PRE-MEETING AGENDA

Casper City Council City Hall, Council Meeting Room Tuesday, November 16, 2021, 5:30 p.m.



Please silence cell phones during the City Council meeting.

Entrance to the meetings is the east door off David Street. Face coverings are encouraged for those individuals who have not been fully vaccinated against COVID-19. Public input via email is encouraged: CouncilComments@casperwy.gov.

	Presentation	Allotted	Beginning Time
1.	Speed Study for 12 th and 13 th Streets	10 min	5:30
2.	Casper 311	5 min	5:40
3.	Agenda Review	5 min	5:45
	Approximate Ending Time		5:50

MEMO TO:

J. Carter Napier, City Manager

FROM:

Keith McPheeters, Police Chief

Shane Chaney, Deputy Police Chief

SUBJECT:

That Council, Review the Requested Information Regarding Traffic Studies

on 12th and 13th Streets, to include Traffic Stops, Accident Data, and Vehicle

Crashes

Meeting Type & Date

November 16, 2021

Action type

Information only

Recommendation

That Council, review the requested information regarding traffic stops, accident data, and vehicle crashes on 12th and 13th Streets.

Summary

Speed is an important transportation consideration because it relates to safety, time, comfort, convenience, and economics. Speed studies are used to determine the speed distribution of a traffic stream at a specific location. The data gathered is used to determine vehicle speed percentiles, which are used in making many speed-related decisions.

The latest study performed by the Casper Police Department was in September 2020, on 12th street between Wolcott and CY showed the following:

- 1) The 85th percentile was 31 MPH during this two (2)-week time period
- 2) 2.6% of vehicles traveling 5 MPH or more over the speed limit in a two (2)-week period
- 3) 12 vehicles traveling in excess of 65 MPH in a two (2)-week period
- When a speed trailer was deployed, there was no change, showing an 85th percentile of 31 MPH.
- 5) The maximum speed captured by the speed trailer was 92 MPH (as a side note, the speed trailer feedback display is programmed to shut off at 50 MPH to prevent the "high score" effect).
- After the speed trailer was removed, the traffic team officers deployed in the area for two weeks within the high enforcement times, with very few stops made or citations issued. The overall team consensus was there are areas where speeding issues are worse, and enforcement efforts have a greater impact. Examples of those areas include our current

High Visibility Enforcement area on CY between Wolf Creek and Wyoming Blvd, and our current DDACTS area on 2nd street between Jackson and Beech.

Again, we do know there are super high speeds ("fliers") that are being recorded, but they are sporadic and we are unable to necessarily predict when those speeds are being attained.

Roll over crashes have many causes. Focusing on city speeds, which are generally lower speeds, there are two reasons a vehicle will roll over.

- 1) The vehicle velocity is at a right angle to direction the vehicle is heading, sliding sideways, and another force causes the vehicle center of gravity to be overcome and the vehicle goes over.
 - a. After being hit from the side and sliding sideways, the vehicle hits a curb or another object causing the vehicle to "trip," and overturn.
 - b. The lead tires in the slide burrow into a soft material such as dirt, or the tires deflate, causing the rims to catch on the roadway, making the vehicle to trip and overturn.
 - c. Dynamic steering induced instabilities, or "overcorrecting", turning the steering wheel abruptly or in the wrong direction.
- 2) The vehicle ramps off another object, which can be a parked vehicle, curbs, medians, or rocks. The center of gravity for the vehicle is a key factor in a rollover, with SUV's and trucks being more likely to roll than a passenger car.

After reviewing a few of the crashes on 12th and 13th with rollovers, it appears that the significant causation is driver impairment, or drivers not stopping at stop signs or stop lights.

Reference: Fundamentals of Traffic Crash Reconstruction by Daily, Shigemura, and Daily

Information obtained from the NHTSA website. www.nhtsa.gov

Financial Considerations

None

Oversight/Project Responsibility

Shane Chaney Deputy Police Chief

Attachments

Study data

TRAFFIC ANALYSIS REPORT

For Project:

12th Street

Location/Name:

Incoming Direction

Report Generated:

8/20/2018 8:34

Speed Intervals

1 mph

Time Intervals

0 minutes

Traffic Report From

8/13/2018 7:39:42 AM through 8/20/2018 8:07:37 AM

85th Percentile Speed

33 mph

85th Percentile Vehicles

27,512 counts

Max Speed

76.0 mph on 8/18/2018 2:51:04 AM

Total Vehicles

32,367 count

AADT:

4,611

Volumes - weekly vehicle counts

	Time	5 Day	7 Day
Average Daily		4,525	4,270
AM peak	8:00 to 9:00	223	202
PM peak	5:00 to 6:00	445	389

Speed

Speed limit:

30 mph

85th Percentile Speed:

33 mph

Average Speed:

29.0 mph

	_ Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	2,264	2,175	2,386	2,436	2,319	1,609	1,586
% over limit	45.8	43.7	46.5	49.2	45.6	41.5	46.8
Avg speeder	32.8	32.7	32.7	32.8	32.9	32.7	32.9

Class counts

	Number	%
VEH_SM	133	0.4
VEH_MED	31,665	97.8
VEH_LG	569	1.8

[VEH_SM = motorcycle, VEH_MED = sedan, VEH_LG = truck]

TRAFFIC ANALYSIS REPORT

For Project:

13th Street

Location/Name:

Incoming Direction

Report Generated:

8/20/2018 8:39

Speed Intervals

1 mph

Time Intervals

0 minutes

Traffic Report From

8/13/2018 7:46:52 AM through 8/20/2018 8:13:54 AM

85th Percentile Speed

34 mph

85th Percentile Vehicles

32,620 counts

Max Speed

62.0 mph on 8/16/2018 7:26:27 PM

Total Vehicles

38,376 count

AADT:

5,468

Volumes - weekly vehicle counts

	Time	5 Day	7 Day
Average Daily		5,393	5,062
AM peak	8:00 to 9:00	300	262
PM peak	5:00 to 6:00	533	463

Speed

Speed limit:

30 mph

85th Percentile Speed:

34 mph

Average Speed:

30.3 mph

	Monday_	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	3,739	3,652	3,881	3,891	3,769	2,609	2,492
% over limit	63.6	62.5	64.7	63.6	62.2	57.7	63.1
Avg speeder	33.3	33.2	33.4	33.3	33.2	33.2	33.3

Class counts

	Number	%
VEH_SM	8	0.0
VEH_MED	37,655	98.1
VEH_LG	713	1.9

Survey Description

Survey Details

Survey Location 12th & Elm ,Casper WY

Survey GPS Coordinates

Survey Dates Start Stop

Wednesday, 6/10/2020 10:25 AM Th

Thursday, 6/18/2020 9:36 AM

Posted Speed Limit 30 (mph)

Traffic Zone One Way West

File Name SurveyDataFile@2020-06-18_09-36-51.xml

Device TypeTraffic TrailerDevice Serial NumberSNAA000000

Survey Note Default survey set up

Total Vehicle Count 41255

Traffic Direction West (Closing) East (Away)

Vehicle Count 41255

Survey Map



Survey Summary

Survey I	Desci	ription
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Survey Location 12th & Elm ,Casper WY

Survey GPS Coordinates

Survey Dates Start Stop

Wednesday, 6/10/2020 10:25 AM Thursday, 6/18/2020 9:36 AM

Posted Speed Limit 30 (mph)
Traffic Zone One Way West

Survey Result			
Total Vehicle Count		41255	
Traffic Direction	Closing	Away	Combined
	West	East	
Vehicle Count	41255	0	41255
Posted Speed Limit		30 (mph)	
Vehicles Under the Speed Limit Count	34191	0	34191
Vehicles Under the Speed Limit Percentage	82.88%	0	82.88%
Vehicles Over the Speed Limit Count	7064	0	7064
Vehicles Over the Speed Limit Percentage	17.12%	0	17.12%
Excessive Speed Threshold		40 (mph)	
Vehicles Over the Excessive Speed Count	229	0	229
Vehicles Over the Excessive Speed Percentage	0.56%	0	0.56%
Average Speed Over Limit	32.76 (mph)	0	32.76 (mph)
Speed Profile			
Average Speed	27.11 (mph)		27.11 (mph)
Minimum Speed	10 (mph)	1000 (mph)	10 (mph)
Maximum Speed	92 (mph)	0 (mph)	92 (mph)
85th Percentitle Speed	31 (mph)	0 (mph)	31 (mph)
Standard Deviation	14 (mph)	0 (mph)	14 (mph)
10 mph Pace	23-32 (mph)	0-9 (mph)	23-32 (mph)
In Pace Count	32969	0	32969
Data Recording Limits			
Highest Speed Allowed		120 (mph)	
Lowest Speed Allowed		10 (mph)	
Minimum Following Time		2 Second(s)	

Survey Description

Survey Location 12th & Elm , Casper WY

Survey GPS Coordinates

Survey Dates Start Stop

Wednesday, 6/10/2020 10:25 AM Thursday, 6/18/2020 9:36 AM

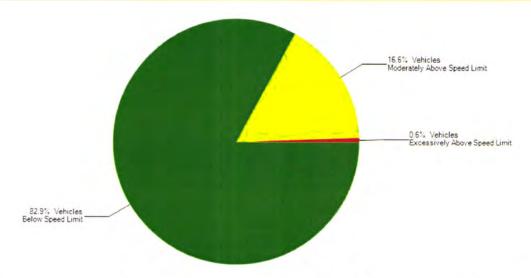
Posted Speed Limit 30 (mph)

Traffic Zone One Way West

Speed Pie Chart

Date Range: 2020-06-10 - 2020-06-18

Direction:



Traffic Direction	Closing	Away	Combined
Posted Speed Limit		30 (mph)	
Vehicles Under the Speed Limit Count	34191	0	34191
Vehicles Under the Speed Limit Percentage	82.88%	0	82.88%
Vehicles Over the Speed Limit Count	7064	0	7064
Vehicles Over the Speed Limit Percentage	17.12%	0	17.12%
Excessive Speed Threshold		40 (mph)	
Vehicles Over the Excessive Speed Count	229	0	229
Vehicles Over the Excessive Speed Percentage	0.56%	0	0.56%
Average Speed Over Limit	32.76 (mph)	0	32.76 (mph)

Survey Description

Survey Location 12th & Elm , Casper WY

Survey GPS Coordinates

Survey Dates Start Stop

Wednesday, 6/10/2020 10:25 AM Thursday, 6/18/2020 9:36 AM

Posted Speed Limit 30 (mph)

Traffic Zone One Way West

Enforcement Schedule

Date Range: 2020-06-10 - 2020-06-18

Direction:

Best Speed Enforcement Time

Closing Traffic
Start Time
Stop Time
Start Time
Stop Time
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

Casper Police Department

201 N. David St - 1st Floor Casper, WY 82601 Traffic Division: (307)235-8263

Speed Enforcement Evaluator

Location: W 12th

Closest Cross Street:

S David

Analysis Dates:

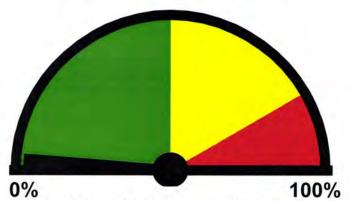
Friday, September 4, 2020 Saturday, September 12, 2020

Equipment Used:

Installed By:

Requested By:

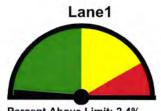
Total Percentage of Enforceable Violations



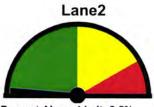
Posted Speed Limit: 30 MPH Enforcement Tolerance: 5 MPH

Enforcement Limit: 36 MPH & Up

Percentage Above Limit: 2.5% Enforcement Rating: LOW



Percent Above Limit: 2.4% Enforcement Rating: LOW



Percent Above Limit: 2.5% Enforcement Rating: LOW

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	110	222	1028	5640	23013	11465	892	114	23	14	9	7	3

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	78	111	403	2502	10562	4884	380	62	9	7	4	2	0

1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	E4 EE	56-60	C4 CE	201
1-5	0-10	11-10	10-20	21-20	20-30	31-33	30-40	41-45	40-00	51-55	00-00	61-65	>65
0	32	111	625	3138	12451	6581	512	52	14	7	5	5	

Casper Police Department

201 N. David St - 1st Floor Casper, WY 82601 Traffic Division: (307)235-8263

Speed Enforcement Evaluator

Location: W 12th

Closest Cross Street:

S David

Analysis Dates:

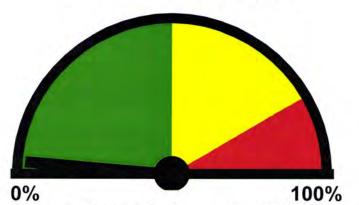
Saturday, September 12, 2020 Monday, September 21, 2020

Equipment Used:

Installed By:

Requested By:

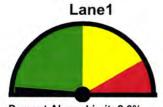
Total Percentage of Enforceable Violations



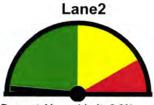
Posted Speed Limit: 30 MPH Enforcement Tolerance: 5 MPH

Enforcement Limit: 36 MPH & Up

Percentage Above Limit: 2.7% Enforcement Rating: LOW







Percent Above Limit: 2.8% Enforcement Rating: LOW

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	79	174	1002	5701	27043	14285	1144	112	31	12	12	10	C

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	52	98	438	2407	11907	5966	459	58	17	4	6	6	4

ane2													
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	27	76	564	3294		8319	685	54	14	8	6	4	5

MEMO TO:

J. Carter Napier, City Manager

FROM:

Tracey L. Belser, Support Services Director

Michael Szewczyk, IT Manager

SUBJECT:

Casper 311 Update

Meeting Type & Date

Council Pre-Meeting November 16, 2021

Action type

Informational Only

Recommendation - None

Summary

In January of this year, the City went live with its citizen request management system, Casper 311, for potholes, signs and streetlights. Another category for snow removal was built in during the major storm in March 2021. Four more request types have since been added for the code enforcement office this fall - weeds, litter, junk, and junk vehicles. To date, more than 1,000 submissions for service have been received.

Shortly after implementing the code enforcement piece, a bug was encountered which re-sent email messages to the individuals who had previously submitted requests. Now that the issue has been identified, staff is evaluating a vendor provided fix to confirm it resolves the problem. Barring any setbacks, the update is planned to be installed the week of November 15, 2021.

Moving forward, efforts are underway to integrate the City's two mobile applications (app) into one. Over the next several months, the City will be upgrading from the existing MyCivic app which has limited abilities (where Casper 311 resides), to the full-featured application. In addition to citizen requests, the full-featured app will include connections to other City information and services available at the CasperWY.gov website. This new functionality will allow for the decommissioning of the existing, second app currently providing that service. Sample images of the full and limited Casper 311 app versions has been provided below for comparison purposes.

Financial Considerations - None

Oversight/Project Responsibility

Michael Szewczyk, IT Manager

Attachments - None

