# Neighborhood Traffic Management Program <br> Van Buren Avenue, Cheyenne Wyoming <br> February 2015 

## EXECUTIVE SUMMARY

A request from the neighbors of Van Buren Avenue in eastern Cheyenne for a traffic calming project was submitted in mid October, 2014. The residents expressed concerns of citizens speeding through their neighborhood and of generally unsafe pedestrian conditions. The residents submitted a petition calling for various solutions, i.e. lowering speed limits, installing speed humps and making modifications to school zone and signage to assist with pedestrian safety.

A neighborhood meeting was held by City Engineering office in early November to listen to residents' concerns. Data has since been collected by the Cheyenne PD and the Cheyenne MPO and the latter office along with City Engineering have prepared this report. Data that was collected shows that speeding is a common occurrence. Several crashes have also occurred along the corridor especially at the intersection with US 30. There are several pedestrian attractions along the corridor and sidewalk is missing in a number of areas. There are a couple of Neighborhood Traffic Management Program (NTMP) solutions that could be implemented and the City may choose to address issues of safety and or hazardous conditions with other solutions that have been presented with this report.

## Cheyenne Neighborhood Traffic Management Program

The objectives of the NTMP are derived from the City's desire to ensure overall safety, protect its neighborhoods and improve the quality of life for its residents.

1. Promote safe, reasonable convenient, accessible and pleasant conditions for bicyclists, pedestrians, motorists, and residents on neighborhood streets.
2. Improve neighborhood livability by mitigating the negative impact of vehicular traffic on residential neighborhoods.
3. Encourage citizen involvement in all phases of Neighborhood Traffic Management activities.
4. Make efficient use of City resources by prioritizing and ranking traffic management requests.

The NTMP provides a mechanism for neighborhood groups to work with the City to make decisions about how traffic management devices might be used to manage traffic in their neighborhood.

These policies were adopted in 2004 by the City Governing Body and established as part of the Neighborhood Traffic Management Program (NTMP) for local streets.

However, collector streets could be considered on a case-by-case basis. Since Van Buren is a collector the City and MPO followed the local street NTMP process.

## 1. NTMP Process

1. Neighborhood Identifies Issues and Submits Application
2. NTMP staff determine NTMP Eligibility using Evaluation criteria
3. Development of Plans on Eligible Projects
4. Testing of Plan
5. Funding sought for Implementation

The 2006 adopted Neighborhood Traffic Management Program (NTMP) process recommends collecting and ranking certain data to evaluate the severity and magnitude of the problem in a specific area of concern brought to the City or City Council's attention by citizens. This process also sorts out whether a project should be elevated to a full NTMP study. Data is collected and then entered into an eligibility and priority formula. The formula is based on traffic volumes, vehicular speeds, crash history, school crossing, presence or lack of sidewalks, and pedestrian generators. The formula produces a numerical score used to determine the request's eligibility and priority. Applications must have an NTMP formula score of $\mathbf{6 0}$ points or greater to be considered eligible for the NTMP.

Each application will be placed into one of the following three categories based on its NTMP formula score:
a. Active Projects - NTMP staff will work with the neighborhood to create a Traffic Management Plan (Plan) for top priority applications. The Plan will include traffic management measures to address the neighborhood's traffic problems. NTMP staff will work with as many of the highest-priority eligible projects as resources allow. As work on one project is completed, work will begin on the next highest priority Eligible Project.
b. Eligible Projects - Requests in this category meet program eligibility requirements. As work on an Active Project is completed, the highest priority Eligible Project becomes the next Active Project. Project priorities will be continuously updated as new applications are received. While waiting to become an Active Project, Eligible Project neighborhoods will be provided information and guidance on Resident Participation/Education Program and other self help solutions in the NTMP that may help ease neighborhood traffic problems.
c. Not Program Eligible - Requests in this category do not meet program eligibility requirements based on the NTMP formula, i.e. based on the formula the problem identified by the residents is not of sufficient magnitude to be considered eligible for development of a formal plan. However, these

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neighborhoods will be provided information and guidance. Petitioners may resubmit in the future if they sense their problem has grown or other issues arise. If requests have been submitted within the previous 2 years and conditions have not changed, then the application is not program eligible.

## NTMP Formula Score Point Assignment Chart

| Criteria | Points | Basis for Point Assignment |
| :---: | :---: | :---: |
| Speed | 0 to 40 | Extent by which the "operating speed" as defined below exceeds posted speed limit <br> With 4 points assigned for every 1 mph over the limit (Collector) With 3 points assigned for every 1 mph over the limit (Local) |
| Volume | 0 to 25 | Average daily traffic volumes 1 point assigned for every 100 vehicles |
| Crashes | 0 to 5 | 1 point for every crash reported within past 3 years |
| School <br> Crossings | 0 to 10 | 5 points assigned for each school crossing on the project street |
| Pedestrian Generators | 0 to 15 | 5 points assigned for each public facility such as parks, community centers, high schools, commercial use, transit service, bike routes, etc. |
| Pedestrian <br> Facility | 0 to 5 | 5 points assigned if there is no continuous sidewalk on either side of the street 10 points if missing on both sides. |
|  | 100 | al Points Possible |

- Operating speed is the speed at which drivers are observed operating their vehicles during free flow conditions. The $85^{\text {th }}$ percentile of the distribution of observed speeds is the most frequently used measure of the operating speed associated with a particular location or geometric feature.

Further Evaluation of Non Eligible Projects may discover safety issues or hazards which still may need solutions The City may address the issue separately from the NTMP.

## 2. Van Buren Avenue

The area of concern is Van Buren Avenue. It is a collector which begins on the south end at U.S. 30 and runs north to Dell Range Blvd for about 65 miles. The entire corridor is annexed in the City of Cheyenne however there are parcels of land mostly on the southern extent of the road that are unincorporated county properties. Dildine Elementary School is located along the corridor in the northwest quadrant of Van Buren Avenue and Green River Street. The street is posted at 30 MPH except for the school zone which is posted at 20 MPH. There are two school
zones for Dildine; one on Van Buren approximately 450 feet total length at Green River, and one on Dell Range which is approximately 500 feet total length near the intersection of Van Buren. Summary of the Neighborhood Traffic Issues

At the City Council on October 13, 2013 resident, Bart Stolp spoke to the City Governing Body and turned in a petition concerning Van Buren. The main issues are listed below:

1. Speed along the corridor - The suggestion from the petition is to lower the speed on the entire corridor to 25 MPH. Speed humps were suggested.
2. If traveling on Dell Range you are in the school zone but then when you turn south onto Van Buren, you are out of the school zone area as you approach the school. Then you come upon the school zone adjacent to the school and are slowed again. The suggestion was to extend the Van Buren School zone farther north.
3. Pedestrian safety at the cross walks were addressed as the observation is that motorists do not follow pedestrian crossing rules well, especially if it is not the normal children crossing times before and after school. A traffic light at Dell Range was suggested.
The petition is found in Appendix A.

## 3. Neighborhood Meeting

A neighborhood meeting was held on November 6, 2014 at Dildine Elementary from 5:30-7:30 PM regarding the Van Buren Avenue petition. About 25 residents came out to voice their concerns. There were representatives from the City Engineering office, Police Department, Cheyenne MPO and Laramie County School District \#1 personnel. The Principal of Dildine was also there. The purpose of the meeting was to hear and record the concerns of residents, as well as, what they thought they might want for possible solutions regarding Van Buren. Attendees as well as comment sheets that were received are listed in Appendix B.

## Van Buren Avenue Neighborhood Issues:

- Average speed observed between $35-55 \mathrm{mph}$, ( 3.6 cars/hour)
- Cars not stopping at pedestrian crossings when kids are there
- Cars slam on brakes when they hit school zone to slow down, but are driving too fast before and after
- The flashing yellow light is right where the buses stop, which blocks its visibility
- Cars driving into yards/hitting mailboxes
- Traffic is going to get worse with storage units going in
- People parking on both sides of street (near county pockets) creates only one travel lane
- People crossing the street to get mail - no sidewalks and fast traffic
- Accidents could happen when people are passing cars that are trying to turn
- People really drive fast driving south towards US 30
- Church sign blocks visibility (site distance) on Dell Range
- When you turn on Van Buren from Dell Range, people do not realize they are in a school zone
- RV's parking on street
- Cars backing out of driveways
- Some annexed properties are still waiting for curb and gutter


## Suggested Neighborhood Solutions:

- More speed limit signs or extend school zone (non NTMP)
- Pedestrian crossing at Liberty (non NTMP)
- Stop light at Van Buren and Dell Range (non NTMP)
- More school zone signs (non NTMP)
- Speed humps (NTMP Toolbox)
- Flashing pedestrian crossing at Green River, Liberty, Dildine (non NTMP)
- Drop speed limit down to 25 (non NTMP)
- School district support (non NTMP)
- Install 3 speed tables (NTMP toolbox)


## Summary of comments from public meeting:

The residents of Van Buren Avenue agree that speeding along the entire corridor is an issue. The school zones are too small or short. The school buses park on Van Buren causing sight distance problems, especially for pedestrians at the cross walks next to the school. Speeds are worse on the south side of the corridor. Sidewalk on the south end of the corridor from U.S. 30 north is missing. The neighbors have stated that some racing has been observed.

## 5. Van Buren Avenue Data

a. Speeds

The Cheyenne Police department collected speeds from October 14 20, 2014 on the 4100 block of Van Buren Avenue. The 85th percentile was shown to be 31 mph . This is considered low with no enforcement
advised. The average speed was 26 mph .
The MPO also collected speed data in two locations, south of Rock Springs and north of Liberty during November. The data showed the $85^{\text {th }}$ percentile $S$. of Rock Springs as 34 mph and the average speed as 28 mph . North of Liberty the $\mathbf{8 5}^{\text {th }}$ percentile was 32 mph and the average speed was recorded at 24 mph .
(Averaging the three $85^{\text {th }}$ percentiles results in a speed of 32 mph . Two miles over speed limit times 4 pts. Equals 8)

## - Evaluation ranking = 8

Appendix C contains the speed and volume study reports.

## b. Volume

The Average Daily Traffic or volume of traffic is 1700 from the Cheyenne PD study. The Average Daily Traffic from the MPO study was 1850 south of Rock Springs and 1450 north of Liberty.

## - Evaluation ranking = 18

## c. Crashes

Within the past three years there have been nine reported crashes on Van Buren Avenue. One was a rear end at the stop sign at Dell Range.
Five occurred at the intersection of Van Buren and U.S. 30, two of those were angle crashes, two were rear ends and one was a driver hitting a fixed object. Between U.S. 30 and Dell Range there were three that were all non- intersection related. It should be noted that the 2014 crash data is not published yet but there was one motorcycle fatality on the corridor in 2014.

## - Evaluation ranking $=5$

## d. School Crossings

Van Buren Avenue has a school crossing zone with flashing warning signals for Dildine Elementary at the Green River Street intersection with Van Buren.

## - Evaluation ranking = 5

## e. Pedestrian Generators

Dildine Elementary is the main pedestrian generator on this corridor. On the south end of the corridor, Laramie Street extends approximately three quarter of a block to a cul-de-sac containing a Greenway trailhead.

## - Evaluation ranking = 10

## f. Pedestrian Facilities

Sidewalk is missing from both sides of Van Buren between U.S. 30 and Eastview Street. Sidewalk is present on the east side of Van Buren from Eastview to Liberty with another missing segment between Liberty and Dell Range. Sidewalk is present on the west side of Van Buren from Green River to Dell Range.

- Evaluation ranking $=10$


## Van Buren Avenue total ranking is 56 = Non Eligible

g. A Signal Warrant Study (Appendix D) was conducted on November 6, 2014 at the Dell Range and Van Buren intersection. None of the nine warrant categories were met therefore the warrant to place a signal at this intersection was not satisfied.

## 6. Possible Short Term Solutions

The City and MPO staff discussed potential infrastructure solutions to address safety. Potential solutions to address the safety issues or hazards are listed below. Some of the solutions listed will require City Council and or LCSD\#1 approval.
Low cost infrastructure solutions range between $\$ 500$ and $\$ 2,000$.
Moderate cost solutions range from $\$ 5,000$ to $\$ 25,000$.
High cost solutions range from \$50,000 and up.

| Solutions that address safety or hazards | Low <br> Cost | Moderate <br> Cost | High Cost |
| :---: | :---: | :---: | :---: |
| Stripe a centerline from U.S. 30 to Dell Range <br> to delineate travel lanes and prohibit passing | $\mathbf{X}$ |  |  |
| Prohibit parking on one or both sides of the <br> street in narrow areas | $\mathbf{X}$ |  |  |
| Discuss school walking routes and bus pick- <br> ups at the City/LCSD\#1 School Traffic Safety <br> Committee | $\mathbf{X}$ |  |  |
| Add a cross-walk at Liberty | $\mathbf{X}$ |  |  |
| Expand the school zone to the north | $\mathbf{X}$ |  |  |
| Construct a School Bus pull out by moving the <br> curb and sidewalk away from Van Buren <br> approximately 8 feet. | $\mathbf{X}$ |  |  |

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| Add Rectangular Rapid Flashing Beacons at <br> the Dell Range / Van Buren school crossing |  | $\mathbf{X}$ |  |
| :---: | :---: | :---: | :---: |
| Apply for Safe Routes to School Grant for <br> sidewalks |  |  | $\mathbf{x}$ |
| Apply for Safety Funds for improved cross <br> walks and sidewalks |  |  | $\mathbf{x}$ |


| NTMP Solutions | Low <br> Cost | Moderate <br> Cost | High Cost |
| :---: | :---: | :---: | :---: |
| Neighborhood Speed Watch | $\mathbf{x}$ |  |  |
| Cheyenne PD Speed Display Trailers | $\mathbf{x}$ |  |  |
| Construct bulb-outs at the Van Buren / Green <br> River school crossing to shorten crossing <br> distance |  | $\mathbf{X}$ |  |

7. Other Long-term Solutions

| Solution | Low <br> Cost | Moderate <br> Cost | High Cost |
| :---: | :---: | :---: | :---: |
| Conduct a full corridor study/plan by the <br> MPO |  |  | X |

## 8. Funding

No specific funding for NTMP projects is currently allocated in the City budget. Low cost infrastructure solutions may be able to be funded from the Traffic Division's annual 5th Penny Sales Tax allocation. Moderate and high cost solutions would have to compete with other projects for funding priorities.

## 9. Recommendations

The City of Cheyenne will:

- Increase the size of the Dildine Elementary school zone and add a second crosswalk at Liberty Street.
- Remove the current school zone signage in both locations and replace them with ones that include two way yellow flashing beacons (on front and back). This will also mean moving the location of the northern crosswalk warning sign to encompass the new crosswalk at Liberty Street.
- Due to the increasing infill development and redevelopment along the Van Buren Corridor the character of the area is changing from rural residential to a more dense urban residential area. Therefore, the Cheyenne Metropolitan Planning Organization will recommend to the MPO Policy Committee (MPO Governing Body) to add a Van Buren Corridor Planning project to its FY 2016-2017 Work Program.


## 10. Functional Classification

The functional classification of our area's roads and highways are recommended by the citizens, engineers and planners who serve on the committees of the Metropolitan Planning Organization. The MPO Policy Committee then adopts the Urban Roadway Existing Functional Classification Map (FCM). The FCM displays the roads and highways as either local streets, collectors, minor arterials, principal arterials or interstates as they currently function. The Master Transportation and Land Use Plan also plays a part in the classification of existing roads. The rules and guidelines of classifying existing streets should not be confused with how the City (Unified Development Codes) or County's (The Laramie County Land Use Regulations) codes state and regulate how new roads are to be designed and built based on their projected functional classification. The existing FCM is governed by federal rules and regulations.

The general characteristics found in Highway Functional Classification - A Management Tool, dated November, 1982 states for collectors:

- Collects traffic from local (streets) and channels it into the arterial (road) system
- Provides both land access and traffic circulation within residential neighborhoods, commercial, and industrial areas

The most current FHWA guidelines are found at:
http://www.fhwa.dot.gov/planning/processes/statewide/related/highway fun ctional classifications/
The most current criteria for an urban minor collector are this:

- Serve both land access and traffic circulation in lower density residential and commercial/industrial areas
- Penetrate residential neighborhoods, often only for a short distance
- Distribute and channel trips between Local Roads and Arterials, usually over a distance of less than three-quarters of a mile
- Operating characteristics include lower speeds and fewer signalized intersections


## Appendix A

City Engineers Office
2101 O'Neil Avenue
Cheyenne, WY 82002

To Whom It May Concern:
I would like to start by saying that the upgrades your office is making are very commendable and appreciated. The water and sewer rehabs are very well planned and needed in the order they have been done. The curb and gutter rebuilds appear to be very handy to those that have limited mobility, and the street and alley division has been doing a remarkable job with the maintenance which can be very labor intensive and unforgiving.

However I believe that an issue should be addressed as it becomes more of a safety problem and could turn into a liability if this is not taken care of expeditiously.

I live on VanBuren Avenue about half a block south of Dildine Elementary School, and it has come to my attention that speed and pedestrian traffic has become very unsafe. I know a traffic study has been recently completed so that study should be available for use in this matter.

I would like to first bring the matter of speed to your attention. Being former law enforcement I realize it is impractical to assign a twenty four hour officer to ensure drivers maintain the speed limit. Therefore I would like to propose that the speed limit be lowered to twenty five miles per hour. I understand that most residential speed limits are at twenty five miles per hour, however, VanBuren does not have sidewalks on the west side after Green River Street and the width is decreased to the point that when one vehicle is parked next to the sidewalk and two vehicles pass each other they are close enough that vehicles have been hit. A guest in our home had his truck parked in front of our house and it was hit and the driver side mirror broke. Just an example of how narrow this part of the road is. Not to mention the joggers, mail carriers and children that walk on the west side of VanBuren. A twenty five mile per hour speed limit would be a safe and practical solution. In addition, three speed humps could be installed between Del Range and Eastview St. at proper intervals as to maintain proper speed for example like the ones that are positioned around Alta Vista Elementary School. Perhaps one between Del Range and the school, one after Green River St. and one more by Eastview Drive.

Also the school zone lights are placed well with two on Del Range and two on VanBuren with the exception of one. If you travel east on Del Range you will find that a school zone flashing light will slow traffic on Del Range. However, when traffic turns south on VanBuren, there is not another school zone light until approximately a hundred feet before the school property ends. That is approximately three to four hundred feet after the school property starts. In that uncontrolled span there is a traffic entrance and exit into Dildine School main parking lot which is also used by pedestrians and one pedestrian entrance gate which is for loading and unloading school buses onto the play ground. That section has a high number of both pedestrian and vehicle traffic at the beginning and ending of the school day and is not speed controlled.

Pedestrian traffic safety has also become somewhat disturbing. At the corner of Del Range and VanBuren and the corner of Green River are crosswalks. I have witnessed several vehicles make panic stops and come very close to hitting pedestrians, mostly children in these crosswalks. I have personally witnessed drivers getting upset at the pedestrians for using the crosswalks as they understood the crosswalks were only valid during the mandated school times. The pedestrian signs that have the flashing amber lights seem very effective to alerting motorists of impending pedestrians. Also, possibly adding a traffic light at Del Range and VanBuren would cut down on the amount of traffic during these busier times.

In closing I would like to point out that where there is a school, children are going to be close by. With some of the speeds and total disregard for safety by motorists on this road that has been witnessed on a daily basis. A child can and will be hurt or killed on this road someday if immediate action is not taken. I have already witnessed speed that has claimed one life of a young man on a motor cycle just this last August. Perhaps with these changes and upgrades this will be the only life that this road will claim.

Thank you for your time and consideration in this matter.

Sincerely,


Below are names and signatures of the surrounding neighborhood that supports this request.



Below are names and signatures of the surrounding neighborhood that supports this request.
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Rick Robioson 5308 Libeetsht.
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Below are names and signatures of the surrounding neighborhood that supports this request.

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## Appendix B

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Neighborhood Traffic Management Program
Van Buren Avenue Neighborhood Meeting
Dildine Elementary School
November 6, 2014 5:30-7:30 PM


Name: $\qquad$ TERRY ZVIKER
Address: 402
Email: TZUIEARC BRESNAN, NET
Would you like to be notified of future meetings? Neo

Please tell us about your traffic concerns regarding Van Buran Avenue. If there is a location of particular concern to you, please indicate it here or mark it on one of the maps that have been provided.
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Do you have any additional thoughts, information, or comments that you would like to provide at this time?
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$\qquad$

You may turn in this comment sheet at today's meeting; email comments to James Sims at jisims@cheyennempo.org ; send the questionnaire to 2101 O' Neil Room 205, Cheyenne, WY 82001; or call James directly at 638-4308. $_{\text {2 }}$.

Neighborhood Traffic Management Program Van Buren Avenue Neighborhood Meeting

Dildine Elementary School
November 6, 2014 5:30-7:30 PM
Name: Frnete Stewaf Phone: 4212627
Address: 5312 free Puri- os l
Email: $\qquad$
Would you like to be notified of future meetings? Yes $\square$ No $\square$

Please tell us about your traffic concerns regarding Van Buran Avenue. If there is a location of particular concern fo you, please indicate it here or mark it on one of the maps that have been provided.


Do you have any additional thoughts, information, or comments that you would like to provide at this time?

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Neighborhood Traffic Management Program
Van Buran Avenue Neighborhood Meeting
Dildine Elementary School
November 6, 2014 5:30-7:30 PM

Name: NAncy Moncktor Phone: 514-1226
Address: 4507 UAM Buran Are
Email: $\qquad$
Would you like to be notified of future meetings? Yes No $\square$

Please tell us about your traffic concerns regarding Van Buren Avenue. If there is a location of particular concern to you, please indicate it here or mark it on one of the maps that have been provided.

What ABout Traffic when strange units
Are bunt on VAn Buran
speelmg pefriteb - problem and traffic Lust needed at Dell Range

Do you have any additional thoughts, information, or comments that you would like to provide at this time?
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You may turn in this comment sheet at today's meeting; email comments to James Sims at jsims@chevennempo.org; send the questionnaire to 2101 O'Neil Room 205, Cheyenne, WY 82001; or call James directly at 638-4308.

## Appendix C

## Speed Enforcement Evaluator

## Location: <br> 4100 Bk Van Buren

## Closest Cross Street:

## Analysis Dates:

Tuesday, October 14, 2014
Monday, October 20, 2014

## Installed By:

## Total Percentage of Enforceable Violations



Percent Above Limit: 0.4\% Enforcement Rating: LOW

Lane2


Percent Above Limit: 0.7\% Enforcement Rating: LOW

| Combined |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-5 | 6-10 | 11-15 | 16-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | >65 |
| 0 | 22 | 88 | 443 | 2198 | 4090 | 2101 | 292 | 26 | 5 | 4 | 0 | 0 | 0 |
| 85 percentile $=31$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 1-5 | 6-10 | 11-15 | 16-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | >65 |
| 0 | 19 | 41 | 283 | 1221 | 2015 | 869 | 134 | 11 | 3 | 1 | 0 | 0 | 0 |
| 85 percentile $=31$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1-5 | 6-10 | 11-15 | 16-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | 51-55 | 56-60 | 61-65 | >65 |
| 0 | 3 | 47 | 160 | 977 | 2075 | 1232 | 158 | 15 | 2 | 3 | 0 | 0 | 0 |

[^0]Site Code: 00000001 Station ID: 4100 Bk Van Buren

Latitude: 0' 0.000 South

| 10 | Lane1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Date\Speed | $1-5$ | $6-10$ | $11-15$ | $16-20$ | $21-25$ | $26-30$ | $31-35$ | $36-40$ | $41-45$ | $46-50$ | $51-55$ | $56-60$ | $61-65$ | $>65$ | Total |
| $10 / 15 / 2014$ | 0 | 1 | 5 | 60 | 224 | 345 | 146 | 24 | 2 | 1 | 1 | 0 | 0 | 0 | 809 |
| $10 / 16 / 2014$ | 0 | 3 | 8 | 54 | 239 | 396 | 152 | 25 | 1 | 0 | 0 | 0 | 0 | 0 | 878 |
| $10 / 17 / 2014$ | 0 | 6 | 6 | 79 | 280 | 351 | 135 | 12 | 2 | 2 | 0 | 0 | 0 | 0 | 873 |
| $10 / 18 / 2014$ | 0 | 3 | 7 | 37 | 170 | 268 | 149 | 24 | 3 | 0 | 0 | 0 | 0 | 0 | 661 |
| $10 / 19 / 2014$ | 0 | 3 | 6 | 22 | 110 | 303 | 155 | 23 | 1 | 0 | 0 | 0 | 0 | 0 | 623 |
| Lane1 Total | 0 | 16 | 32 | 252 | 1023 | 1663 | 737 | 108 | 9 | 3 | 1 | 0 | 0 | 0 | 3844 |


| DatelSpeed | $1-5$ | $6-10$ | $11-15$ | $16-20$ | $21-25$ | $26-30$ | $31-35$ | $36-40$ | $41-45$ | $46-50$ | $51-55$ | $56-60$ | $61-65$ | $>65$ | Total |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $10 / 15 / 2014$ | 0 | 2 | 6 | 32 | 212 | 371 | 222 | 27 | 4 | 0 | 1 | 0 | 0 | 0 | 877 |
| $10 / 16 / 2014$ | 0 | 0 | 8 | 31 | 195 | 389 | 198 | 21 | 4 | 1 | 0 | 0 | 0 | 0 | 847 |
| $10 / 1 / 2014$ | 0 | 0 | 7 | 32 | 208 | 387 | 204 | 21 | 2 | 0 | 0 | 0 | 0 | 0 | 861 |
| $10 / 18 / 2014$ | 0 | 0 | 11 | 21 | 112 | 274 | 206 | 28 | 4 | 1 | 0 | 0 | 0 | 0 | 657 |
| $10 / 19 / 2014$ | 0 | 1 | 10 | 14 | 81 | 284 | 190 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 613 |
| Lane2 Total | 0 | 3 | 42 | 130 | 808 | 1705 | 1020 | 130 | 14 | 2 | 1 | 0 | 0 | 0 | 3855 |


| Combined |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| DatelSpeed | $1-5$ | $6-10$ | $11-15$ | $16-20$ | $21-25$ | $26-30$ | $31-35$ | $36-40$ | $41-45$ | $46-50$ | $51-55$ | $56-60$ | $61-65$ | $>65$ | Total |
| $10 / 15 / 2014$ | 0 | 3 | 11 | 92 | 436 | 716 | 368 | 51 | 6 | 1 | 2 | 0 | 0 | 0 | 1686 |
| $10 / 16 / 2014$ | 0 | 3 | 16 | 85 | 434 | 785 | 350 | 46 | 5 | 1 | 0 | 0 | 0 | 0 | 1725 |
| $10 / 17 / 2014$ | 0 | 6 | 13 | 111 | 488 | 738 | 339 | 33 | 4 | 2 | 0 | 0 | 0 | 0 | 1734 |
| $10 / 18 / 2014$ | 0 | 3 | 18 | 58 | 282 | 542 | 355 | 52 | 7 | 1 | 0 | 0 | 0 | 0 | 1318 |
| $10 / 19 / 2014$ | 0 | 4 | 16 | 36 | 191 | 587 | 345 | 56 | 1 | 0 | 0 | 0 | 0 | 0 | 1236 |
| Combined <br> Total | 0 | 19 | 74 | 382 | 1831 | 3368 | 1757 | 238 | 23 | 5 | 2 | 0 | 0 | 0 | 7699 |

## Heading1

Heading2
Heading3

Direction: NB


| Wednesday | Vehicles | 832 | AM P | Peak Hour : | 07:45 | Factor : | 0.70 | PM |  | Peak Hour : | 03:15 | Factor : 0.59 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11/19 Errors | Axles Used : | A: | 96.00 | B : | 96.00 \% | Avg A | s/Vehicle : |  | 2.02 | Avg Two | Axle Spacin |  | 9.9 ft . |
| Speed | Avg Speed : |  | 5 MPH | Percentiles | : 10\%: | 15.0 | 15\%: 16.0 |  |  | 23.3 | 85\%: 31.0 | 90\% | 32.6 |
| Class \% | 0.0 68.8 | 24.3 | 30.5 | 5.90 .2 | . 20.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| Gap \% | 12.38 | 7.0 | 6.9 | 4.04 .7 | . $7 \quad 3.0$ | 3.6 | 2.9 | 3.2 | 2.9 | 2.1 | 38.8 |  |  |


| Thursday | Vehicles | AM | Peak Hour : | 07:45 | Factor : | 0.78 | PM |  | Peak Hour : | 03:30 | Factor : 0.59 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11/20 Errors | $\begin{array}{\|l} \hline \text { Axles Used : } \\ \hline \text { Avg Speed : } \\ \hline \end{array}$ | A: 97.00 | B : | 97.00 \% | Avg Axles/Vehicle : |  | 2.01 |  | Avg Two Axle Spacing |  | : $\quad 9.9 \mathrm{ft}$. |
| Speed |  | 22.5 MPH | Percentiles | 10\%: | 15.5 | 15\%: 16.4 | 50\%: 22.9 |  |  | 85\%: 30.7 | 90\%: 32.4 |
| Class \% | 0.068 .2 | $24.9 \quad 0.4$ | 6.50 .0 | $\begin{array}{ll}0.0 & 0.0\end{array}$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Gap \% | 16.69 .0 | $7.7 \quad 8.2$ | 5.25. | 5.33 .0 | 3.2 | 3.2 | 2.6 | 1.7 | 2.5 | 31.7 |  |


|  |  |
| :--- | ---: |
| Friday |  |
| 11/21 | Errors |
|  | Speed |
|  | Class \% |
|  | Gap \% |


| Vehicles | 832 | AM Pe | Peak Hour : | 07:45 | Factor : 0.70 |  | PM |  | Peak Hour : | : 03:15 | Factor: 0.57 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Axles Used : | A: | 98.00 | \% B : | 98.00 \% | Avg A | les/Vehicle |  | 2.02 | Avg Two | Axle Spacin | : 9.9 ft . |
| Avg Speed : |  | .1 MPH | Percentiles | : 10\%: | 15.4 | 15\%: 16.3 |  | 50\% | 23.9 | 85\%: 32.0 | 90\%: 33.4 |
| 0.4 68.9 | 23.4 | 40.2 | 7.10 .0 | $0.0 \quad 0.0$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| 16.38 .3 | 7.0 | 5.7 | 3.3 3. | 3.52 .6 | 3.9 | 2.5 | 2.6 | 2.5 | 2.2 | 39.6 |  |


| $\begin{array}{ll}\text { Saturday } & \\ \text { 11/22 } & \text { Errors }\end{array}$ | Vehicles | AM P | Peak Hour : | 11:00 | Factor: 0.73 |  | PM |  | Peak Hour : 12:45 |  | Factor : 0.80 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{\|l\|} \hline \text { Axles Used: } \\ \hline \text { Avg Speed : } \end{array}$ | A: 99.00 | B : | 99.00 \% | Avg Axles/Vehicle : |  | 2.02 |  | Avg Two Axle Spacing : |  | $: \quad 9.8 \mathrm{ft}$. |
| Speed |  | 27.5 MPH | Percentiles : | 10\%: | 18.2 | 15\%: 20.2 |  | 50\% | : 28.8 | 85\%: 33.9 | 90\%: 34.6 |
| Class \% | $0.6 \quad 68.2$ | 23.20 .0 | 7.40 .2 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Gap \% | $5.4 \quad 4.4$ | 4.24 .8 | $3.0 \quad 3.8$ | 3.8 | 3.4 | 2.0 | 3.6 | 2.4 | 2.8 | 56.6 |  |


| $\begin{aligned} & \text { Sunday } \\ & 11 / 23 \end{aligned}$ | Errors Speed | Vehicles |  | 499 | AM P | Peak Hour | 07:45 |  | Factor : | 0.58 | PM |  | Peak Hour : |  |  | 12:00 | Factor : 0.79 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Axles Used : A: |  |  | $97.00 \%$ B |  | : $98.00 \%$ |  | Avg Axles/Vehicle : |  | 2.01 |  | Avg Two Axle Spacing |  |  |  | : $\quad 9.7 \mathrm{ft}$. |  |  |
|  |  | Avg Speed : |  | 27.8 MPH |  | Percentiles: |  | 10\%: 19.1 |  | 15\%: 21.6 |  | 50\%: 29.1 |  |  | 85\%: 34.0 |  | 90\%: 34.7 |  |  |
|  | Class \% | 0.2 | 73.5 | 21.8 | 0.0 | 4.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0. | . 0 |  |  |  |
|  | Gap \% | 5.4 | 4.5 | 3.9 | 5.2 | 4.1 | 3.2 | 4.8 | 3.2 | 2.8 | 1.9 | 1.7 |  | 3.0 |  | 6.2 |  |  |  |

## Heading1

Heading2
Heading3

Direction: SB


| Wednesday | Vehicles | AM P | Peak Hour : | 11:00 | Factor : | 0.61 | PM |  | Peak Hour : 03:00 |  | Factor : 0.79 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11/19 Errors | Axles Used : | A: 96.00 | B : | . 00 \% | Avg | s/Vehicle : |  | 2.02 | Avg Two | Axle Spacing | 9.9 ft . |
| Speed | Avg Speed : | 25.5 MPH | Percentiles : | 10\%: | 17.6 | 15\%: 19.3 |  | 50\% | 26.5 | 85\%: 32.5 | 90\%: 33.7 |
| Class \% | $\begin{array}{ll}0.0 & 64.4\end{array}$ | $23.5 \quad 2.0$ | 9.30 .5 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Gap \% | $5.6 \quad 6.0$ | 4.25 .0 | 5.23 .6 | 3.2 | 2.8 | 3.8 | 1.6 | 2.6 | 1.8 | 54.3 |  |


| Thursday <br> 11/20 Errors | Vehicles | AM P | Peak Hour : | 07:30 | Factor : | 0.67 | PM |  | Peak Hour : 03:00 |  | Factor: 0.88 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Axles Used : | A: 97.00 | B : | 7.00 \% | Avg Axl | es/Vehicle : |  | 2.01 | Avg Two | Axle Spacing | : $\quad 9.9 \mathrm{ft}$. |
| Speed | Avg Speed : | 25.1 MPH | Percentiles: | 10\%: | 17.6 | 15\%: 19.3 |  | 50\% | \%: 26.0 | 85\%: 31.8 | 90\%: 33.2 |
| Class \% | 0.064 .5 | 23.81 .7 | 9.50 .2 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Gap \% | $7.4 \quad 4.4$ | $4.8 \quad 5.3$ | 3.62 .9 | 3.2 | 3.4 | 2.5 | 3.6 | 2.7 | $7 \quad 1.9$ | 54.3 |  |



| Saturday | Vehicles | AM Peak Hour: |  | 10:15 | Factor : 0.92 |  | PM |  | Peak Hour : |  | Factor : 0.72 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11/22 Errors | Axles Used : A: | 99.00 \% | B | 99.00 \% | Avg Axles/Vehicle : |  |  | 2.02 | Avg Two Axle Spacing |  | $: \quad 9.8 \mathrm{ft}$. |  |
| Speed | Avg Speed : | 27.2 MPH | Percentiles: | 10\%: 20.1 |  | 15\%: 21.4 |  | 50\%: 28.0 |  | 85\%: 33.5 | 90\%: 34.4 |  |
| Class \% | 0.262 .6 | $28.0 \quad 0.0$ | 8.10 .6 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| Gap \% | $6.0 \quad 4.5$ | $4.5 \quad 2.7$ | $2.9 \quad 2.5$ | 2.9 | 2.5 | 1.9 | 2.7 | 3.1 | 3.1 | 60.9 |  |  |



## Heading1

Heading2
Heading3
Title1 : VanBuren S of Rock Springs Title2 Title3 Direction: NB


| Wednesday | Vehicles | 865 | AM P | Peak Hour : | 07:30 | Factor : 0.57 |  | PM |  | Peak Hour : 03:00 |  | Factor: 0.89 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11/19 Errors | Axles Used : | A: | 88.00 | B : | 87.00 \% | Avg Axl | les/Vehicle |  | 2.01 | Avg Tw | Axle Spacin | 10.1 ft . |
| Speed | Avg Speed : |  | . 0 MPH | Percentiles : | : 10\%: | 21.6 | 15\%: 22.9 |  | 50\% | 28.7 | 85\%: 33.8 | 90\%: 34.5 |
| Class \% | 0.2 62.5 | 23. | 10.2 | 13.20 .3 | 0.30 .0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Gap \% | $12.7 \quad 7.9$ | 6.1 | 5.9 | 4.8 3.5 | 3.55 .1 | 4.4 | 4.7 | 3.8 | 2.6 | 2.0 | 36.6 |  |




| Saturday | Vehicles | AM Peak Hour : |  | 11:00 | Factor : | 0.78 | PM |  | Peak Hour | : 03:15 | Factor: 0.86 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11/22 Error | Axles Used : | A: 97.00 | B : 9 | 6.00 \% | Avg Ax | s/Vehicle |  | 2.02 | Avg Two | Axle Spacing | : $\quad 9.9 \mathrm{ft}$. |
| Speed | Avg Speed : | 27.6 MPH | Percentiles: | 10\%: | 21.2 | 15\%: 22.2 |  | 50\% | : 28.0 | 85\%: 33.7 | 90\%: 34.6 |
| Class \% | 0.663 .0 | 22.400 | 13.30 .1 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Gap \% | 8.74 .7 | 5.63 .7 | 5.92 .6 | 2.6 | 3.3 | 2.1 | 4.6 | 3.8 | 3.2 | 49.2 |  |



## Heading1

Heading2
Heading3
Title1 : VanBuren S of Rock Springs Title2 Title3 Direction: SB

Bikes Tlrs Long Buses 6 Tire Single Single Double Double Double Multi Multi Multi
Gap [Secs] $5-910-1415-1920-2425-2930-3435-3940-4445-4950-54 \quad 55-5960-64 \quad 65-99$ !


| Friday <br> 11/21 | Errors Speed | Vehicles 1,010 |  |  | AM Peak Hour : |  |  | 07:45 |  | Factor: 0.81 |  | PM |  | Peak Hour : |  |  | 03:00 |  | Factor : 0.76 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Axles Used: A: |  |  | 97.00 \% |  | B : | 96.00 \% |  | Avg Axles/Vehicle : |  |  | 2.01 | Avg Two Axle Spacing : |  |  |  |  |  | 10.1 ft . |  |
|  |  | Avg Speed : |  | 28.8 MPH |  | Percentiles : |  | 10\%: 21.9 |  |  | 15\%: 23.5 |  | 50\%: 29.6 |  |  |  | 85\%: 34.4 |  |  | 90\%: 35.2 |  |
|  | Class \% | 0.4 | 66.9 | 23.7 | 71.4 | 7.1 | 0.2 | . 2 | 0.0 | 0.3 | 0.1 | 0.0 | 0. | . 0 | 0. | . 0 | 0.0 |  |  |  |  |
|  | Gap \% | 11.7 | 8.1 | 6.8 | 5.9 | 5.7 | 5.1 | . 1 | 4.7 | 3.8 | 3.0 | 3.4 |  | . 3 | 3. | . 0 | 36.6 |  |  |  |  |




## Appendix D

Study Name : DellRange_VanBuren<br>Study Date : 11/06/14

## Major Street Approaches

Eastbound: Dell Range
Number of Lanes: 1
$85 \%$ Speed > 40 MPH.
Total Approach Volume: 2,525
Westbound: Dell Range
Number of Lanes: 1
85\% Speed > 40 MPH.
Total Approach Volume: 2,000

## Minor Street Approaches

Northbound: Van Buren
Number of Lanes: 1
Total Approach Volume: 441
Southbound: Van Buren
Number of Lanes: 1
Total Approach Volume: 49

## Warrant Summary (Rural values apply.)

Warrant 1 - Eight Hour Vehicular Volumes Not Satisfied
Warrant 1A - Minimum Vehicular Volume Not Satisfied
Required volumes reached for 0 hours, 8 are needed
Warrant 1B - Interruption of Continuous Traffic Not Satisfied
Required volumes reached for 4 hours, 8 are needed
Warrant 1 A\&B - Combination of Warrants Not Satisfied
Required volumes reached for 3 hours, 8 are needed
Warrant 2 - Four Hour Volumes Not Satisfied Number of hours (3) volumes exceed minimum < minimum required (4).
Warrant 3 - Peak Hour Not Satisfied
Warrant 3A - Peak Hour DelayNot Satisfied
Approach volumes on minor street don't exceed minimums for any hour. Delay data not evaluated.
Warrant 3B - Peak Hour Volumes Not SatisfiedVolumes do not exceed minimums for any hour.Warrant 4 - Pedestrian VolumesNot Satisfied
Required 4 Hr pedestrian volume reached for 0 hour(s) and the single hour volume for 0 hour(s)
Warrant 5 - School Crossing Not Evaluated
Warrant 6 - Coordinated Signal System Not Evaluated
Warrant 7 - Crash Experience Not Satisfied
Number of accidents (1) is less than minimum (5). Volume minimums are not met.
Warrant 8 - Roadway Network Not Satisfied Major Route conditions not met. No volume requirement met.
Warrant 9 - Intersection Near a Grade Crossing

Cheyenne MPO
2101 O'Neil Ave
Cheyenne, WY 82001
Study Name : DellRange_VanBuren
Study Date : 11/06/14
Signal Warrants - Summary


## Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume
War 1B-Interruption of Traffic
War 1C-Combination of Warrants

| Hour Begin | Major <br> Total | Minor |  | Maj Min <br> 350 105 |  | $\begin{aligned} & \text { Hour } \\ & \text { Begin } \end{aligned}$ | $\begin{gathered} \hline \text { Major } \\ \text { Total } \end{gathered}$ | Minor |  | Maj Min <br> 525 53 |  | $\begin{aligned} & \text { Hour } \\ & \text { Begin } \end{aligned}$ | Major <br> Total | Minor |  | $\begin{aligned} & \hline \text { Maj } \\ & 420 \end{aligned}$ | $\begin{gathered} \hline \text { Min } \\ 84 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Vol | Dir |  |  | Vol |  | Dir | Vol |  |  | Dir |  |  |  |
| 16:45 | 783 | 79 | NB | Yes | No |  | 17:00 | 743 | 68 | NB | Yes |  | Yes | 16:30 | 754 | 86 | NB | Yes | Yes |
| 16:30 | 754 | 86 | NB | Yes | No | 16:00 | 732 | 76 | NB | Yes | Yes | 15:15 | 695 | 92 | NB | Yes | Yes |
| 17:00 | 743 | 68 | NB | Yes | No | 15:00 | 684 | 82 | NB | Yes | Yes | 07:45 | 557 | 89 | NB | Yes | Yes |
| 16:15 | 733 | 80 | NB | Yes | No | 07:30 | 601 | 72 | NB | Yes | Yes | 16:15 | 733 | 80 | NB | Yes | No |
| 16:00 | 732 | 76 | NB | Yes | No | 14:45 | 624 | 47 | NB | Yes | No | 15:00 | 684 | 82 | NB | Yes | No |
| 15:30 | 729 | 93 | NB | Yes | No | 07:15 | 602 | 52 | NB | Yes | No | 14:45 | 624 | 47 | NB | Yes | No |
| 15:45 | 717 | 90 | NB | Yes | No | 07:00 | 555 | 48 | NB | Yes | No | 07:15 | 602 | 52 | NB | Yes | No |
| 15:15 | 695 | 92 | NB | Yes | No | 14:30 | 542 | 26 | NB | Yes | No | 07:30 | 601 | 72 | NB | Yes | No |
| 15:00 | 684 | 82 | NB | Yes | No | 14:15 | 495 | 22 | NB | No | No | 07:00 | 555 | 48 | NB | Yes | No |
| 14:45 | 624 | 47 | NB | Yes | No | 11:30 | 468 | 35 | NB | No | No | 14:30 | 542 | 26 | NB | Yes | No |
| 07:15 | 602 | 52 | NB | Yes | No | 11:45 | 457 | 39 | NB | No | No | 14:15 | 495 | 22 | NB | Yes | No |
| 07:30 | 601 | 72 | NB | Yes | No | 11:15 | 450 | 28 | NB | No | No | 11:30 | 468 | 35 | NB | Yes | No |
| 17:15 | 568 | 47 | NB | Yes | No | 12:00 | 447 | 47 | NB | No | No | 11:45 | 457 | 39 | NB | Yes | No |
| 07:45 | 557 | 89 | NB | Yes | No | 14:00 | 427 | 19 | NB | No | No | 11:15 | 450 | 28 | NB | Yes | No |
| 07:00 | 555 | 48 | NB | Yes | No | 11:00 | 426 | 19 | NB | No | No | 12:00 | 447 | 47 | NB | Yes | No |
| 14:30 | 542 | 26 | NB | Yes | No | 06:45 | 405 | 36 | NB | No | No | 14:00 | 427 | 19 | NB | Yes | No |
| 08:00 | 511 | 82 | NB | Yes | No | 12:15 | 331 | 35 | NB | No | No | 11:00 | 426 | 19 | NB | Yes | No |
| 14:15 | 495 | 22 | NB | Yes | No | 10:45 | 318 | 15 | NB | No | No | 06:45 | 405 | 36 | NB | No | No |
| 11:30 | 468 | 35 | NB | Yes | No | 13:45 | 300 | 16 | NB | No | No | 17:30 | 363 | 28 | NB | No | No |
| 11:45 | 457 | 39 | NB | Yes | No | 06:30 | 249 | 24 | NB | No | No | 12:15 | 331 | 35 | NB | No | No |
| 11:15 | 450 | 28 | NB | Yes | No | 08:30 | 216 | 34 | NB | No | No | 10:45 | 318 | 15 | NB | No | No |
| 12:00 | 447 | 47 | NB | Yes | No | 12:30 | 204 | 23 | NB | No | No | 13:45 | 300 | 16 | NB | No | No |
| 14:00 | 427 | 19 | NB | Yes | No | 10:30 | 201 | 8 | NB | No | No | 06:30 | 249 | 24 | NB | No | No |
| 11:00 | 426 | 19 | NB | Yes | No | 13:30 | 198 | 12 | NB | No | No | 12:30 | 204 | 23 | NB | No | No |

## Appendix E

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Van Buren Avenue<br>Neighborhood Traffic Management Program<br>February 18, 2015 Public Meeting

Tom Mason, Nathan Beauheim, Mike Luna, Annette Williams, Chief Kozak, James Sims, Dennis Auker, Mike Wortman. 17 citizens were present.

Tom told the audience that the MPO is now updating the Neighborhood Traffic Management Program (NTMP) with a formal process to include applications for collector streets.

Tom summarized this project and the response paper: The traffic speed on Van Buren is within normal parameters. The volumes are within expected parameters; ADT 1500-1700. There have been nine crashes over a three year time frame which is expected for this type of collector, and there is one school zone. The items that the City is willing to do are:

- Lengthen school zone, add another crosswalk at Liberty, and install two way flashing yellow lights on school zone signs.
- The MPO may do a full corridor study if the MPO Policy Committee recommends them to do so.

Comments from the attendees:
Nathan stated that the school traffic safety committee will look at traffic circulation around the school next week. There may be other recommendations from that meeting.

Question: Did you do a pedestrian study for the corner of Dildine and Van Buren? Maybe there should be a school crossing at Dildine Street on the south side of school.

Signal warrant analysis was not met at Dell Range and Van Buren said James Sims. A citizen pointed out that there needs to be a traffic light at that location because without traffic control the kids wait a very long time to cross due to the fact that cars do not stop.

A citizen asked what needs to be done to get the push button flashers at the Dell Range crossing like on Central by Starbucks and by Baggs Elementary on Pershing Blvd. James said there would need to be a study done to look at pedestrian counts and traffic gaps. Nathan said pedestrian activated cross walk signals might be a solution. It will be looked into.

The school district could look at walking route changes during the summer and changes could take place at the beginning of the next school year.

Bart asked for larger signs for the crossing on Van Buren. Could the flashing signals be also put on Van Buren?

Many folks stated that parking during pick up on Green River and Polk is crazy.

A man asked if there was more traffic cutting through from Saddleridge to Dell Range? During a corridor study that could be looked at.

People park too close to driveways so people cannot see to pull out.

One lady said that the school playground is popular during summer hours. Need a 'children at play' sign installed. The main focus of the school zone warning etc. is for school times and there cannot be a mixing of messages.

One citizen still asked why we can't have speed humps. Mr. Stolp said that that wouldn't work and maybe rumble strips could be considered. It was pointed out that they are quite noisy. A few people agreed that safety was more important than the noise they would create.

Tom pointed, out that according to the NTMP, whatever treatments are to be implemented would have to be voted on by the entire neighborhood, not just those present in the room.

What can the school district do? Dennis Auker said they could build a bus pull out on Van Buren so pedestrians could see cars coming and motorists could see people in the crosswalks. Someone asked could the district change the bus pattern and drop and pick up areas; maybe move the busses around the corner. Also the school releases the kids to the back off of Polk so could they look at the bus drop off configuration. Parent pickup area needs to be looked at as well.

Principal Wortman said the busses have transfers at this location because they pick up kids that are going to other schools, so there are a lot of buses.

Consensus is the group wants the new crosswalk and bigger zone with more prominent signage. They also agree that there needs to be more education and enforcement for using the crosswalks that are there.

On gentleman suggested that the speed trailer be moved further north.
Thanks to the PD presence the crossing is much better. More police presence has made a difference for speeding, illegal parking and other problems on the corridor and at the school.

Citizens in attendance expressed appreciation for the work and analysis of the City and MPO staff.


[^0]:    85 percentile $=32$

