 15.6% |
| 2033 | 16.7% | 15.0% | -5.5% | -11.3% | -1.2% | -30.2% | 16.5% |
| 2034 | 18.7% | 16.7% | -6.8% | -12.5% | -1.6% | -32.6% | 18.2% |
| 2035 | 19.8% | 17.5% | -7.2% | -12.8% | -1.4% | -34.8% | 19.0% |
| 2036 | 20.9% | 18.3% | -7.5% | -13.1% | -1.6% | -36.8% | 19.7% |
| 2037 | 22.7% | 19.8% | -8.3% | -13.9% | -2.5% | -39.0% | 21.2% |
| 2038 | 24.6% | 21.4% | -9.2% | -14.7% | -3.4% | -41.3% | 22.7% |
| 2039 | 26.4% | 22.9% | -10.1% | -15.6% | -4.4% | -43.4% | 24.1% |
| 2040 | 28.3% | 24.5% | -11.1% | -16.4% | -5.4% | -45.5% | 25.6% |
| 2041 | 30.2% | 26.0% | -12.1% | -17.4% | -6.4% | -47.5% | 27.1% |

Table 4: Percent Deviation from Mean by Model: High Schools

Summary of Projection Findings

- The historical data suggests some fluctuations, with periods of both decline and growth, peaking around 1993 and again around 2019.
- Most models forecast a decline in enrollment over the projection period (2024-2041), but they vary in the steepness of the decline:
 - The Average Percent Increase Model (5-year) shows a moderate decline, projecting a gradual reduction in enrollment as does the Linear Regression Model while the Average Percent Increase Model (10-year) shows a slight increase in enrollment.
 - The Cohort Survival Models (5-year and 10-year averages) predict a more pronounced decline, though they remain more conservative than the Grade Progression - Linear Regression Model.



- The Grade Progression Model Linear Regression forecasts the most dramatic drop in enrollment, predicting a sharp and consistent decrease over the coming decade on the overall enrollment.
- The Grade Progression Model Exponential Smoothing anticipates a steady and controlled decline, smoothing out historical fluctuations while placing more weight on recent trends, thus reflecting a more gradual downward trend compared to sharper declines predicted by some other models.



A02.6 Enrollment Estimates

Elementary Schools

| Year | Historical Enrollment | Year | Enrollment Estimates (Mean of models) | Extrapolated Mean Absolute Percent Error (MAPE) |
|------|--------------------------|------|---|--|
| 2006 | 6679 | 2024 | 6986 | ±1.89% |
| 2007 | 6764 | 2025 | 6897 | ±3.82% |
| 2008 | 7016 | 2026 | 6848 | ±5.78% |
| 2009 | 7300 | 2027 | 6768 | ±7.78% |
| 2010 | 7307 | 2028 | 6655 | ±9.81% |
| 2011 | 7502 | 2029 | 6587 | ±11.89% |
| 2012 | 7481 | 2030 | 6523 | ±14.00% |
| 2013 | 7716 | 2031 | 6428 | ±16.16% |
| 2014 | 7844 | 2032 | 6333 | ±18.35% |
| 2015 | 7986 | 2033 | 6238 | ±20.59% |
| 2016 | 7903 | 2034 | 6144 | ±22.87% |
| 2017 | 7942 | 2035 | 6051 | ±25.19% |
| 2018 | 7847 | 2036 | 5958 | ±27.56% |
| 2019 | 7862 | 2037 | 5865 | ±29.97% |
| 2020 | 7355 | 2038 | 5774 | ±32.43% |
| 2021 | 7425 | 2039 | 5683 | ±34.93% |
| 2022 | 7228 | 2040 | 5593 | ±37.48% |
| 2023 | 7023 | 2041 | 5503 | ±40.08% |

Table 5: Elementary Enrollment Estimates

Middle Schools

| Year | Historical Enrollment | Year | Enrollment Estimates (Mean of models) | Extrapolated Mean Absolute Percent Error (MAPE) |
|------|--------------------------|------|---------------------------------------|---|
| 2006 | 2036 | 2024 | 2113 | ±1.12% |
| 2007 | 1912 | 2025 | 2112 | ±2.25% |
| 2008 | 1922 | 2026 | 2087 | ±3.40% |
| 2009 | 1940 | 2027 | 2063 | ±4.56% |
| 2010 | 1964 | 2028 | 2113 | ±5.73% |
| 2011 | 2033 | 2029 | 2089 | ±6.91% |
| 2012 | 2016 | 2030 | 2026 | ±8.11% |
| 2013 | 2042 | 2031 | 2040 | ±9.32% |
| 2014 | 1976 | 2032 | 2058 | ±10.54% |
| 2015 | 2086 | 2033 | 2044 | ±11.78% |



| 2016 | 2185 | 2034 | 2030 | ±13.03% |
|------|------|------|------|---------|
| 2017 | 2151 | 2035 | 2017 | ±14.30% |
| 2018 | 2266 | 2036 | 2004 | ±15.58% |
| 2019 | 2344 | 2037 | 1991 | ±16.87% |
| 2020 | 2285 | 2038 | 1977 | ±18.18% |
| 2021 | 2342 | 2039 | 1965 | ±19.51% |
| 2022 | 2216 | 2040 | 1952 | ±20.85% |
| 2023 | 2157 | 2041 | 1940 | ±22.20% |

Table 6: Middle School Enrollment Estimates

High Schools

| Year | Historical Enrollment | Year | Enrollment Estimates (Mean of models) | Extrapolated Mean Absolute Percent Error (MAPE) |
|------|--------------------------|------|---------------------------------------|---|
| 2006 | 4117 | 2024 | 4189 | ±0.78% |
| 2007 | 4100 | 2025 | 4170 | ±1.57% |
| 2008 | 3995 | 2026 | 4098 | ±2.36% |
| 2009 | 3955 | 2027 | 4058 | ±3.16% |
| 2010 | 3900 | 2028 | 3980 | ±3.96% |
| 2011 | 3835 | 2029 | 3966 | ±4.77% |
| 2012 | 3890 | 2030 | 4000 | ±5.59% |
| 2013 | 3877 | 2031 | 3960 | ±6.41% |
| 2014 | 3941 | 2032 | 3943 | ±7.24% |
| 2015 | 3957 | 2033 | 3944 | ±8.08% |
| 2016 | 3948 | 2034 | 3919 | ±8.92% |
| 2017 | 3978 | 2035 | 3923 | ±9.77% |
| 2018 | 4039 | 2036 | 3928 | ±10.63% |
| 2019 | 4055 | 2037 | 3910 | ±11.49% |
| 2020 | 4200 | 2038 | 3893 | ±12.36% |
| 2021 | 4243 | 2039 | 3877 | ±13.24% |
| 2022 | 4197 | 2040 | 3860 | ±14.12% |
| 2023 | 4175 | 2041 | 3844 | ±15.01% |

Table 7: High School Enrollment Estimates



District-wide

| Year | Historical Enrollment | Year | Enrollment Estimates (Mean of models) | Extrapolated Mean Absolute Percent Error (MAPE) |
|------|--------------------------|------|---------------------------------------|---|
| 2006 | 12832 | 2024 | 13287 | ±1.01% |
| 2007 | 12776 | 2025 | 13179 | ±2.03% |
| 2008 | 12933 | 2026 | 13033 | ±3.06% |
| 2009 | 13195 | 2027 | 12889 | ±4.10% |
| 2010 | 13171 | 2028 | 12748 | ±5.15% |
| 2011 | 13370 | 2029 | 12642 | ±6.22% |
| 2012 | 13387 | 2030 | 12550 | ±7.29% |
| 2013 | 13635 | 2031 | 12427 | ±8.37% |
| 2014 | 13761 | 2032 | 12334 | ±9.47% |
| 2015 | 14029 | 2033 | 12225 | ±10.57% |
| 2016 | 14036 | 2034 | 12094 | ±11.69% |
| 2017 | 14071 | 2035 | 11991 | ±12.82% |
| 2018 | 14152 | 2036 | 11890 | ±13.96% |
| 2019 | 14261 | 2037 | 11766 | ±15.11% |
| 2020 | 13840 | 2038 | 11644 | ±16.27% |
| 2021 | 14010 | 2039 | 11524 | ±17.44% |
| 2022 | 13641 | 2040 | 11405 | ±18.63% |
| 2023 | 13355 | 2041 | 11287 | ±19.83% |

Table 8: District-wide Enrollment Estimates



A03 Most Cost-Effective Remedy Details

A03.1 Prioritization of Remedies Workshop

The prioritization of remedies workshop was a structured interactive workshop facilitated by FEA on August 27, 2024. The workshop included representatives from the District and the SCD. The workshop focused on analyzing each proposed remedy's anticipated actions to determine an order of priorities to accomplish the actions that address the building need identified for the study. Representatives from the District and the SFD collaborated in developing a priority-based approach for each remedy based on the seven schools that are the identified building need for the study, overlaying the District's priorities, prospective timing of funding, and other economic factors specific to Laramie County.

The first step of this process utilized the outline of actions for each remedy from the previous workshop. Each remedy was laid out using building blocks with each school's name, placing them from left to right, in line, or groups, indicating what action could happen first with dependencies and projected milestones. After each remedy was laid out in order of priorities, a schedule was established with anticipated milestones relative to anticipated funding and local economic factors that should be considered. These local economic factors included concerns about having multiple major capital improvement projects underway at the same time and the ability to find qualified contractors to perform the work.

A hybrid remedy (Remedy 4) was developed after the three remedy concept schedules were established. One additional remedy (Remedy 5) was later considered based on a slight variation of Remedy 4. Both the Remedy 3 and Remedy 4 were suggested as offering additional advantages and were anticipated to be financially favorable. The outcome of the CBA workshop and prioritization workshop identified the following Preferred remedy.

The following is a description of the Preferred remedy with justifications for how remedy elements were prioritized.

PHASE 1: Utilizes existing appropriated funding to make the most significant impact across the District and impact the largest number of elementary schools. This Phase addresses six of the seven schools with identified building needs for the MCER and remedies the following schools: Arp, Buffalo Ridge, Hobbs, Jessup, Miller, and Sunrise.

1. South Triad - Phase 1:

- a. Design and Construction Actions: With the release of currently appropriated State funding, the following actions could commence upon release:
 - i. New 5-6 Elementary School. This new school will be constructed first in Phase 1, next to Afflerbach Elementary School. It is anticipated that funding for design and construction for this project can be allocated from funding currently in place, pending the approval of this MCER study. The District has an architect under contract for the design, and the design will take advantage of a prototype



previously developed for Coyote Ridge. With an architect already in place, procurement of design services for this school will not be required, and design may proceed with the release of funding following the approval of the Commission. It is anticipated that this school can be designed, permitted, constructed, and commissioned to be online for the 2027-28 school year. Refer to the test-fit site plan for the New 5-6 Elementary School, which is attached in Appendix A06, Site Diagrams.

- ii. Replacement Arp Elementary School (capacity need). Completion of this school will follow soon after completion of the New 5-6 School. Funding for design and construction is in place pending approval of this MCER study. Upon Commission approval, the District will be required to solicit design services for this project. It is anticipated that this school can be designed, permitted, constructed, and commissioned to be online for the 2028-29 school year. The students from Arp are currently located in the swing space at Eastridge (the old Carrie Junior High School). When the new Arp comes online, Eastridge swing space will become available for future projects. Refer to the test-fit site plan for the replacement of Arp Elementary School, which is attached in Appendix A06, Site Diagrams.
- b. Non-Construction Actions: Several schools do not require construction actions but will require non-construction actions. The non-construction actions have been scheduled to minimize nonfinancial impacts.
 - i. Reconfigurations/Boundary Adjustments: These Elementary Schools will be reconfigured to K-4 schools and the 5-6 students will move to the New 5-6 School when the new school comes online for the 2027-28 school year. Anticipated future needs are consistent with buildings of similar age. Therefore, application of block grant and major maintenance funding will be required to continue to sustain these buildings.
 - 1. Afflerbach Elementary (constructed 1986)
 - 2. Goins Elementary (constructed 2012)
 - 3. Rossman Elementary (constructed 2009)
 - 4. Sunrise Elementary (capacity need; constructed 2007)
 - ii. Offline: These Elementary Schools will be taken offline when the Replacement Arp School comes online for the 2028-29 school year. The District will determine where the students will go from each offline school.
 - 1. Bain Elementary (current K-6) (Constructed 1961)
 - 2. Lebhart Elementary (current K-2) (Constructed 1959
 - 3. Hebard Elementary (current K-6) (Constructed 1945)
 - 4. Fairview Elementary (current 3-6) (Constructed 1956)



2. Central Triad - Phase 1:

- a. Design and Construction Actions:
 - i. Replacement Hobbs Elementary School (condition need). A request for funding for design and construction is anticipated to be made in 2026, and design will commence once the funding is approved and released. The replacement school will be designed to be built on the same site as and adjacent to the existing Hobbs building. It is anticipated that this school can be designed, permitted, constructed, and commissioned to be online for the 2030-31 school year. No swing space is anticipated to be required. Refer to the test-fit site plan for the replacement of Hobbs Elementary School, which is attached in Appendix A06, Site Diagrams.
- b. Non-Construction Actions: Several schools do not require action or do not require construction actions. The non-construction actions have been scheduled to minimize nonfinancial impacts.
 - i. No Action: The following elementary schools are all rural schools, with no needs identified for this MCER study. Therefore, no modifications are anticipated for these schools. Clawson and Willadsen serve very small populations, with total 2023/2024 enrollment of 4 and 5 students respectively. However, application of block grant and major maintenance funding will be required to sustain these buildings as they continue to age:
 - 1. Clawson Elementary (constructed in 1939)
 - 2. Gilchrist Elementary (constructed in 1984)
 - 3. Willadsen Elementary (constructed in 1955)
 - ii. No Action: This elementary school's function is for the K-6 students of the Air Force Base's families and no needs were identified for this MCER study. Therefore, no modifications were anticipated for this school. Anticipated future sustainment needs are consistent with buildings of similar age. Therefore, application of block grant and major maintenance funding will be required to continue to sustain this building.
 - 1. Freedom Elementary (constructed in 2005)
 - iii. Reconfiguration/Boundary Adjustments: With Coyote Ridge now in operation, the following schools have been reconfigured to K-4 schools for the 2024/25 school year, and boundary adjustments will be made to balance the capacity. The 5-6 students are now at Coyote Ridge from the following schools.
 - 1. Davis Elementary (constructed 2015)
 - 2. Prairie Wind Elementary (constructed 2015)



iv. Boundary Adjustments: The District recommends that this reconfiguration be implemented for the 2027-28 school year to align with taking Jessup Elementary offline.

1. Pioneer Park Elementary (constructed 1955)

v. Offline: The following Elementary Schools will be taken offline, which the District anticipated executing in steps. At the end of the school year, the District will determine where the students will go from each offline school. A demolition budget has been included for the removal of these buildings.

- 1. Miller Elementary (condition need; offline 2025) (constructed in 1965)
- 2. Deming Elementary (offline 2026) (constructed in 1945)
- 3. Jessup Elementary (condition need; offline 2027) (constructed in 1961)

3. East Triad - Phase 1:

- a. Design and Construction Actions: None
- b. Non-Construction Actions: The schools in the East Triad do not require construction actions in Phase 1. A review of Buffalo Ridge Elementary (condition need) confirmed it had been recently renovated. The District confirmed the immediate condition needs that were identified in the 2023 facility condition assessment could be remedied through commissioning (or re-commissioning) of HVAC systems. Addressing capacity needs will require reconfiguration and boundary adjustments, as described below.
 - i. No Action: None.
 - ii. Reconfiguration/Boundary Adjustments: To address capacity needs, the following schools will undergo some changes. The 5-6 students from Henderson (current capacity of 117%) will be moved to Meadowlark, which can accommodate them, but they will put Meadowlark at full capacity. The K-4 students in Saddle Ridge (current capacity of 130%) will require boundary adjustments. Although this will relieve the capacity needs for the Triad, it will temporarily leave Alta Vista and Baggs as K-6 schools. It is anticipated that Alta Vista and Baggs will be remedied in Phase 2 to complete the K-4 / 5-6 reconfiguration in this Triad. The following schools would be considered in the K-4 boundary adjustments, with final disposition of student movement to be determined by the District. Anticipated future sustainment needs are consistent with buildings of similar age. Therefore, application of block grant and major maintenance funding will be required to continue to sustain this building.
 - 1. Alta Vista Elementary (constructed 1987)
 - 2. Anderson Elementary (constructed 1983)
 - 3. Baggs Elementary (constructed 2008)
 - 4. Buffalo Ridge Elementary (constructed 1959; recently renovated)



- 5. Dildine Elementary (constructed 1959)
- 6. Henderson Elementary (constructed 1950)
- 7. Saddle Ridge Elementary (constructed 2009)



PHASE 2: Requires future requests for design and construction. These requests have been planned to stagger projects to alleviate local economic factors, including concerns about having multiple major capital improvement projects underway at the same time and the ability to find qualified contractors to perform the work. This Phase addresses one of the seven schools with identified building need for the MCER and remedies the following school: Saddle Ridge.

1. South Triad - Phase 2:

- a. Design and Construction Actions: With the release of future requested and appropriated State funding, the following actions will commence:
 - i. Replacement Cole Elementary School request for funding for design and construction will be made in 2030, and design will commence once the funding is approved and released. The replacement school will be designed to be built on the same site adjacent to the existing building. No swing space is anticipated to be required. It is anticipated that this school can be designed, permitted, constructed, and commissioned to be online for the 2034-35 school year. Refer to the test-fit site plan for the replacement Cole Elementary School, which is in Appendix A06, Site Diagrams.
- b. Non-Construction Actions: None

2. Central Triad - Phase 2:

- a. Design and Construction Actions: With the release of future requested and appropriated State funding, the following actions will commence:
 - i. Addition Coyote Elementary School request for funding for design and construction will be made in 2031, and design will commence once the funding is approved and released. The addition will be designed to extend classrooms off the end of each section. Swing space is not anticipated to be required. It is anticipated that this addition can be designed, permitted, constructed, and commissioned to be online for the 2033-34 school year. Refer to the test-fit site plan for the addition to Coyote Ridge Elementary School, which is attached in Appendix A06, Site Diagrams.
- b. Non-Construction Actions: None

3. East Triad - Phase 2:

- a. Design and Construction Actions: With the release of future requested and appropriated State funding, the following actions will commence:
 - i. A New K-4 Saddle Ridge II Elementary School will be constructed at the Three Hearts Drive site. A request for funding for design and construction will be made in 2028, and design will commence once the funding is approved and released. No swing space is anticipated to be required. It is expected this school can be designed, permitted, constructed, and commissioned to be online for the 2032-



33 school year. Refer to the test-fit site plan for the new Saddle Ridge II Elementary School, which is attached in Appendix A06, Site Diagrams.

- ii. Addition Meadowlark Elementary School request for funding for design and construction will be made in 2029, and design will commence once the funding is approved and released. The addition will be designed to extend classrooms off the end of each section. No swing space is anticipated to be required. It is expected this addition can be designed, permitted, constructed, and commissioned to be online for the 2033-34 school year. Refer to the test-fit site plan for the addition to Meadowlark Elementary School, which is attached in Appendix A06, Site Diagrams.
- c. Non-Construction Actions: Several schools do not require action or do not require construction actions. The non-construction actions have been scheduled to minimize nonfinancial impacts.
 - i. Boundary Adjustment: This school will have a boundary adjustment to balance the capacity.

1. Saddle Ridge Elementary 2032

ii. Reconfiguration/Boundary Adjustments: These schools will be reconfigured to K-4 schools, and boundary adjustments will be made to balance the capacity. The 5-6 students will go to Meadowlark. The District recommends that this reconfiguration be implemented for the 2032-33 school year.

Alta Vista Elementary
 Baggs Elementary
 2032

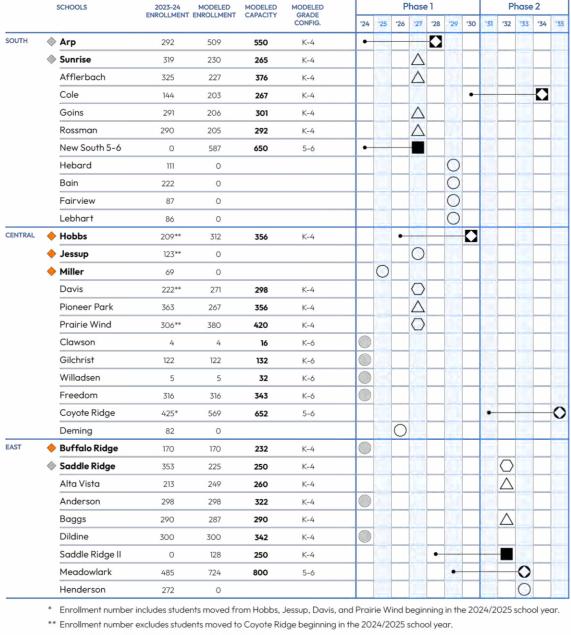
iii. Offline: This Elementary School will be taken offline. At the end of the school year, the District will determine where the students will go from the offline school. A demolition budget has been included for the removal of these buildings.

1. Henderson Elementary 2033



A03.2 Implementation plan and timeline for the recommended remedy.

The following information explains the details provided in the following infographic in Figure 1.



The end state of each school is shown for this MCER.



Figure 1: Most Cost-Effective Remedy Infographic



The Condition and Capacity Needs included in this MCER study have been identified as impeding the delivery of the prescribed statewide educational program. This directly relates to Wyoming Statute 21-15-117(a) which states, "Under each of the two (2) schedules the commission shall prioritize educational building and facility needs that impede the delivery of the prescribed statewide educational program."

To address these needs, the MCER implementation schedule for the District is broken into two phases:

- Phase 1 (2024-2030)
- Phase 2 (2031-2035)

Each phase outlines a sequence of construction, reconfigurations, and school closures, targeting the South, Central, and East Triads to address capacity and condition needs. Completion of identified construction activities allows the execution of reconfigurations and school closures, which will require some attendance boundary adjustments, as indicated in Figure 1. However, current triad boundaries are not anticipated to change, and all attendance boundary adjustments will be within each triad—not across triads or districts.

The following explains the specific actions included in each execution phase of this MCER study and how each of the condition and capacity need schools will be remedied as illustrated in the infographic in Figure 1. At the conclusion of these actions, the condition and capacity needs identified for this MCER will be remedied, thereby addressing the current identified needs that impact the delivery of the statewide educational program.

Explanation of Activities in Phase 1 (2024-2030) by Triad

South Triad (top of infographic table):

- Primary Construction:
 - New 5-6 School: As part of addressing the capacity issue at Arp, a new 5-6 school will be constructed in the South Triad, which will allow for the reconfiguration of the grade structure across the triad. All 5-6 students across the triad will move to the New 5-6 School, and the K-4 grades will be redistributed via boundary adjustments.
 - Replacement ARP School: Replacement of the existing ARP building also addresses the Arp capacity need. Completion will also open the Eastridge building for future swing space.
- Reconfiguration of the Triad:
 - Once the New 5-6 School and Replacement Arp School are operational, the South Triad will fully transition to a K-4 and 5-6 configuration, completing the District's long-term reconfiguration strategy in this triad and across the District. This reconfiguration aims to alleviate both capacity and condition concerns at ARP and the capacity concern at Sunrise school.
- Buildings to be Taken Offline:
 - As part of this reconfiguration, several older buildings are shown as offline to minimize maintenance costs and optimize resource allocation. This will be necessary



to execute a District-wide Most Cost-Effective Remedy, and the schools can be taken offline as soon as the Replacement Arp School is operational. At the conclusion of these actions, The following schools will be offline from operation.

- Hebard
- Bain
- Fairview
- Lebhart
- O Please note, as of the time of this writing, research for the MCER study indicates some buildings listed as offline may be on the historic registry (e.g., Hebard). For the purposes of the MCER study, these buildings have been modeled to be removed from use for educational purposes and an allowance for the cost of demolition has been included in the present value analysis. The District will need to review the buildings modeled as going offline as the MCER is implemented and proceed appropriately.
- o Additional Actions in the South Triad:
 - o Toward the end of Phase 1, funding will be requested for the replacement of Cole School (anticipated in Phase 2), though construction will not begin until later. This will replace the third oldest building in the District, which is projected to have a 10-year FCI of .44. Source: SFD 2023 FCI Analysis Report (assetworks.com).

Central Triad (middle of infographic table):

- Replacement of Hobbs School:
 - o In Phase 1, Hobbs School will be replaced with a larger facility to accommodate boundary adjustments, consolidating students from other nearby schools. The larger school size will enable the District to take additional buildings offline, reducing operating costs. The District will apply major maintenance funds as needed to maintain Hobbs until replacement is completed.
- Boundary Adjustments:
 - Boundary adjustments will be implemented to shift student populations to the newly constructed Hobbs and other reconfigured schools. These adjustments are essential to optimize building utilization and accommodate projected enrollment growth.
- Buildings to be Taken Offline:
 - Some older and aging buildings in the Central Triad will be offline to align with the new capacity configurations and boundary adjustments are made. Please note, as of the time of this writing, research for the MCER study indicates some buildings listed as offline may be on the historic registry (e.g., Deming). For the purposes of the MCER study, these buildings have been modeled to be removed from use for educational purposes and an allowance for the cost of demolition has been included in the present value analysis. The District will need to review the buildings modeled as going offline as the MCER is implemented and proceed appropriately.



- Expansion of Coyote Ridge School:
 - Coyote Ridge 5-6 School, which began operations in the 2024-2025 academic year, will continue to fill with 5-6 students throughout Phase 1. By the end of the phase, Coyote Ridge will be fully operational, serving the majority of 5-6 students in the Central Triad.
- Exempted Schools:
 - A few schools will not be involved in boundary adjustments due to their geographic location or unique population:
 - Freedom Elementary (serving a military base)
 - Clawson, Gilchrist, and Wilson (rural schools)
- Future Growth Contingency:
 - o Should the Central Triad experience enrollment growth during Phase 1, the District has projected the need for a four-section addition to an existing school to accommodate an additional 100 students. Funding for this addition would be requested in Phase 2, though the planning and determination will take place during Phase 1.

East Triad (bottom of infographic table):

- Saddle Ridge School Expansion:
 - Saddle Ridge II, a new school to address capacity issues, will be funded in Phase 1 and constructed in Phase 2. This school will serve students in a K-4 configuration and will help resolve overcrowding at Saddle Ridge I.
- Non-Construction remedy for Buffalo Ridge:
 - Buffalo Ridge School was initially identified for condition concerns but, after further review, FEA determined that no major construction was required. Instead, the mechanical systems will be fully commissioned to improve operations, making this a non-construction remedy.
- Addition to Meadowlark School:
 - o To accommodate the full transition to a K-4 and 5-6 configuration in the East Triad, Meadowlark 5-6 school will be expanded. Funding for this addition will be requested late in Phase 1, with construction taking place in the middle of Phase 2.
- Henderson School Closure:
 - Henderson School, one of the oldest buildings in the District, will come offline once the Meadowlark addition is complete, furthering the cost-effective consolidation strategy. The 5-6 students from Henderson will be reallocated to Meadowlark. Attendance boundary adjustments within the Triad will be to redistribute K-4 students.



Explanation of Activities in Phase 2 (2031-2035) by Triad

South Triad (top of infographic table):

- Replacement of Cole School:
 - The replacement of Cole School, for which funding was requested at the end of Phase 1, will take place in Phase 2. The new Cole building will be constructed with a K-4 configuration.

Central Triad (middle of infographic table):

- Potential Four-Section Addition to Coyote Ridge:
 - Should the four-section addition be required based on enrollment trends from Phase
 1, construction will begin early in Phase 2. This addition will be completed by the end of the phase and will add capacity for 100 additional students.

East Triad (bottom of infographic table):

- Completion of Saddle Ridge II and Meadowlark Expansion:
 - The expansion of Meadowlark 5-6 school, begun in Phase 1, will be completed early in Phase 2. This will allow the full transition to a K-4 and 5-6 configuration across the East Triad.
- Ongoing Operations:
 - After the closure of Henderson and the expansion of Meadowlark, the East Triad will operate under the new grade structure, optimizing capacity and reducing operational inefficiencies.



A04 Present Value Analysis

The present value analysis calculates the present value of capital construction, block grant, and major maintenance costs over a 20-year analysis period for this MCER study. Since the block grant funding is a guarantee by the State through the Wyoming School Foundation Program, the full amount of the block grant has been modeled. However, it is understood that the amount paid by the State to each school district may be reduced—by the amount of local resources available to the District.

For Laramie County School District No. 1, the following chart provides an historical accounting of the block grant funds provided by the State versus those provided by local resources. Although the portion of the guarantee paid by the state varies year to year, the outcome of the most cost-effective remedy does not change across the range of historical percentages indicate to be provided via State Resources.

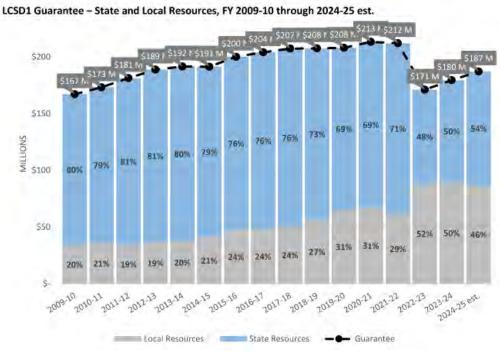


Figure 1: District Historical Block Grant Funding

Source: <a href="https://laramie1.sharepoint.com/Departments/Technology/IS/Public%20Website%20Content/Forms/AllItems.aspx?id=%2FDepartments%2FTechnology%2FIS%2FPublic%20Website%20Content%2FFinance%2FFinal%5FFY25%5FBudget%5F7%2D15%2D24jc%2Epdf&parent=%2FDepartments%2FTechnology%2FIS%2FPublic%20Website%20Content%2FFinance&p=true&qa=1

The following table presents a summary of the projected cost in each year of the study for each potential remedy. The cost in each year of the study for each remedy is the summation of potential capital construction, block grant, and major maintenance costs for that remedy in that year.



MODELED ANNUAL REMEDY COSTS

| REMEDY | 1 | 2 | 3 | 4 | 5 |
|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Year 0 | \$145,904,948 | \$145,904,948 | \$145,904,948 | \$145,904,948 | \$145,904,948 |
| Year 1 | \$145,904,948 | \$145,904,948 | \$145,904,948 | \$145,904,948 | \$145,904,948 |
| Year 2 | \$145,904,948 | \$145,904,948 | \$145,904,948 | \$146,039,721 | \$145,904,948 |
| Year 3 | \$146,039,721 | \$146,182,828 | \$146,182,828 | \$199,910,721 | \$200,850,705 |
| Year 4 | \$223,744,467 | \$242,487,681 | \$246,245,385 | \$197,284,429 | \$198,594,264 |
| Year 5 | \$145,147,752 | \$148,444,177 | \$149,957,401 | \$149,817,969 | \$151,601,126 |
| Year 6 | \$173,223,612 | \$182,456,468 | \$182,878,993 | \$178,076,826 | \$184,405,382 |
| Year 7 | \$166,828,797 | \$166,854,431 | \$189,019,050 | \$144,230,485 | \$144,263,749 |
| Year 8 | \$170,710,683 | \$199,479,284 | \$176,084,765 | \$174,171,156 | \$185,876,258 |
| Year 9 | \$192,325,510 | \$144,221,267 | \$146,454,799 | \$166,417,390 | \$148,923,252 |
| Year 10 | \$162,676,264 | \$160,881,540 | \$159,135,778 | \$174,610,826 | \$177,856,098 |
| Year 11 | \$145,957,253 | \$144,162,529 | \$147,991,227 | \$157,624,123 | \$158,972,113 |
| Year 12 | \$172,454,111 | \$183,988,514 | \$147,991,227 | \$146,479,572 | \$147,827,562 |
| Year 13 | \$146,869,409 | \$145,544,679 | \$147,991,227 | \$146,479,572 | \$147,827,562 |
| Year 14 | \$146,869,409 | \$145,530,860 | \$147,991,227 | \$146,479,572 | \$147,827,562 |
| Year 15 | \$146,869,409 | \$143,608,760 | \$147,991,227 | \$146,479,572 | \$147,827,562 |
| Year 16 | \$146,869,409 | \$143,608,760 | \$147,991,227 | \$146,479,572 | \$147,827,562 |
| Year 17 | \$146,869,409 | \$143,608,760 | \$147,991,227 | \$146,479,572 | \$147,827,562 |
| Year 18 | \$146,869,409 | \$143,608,760 | \$147,991,227 | \$146,479,572 | \$147,827,562 |
| Year 19 | \$146,869,409 | \$143,608,760 | \$147,991,227 | \$146,479,572 | \$147,827,562 |
| Year 20 | \$146,869,409 | \$143,608,760 | \$147,991,227 | \$146,479,572 | \$147,827,562 |
| Present Value | \$3,021,431,014 | \$3,022,138,963 | \$3,025,032,862 | \$3,011,287,064 | \$3,030,413,495 |

Analysis Summary

The costs shown in the table are in 2024 dollars. For each Remedy, each cost (by year) is inflated to the year indicated in the lefthand column (e.g., Year 5) using the inflation rate below, and then discounted back to present using the discount rate below. The total sum of those calculations represents the Present Value of the Remedy.

Analysis Inputs

The inflation rate used for the present value analysis is 5.6%, which represents the annualized inflation rate from January 2006 to January 2024, based on U.S. Bureau of Labor Statistics (BLS), Producer Price Index data for new school building construction, not seasonally adjusted. This is represented in BLS data Series ID PCU236222236222; https://data.bls.gov/timeseries/pcu236222236222.

The discount rate used to discount future values back to present is 6.6%, which represents the annualized return over the last 10 years of the Common School Permanent Land Fund as provided by Wyoming State Treasurer's Office as of July 31, 2024. The ten year rate was selected because the period is greater than the period between this study and the final year of funding allocation required to fund the activities in the proposed study.



A05 MCER Cost Estimate

The following cost estimates represent first-time costs and are developed for each identified action in the MCER. The cost estimates are in 2024 dollars. The cost of each action is inflated to the anticipated year of construction (and discounted back to present) as part of the Present Value Analysis based on the assumed timing of each action. The total present value of the MCER is presented in Appendix A04 Present Value Analysis.



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| Location | Individual Elements | Total Amount |
|--------------------------|----------------------|--------------|
| 1- Building Construction | | |
| | A1010StandardFoundtn | 1,230,469 |
| | A1030SlabOnGrade | 660,830 |
| | B1010FloorConst | 889,592 |
| | B1020RoofConst | 3,061,643 |
| | B2010ExteriorWalls | 4,027,096 |
| | B2020ExteriorWindows | 948,815 |
| | B2030ExteriorDoors | 123,763 |
| | B3010RoofCoverings | 1,011,323 |
| | B3020RoofOpenings | 130,196 |
| | C1010Partitions | 1,461,212 |
| | C1020InteriorDoors | 540,551 |
| | C1030Specialties | 385,446 |
| | C2010StairConstructn | 65,400 |
| | C3010WallFinishes | 442,456 |
| | C3020FloorFinishes | 680,987 |
| | C3030CeilingFinishes | 720,884 |
| | D1010Elevators&Lifts | 130,000 |
| | D4090OthrFireProtSys | 436,890 |
| | D4910MechComplete | 5,097,050 |
| | D5910ElecComplete | 4,004,825 |
| | E1020InstitutEquip | 17,383 |
| | E1090OtherEquipment | 359,528 |
| | E2010FixedFurnishing | 919,167 |
| | X1010Field/SiteSetup | 1,330,000 |
| | | 28,675,507 |
| 2 - Sitework | | |
| | G1030SiteEarthwork | 300,000 |
| | G2010Roadways | 599,300 |
| | G2020ParkingLots | 658,500 |
| | G2030PedestrianPvmt | 360,000 |
| | G2040SiteDevelopment | 377,438 |
| | G2050Landscaping | 442,605 |
| | G3010WaterSupply | 100,000 |
| | G3020SanitarySewer | 100,000 |
| | G3030StormSewer | 200,000 |
| | | 3,137,843 |
| 3 - Asbestos Abatement | | |
| | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 35,000 |
| | | 110,000 |
| 4 - Building & Site Demo | | |
| | G1020SiteDemolition | 505,212 |
| | X1010Field/SiteSetup | 175,000 |
| | | 680,212 |

| Description | Amount | Totals | Hours | Rate |
|--------------------------|------------|------------|---------------|----------|
| Labor | 498,970 | | 8,415.447 hrs | |
| Material | 3,595,791 | | | |
| Subcontract | 26,959,301 | | | |
| Other | 1,549,500 | | | |
| | 32,603,562 | 32,603,562 | | |
| Design Contingency | 3,260,356 | | | 10.000 % |
| Sales / Use Tax | 215,747 | | | 6.000 % |
| General Liability | 180,398 | | | 0.500 % |
| Builder's Risk | 114,112 | | | 0.350 % |
| Building Permit | 102,334 | | | |
| Plan Check Fee | 66,517 | | | 65.000 % |
| Public Safety Impact Fee | 13,000 | | | |
| CM/GC Bonds | 273,360 | | | |
| | 4,225,824 | 36,829,386 | | |
| GC Profit | 1,473,175 | | | 4.000 % |
| | 1,473,175 | 38,302,561 | | |
| Owner Contingency | 1,915,128 | | | 5.000 % |
| Arch./Engr. Fee | 3,064,205 | | | 8.000 % |
| Owner FF&E | 1,663,984 | | | 4.344 % |
| Owner's Representative | 367,000 | | | |
| Commissioning | 229,815 | | | 0.600 % |
| Utility Tap Fees | 887 | | | |
| Independent Testing | 120,000 | | | |
| Geotech Survey | 20,000 | | | |
| Auditing | 25,000 | | | |
| | 7,406,019 | 45,708,580 | | |
| Total | | 45,708,580 | | |

Location Summary Hobbs Replacement Conceptual Estimate

K-MACK CONSULTING LLC

| Location | Individual Elements | Total Amount |
|---------------------------|----------------------|--------------|
| 1 - Building Construction | | |
| | A1010StandardFoundtn | 878,907 |
| | A1030SlabOnGrade | 472,021 |
| | B1010FloorConst | 637,829 |
| | B1020RoofConst | 2,214,865 |
| | B2010ExteriorWalls | 2,876,497 |
| | B2020ExteriorWindows | 724,715 |
| | B2030ExteriorDoors | 88,402 |
| | B3010RoofCoverings | 675,383 |
| | B3020RoofOpenings | 130,196 |
| | C1010Partitions | 1,076,357 |
| | C1020InteriorDoors | 386,108 |
| | C1030Specialties | 285,516 |
| | C2010StairConstructn | 65,400 |
| | C3010WallFinishes | 317,184 |
| | C3020FloorFinishes | 488,291 |
| | C3030CeilingFinishes | 527,798 |
| | D1010Elevators&Lifts | 130,000 |
| | D4090OthrFireProtSys | 302,388 |
| | D4910MechComplete | 3,527,860 |
| | D5910ElecComplete | 2,771,890 |
| | E1020InstitutEquip | 17,383 |
| | E1090OtherEquipment | 295,095 |
| | E2010FixedFurnishing | 594,633 |
| | X1010Field/SiteSetup | 1,120,000 |
| | | 20,604,717 |
| 2 - Sitework | | |
| | G1030SiteEarthwork | 350,000 |
| | G2020ParkingLots | 658,500 |
| | G2030PedestrianPvmt | 360,000 |
| | G2040SiteDevelopment | 324,128 |
| | G2050Landscaping | 442,605 |
| | G3010WaterSupply | 100,000 |
| | G3020SanitarySewer | 100,000 |
| | G3030StormSewer | 200,000 |
| | | 2,535,233 |
| 3 - Asbestos Abatement | | |
| | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 70,000 |
| 4 - Building & Site Demo | | 145,000 |
| | G1020SiteDemolition | 551,164 |
| | X1010Field/SiteSetup | 210,000 |
| | · | 761,164 |

| Description | Amount | Totals | Hours | Rate |
|--------------------------|------------|------------|---------------|----------|
| Labor | 367,344 | | 6,263.452 hrs | |
| Material | 2,639,576 | | | |
| Subcontract | 19,630,194 | | | |
| Other _ | 1,409,000 | | | |
| | 24,046,114 | 24,046,114 | | |
| Design Contingency | 2,404,611 | | | 10.000 % |
| Sales / Use Tax | 158,375 | | | 6.000 % |
| General Liability | 133,046 | | | 0.500 % |
| Builder's Risk | 84,161 | | | 0.350 % |
| Building Permit | 100,509 | | | |
| Plan Check Fee | 65,331 | | | 65.000 % |
| Public Safety Impact Fee | 13,000 | | | |
| CM/GC Bonds | 204,559 | | | |
| | 3,163,592 | 27,209,706 | | |
| GC Profit _ | 1,088,388 | | | 4.000 % |
| | 1,088,388 | 28,298,094 | | |
| Owner Contingency | 1,414,905 | | | 5.000 % |
| Arch./Engr. Fee | 2,263,848 | | | 8.000 % |
| Owner FF&E | 1,216,818 | | | 4.300 % |
| Owner's Representative | 317,000 | | | |
| Commissioning | 169,789 | | | 0.600 % |
| Utility Tap Fees | 887 | | | |
| Independent Testing | 120,000 | | | |
| Geotech Survey | 20,000 | | | |
| Auditing _ | 25,000 | | | |
| | 5,548,247 | 33,846,341 | | |
| Total | | 33,846,341 | | |

| Location | Individual Elements | Total Amount |
|--------------------------|----------------------|--------------|
| 1 - Asbestos Abatement | | |
| | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 25,000 |
| | | 100,000 |
| 2 - Building & Site Demo | | |
| _ | G1020SiteDemolition | 412,460 |
| | X1010Field/SiteSetup | 125,000 |
| | | 537,460 |
| 3 - Site Reclamation | | |
| | G1030SiteEarthwork | 217,500 |
| | G2050Landscaping | 253,981 |
| | X1010Field/SiteSetup | 50,000 |
| | | 521,481 |

| Description | Amount | Totals | Hours | Rate |
|---------------------|-----------|-----------|-------|----------|
| Labor | | | | |
| Material | | | | |
| Subcontract | 958,941 | | | |
| Other | 200,000 | | | |
| | 1,158,941 | 1,158,941 | | |
| Contingency | 173,841 | | | 15.000 % |
| General Liability | 6,664 | | | 0.500 % |
| Builder's Risk | 4,056 | | | 0.350 % |
| Building Permit | 7,434 | | | |
| Plan Check Fee | 4,832 | | | 65.000 % |
| CM/GC Bonds | 13,360 | | | |
| | 210,187 | 1,369,128 | | |
| GC Profit | 109,530 | | | 8.000 % |
| | 109,530 | 1,478,658 | | |
| Owner Contingency | 73,933 | | | 5.000 % |
| Arch./Engr. Fee | 103,506 | | | 7.000 % |
| Independent Testing | 35,000 | | | |
| | 212,439 | 1,691,097 | | |
| Total | • | 1,691,097 | | |

| Location | Individual Elements | Total Amount |
|--------------------------|----------------------|--------------|
| 1 - Asbestos Abatement | | |
| | F2020HazardAbatement | 50,000 |
| | X1010Field/SiteSetup | 25,000 |
| | | 75,000 |
| 2 - Building & Site Demo | | |
| | G1020SiteDemolition | 251,520 |
| | X1010Field/SiteSetup | 75,000 |
| | | 326,520 |
| 3 - Site Reclamation | | |
| | G1030SiteEarthwork | 110,000 |
| | G2050Landscaping | 161,000 |
| | X1010Field/SiteSetup | 50,000 |
| | | 321,000 |

| Description | Amount | Totals | Hours | Rate |
|---------------------|---------|-----------|-------|----------|
| Labor | | | | |
| Material | | | | |
| Subcontract | 572,520 | | | |
| Other | 150,000 | | | |
| | 722,520 | 722,520 | | |
| Contingency | 108,378 | | | 15.000 % |
| General Liability | 4,154 | | | 0.500 % |
| Builder's Risk | 2,529 | | | 0.350 % |
| Building Permit | 5,609 | | | |
| Plan Check Fee | 3,646 | | | 65.000 % |
| CM/GC Bonds | 8,449 | | | |
| | 132,765 | 855,285 | | |
| GC Profit | 68,423 | | | 8.000 % |
| | 68,423 | 923,708 | | |
| Owner Contingency | 46,185 | | | 5.000 % |
| Arch./Engr. Fee | 64,660 | | | 7.000 % |
| Independent Testing | 35,000 | | | |
| | 145,845 | 1,069,553 | | |
| Total | • | 1,069,553 | | |

K-MACK CONSULTING LLC

Conceptual Estimate

| Location | Individual Elements | Total Amount |
|---------------------------|----------------------|--------------|
| 1 - Building Construction | | |
| | A1010StandardFoundtn | 1,556,271 |
| | A1030SlabOnGrade | 1,034,700 |
| | B1010FloorConst | 53,975 |
| | B1020RoofConst | 2,146,972 |
| | B2010ExteriorWalls | 2,707,093 |
| | B2020ExteriorWindows | 809,825 |
| | B2030ExteriorDoors | 154,566 |
| | B3010RoofCoverings | 1,437,590 |
| | B3020RoofOpenings | 44,589 |
| | C1010Partitions | 2,172,199 |
| | C1020InteriorDoors | 852,795 |
| | C1030Specialties | 398,345 |
| | C2010StairConstructn | 82,032 |
| | C2020StairFinishes | 15,656 |
| | C3010WallFinishes | 460,903 |
| | C3020FloorFinishes | 715,284 |
| | C3030CeilingFinishes | 926,207 |
| | D4090OthrFireProtSys | 516,324 |
| | D4910MechComplete | 6,023,780 |
| | D5910ElecComplete | 4,806,890 |
| | E1020InstitutEquip | 3,924 |
| | E1090OtherEquipment | 465,605 |
| | E2010FixedFurnishing | 887,297 |
| | X1010Field/SiteSetup | 1,700,000 |
| | | 29,972,819 |
| 2 - Sitework | | |
| | G1030SiteEarthwork | 449,295 |
| | G2010Roadways | 720,329 |
| | G2020ParkingLots | 588,581 |
| | G2030PedestrianPvmt | 705,583 |
| | G2040SiteDevelopment | 554,397 |
| | G2050Landscaping | 1,176,606 |
| | G3010WaterSupply | 202,136 |
| | G3020SanitarySewer | 206,545 |
| | G3030StormSewer | 346,869 |
| | | 4,950,340 |

Conceptual Estimate

Estimate Totals

| Description | Amount | Totals | Hours | Rate |
|------------------------|------------|------------|---------------|----------|
| Labor | 427,568 | | 5,984.628 hrs | |
| Material | 2,909,727 | | | |
| Subcontract | 29,876,614 | | | |
| Other | 1,709,250 | | | |
| | 34,923,159 | 34,923,159 | | |
| Contingency | 3,492,316 | | | 10.000 % |
| Sales / Use Tax | 174,584 | | | 6.000 % |
| General Liability | 192,950 | | | 0.500 % |
| Builder's Risk | 52,385 | | | 0.150 % |
| Building Permit | 147,959 | | | |
| Plan Check Fee | 96,173 | | | 65.000 % |
| Public Safety Fee | 22,625 | | | |
| CM/GC Bonds | 291,802 | | | |
| | 4,470,794 | 39,393,953 | | |
| GC Profit | 1,575,758 | | | 4.000 % |
| | 1,575,758 | 40,969,711 | | |
| Owner Contingency | 2,048,486 | | | 5.000 % |
| Arch./Engr. Fee | 3,277,577 | | | 8.000 % |
| Owner FF&E | 1,761,698 | | | 4.300 % |
| Owner's Representative | 333,000 | | | |
| Commissioning | 225,333 | | | 0.550 % |
| Utility Tap Fees | 77,502 | | | |
| Independent Testing | 150,000 | | | |
| Geotech Survey | 20,000 | | | |
| Auditing | 25,000 | | | |
| | 7,918,596 | 48,888,307 | | |
| | _ | | | |

Total 48,888,307

Conceptual Estimate

| Location | Individual Elements | Total Amount |
|--------------------------|----------------------|--------------|
| 1 - Asbestos Abatement | | |
| | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 50,000 |
| | | 125,000 |
| 2 - Building & Site Demo | | |
| _ | G1020SiteDemolition | 542,844 |
| | X1010Field/SiteSetup | 100,000 |
| | | 642,844 |
| 3 - Site Reclamation | | |
| | G1030SiteEarthwork | 225,000 |
| | G2050Landscaping | 270,481 |
| | X1010Field/SiteSetup | 50,000 |
| | | 545,481 |

| Description | Amount | Totals | Hours | Rate |
|---------------------|-----------|-----------|-------|----------|
| Labor | | | | |
| Material | | | | |
| Subcontract | 1,113,325 | | | |
| Other | 200,000 | | | |
| | 1,313,325 | 1,313,325 | | |
| Contingency | 196,999 | | | 15.000 % |
| General Liability | 7,552 | | | 0.500 % |
| Builder's Risk | 4,597 | | | 0.350 % |
| Building Permit | 7,799 | | | |
| Plan Check Fee | 5,069 | | | 65.000 % |
| CM/GC Bonds | 15,092 | | | |
| | 237,108 | 1,550,433 | | |
| GC Profit | 124,035 | | | 8.000 % |
| | 124,035 | 1,674,468 | | |
| Owner Contingency | 83,723 | | | 5.000 % |
| Arch./Engr. Fee | 117,213 | | | 7.000 % |
| Independent Testing | 35,000 | | | |
| | 235,936 | 1,910,404 | | |
| Total | , | 1,910,404 | | |

449,481

Conceptual Estimate

| Location | Individual Elements | Total Amount |
|--------------------------|----------------------|--------------|
| 1 - Asbestos Abatement | | |
| | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 50,000 |
| | | 125,000 |
| 2 - Building & Site Demo | | |
| | G1020SiteDemolition | 352,756 |
| | X1010Field/SiteSetup | 100,000 |
| | | 452,756 |
| 3 - Site Reclamation | | |
| | G1030SiteEarthwork | 195,000 |
| | G2050Landscaping | 204,481 |
| | X1010Field/SiteSetup | 50,000 |

| Description | Amount | Totals | Hours | Rate |
|---------------------|-----------|-----------|-------|----------|
| Labor | | | | |
| Material | | | | |
| Subcontract | 827,237 | | | |
| Other | 200,000 | | | |
| | 1,027,237 | 1,027,237 | | |
| Contingency | 154,086 | | | 15.000 % |
| General Liability | 5,907 | | | 0.500 % |
| Builder's Risk | 3,595 | | | 0.350 % |
| Building Permit | 6,521 | | | |
| Plan Check Fee | 4,239 | | | 65.000 % |
| CM/GC Bonds | 11,872 | | | |
| | 186,220 | 1,213,457 | | |
| GC Profit | 97,077 | | | 8.000 % |
| | 97,077 | 1,310,534 | | |
| Owner Contingency | 65,527 | | | 5.000 % |
| Arch./Engr. Fee | 91,737 | | | 7.000 % |
| Independent Testing | 35,000 | | | |
| | 192,264 | 1,502,798 | | |
| Total | , | 1,502,798 | | |

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| Location | Individual Elements | Total Amount |
|---------------------------|----------------------|-------------------|
| 1 - Building Construction | | |
| | A1010StandardFoundtn | 878,907 |
| | A1030SlabOnGrade | 472,021 |
| | B1010FloorConst | 173,471 |
| | B1020RoofConst | 2,214,865 |
| | B2010ExteriorWalls | 2,531,317 |
| | B2020ExteriorWindows | 637,749 |
| | B2030ExteriorDoors | 74,002 |
| | B3010RoofCoverings | 675,383 |
| | B3020RoofOpenings | 130,196 |
| | C1010Partitions | 913,667 |
| | C1020InteriorDoors | 328,174 |
| | C1030Specialties | 267,067 |
| | C2010StairConstructn | 65,400 |
| | C3010WallFinishes | 291,540 |
| | C3020FloorFinishes | 436,457 |
| | C3030CeilingFinishes | 465,934 |
| | D1010Elevators&Lifts | 130,000 |
| | D4090OthrFireProtSys | 245,622 |
| | D4910MechComplete | 2,865,590 |
| | D5910ElecComplete | 2,251,535 |
| | E1020InstitutEquip | 17,383 |
| | E1090OtherEquipment | 254,495 |
| | E2010FixedFurnishing | 527,859 |
| | X1010Field/SiteSetup | 1,152,000 |
| | | 18,000,634 |
| 2 - Sitework | | |
| | G1030SiteEarthwork | 350,000 |
| | G2020ParkingLots | 504,500 |
| | G2030PedestrianPvmt | 300,000 |
| | G2040SiteDevelopment | 324,128 |
| | G2050Landscaping | 442,605 |
| | G3010WaterSupply | 100,000 |
| | G3020SanitarySewer | 100,000 |
| | G3030StormSewer | 200,000 |
| | | 2,321,233 |
| 3 - Asbestos Abatement | | _,=,==, == |
| - 1. Choose / Materiality | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 72,000 |
| | | 147,000 |
| 4 - Building & Site Demo | | , , 3 0 0 |
| ananig a one point | G1020SiteDemolition | 393,864 |
| | X1010Field/SiteSetup | 144,000 |
| | | 537,864 |

| Description | Amount | Totals | Hours | Rate |
|--------------------------|------------|------------|---------------|----------|
| Labor | 329,918 | | 5,719.685 hrs | |
| Material | 2,312,191 | | | |
| Subcontract | 16,987,621 | | | |
| Other | 1,377,000 | | | |
| | 21,006,730 | 21,006,730 | | |
| Design Contingency | 2,100,673 | | | 10.000 % |
| Sales / Use Tax | 138,731 | | | 6.000 % |
| General Liability | 116,231 | | | 0.500 % |
| Builder's Risk | 73,524 | | | 0.350 % |
| Building Permit | 102,334 | | | |
| Plan Check Fee | 66,517 | | | 65.000 % |
| Public Safety Impact Fee | 13,000 | | | |
| CM/GC Bonds | 180,104 | | | |
| | 2,791,114 | 23,797,844 | | |
| GC Profit | 951,914 | | | 4.000 % |
| | 951,914 | 24,749,758 | | |
| Owner Contingency | 1,237,488 | | | 5.000 % |
| Arch./Engr. Fee | 1,979,981 | | | 8.000 % |
| Owner FF&E | 1,064,240 | | | 4.300 % |
| Owner's Representative | 304,000 | | | |
| Commissioning | 148,499 | | | 0.600 % |
| Utility Tap Fees | 1,000 | | | |
| Independent Testing | 100,000 | | | |
| Geotech Survey | 20,000 | | | |
| Auditing _ | 25,000 | | | |
| | 4,880,208 | 29,629,966 | | |
| Total | | 29,629,966 | | |

Location Summary *Meadowlark Addition*

K-MACK CONSULTING LLC

Conceptual Estimate

| Location | Individual Elements | Total Amount |
|---------------------------|----------------------|--------------|
| 1 - Building Construction | | |
| _ | A1010StandardFoundtn | 555,988 |
| | A1030SlabOnGrade | 517,475 |
| | B1020RoofConst | 1,462,969 |
| | B2010ExteriorWalls | 1,483,199 |
| | B2020ExteriorWindows | 259,200 |
| | B2030ExteriorDoors | 41,922 |
| | B3010RoofCoverings | 571,745 |
| | B3020RoofOpenings | 94,196 |
| | C1010Partitions | 696,268 |
| | C1020InteriorDoors | 144,890 |
| | C1030Specialties | 143,316 |
| | C3010WallFinishes | 113,367 |
| | C3020FloorFinishes | 248,100 |
| | C3030CeilingFinishes | 261,325 |
| | D4090OthrFireProtSys | 196,998 |
| | D4910MechComplete | 2,626,640 |
| | D5910ElecComplete | 1,805,815 |
| | E1020InstitutEquip | 3,482 |
| | E2010FixedFurnishing | 275,700 |
| | X1010Field/SiteSetup | 888,000 |
| | | 12,390,594 |
| 2 - Sitework | | |
| | G1020SiteDemolition | 110,000 |
| | G1030SiteEarthwork | 250,000 |
| | G2030PedestrianPvmt | 180,000 |
| | G2040SiteDevelopment | 68,544 |
| | G2050Landscaping | 188,640 |
| | G3020SanitarySewer | 50,000 |
| | G3030StormSewer | 200,000 |
| | | 1,047,184 |

| Description | Amount | Totals | Hours | Rate |
|--------------------------|------------|------------|---------------|----------|
| Labor | 260,380 | | 4,509.126 hrs | |
| Material | 1,570,557 | | | |
| Subcontract | 10,710,340 | | | |
| Other _ | 896,500 | | | |
| | 13,437,777 | 13,437,777 | | |
| Design Contingency | 2,015,667 | | | 15.000 % |
| Sales / Use Tax | 94,233 | | | 6.000 % |
| General Liability | 77,738 | | | 0.500 % |
| Builder's Risk | 47,032 | | | 0.350 % |
| Building Permit | 96,494 | | | |
| Plan Check Fee | 62,721 | | | 65.000 % |
| Public Safety Impact Fee | 10,440 | | | |
| CM/GC Bonds _ | 123,717 | | | |
| | 2,528,042 | 15,965,819 | | |
| GC Profit | 638,633 | | | 4.000 % |
| | 638,633 | 16,604,452 | | |
| Owner Contingency | 830,223 | | | 5.000 % |
| Arch./Engr. Fee | 1,394,774 | | | 8.000 % |
| Owner FF&E | 713,991 | | | 4.300 % |
| Owner's Representative | 200,000 | | | |
| Commissioning | 99,627 | | | 0.600 % |
| Independent Testing | 50,000 | | | |
| Auditing _ | 15,000 | | | |
| | 3,303,615 | 19,908,067 | | |
| Total | | 19,908,067 | | |

250,000

180,000

65,797

188,640 100,000

894,437

Location Summary Coyote Ridge Addition Conceptual Estimate

K-MACK CONSULTING LLC

Individual Elements Total Amount Location 1 - Building Construction A1010StandardFoundtn 335,725 A1030SlabOnGrade 184,558 B1020RoofConst 871,505 **B2010ExteriorWalls** 844,686 **B2020ExteriorWindows** 200,000 28,800 **B2030ExteriorDoors** 239,800 **B3010RoofCoverings B3020RoofOpenings** 64,196 C1010Partitions 352,022 C1020InteriorDoors 139,247 79,888 C1030Specialties C3010WallFinishes 76,281 C3020FloorFinishes 137,200 C3030CeilingFinishes 111,325 D4090OthrFireProtSys 81,018 D4910MechComplete 1,080,240 D5910ElecComplete 742,665 E1020InstitutEquip 6,953 E2010FixedFurnishing 199,962 X1010Field/SiteSetup 840,000 6,616,071 2 - Sitework 110,000 G1020SiteDemolition

G1030SiteEarthwork

G2050Landscaping

G3030StormSewer

G2030PedestrianPvmt

G2040SiteDevelopment

| Description | Amount | Totals | Hours | Rate |
|--------------------------|-----------|------------|---------------|----------|
| Labor | 121,056 | | 2,130.390 hrs | |
| Material | 931,717 | | | |
| Subcontract | 5,609,735 | | | |
| Other _ | 848,000 | | | |
| | 7,510,508 | 7,510,508 | | |
| Design Contingency | 1,126,576 | | | 15.000 % |
| Sales / Use Tax | 55,903 | | | 6.000 % |
| General Liability | 43,465 | | | 0.500 % |
| Builder's Risk | 26,287 | | | 0.350 % |
| Building Permit | 40,649 | | | |
| Plan Check Fee | 26,422 | | | 65.000 % |
| Public Safety Impact Fee | 3,654 | | | |
| CM/GC Bonds _ | 72,888 | | | |
| | 1,395,844 | 8,906,352 | | |
| GC Profit _ | 356,254 | | | 4.000 % |
| | 356,254 | 9,262,606 | | |
| Owner Contingency | 463,130 | | | 5.000 % |
| Arch./Engr. Fee | 778,059 | | | 8.000 % |
| Owner FF&E | 398,292 | | | 4.300 % |
| Owner's Representative | 78,732 | | | 0.850 % |
| Commissioning | 78,732 | | | 0.850 % |
| Independent Testing | 75,000 | | | |
| Geotech Survey _ | 10,000 | | | |
| | 1,881,945 | 11,144,551 | | |
| Total | | 11,144,551 | | |

| Location | Individual Elements | Total Amount |
|--------------------------|----------------------|--------------|
| 1 - Asbestos Abatement | | |
| | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 50,000 |
| | | 125,000 |
| 2 - Building & Site Demo | | |
| | G1020SiteDemolition | 453,204 |
| | X1010Field/SiteSetup | 100,000 |
| | | 553,204 |
| 3 - Site Reclamation | | |
| | G1030SiteEarthwork | 207,500 |
| | G2050Landscaping | 231,981 |
| | X1010Field/SiteSetup | 50,000 |
| | | 489,481 |

| Description | Amount | Totals | Hours | Rate |
|---------------------|-----------|-----------|-------|----------|
| Labor | | | | |
| Material | | | | |
| Subcontract | 967,685 | | | |
| Other | 200,000 | | | |
| | 1,167,685 | 1,167,685 | | |
| Contingency | 175,153 | | | 15.000 % |
| General Liability | 6,714 | | | 0.500 % |
| Builder's Risk | 4,087 | | | 0.350 % |
| Building Permit | 6,799 | | | |
| Plan Check Fee | 4,419 | | | 65.000 % |
| CM/GC Bonds | 13,447 | | | |
| | 210,619 | 1,378,304 | | |
| GC Profit | 110,264 | | | 8.000 % |
| | 110,264 | 1,488,568 | | |
| Owner Contingency | 74,428 | | | 5.000 % |
| Arch./Engr. Fee | 104,200 | | | 7.000 % |
| Independent Testing | 35,000 | | | |
| · · | 213,628 | 1,702,196 | | |
| Total | , | 1,702,196 | | |

Conceptual Estimate

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| Location | Individual Elements | Total Amount |
|--------------------------|----------------------|--------------|
| 1 - Asbestos Abatement | | |
| | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 50,000 |
| | | 125,000 |
| 2 - Building & Site Demo | | |
| | G1020SiteDemolition | 336,974 |
| | X1010Field/SiteSetup | 100,000 |
| | | 436,974 |
| 3 - Site Reclamation | | |
| | G1030SiteEarthwork | 165,000 |
| | G2050Landscaping | 125,000 |
| | X1010Field/SiteSetup | 50,000 |
| | | 340,000 |

| Description | Amount | Totals | Hours | Rate |
|---------------------|---------|-----------|-------|----------|
| Labor | | | | |
| Material | | | | |
| Subcontract | 701,974 | | | |
| Other | 200,000 | | | |
| | 901,974 | 901,974 | | |
| Contingency | 135,296 | | | 15.000 % |
| General Liability | 5,186 | | | 0.500 % |
| Builder's Risk | 3,157 | | | 0.350 % |
| Building Permit | 5,930 | | | |
| Plan Check Fee | 3,855 | | | 65.000 % |
| CM/GC Bonds | 10,462 | | | |
| | 163,886 | 1,065,860 | | |
| GC Profit | 85,269 | | | 8.000 % |
| | 85,269 | 1,151,129 | | |
| Owner Contingency | 57,556 | | | 5.000 % |
| Arch./Engr. Fee | 80,579 | | | 7.000 % |
| Independent Testing | 35,000 | | | |
| | 173,135 | 1,324,264 | | |
| Total | , | 1,324,264 | | |

489,481

| Location | Individual Elements | Total Amount |
|--------------------------|----------------------|--------------|
| 1 - Asbestos Abatement | | |
| | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 50,000 |
| | | 125,000 |
| 2 - Building & Site Demo | | |
| _ | G1020SiteDemolition | 497,910 |
| | X1010Field/SiteSetup | 100,000 |
| | | 597,910 |
| 3 - Site Reclamation | | |
| | G1030SiteEarthwork | 207,500 |
| | G2050Landscaping | 231,981 |
| | X1010Field/SiteSetup | 50,000 |

| Description | Amount | Totals | Hours | Rate |
|---------------------|-----------|-----------|-------|----------|
| Labor | | | | |
| Material | | | | |
| Subcontract | 1,012,391 | | | |
| Other | 200,000 | | | |
| | 1,212,391 | 1,212,391 | | |
| Contingency | 181,859 | | | 15.000 % |
| General Liability | 6,971 | | | 0.500 % |
| Builder's Risk | 4,243 | | | 0.350 % |
| Building Permit | 7,069 | | | |
| Plan Check Fee | 4,595 | | | 65.000 % |
| CM/GC Bonds | 13,952 | | | |
| | 218,689 | 1,431,080 | | |
| GC Profit | 114,486 | | | 8.000 % |
| | 114,486 | 1,545,566 | | |
| Owner Contingency | 77,278 | | | 5.000 % |
| Arch./Engr. Fee | 108,190 | | | 7.000 % |
| Independent Testing | 35,000 | | | |
| | 220,468 | 1,766,034 | | |
| Total | | 1,766,034 | | |

| Location | Individual Elements | Total Amount |
|--------------------------|----------------------|--------------|
| 1 - Asbestos Abatement | | |
| | F2020HazardAbatement | 75,000 |
| | X1010Field/SiteSetup | 25,000 |
| | | 100,000 |
| 2 - Building & Site Demo | | |
| | G1020SiteDemolition | 324,140 |
| | X1010Field/SiteSetup | 75,000 |
| | | 399,140 |
| 3 - Site Reclamation | | |
| | G1030SiteEarthwork | 165,000 |
| | G2050Landscaping | 138,481 |
| | X1010Field/SiteSetup | 50,000 |
| | | 353,481 |

Estimate Totals

| Description | Amount | Totals | Hours | Rate |
|---------------------|---------|-----------|-------|----------|
| Labor | | | | |
| Material | | | | |
| Subcontract | 702,621 | | | |
| Other | 150,000 | | | |
| | 852,621 | 852,621 | | |
| Contingency | 127,893 | | | 15.000 % |
| General Liability | 4,903 | | | 0.500 % |
| Builder's Risk | 2,984 | | | 0.350 % |
| Building Permit | 5,609 | | | |
| Plan Check Fee | 3,646 | | | 65.000 % |
| CM/GC Bonds | 9,905 | | | |
| | 154,940 | 1,007,561 | | |
| GC Profit | 80,605 | | | 8.000 % |
| | 80,605 | 1,088,166 | | |
| Owner Contingency | 54,408 | | | 5.000 % |
| Arch./Engr. Fee | 76,172 | | | 7.000 % |
| Independent Testing | 35,000 | | | |
| | 165,580 | 1,253,746 | | |
| Total | • | 1,253,746 | | |

Location Summary Saddle Ridge II (New Construction) Conceptual Estimate

K-MACK CONSULTING LLC

| Location | Individual Elements | Total Amount |
|---------------------------|----------------------|--------------|
| 1 - Building Construction | | |
| | A1010StandardFoundtn | 944,826 |
| | A1030SlabOnGrade | 472,021 |
| | B1020RoofConst | 2,443,201 |
| | B2010ExteriorWalls | 2,531,317 |
| | B2020ExteriorWindows | 637,749 |
| | B2030ExteriorDoors | 74,002 |
| | B3010RoofCoverings | 710,627 |
| | B3020RoofOpenings | 130,196 |
| | C1010Partitions | 910,451 |
| | C1020InteriorDoors | 328,174 |
| | C1030Specialties | 267,067 |
| | C3010WallFinishes | 284,220 |
| | C3020FloorFinishes | 424,457 |
| | C3030CeilingFinishes | 449,934 |
| | D4090OthrFireProtSys | 233,928 |
| | D4910MechComplete | 2,729,160 |
| | D5910ElecComplete | 2,144,340 |
| | E1020InstitutEquip | 17,383 |
| | E1090OtherEquipment | 289,495 |
| | E2010FixedFurnishing | 527,859 |
| | X1010Field/SiteSetup | 1,152,000 |
| | · | 17,702,407 |
| 2 - Sitework | | |
| | G1030SiteEarthwork | 400,000 |
| | G2020ParkingLots | 504,500 |
| | G2030PedestrianPvmt | 300,000 |
| | G2040SiteDevelopment | 395,698 |
| | G2050Landscaping | 442,605 |
| | G3010WaterSupply | 100,000 |
| | G3020SanitarySewer | 100,000 |
| | G3030StormSewer | 200,000 |
| | | 2,442,803 |

Saddle Ridge II (New Construction) Conceptual Estimate

Estimate Totals

| Description | Amount | Totals | Hours | Rate |
|--------------------------|------------|------------|---------------|----------|
| Labor | 329,968 | | 5,760.035 hrs | |
| Material | 2,343,610 | | | |
| Subcontract | 16,310,633 | | | |
| Other _ | 1,161,000 | | | |
| | 20,145,211 | 20,145,211 | | |
| Design Contingency | 2,014,521 | | | 10.000 % |
| Sales / Use Tax | 140,617 | | | 6.000 % |
| General Liability | 111,502 | | | 0.500 % |
| Builder's Risk | 70,508 | | | 0.350 % |
| Building Permit | 102,334 | | | |
| Plan Check Fee | 66,517 | | | 65.000 % |
| Public Safety Impact Fee | 13,000 | | | |
| CM/GC Bonds | 173,502 | | | |
| | 2,692,501 | 22,837,712 | | |
| GC Profit | 913,508 | | | 4.000 % |
| | 913,508 | 23,751,220 | | |
| Owner Contingency | 1,187,561 | | | 5.000 % |
| Arch./Engr. Fee | 1,900,098 | | | 8.000 % |
| Owner FF&E | 1,021,302 | | | 4.300 % |
| Owner's Representative | 267,000 | | | |
| Commissioning | 142,507 | | | 0.600 % |
| Utility Tap Fees | 77,000 | | | |
| Independent Testing | 100,000 | | | |
| Geotech Survey | 20,000 | | | |
| Auditing _ | 25,000 | | | |
| | 4,740,468 | 28,491,688 | | |
| Total | | 28,491,688 | | |

A06 Site diagrams

Concept site diagrams are for test-fit purposes only and therefore only intended to show a concept that the building size and other site requirements fit on the site. These diagrams are not a representation of the final site layout and design.



SUBJECT WEST SITE INFORMATION:

1. PIDN: 13661730501400

2. NAME: LARAMIE COUNTY SCHOOL DIST NO 1 3. MAIL ADDR: 2810 HOUSE AVE

4. MAIL ADDR: CHEYENNE, WY 82001 5. ST ADDR: 402 W WALLICK RD

6. LOCATION: AFFLERBACH ADDITION: LOT 2,

7. TYPE: EXEMPT 8. ACRES: 29.20 ACRES

AND DESIGN.

9. TAX DISTRICT: 0130 9. TAX DISTRICT: 0130 THIS CONCEPT DIAGRAM IS INTENDED TO SHOW THE CONCEPT THAT THE BUILDING SIZE AND OTHER SITE REQUIREMENTS FIT ON THE SITE. THIS DIAGRAM IS NOT A REPRESENTATION OF THE FINAL SITE LAYOUT

2. NAME: LARAMIE COUNTY SCHOOL DIST NO 1

6. LOCATION: AFFLERBACH ADDITION: LOT 1,

3. MAIL ADDR: 2810 HOUSE AVE 4. MAIL ADDR: CHEYENNE, WY 82001

5. ST ADDR: 400 W WALLICK RD

BLOCK 1

7. TYPE: EXEMPT

8. ACRES: 20.63 ACRES

MAP DATA SOURCES AND NOTES:

NO SITE SURVEY WAS CONDUCTED.

2. DATA SOURCES UTILIZED FOR MAP GENERATION:

2.1. LOT DIMENSIONS SHOWN HEREIN ARE DERIVED USING LARAMIE COUNTY GIS DATA.

2.2. AERIAL IMAGERY SHOWN HEREIN DERIVED FROM LARAMIE COUNTY IMAGERY COLLECTED IN 2020. 2.3. ELEVATION CONTOUR INFORMATION SHOWN HEREIN ARE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2021.

2.4. EXISTING SITE UTILITIES APPROXIMATE PER CHEYENNE BOARD OF PUBLIC UTILITIES MUNICIPAL

2.5. PROPERTY EASEMENTS GENERATED FROM AFFLERBACH ADDITION PLAT MAP DATED MAY 1986. 3. LARAMIE COUNTY LAND DEVELOPMENT REGULATIONS FOR P-PUBLIC ZONING WERE REFERENCED FOR

PROPERTY SETBACKS. 4. UNDERGROUND UTILITIES AND SUBSURFACE IMPROVEMENTS ARE APPROXIMATE LOCATIONS ONLY. ADDITIONAL SUBSURFACE IMPROVEMENTS NOT SHOWN HEREON MAY EXIST.

5. ALL ELEVATIONS ARE ASSUMED BASED ON COUNTY LIDAR DATA.

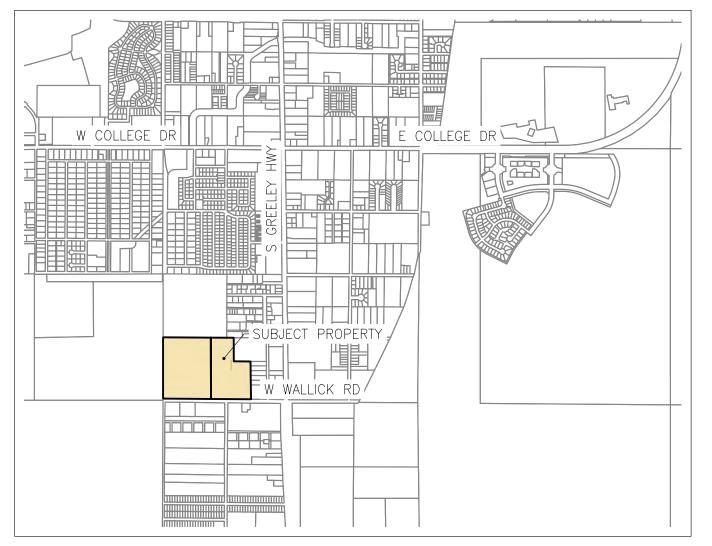
6. ALL PROPERTY AND DEVELOPMENT SETBACKS ARE TO BE VERIFIED.

7. EASEMENTS OF SIGHT AND RECORD NOT SHOWN HEREON MAY EXIST.

8. SUBJECT SITE DESIGNATED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD, PER NATIONAL FLOOD HAZARD FIRM PANEL 56021C1358F EFF. 1/17/2007.

PLAN ACCURACY DISCLAIMER

THIS SITE PLAN IS CONCEPTUAL ONLY AND BASED ON PUBLICLY AVAILABLE DATA AND OTHER DOCUMENTS REFERENCED WITH KNOWN INACCURACIES. THIS PLAN IS NOT TO BE UTILIZED FOR CONSTRUCTION OR PERMITTING PURPOSES. ALL MEASUREMENTS AND LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.



VICINITY MAP



LEGEND (E) - EXISTING (P) - PROPOSED **LEGEND**

HYDRANT

(E) INTERMEDIATE CONTOUR LINE SUBJECT PROPERTY BOUNDARY NEIGHBORING PROPERTY BOUNDARY

EASEMENT LINE

SETBACK LINE

(E) INDEX CONTOUR LINE

(P) ASPHALT (P) STORMWATER AREA

MANHOLE - SEWER

MANHOLE - WATER

MANHOLE - STORM DRAIN

(Y2)

(P) STRUCTURE (P) EDGE OF ASPHALT

(E) WATER SERVICE (E) SEWER MAIN

—— SD—— SD—— SD—— (E) STORM DRAIN

— ss—— ss—— ss—— (E) SEWER SERVICE

(P) PLAYGROUND AREA

10" WATER SERVICE STUB

16" WATER MAIN

42" WATER MAIN-

NEW SOUTH 5-6 **NEW SITE OVERVIEW**

PROPOSED BUILDING TO CONNECT TO PUBLIC MAINS

PROPOSED STORMWATER

MANAGEMENT AREA

63,000 SF

BLOWOFF HYDRANT

SCWS COLLECTION & DISTRIBUTION SYSTEM SIZE UNKNOWN

W WALLICK RD

SUBJECT EAST SITE INFORMATION: 1. PIDN: 13661730501300

N 89°38'13" W

LARAMIE COUNTY SCHOOL

DIST NO 1

AFFLERBACH ELEMENTARY

402 W WALLICK RD

CHEYENNE, WY 82001

SCWS COLLECTION &

DISTRIBUTION SYSTEM

SIZE UNKNOWN

PROPOSED

PLAYGROUND AREA /150,000/SF/

PROPOSED SCHOOL BUILDING 75,000 SF

-PROPOSED BUS LOOP

PROPOSED FACULTY

PARKING AREA 72,000 SF

36" WATER MAIN-

S-89°34'30"

PRESSURE RELEASE VAULT

EASEMENT, TYP.

5069 89°38 19"

1/44.40

20' SEWER & WATER EASEMENT

LARAMIE COUNTY SCHOOL DIST NO 1 AFFLERBACH ELEMENTARY

400 W WALLICK RD

CHEYENNE, WY 82001

9' SEWER & DRAINAGE RESERVATION,

BOOK 1106 PAGE 1176

25' ROAD RESERVATION

BOOK 1106, PAGE 1176

40' ROAD RESERVATION,

BOOK 1/106, PAGE 1176

Drafter: Reviewer:



W NATION RD

DISTRIC LARAMIE COUNTY
WYOMING

Set Title: CONCEPT SITE

DIAGRAMS PLOT DATE Plot Date: PROGRESS SET 9/23/24

AFFLERBACH ELEMENTARY 5-6 NEW

THIS CONCEPT DIAGRAM IS INTENDED TO SHOW THE CONCEPT THAT THE BUILDING SIZE AND OTHER SITE REQUIREMENTS FIT ON THE SITE. THIS DIAGRAM IS NOT A REPRESENTATION OF THE FINAL SITE LAYOUT AND DESIGN.

SUBJECT SITE INFORMATION:

- 1. PIDN: 13660920202600
- 2. NAME: LARAMIE COUNTY SCHOOL DIST NO 1
- 3. MAIL ADDR: 2810 HOUSE AVE
- 4. MAIL ADDR: CHEYENNE, WY 82001
- 5. ST ADDR: 1216 REINER CT
- 6. LOCATION: ARP ELEMENTARY SCHOOL, 1ST FILING: LOT 1, BLOCK 1
- 7. TYPE: EXEMPT
- 8. ACRES: 16.86 ACRES
 9. TAX DISTRICT: 0130

MAP DATA SOURCES AND NOTES:

- 1. NO SITE SURVEY WAS CONDUCTED.
- 2. DATA SOURCES UTILIZED FOR MAP GENERATION:
- 2. DATA SOURCES UTILIZED FOR MAP GENERATION:
 2.1. LOT DIMENSIONS SHOWN HEREIN ARE DERIVED USING LARAMIE COUNTY GIS DATA.
- 2.2. AERIAL IMAGERY SHOWN HEREIN DERIVED FROM LARAMIE COUNTY IMAGERY COLLECTED IN 2020.
- 2.3. ELEVATION CONTOUR INFORMATION SHOWN HEREIN ARE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2021.

 2.4. EXISTING SITE UTILITIES APPROXIMATE LOCATION PER BOARD OF PUBLIC UTILITIES MUNICIPAL SYSTEM GIS
- 2.4. EXISTING SITE UTILITIES APPROXIMATE LOCATION PER BOARD OF PUBLIC UTILITIES MUNICIPAL SYSTEM GIS VIEWER.
- 2.5. ARP ELEMENTARY SCHOOL 1ST FILING PLAT MAP DATED 10/2012 REFERENCED FOR PROPERTY EASEMENTS.
 3. LARAMIE COUNTY LAND DEVELOPMENT REGULATIONS FOR P-PUBLIC ZONING WERE REFERENCED FOR PROPERTY SETBACKS.
- 4. UNDERGROUND UTILITIES AND SUBSURFACE IMPROVEMENTS ARE APPROXIMATE LOCATIONS ONLY. ADDITIONAL SUBSURFACE IMPROVEMENTS NOT SHOWN HEREON MAY EXIST.
- 5. ALL ELEVATIONS ARE ASSUMED BASED LIDAR DATA.
- 6. ALL PROPERTY AND DEVELOPMENT SETBACKS ARE TO BE VERIFIED.
- 7. EASEMENTS OF SIGHT AND RECORD NOT SHOWN HEREON MAY EXIST.
- 8. SUBJECT SITE IS IN FEMA FLOODPLAIN AS IDENTIFIED ON MAP AND NOTED BELOW:
- 8.1 100 YR FLOODPLAIN, ZONE AE, PER NATIONAL FLOOD HAZARD FIRM PANEL 56021C1356F EFFECTIVE DATE 1/2007; REVISED 9/27/12.
- 8.2 500 YR FLOODPLAIN, ZONE X, PER NATIONAL FLOOD HAZARD FIRM PANEL 56021C1356F EFFECTIVE DATE 1/2007; REVISED 9/27/12.

PLAN ACCURACY DISCLAIMER

THIS SITE PLAN IS CONCEPTUAL ONLY AND BASED ON PUBLICLY AVAILABLE DATA AND OTHER DOCUMENTS REFERENCED WITH KNOWN INACCURACIES. THIS PLAN IS NOT TO BE UTILIZED FOR CONSTRUCTION OR PERMITTING PURPOSES. ALL MEASUREMENTS AND LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.



VICINITY MAP

1" = 1000' (24×36 SHEET)

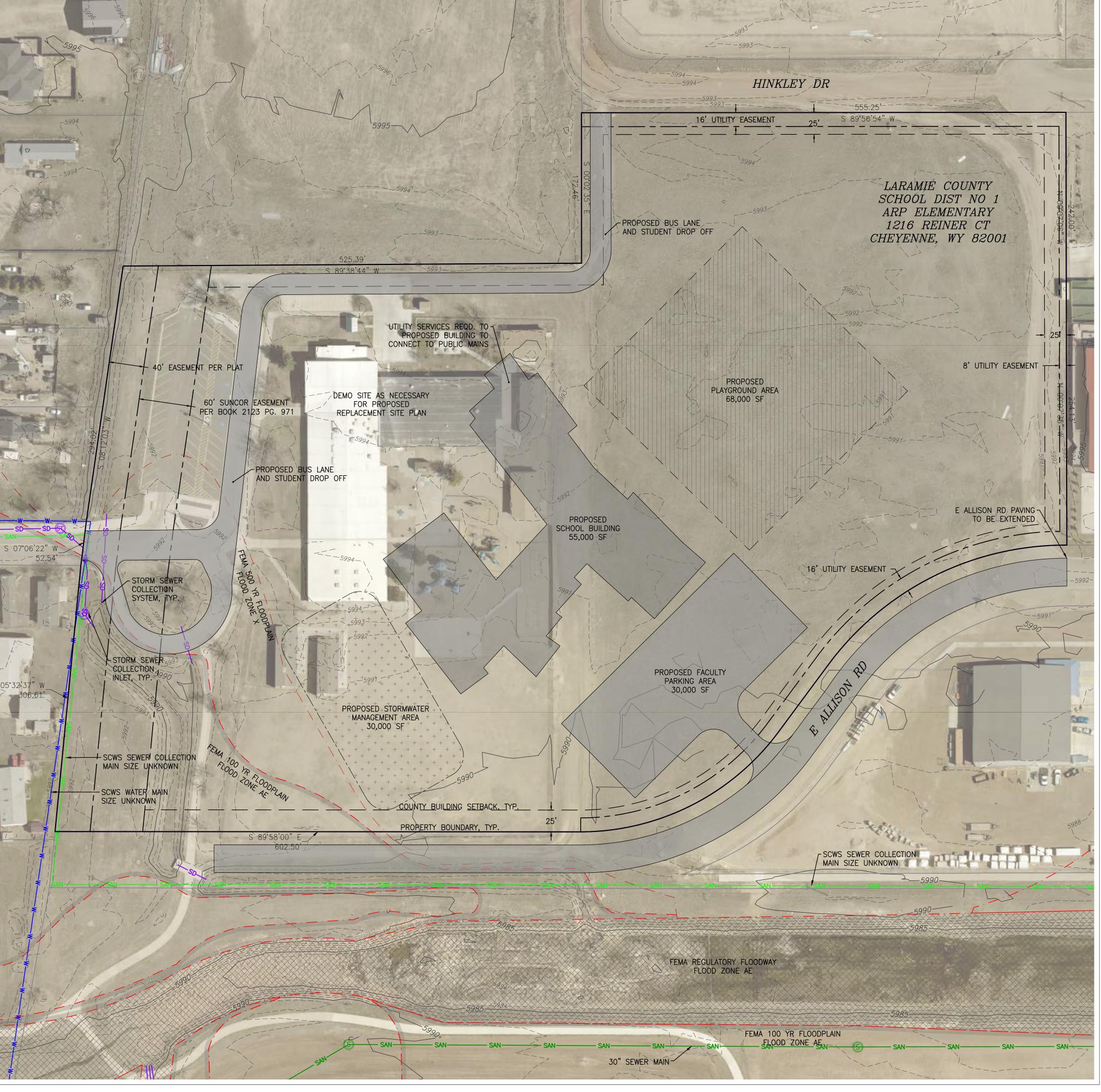
(E) WATER SERVICE

(E) SEWER SERVICE

(E) SEWER MAIN

LEGEND LEGEND (E) - EXISTING (P) - PROPOSED HYDRANT (E) INDEX CONTOUR LINE (E) INTERMEDIATE CONTOUR LINE MANHOLE - STORM DRAIN SUBJECT PROPERTY BOUNDARY MANHOLE - SEWER NEIGHBORING PROPERTY BOUNDARY MANHOLE - WATER EASEMENT LINE (P) ASPHALT (P) STORMWATER AREA (P) STRUCTURE (P) PLAYGROUND AREA (P) EDGE OF ASPHALT

FLOODPLAIN ZONE AE



ARP ELEMENTARY
REPLACEMENT SITE OVERVIEW

Job No.24020Drafter:TKReviewer:SH

ULTE ANTES
SURVEYING & PLANNING
CHITECTURE, GIS

G N S C ENGINEERING, SURVEY



MCER COUNTY SCHOOL DISTRICT

LARAMIE CONCEPT SITE

CONCEPT SITE DIAGRAMS

Plot Date: PLOT DATE

Desc. Date

PROGRESS SET 9/23/24

ARP ELEMENTARY
REPLACEMENT

C1 /

ARP ELEMINATION ARP ELEMINATION OF THE SHEET)

SHEET)

ARP ELEMINATION OF THE SHEET OF THE SHEET

THIS CONCEPT DIAGRAM IS INTENDED TO SHOW THE CONCEPT THAT THE BUILDING SIZE AND OTHER SITE REQUIREMENTS FIT ON THE SITE. THIS DIAGRAM IS NOT A REPRESENTATION OF THE FINAL SITE LAYOUT AND DESIGN.

SUBJECT SITE INFORMATION:

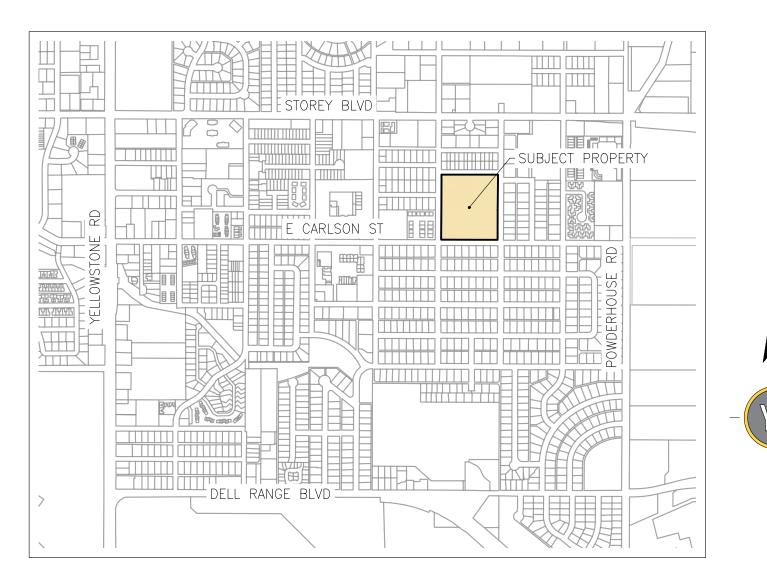
- 1. PIDN: 14661910401400
- 2. NAME: LARAMIE COUNTY SCHOOL DIST NO 1
- 3. MAIL ADDR: 2810 HOUSE AVE
- 4. MAIL ADDR: CHEYENNE, WY 82001
- 5. ST ADDR: 5710 SYRACUSE RD
- 6. LOCATION: AIRPORT VALLEY TRACTS: SOUTH 56.95 TRACT 8; ALL TRACT 13 AND 18
- 7. TYPE: EXEMPT
- 8. ACRES: 9.22 ACRES
- 9. TAX DISTRICT: 0150

MAP DATA SOURCES AND NOTES:

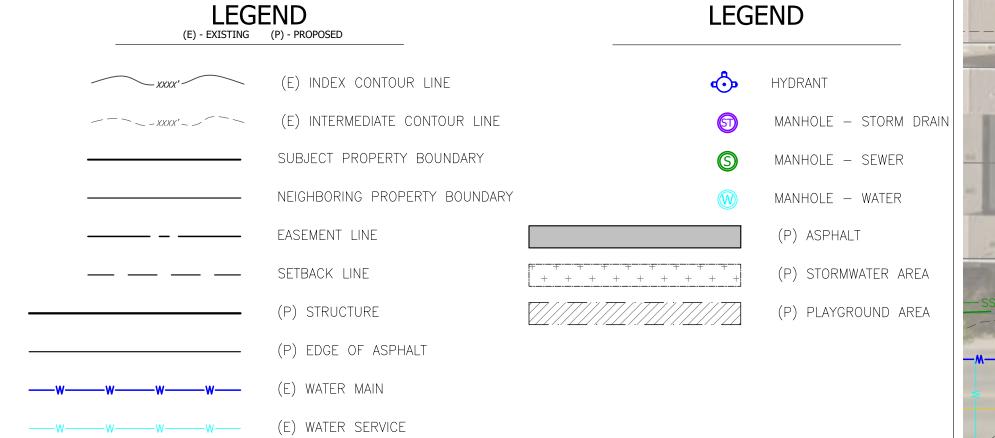
- NO SITE SURVEY WAS CONDUCTED.
- 2. DATA SOURCES UTILIZED FOR MAP GENERATION:
- 2.1. LOT DIMENSIONS SHOWN HEREIN ARE DERIVED USING LARAMIE COUNTY GIS DATA.
- 2.2. AERIAL IMAGERY SHOWN HEREIN DERIVED FROM LARAMIE COUNTY IMAGERY COLLECTED IN 2020. 2.3. ELEVATION CONTOUR INFORMATION SHOWN HEREIN ARE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2021.
- 2.4. EXISTING SITE UTILITIES APPROXIMATE LOCATION PER SITE AS-BUILT SURVEY CONDUCTED MARCH 1986 AND PER CHEYENNE BOARD OF PUBLIC UTILITIES MUNICIPAL SYSTEM GIS VIEWER.
- 2.5. AIRPORT VALLEY TRACT PLAT MAT REFERENCED TRACT PLATS.
- 3. LARAMIE COUNTY LAND DEVELOPMENT REGULATIONS FOR P-PUBLIC ZONING WERE REFERENCED FOR PROPERTY
- 4. UNDERGROUND UTILITIES AND SUBSURFACE IMPROVEMENTS ARE APPROXIMATE LOCATIONS ONLY. ADDITIONAL SUBSURFACE IMPROVEMENTS NOT SHOWN HEREON MAY EXIST.
- 5. ALL ELEVATIONS ARE ASSUMED BASED LIDAR DATA.
- 6. ALL PROPERTY AND DEVELOPMENT SETBACKS ARE TO BE VERIFIED. 7. EASEMENTS OF SIGHT AND RECORD NOT SHOWN HEREON MAY EXIST.
- 8. SUBJECT SITE DESIGNATED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD, PER NATIONAL FLOOD HAZARD FIRM PANEL 56021C1087F EFF. 1/17/2007.

PLAN ACCURACY DISCLAIMER

THIS SITE PLAN IS CONCEPTUAL ONLY AND BASED ON PUBLICLY AVAILABLE DATA AND OTHER DOCUMENTS REFERENCED WITH KNOWN INACCURACIES. THIS PLAN IS NOT TO BE UTILIZED FOR CONSTRUCTION OR PERMITTING PURPOSES. ALL MEASUREMENTS AND LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.



VICINITY MAP



(E) SEWER MAIN

(E) GAS LINE

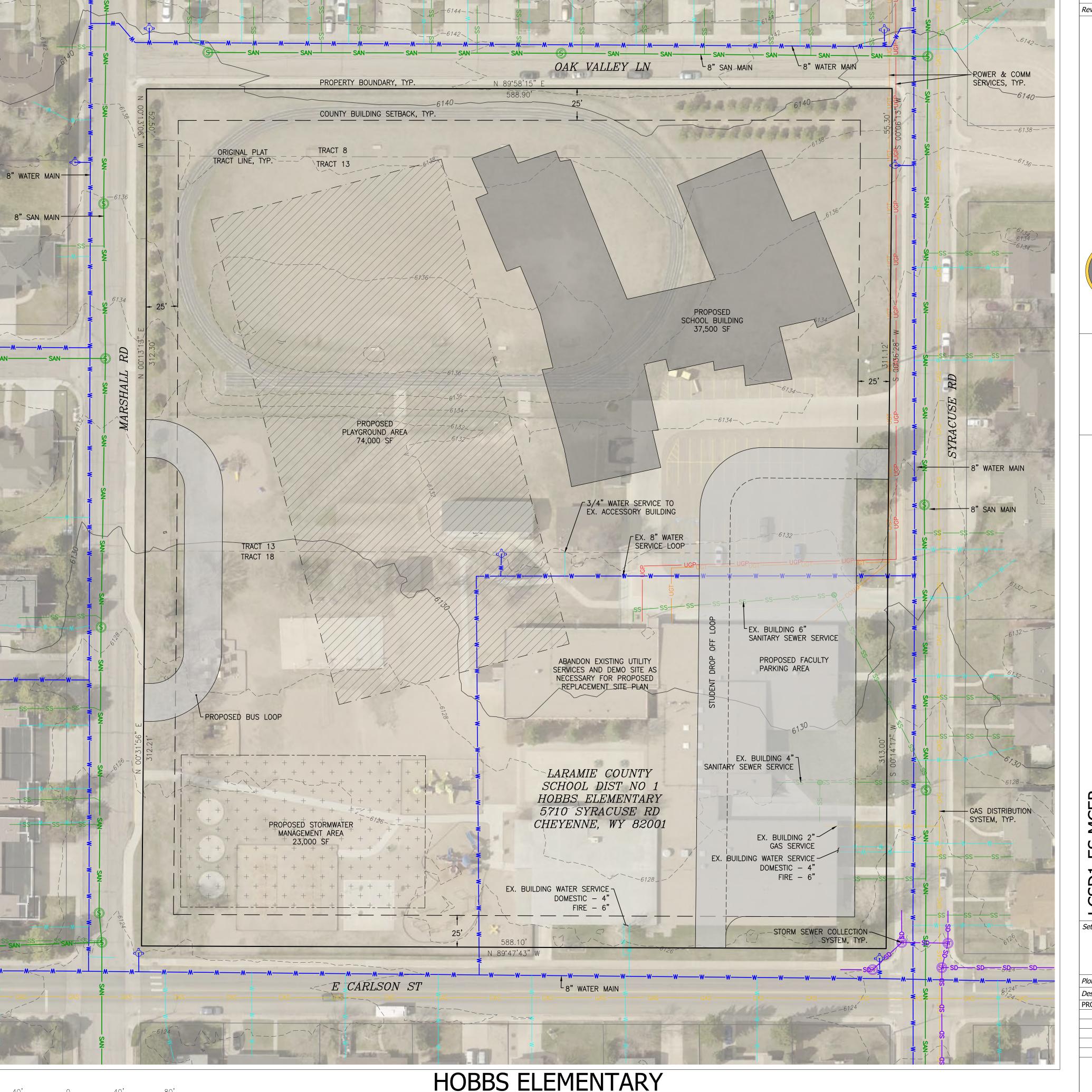
(E) TELEPHONE LINE

—— ss—— ss—— (E) SEWER SERVICE

— SD—— SD—— SD—— (E) STORM DRAIN







Drafter: Reviewer:

Set Title:

CONCEPT SITE DIAGRAMS PROGRESS SET

HOBBS ELEMENTARY

REPLACEMENT

THIS CONCEPT DIAGRAM IS INTENDED TO SHOW THE CONCEPT THAT THE BUILDING SIZE AND OTHER SITE REQUIREMENTS FIT ON THE SITE. THIS DIAGRAM IS NOT A REPRESENTATION OF THE FINAL SITE LAYOUT AND DESIGN.

SUBJECT SITE INFORMATION:

- 1. PIDN: 14662542100100
- 2. NAME: LARAMIE COUNTY SCHOOL DISTRICT NO 1
- 3. MAIL ADDR: 2810 HOUSE AVE
- 4. MAIL ADDR: CHEYENNE, WY 82001
- 5. ST ADDR: FARTHING RD6. LOCATION: SADDLE RIDGE, 13TH FILING: LOT 1, BLOCK 6
- 7. TYPE: EXEMPT
- 8. ACRES: 9.56 ACRES
 9. TAX DISTRICT: 0150

MAP DATA SOURCES AND NOTES:

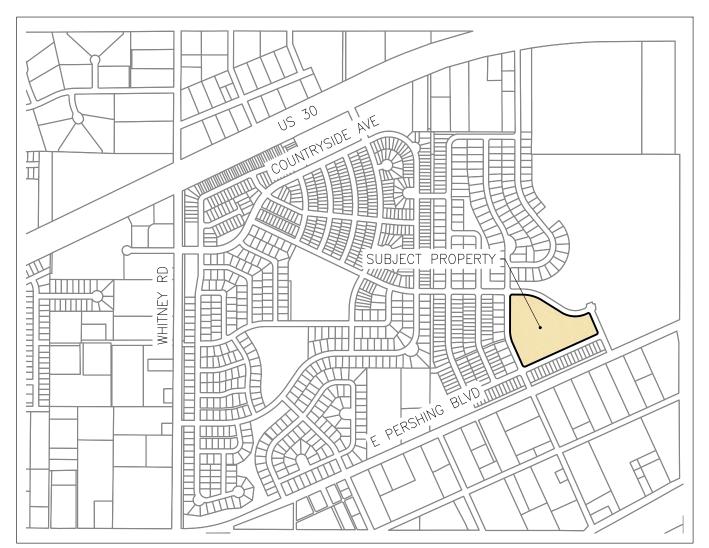
- 1. NO SITE SURVEY WAS CONDUCTED.
- 2. DATA SOURCES UTILIZED FOR MAP GENERATION:
- 2.1. LOT DIMENSIONS SHOWN HEREIN ARE DERIVED USING LARAMIE COUNTY GIS DATA.
- 2.2. AERIAL IMAGERY SHOWN HEREIN DERIVED FROM LARAMIE COUNTY IMAGERY COLLECTED IN 2022.2.3. ELEVATION CONTOUR INFORMATION SHOWN HEREIN ARE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2021.
- 2.4. EXISTING SITE UTILITIES APPROXIMATE LOCATION PER CHEYENNE BOARD OF PUBLIC UTILITIES MUNICIPAL SYSTEM GIS VIEWER.
- 2.5. PROPERTY EASEMENTS GENERATED FROM SADDLE RIDGE 13TH FILING PLAT MAP DATED 5/1/2018
- 3. LARAMIE COUNTY LAND DEVELOPMENT REGULATIONS FOR P-PUBLIC ZONING WERE REFERENCED FOR PROPERTY SETBACKS.
- 4. UNDERGROUND UTILITIES AND SUBSURFACE IMPROVEMENTS ARE APPROXIMATE LOCATIONS ONLY. ADDITIONAL SUBSURFACE IMPROVEMENTS NOT SHOWN HEREON MAY EXIST.
- 5. ALL ELEVATIONS ARE ASSUMED BASED ON COUNTY LIDAR DATA.
- 6. ALL PROPERTY AND DEVELOPMENT SETBACKS ARE TO BE VERIFIED.
- 7. EASEMENTS OF SIGHT AND RECORD NOT SHOWN HEREON MAY EXIST.
- 8. SUBJECT SITE DESIGNATED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD, PER NATIONAL FLOOD HAZARD FIRM PANEL 56021C1114F EFF. 1/17/2007.

PLAN ACCURACY DISCLAIMER

—ss——ss——ss—— (E) SEWER SERVICE

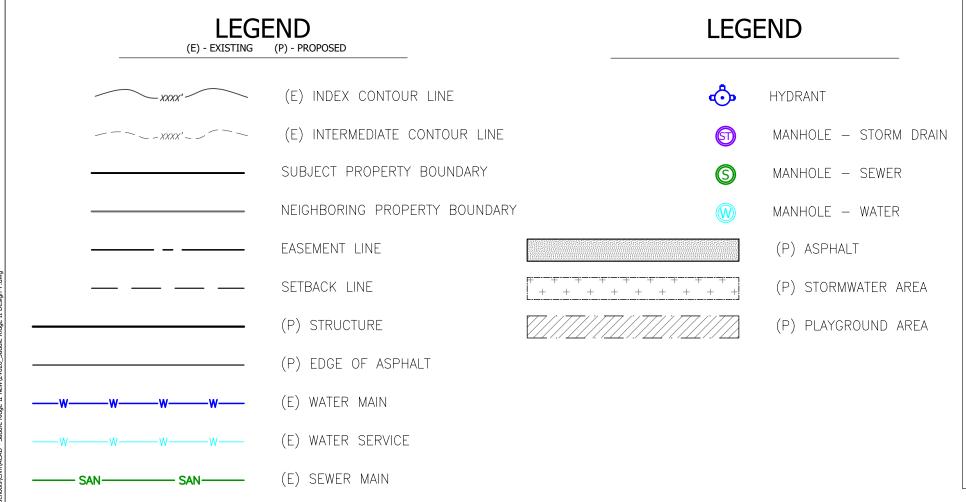
—— SD—— SD—— SD—— (E) STORM DRAIN

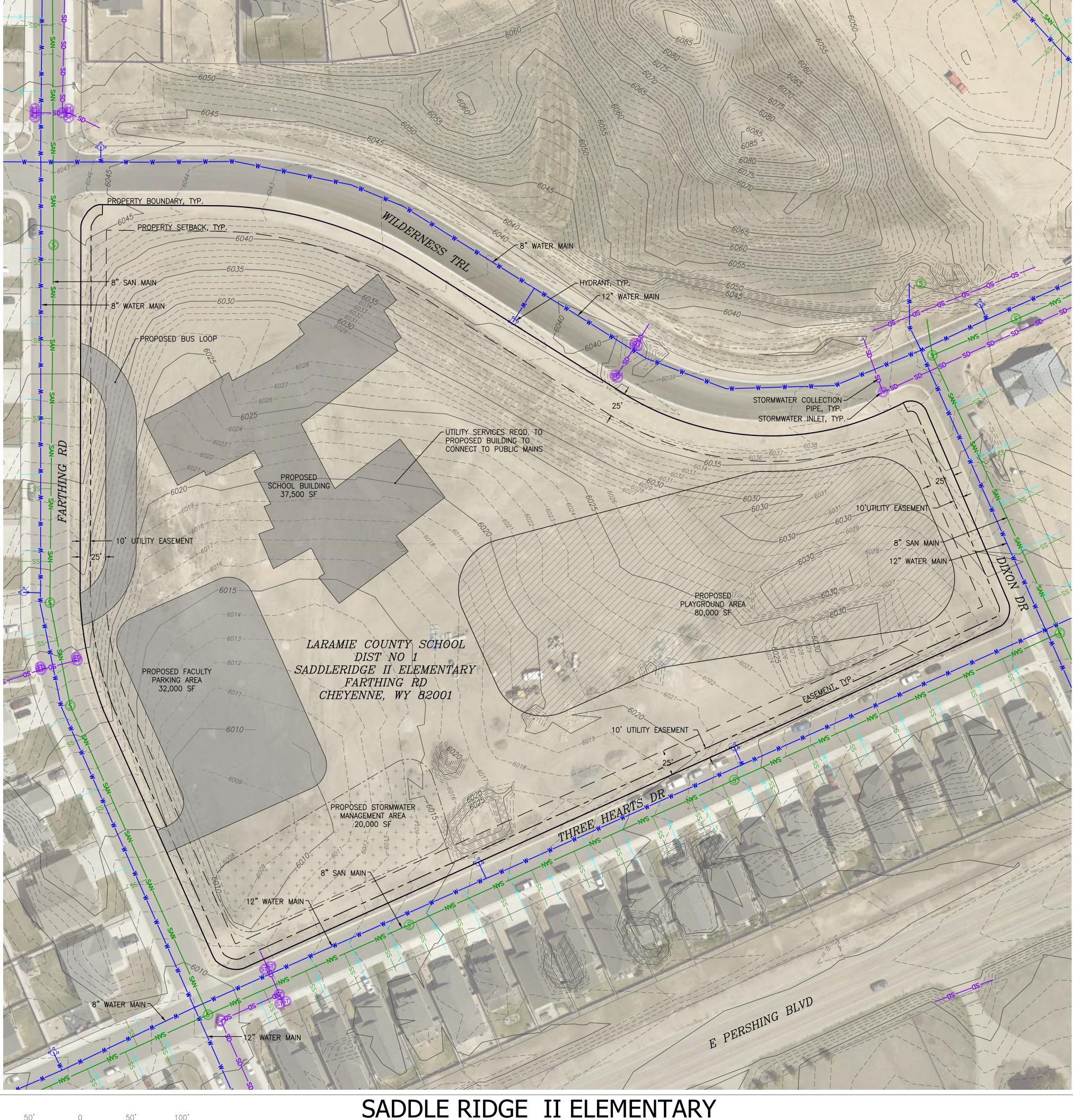
THIS SITE PLAN IS CONCEPTUAL ONLY AND BASED ON PUBLICLY AVAILABLE DATA AND OTHER DOCUMENTS REFERENCED WITH KNOWN INACCURACIES. THIS PLAN IS NOT TO BE UTILIZED FOR CONSTRUCTION OR PERMITTING PURPOSES. ALL MEASUREMENTS AND LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.



VICINITY MAP







ADDITION SITE OVERVIEW

Job No. 24020
Drafter: TK
Reviewer: SH

ENGINEERING, SURVEYING & PLANNIN LANDSCAPE ARCHITECTURE, GIS



MCER COUNTY SCHOOL DISTRICT

LARAMIE

CONCELL SITE

CONCEPT SITE
DIAGRAMS

ot Date: PLOT DATE
esc. Date

Desc. Date
PROGRESS SET 9/23/24

SADDLE RIDGE II ELEMENTARY NEW

C1.8

50' 0 50' 100' 1" = 50' (24x36 SHEET)

SUBJECT SITE INFORMATION:

- 1. PIDN: 14661640500100
- 2. NAME: LARAMIE COUNTY SCHOOL DIST NO 1 % HICKEY & EVANS-TIM BUSH
- 3. MAIL ADDR: PO BOX 467
- 4. MAIL ADDR: CHEYENNE, WY 82003-0467
- 5. ST ADDR: 6325 CHIEF WASHAKIE
- 6. LOCATION: NORTH CHEYENNE COMMUNITY PARK, 2ND FILING: LOT 1, BLOCK 1
- 7. TYPE: EXEMPT
- 8. ACRES: 40.63 ACRES
 9. TAX DISTRICT: 0150

MAD DATA COURCES AND NOTE

- MAP DATA SOURCES AND NOTES:

 1. NO SITE SURVEY WAS CONDUCTED.
- 2. DATA SOURCES UTILIZED FOR MAP GENERATION:
- 2.1. LOT DIMENSIONS SHOWN HEREIN ARE DERIVED USING LARAMIE COUNTY GIS DATA.
- 2.2. AERIAL IMAGERY SHOWN HEREIN DERIVED FROM LARAMIE COUNTY IMAGERY COLLECTED IN 2020.
- 2.3. ELEVATION CONTOUR INFORMATION SHOWN HEREIN ARE DERIVED FROM USGS LIDAR DATA COLLECTED IN 2021.
- 2.4. EXISTING SITE UTILITIES APPROXIMATE LOCATION PER PER CHEYENNE BOARD OF PUBLIC UTILITIES MUNICIPAL SYSTEM GIS VIEWER.
- SITE EASEMENTS.

 3. LARAMIE COUNTY LAND DEVELOPMENT REGULATIONS FOR P-PUBLIC ZONING WERE REFERENCED FOR PROPERTY

2.5. NORTH CHEYENNE COMMUNITY PARK SECOND FILING PLAT MAP DATED DECEMBER 2011 REFERENCED FOR

- SETBACKS.
 4. UNDERGROUND UTILITIES AND SUBSURFACE IMPROVEMENTS ARE APPROXIMATE LOCATIONS ONLY. ADDITIONAL
- 4. UNDERGROUND UTILITIES AND SUBSURFACE IMPROVEMENTS ARE APPROXIMATE LOCATIONS UNLY. ADDITION SUBSURFACE IMPROVEMENTS NOT SHOWN HEREON MAY EXIST.
- 5. ALL ELEVATIONS ARE ASSUMED BASED LIDAR DATA.
- 6. ALL PROPERTY AND DEVELOPMENT SETBACKS ARE TO BE VERIFIED.
- 7. EASEMENTS OF SIGHT AND RECORD NOT SHOWN HEREON MAY EXIST.
- 8. SUBJECT SITE DESIGNATED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD, PER NATIONAL FLOOD HAZARD FIRM PANEL 56021C1092F REVISED 4/14/2011.

PLAN ACCURACY DISCLAIMER

LEGEND

(P) EDGE OF ASPHALT

(E) WATER MAIN

(E) SEWER MAIN

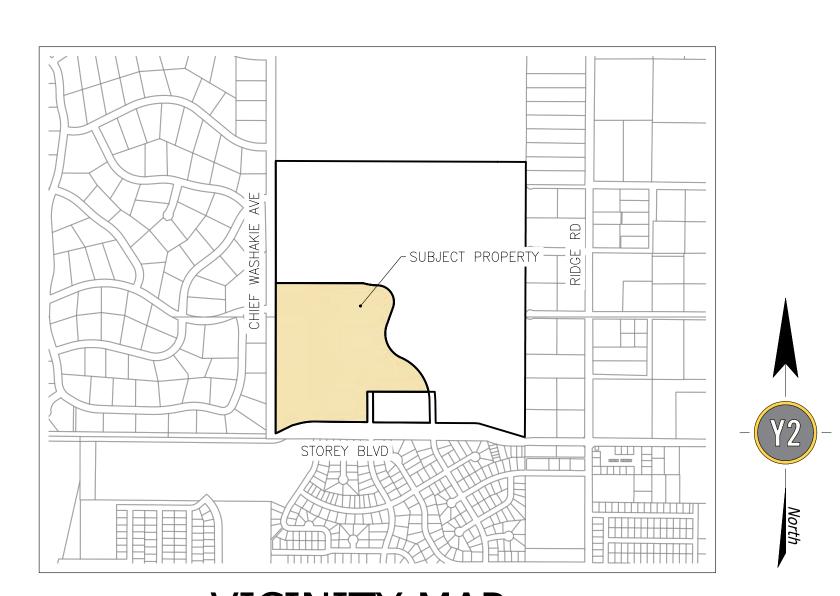
——SD——SD——SD—— (E) STORM DRAIN

(E) SEWER SERVICE

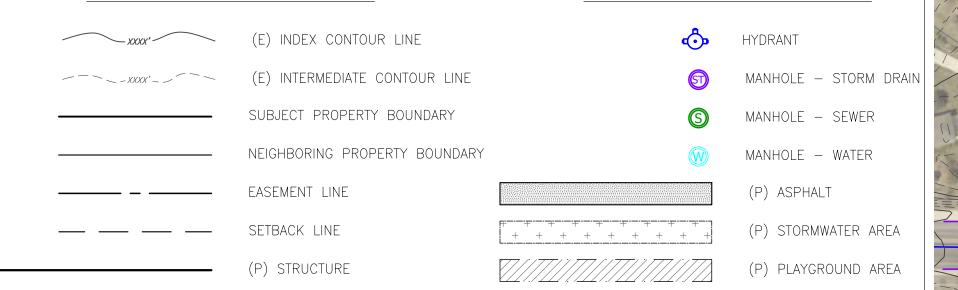
(E) WATER SERVICE

(E) WATER REUSE MAIN

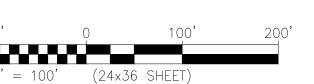
THIS SITE PLAN IS CONCEPTUAL ONLY AND BASED ON PUBLICLY AVAILABLE DATA AND OTHER DOCUMENTS REFERENCED WITH KNOWN INACCURACIES. THIS PLAN IS NOT TO BE UTILIZED FOR CONSTRUCTION OR PERMITTING PURPOSES. ALL MEASUREMENTS AND LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.



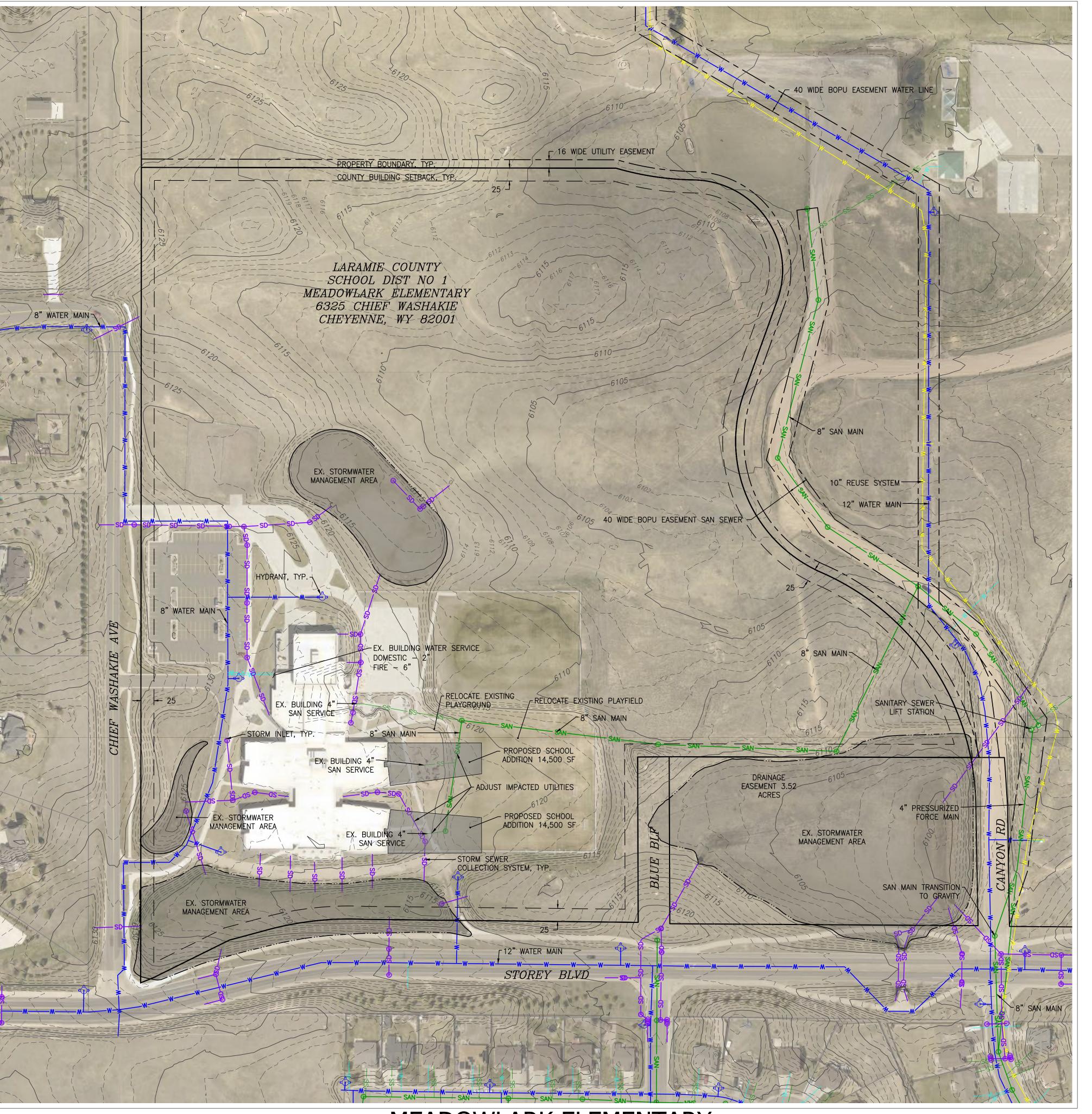
VICINITY MAP 000' 0 1000' 2000



LEGEND



MEADOWLARK ELEMENTARY
ADDITION SITE OVERVIEW



Job No. 24020

Drafter: TK

Reviewer: SH

Reviewer: SH

ONSTANT SURVEYING & PLANNIN



MCER COUNTY SCHOOL DISTRICT

LCSD1-ES I
LARAMIE COL
LARAMIE COL

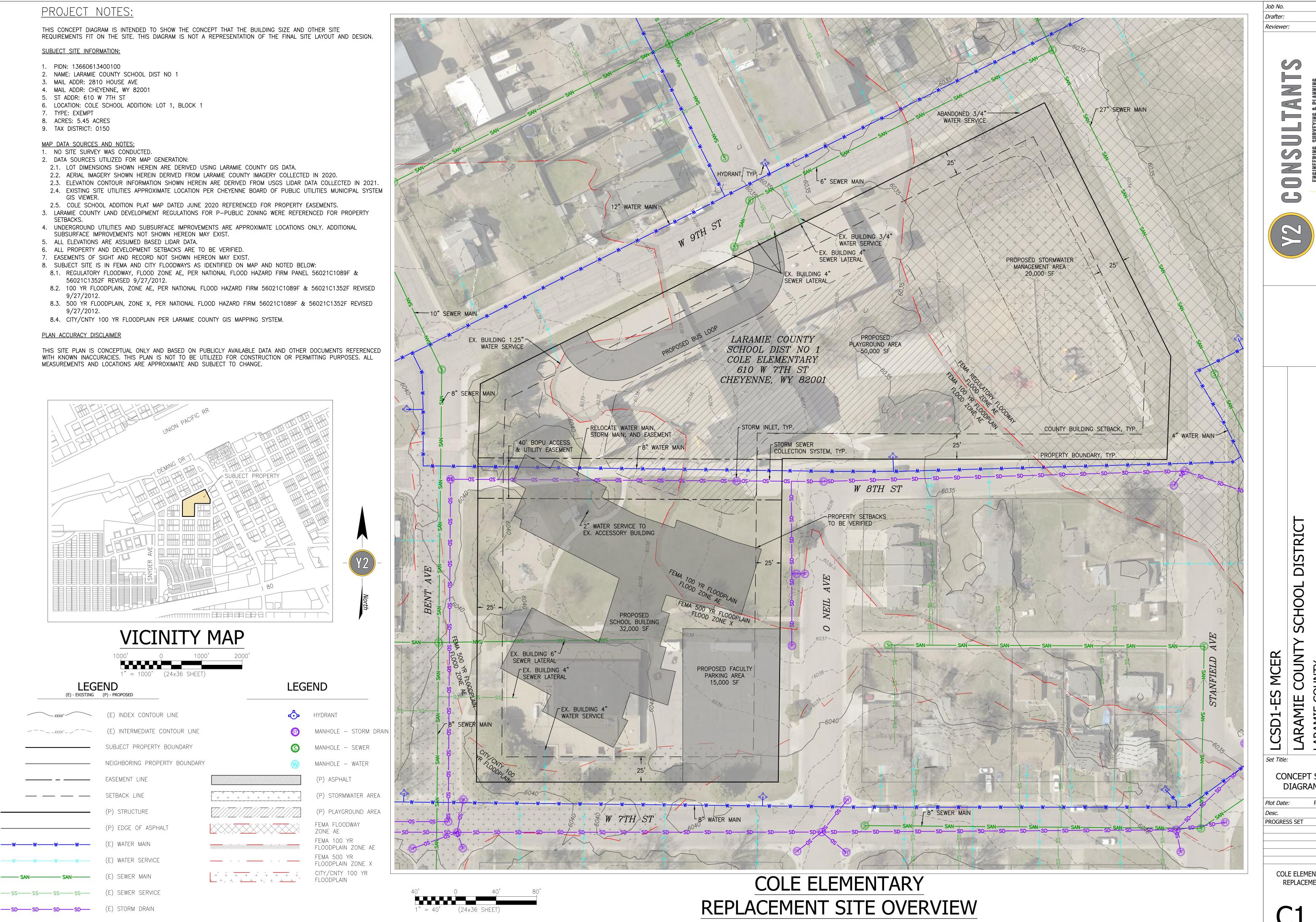
CONCEPT SITE
DIAGRAMS

ot Date: PLOT DATE
esc. Date

Desc. Date
PROGRESS SET 9/23/24

MEADOWLARK ELEMENTARY ADDITION

C1.7





CONCEPT SITE DIAGRAMS PLOT DATE

COLE ELEMENTARY REPLACEMENT

SUBJECT SITE INFORMATION:

- 1. PIDN: 14662020400100
- 2. NAME: LARAMIE COUNTY SCHOOL DIST #1
- 3. MAIL ADDR: 2810 HOUSE AVE 4. MAIL ADDR: CHEYENNE, WY 82001
- 5. ST ADDR: POWDERHOUSE RD
- 6. LOCATION: COYOTE RIDGE: TRACT 1 7. TYPE: EXEMPT
- 8. ACRES: 14.74 ACRES
- 9. TAX DISTRICT: 0150

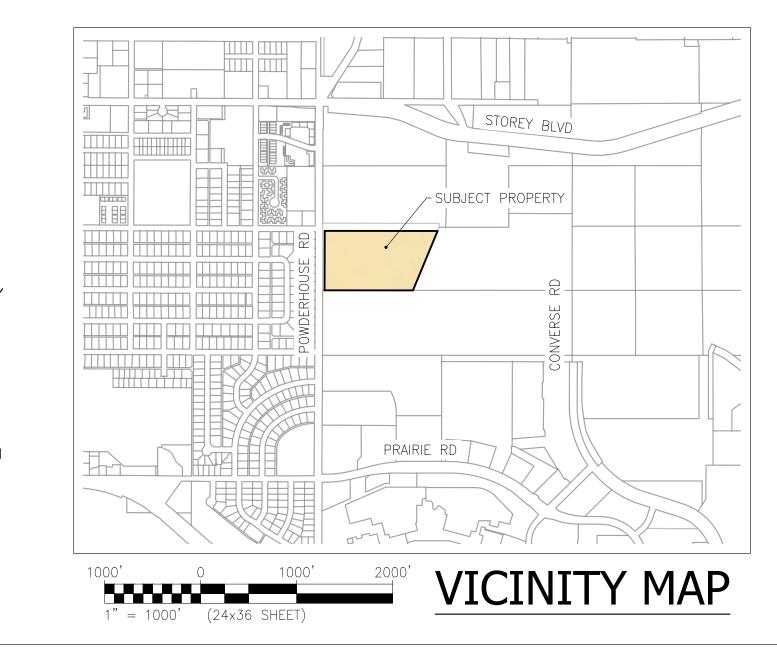
THIS CONCEPT DIAGRAM IS INTENDED TO SHOW THE CONCEPT THAT THE BUILDING SIZE AND OTHER SITE REQUIREMENTS FIT ON THE SITE. THIS DIAGRAM IS NOT A REPRESENTATION OF THE FINAL SITE LAYOUT AND

MAP DATA SOURCES AND NOTES:

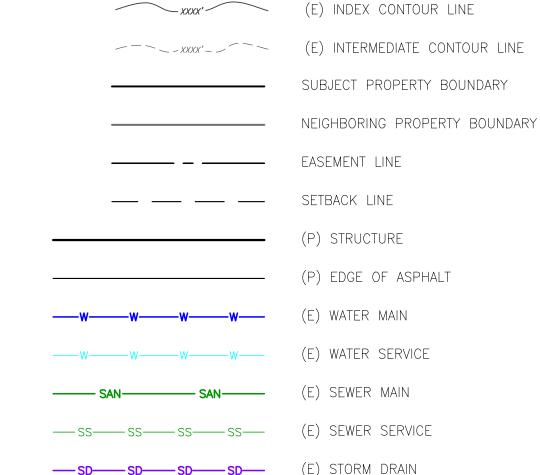
- 1. NO SITE SURVEY WAS CONDUCTED. 2. DATA SOURCES UTILIZED FOR MAP GENERATION:
- 2.1. LOT DIMENSIONS SHOWN HEREIN ARE DERIVED USING LARAMIE COUNTY GIS DATA.
- 2.2. AERIAL IMAGERY SHOWN HEREIN DERIVED FROM LARAMIE COUNTY IMAGERY COLLECTED IN 2022. 2.3. ELEVATION CONTOUR INFORMATION SHOWN HEREIN ARE DERIVED FROM USGS LIDAR DATA COLLECTED IN
- 2.4. EXISTING SITE UTILITIES APPROXIMATE LOCATION PER CHEYENNE BOARD OF PUBLIC UTILITIES MUNICIPAL SYSTEM GIS VIEWER.
- 2.5. COYOTE RIDGE PLAT MAT DATED OCTOBER 2020 REFERENCED FOR EASEMENTS.
- 3. LARAMIE COUNTY LAND DEVELOPMENT REGULATIONS FOR P-PUBLIC ZONING WERE REFERENCED FOR PROPERTY SETBACKS.
- 4. UNDERGROUND UTILITIES AND SUBSURFACE IMPROVEMENTS ARE APPROXIMATE LOCATIONS ONLY. ADDITIONAL SUBSURFACE IMPROVEMENTS NOT SHOWN HEREON MAY EXIST.
- 5. ALL ELEVATIONS ARE ASSUMED BASED LIDAR DATA. 5.1. LIDAR DATA REFERENCED IS BASED ON SITE CONDITIONS PRIOR TO DEVELOPMENT AND MAY NOT REFLECT EXISTING TOPOGRAPHY AFTER DEVELOPMENT.
- 6. JALL PROPERTY AND DEVELOPMENT SETBACKS ARE TO BE VERIFIED.
- 7. EASEMENTS OF SIGHT AND RECORD NOT SHOWN HEREON MAY EXIST. 8. SUBJECT SITE DESIGNATED AS ZONE X, AREA OF MINIMAL FLOOD HAZARD, PER NATIONAL FLOOD HAZARD FIRM PANEL 56021C1091F EFF. 1/17/2007.

PLAN ACCURACY DISCLAIMER

THIS SITE PLAN IS CONCEPTUAL ONLY AND BASED ON PUBLICLY AVAILABLE DATA AND OTHER DOCUMENTS REFERENCED WITH KNOWN INACCURACIES. THIS PLAN IS NOT TO BE UTILIZED FOR CONSTRUCTION OR PERMITTING PURPOSES. ALL MEASUREMENTS AND LOCATIONS ARE APPROXIMATE AND SUBJECT TO CHANGE.

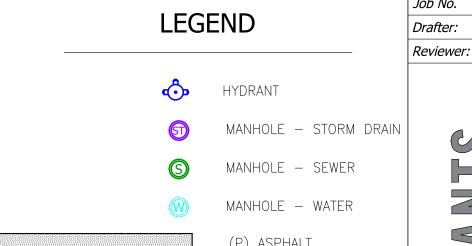


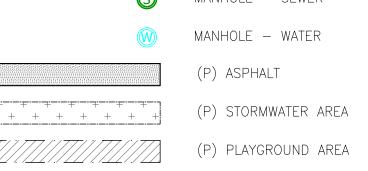
r 8" WATER MAIN



LEGEND

(E) - EXISTING (P) - PROPOSED





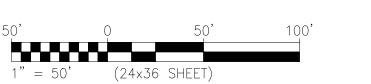


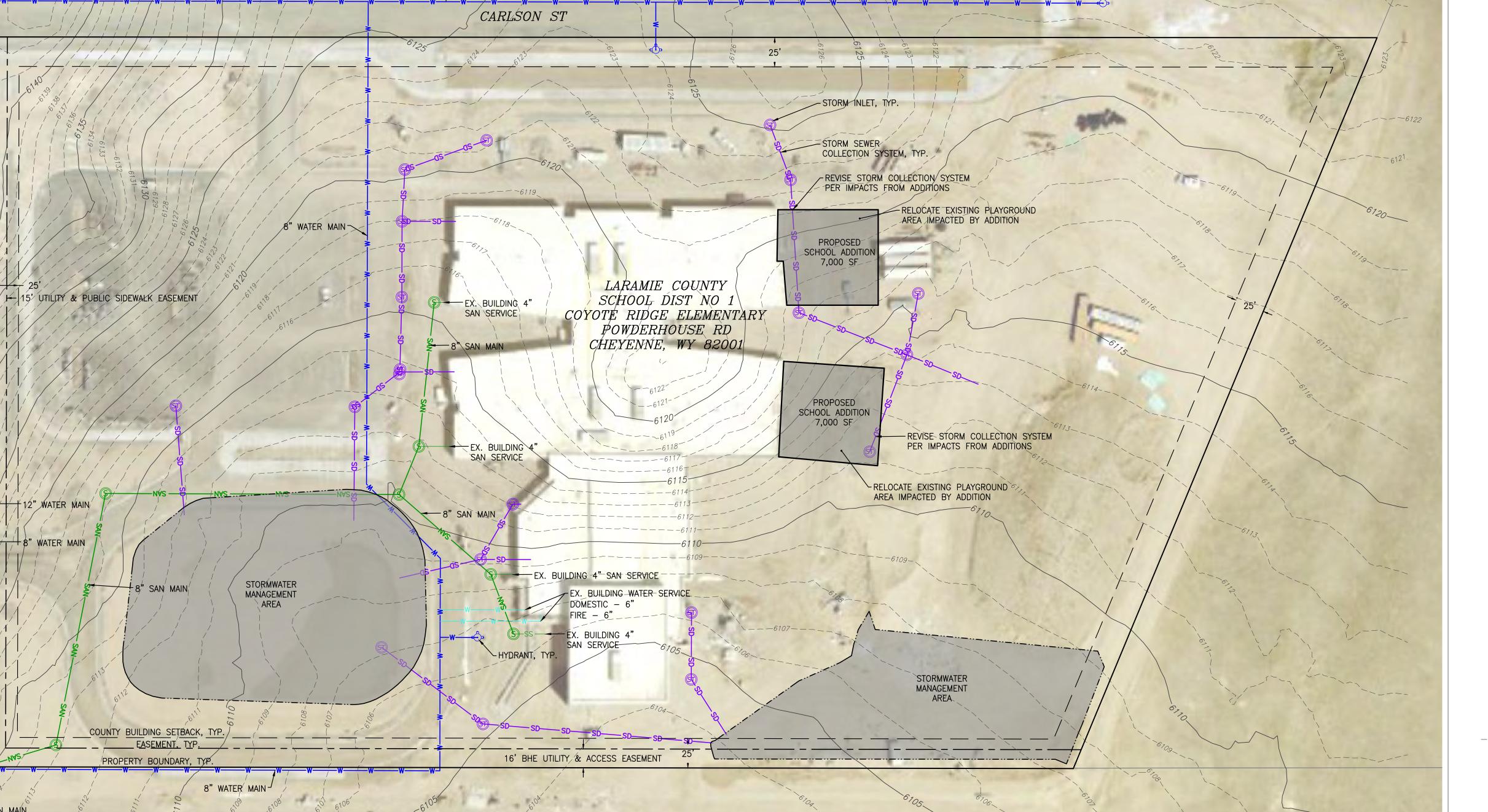
CONCEPT SITE DIAGRAMS PROGRESS SET COYOTE RIDGE **ELEMENTARY ADDITION**

COUNT

LARAMIE

COYOTE RIDGE ELEMENTARY ADDITION SITE OVERVIEW





Glossary



Glossary of Terms

This glossary is provided to clarify terms used specifically within the context of this report. The definitions provided are not meant to provide comprehensive explanations but rather as descriptions of how these terms apply to the Most Cost-Effective Remedy study for Laramie County School District.

| 4-6 | A grade | configuration | consisting | of 4th | and 6th | grades only. |
|-----|---------|---------------|------------|--------|---------|--------------|
| | | | | | | |

5-6 A grade configuration consisting of 5th and 6th grades only.

Actions Specific actions taken to address identified building needs as part of a

remedy. These may include construction, renovation, boundary adjustments, grade reconfigurations, or taking facilities offline.

ARMA (Auto-Regressive Moving Average): A statistical model used to

predict future values based on past data, which has been applied to enrollment projections in this study. Model combines autoregression and

moving average to account for cyclical enrollment trends.

Back Test A method of applying a forecasting model to historical data to evaluate

its accuracy in predicting future outcomes.

Bidding The process by which contractors submit proposals for performing work

on a project, often evaluated on cost, schedule, and technical

qualifications.

Boundary Adjustments Modifications to school attendance zones to optimize student

distribution across schools and address capacity issues. Adjustments are

assumed to be contained within "Triads" for this study.

Capacity The number of students a school building can accommodate based on

state adequacy standards and as calculated according to SFC, Capacity

Calculation Methodology.

CBA Choosing by Advantages: A decision-making framework designed to

ensure that choices are made based on comparing the advantages of alternatives. Used in this study to evaluate potential remedies for relative

benefit and cost-effectiveness.

Cost-Benefit Analysis A financial analysis that compares the projected costs and benefits of

different remedies to determine which option provides the greatest value.

District Laramie County School District Number 1



Enrollment Projections Forecasts of student enrollment numbers over a future period, used to

assess extent of capacity needs and action or actions required as part of a

remedy to address capacity needs.

FCI Per SFC Rules Chapter 1: Facility Condition Index (FCI) means a numerical

rating or building condition score based on measured data or assessment

of physical components or systems. The condition of a building is expressed as a ratio of the Cost to Repair Deficiencies, or "Deferred Maintenance" (DM) divided by the Current Replacement Value (CRV) of

the building. The formula is:

 $FCI = \sum DM \div \sum CRV$

Funding Financial support provided by the State of Wyoming for implementing

solutions to identified needs, including capital construction and major

maintenance.

K-4 A school configuration that includes kindergarten through 4th grade.

K-6 A school configuration that includes kindergarten through 6th grade.

Life-cycle Costs Total costs associated with building, such as: first-time costs/initial

construction; life cycle sustainment cost, including ongoing operations

and major maintenance; and end-of-life costs (e.g., demolition).

Major Maintenance Per SFC Rules Chapter 1: "Major Maintenance" is a common reference

term that means "Major building and facility repair and replacement" as

that term is defined in W.S. § 21-15-109(a)(iii).

MCER "Most Cost-Effective Remedy" as per SFC Rule Chapter 8, Section 5.

Identification and Determination of the Most Cost-Effective Remedy to

meet the requirements of W.S. 21-15-117(b).

MAPE Mean Absolute Percentage Error, expressed as a percentage, measures

the accuracy of a forecasting method by averaging the absolute

percentage errors over all observations.

Offline For the purposes of the MCER study, offline is meant to indicate buildings

modeled to be removed from use for educational purposes. The final disposition of buildings indicated to be offline has not been determined as part of this study; however, an allowance for the cost of demolition has

been included in the present value analysis for cost purpose only.



Present Value The current value of a future cash flow, which accounts for time value of

money and is used to compare the long-term costs of different remedies. Present value is calculated by inflating a current value to a future value and discounting the future value back to a present value. Inflation and

discount rates are not equivalent.

Procurement The process of acquiring products, services or materials (e.g.,

construction).

Reconfiguration The process of changing the grade configuration of a school (e.g., from

K-6 to K-4).

Remedy Solution or correction comprised of a series of actions to address and

identified building need. Wyoming Statute: WS 25-15-111(v) "Remedy" or "remediation" means a course of action addressing identified building and facility needs in accordance with statewide adequacy standards developed under this act, consisting of building or facility construction,

replacement, renovation, repair or any combination thereof.

ROM (Rough Order of Magnitude): A preliminary estimate of the cost of a

project, used during the initial stages of planning to provide a ballpark figure for budgeting purposes. In the context of this study, ROM estimates are meant to provide a relative comparison of preliminary

costs, which may not vary by orders of magnitude.

SCD State Construction Department

SF Area unit of measure in Square Feet

SFC School Facilities Commission

SED School Facilities Division

Triad A grouping of schools within a specific geographic area of the District.



Appendix



Projects already planned may impact walking, rolling, and biking to school. Projects proximal to schools are identified on maps in Recommendations by School with numbers corresponding to the project list in this appendix.



| Мар | Project Name | Agency | Years | Source |
|-----|---|-------------------------|-------|-------------------------------|
| 1D | Division Ave and Wallick Road Street Infrastructure Upgrade | Laramie County | 2024 | 2021 Sample Ballot |
| 2 | Division Ave and Wallick Road Street Infrastructure Upgrade | Laramie County | 2024 | 2024 2021 Sample Ballot |
| 3 | On Street Bicycle Facilities Phase II (20th St) | City o | 2025 | 2024-2028 CIP |
| 4 | On Street Bicycle Facilities Phase II (19th St) | City of | 2025 | 2024-2028 CIP |
| 5 | 19th St (Logan Ave to Converse Ave) | | 2024 | 2024-2028 CIP |
| 6 | On Street Bicycle Facilities Phase II (Morrie St) | City of Cheyenne | 2025 | 2024-2028 CIP |
| 7 | Downtown Connector Greenway | City of Cheyenne | 2025 | 2024-2028 CIP |
| 8 | US 30 Underpass Replacement | WYDOT, City of Cheyenne | 2024 | 2024-2028 CIP |
| 9 | East Jefferson Road reconstruction | Laramie County | 2024 | 2021 Sample Ballot |
| 10 | East Allison Road Reconstruction | Laramie County | 2024 | 2021 Sample Ballot |
| 11 | 6th & Cleveland Ave. Rundown Repair | City of Cheyenne | 2025 | 2024-2028 CIP |
| 12 | On Street Bicycle Facilities Phase II (Western HIlls) | City of Cheyenne | 2025 | 2024-2028 CIP |
| 13 | 8th St & Stanfield Ave. Drainage Improvement | City of Cheyenne | 2025 | 2024-2028 CIP |
| 14 | 5th St Bridge (Crow Creek)/Deming Greenway | City of Cheyenne | 2024 | 2024-2028 CIP |
| 15 | On Street Bicycle Facilities Phase II (Walterscheid Blvd) | City of Cheyenne | 2025 | 2024-2028 CIP |
| 16 | East Dell Range Blvd. Widening | City of Cheyenne | 2024 | 2024-2028 CIP |
| 17 | US 30/Lincolnway Project | WYDOT | 2024 | 2024 Project Website |
| 18 | Nationway Rehabilitation | City of Cheyenne | 2028 | 2024-2028 CIP |
| 19 | Cheyenne Warren Ave (24th St-Pershing Blvd) | WYDOT | 2025 | 2024 STIP |
| 20 | On Street Bicycle Facilities Phase II (Airport Parkway) | City of Cheyenne | 2025 | 2024-2028 CIP |
| 21 | Cheyenne Streets - Dell Range Blvd & Whitney Rd, Lincolnway | WYDOT | 2025 | 2024 STIP |



| Map ID | Project Name | Agency | Years | Source |
|-----------|---|------------------|-------|------------------|
| 0 | On Street Bicycle Facilities Phase II (Prairie Ave) | City of Cheyenne | 2025 | 2024-2028 CIP |
| 0 | Storey Boulevard Extension | City of Cheyenne | 2024 | 2024-2028 CIP |
| 0 | Cheyenne Streets/Central Ave/Yellowstone to Kennedy | WYDOT | 2024 | 2024 STIP |
| 0 | WYO 212/College Drive (I-25 to US 85) | WYDOT | 2024 | 2024 STIP |
| 0 | Whitney Road & Dell Range Blvd | City of Cheyenne | 2024 | 2024-2028 CIP |
| 0 | Dell Range/Rue Terre Reconstruction Project | City of Cheyenne | 2027 | 2024-2028 CIP |
| 0 | Fox Farm & Walterscheid | City of Cheyenne | 2024 | 2024-2028 CIP |
| 0 | Reconstruct Dell Range Blvd. & Yellowstone Rd. | City of Cheyenne | 2024 | 2024-2028 CIP |
| 0 | Converse Ave Phase 1 (Ped Overpass to Masonway) | City of Cheyenne | 2024 | 2024-2028 CIP |

Projects Identified 2024

---- End ----

Continue to attach list as updated to end of document.