



**Department of
Public Works**
Steven A. Kotke, P.E.
City Engineer
Director

350 South 5th Street - Room 203
Minneapolis MN 55415

Office 612 673-3000
Fax 612 673-3565
TTY 612 673-2157

January 7, 2015

Mr. Lars Impola
Mn/DOT Metro District Traffic Engineering
1500 West County Road B2
Roseville, MN 55113

RE: Highway Safety Improvement Program (HSIP) Funding Applications

Dear Mr. Impola:

The City of Minneapolis Department of Public Works is submitting applications for the 2017-2019 Highway Safety Improvement Program (HSIP) for the following projects:

- 6th Street South Overhead Signal Additions
- 7th Street South Overhead Signal Additions
- 8th Street South/11th Avenue South Overhead Signal Additions
- Bicycle Lane Colored Conflict Zones
- Pedestrian Curb Extensions

The City is committed to securing the required local match for these projects and to the operation and maintenance of these projects for their useful lives.

Thank you for considering our applications.

Sincerely,

Steven A. Kotke, P.E.
City Engineer Director of Public Works





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January 7, 2015

Mr. Lars Impola
Mn/DOT Metro District Traffic Engineering
1500 West County Road B2
Roseville, MN 55113

RE: Highway Safety Improvement Program (HSIP) Funding Application
6th Street Overhead Signal Additions (Reactive)

Dear Mr. Impola:

Attached are the 2015 application materials for Highway Safety Improvement Program (HSIP) funds for the 6th Street Overhead Signal Additions project.

This project is being submitted for your consideration by the City of Minneapolis. The project manager will be Allan Klugman, Senior Professional Engineer with Department of Public Works. The main objective of the project is to add overhead signal indications, in all directions, at five existing signal systems along 6th Street from 1st Avenue North to Portland Avenue South in Downtown Minneapolis. (See table attached to this letter for this listing of the five project intersections.)

Additional work will include the following items where current infrastructure is lacking: installing Pedestrian Countdown Timers, Accessible Pedestrian Signals (APS), converting 8" diameter signal lenses to 12" lenses, replacement of outdated conduit, and upgrading to ADA compliant pedestrian curb ramps. Pedestrian curb extensions will be considered in designing the ADA curb ramps. Essentially, the entire signal system will be rebuilt.

The total project cost is estimated at \$1,100,000, with Federal funding requested in the amount of \$990,000. The local match will be \$110,000, coming from a combination of County State Aid (CSA), Municipal State Aid (MSA) and City Net Debt Bond funds.

The following documents are attached:

- A letter from the Minneapolis City Engineer Director of Public Works committing for project local match and future operation and maintenance funding
- Project location map
- Plan sheet showing typical intersection geometry
- HSIP application forms
- HSIP B/C worksheet
- Amortization worksheet
- Collision diagrams for each intersection in the project
- Crash history tables

Over the past decade Minneapolis has converted a number of traffic signals from low mount design to overhead installations and has successfully reduced the number of right angle crashes at those intersections. Minneapolis has a long term goal of upgrading all traffic signals in Downtown with overhead signals to reduce the number of right angle crashes and to obtain a consistent signal design throughout all corridors.



Through a review of three years of right angle crash data, the 6th Street corridor was found to have a number of low mount signal intersections that have high right angle crash histories. About half of 6th Street's deficient Signals are already planned to be upgraded with other projects. This project will address all remaining deficient signals such that when all the 6th Street projects are complete, the entire corridor will have a consistent signal design.

The 6th Street corridor provides access to the downtown core, the future Vikings Stadium, and Target Center. Interstate 394 exits to 6th Street on the west end and leads to the Interstate 94 entrance ramp on the east end. The ADT varies between 7,000 and 15,000.

In the attached table, crash data from the Minnesota Department of Transportation is shown for the five intersections on 6th Street. The project will implement two crash reduction countermeasures. The primary countermeasure is the installation of overhead signals to improve signal visibility. We have estimated the right angle crash reduction factor to be 80% and the reduction factor for all other crashes to be 30%. These reduction factors are based on before and after crash records collected at 22 intersections in Minneapolis where overhead signals were added to existing signal systems in the past five years.

The secondary countermeasure is the installation of pedestrian countdown timers. We have estimated the pedestrian crash reduction factor to be 30%. This reduction factor was obtained from the CMF Clearinghouse with the most similar type of countermeasure to the proposed project. Combining the two countermeasures yields an overall pedestrian crash reduction for the project to be 51% calculated as shown below:

$$1 - (1 - 0.3) \times (1 - 0.3) = 0.51$$

The expected service life of the project is 20 years. Over that time period, we estimate the project to achieve a benefit/cost ratio of 15.30.

Thank you for considering our application for 2015 Highway Safety Improvement Program funds.

Sincerely,



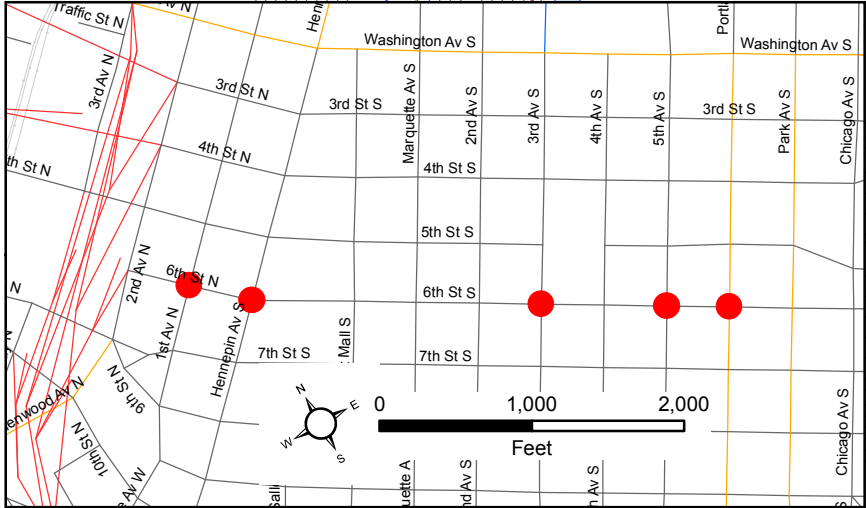
Allan Klugman, P.E., PTOE
City of Minneapolis
300 Border Avenue North
Minneapolis, MN 55405

Attachments

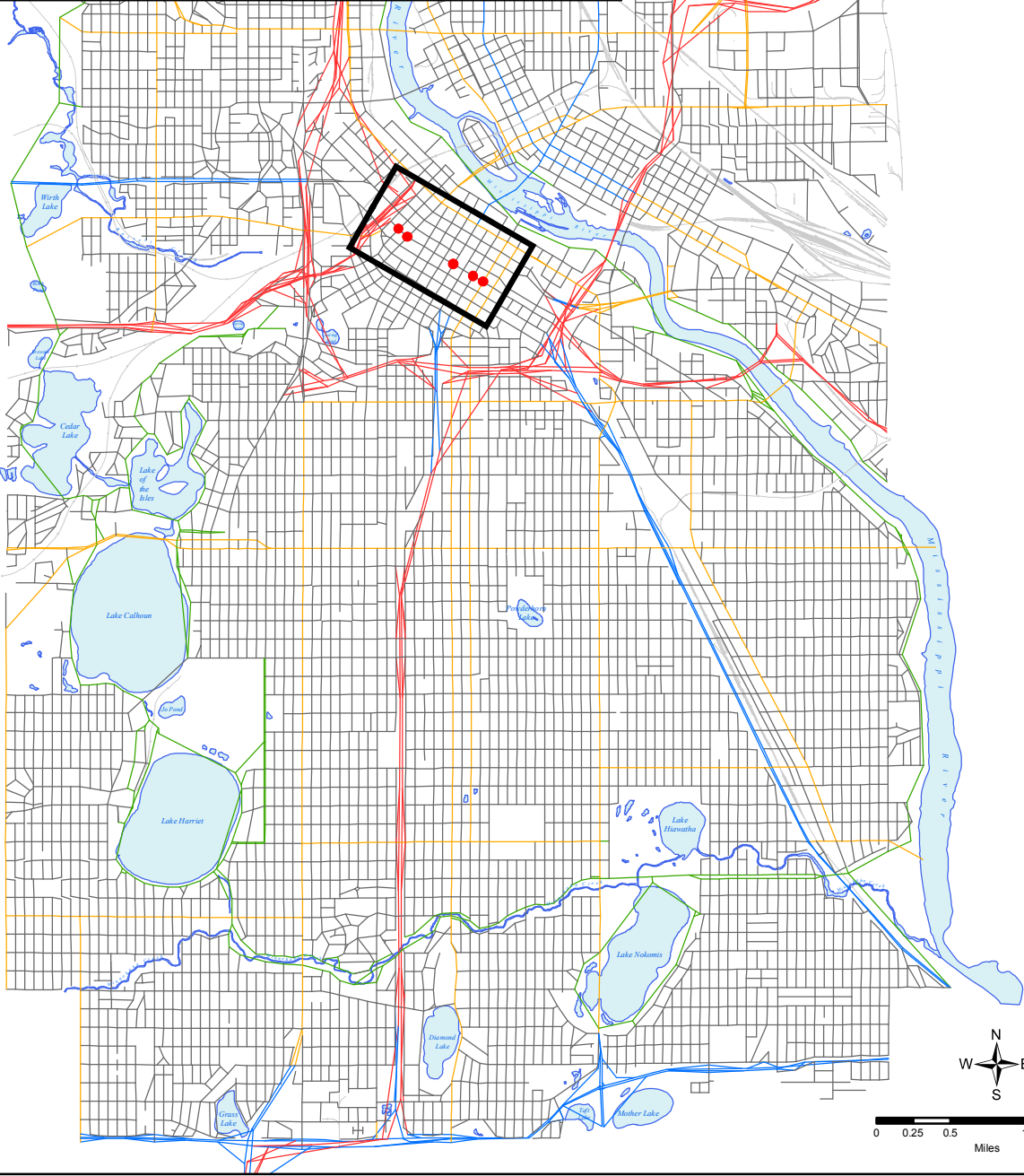
cc: Mr. Steve Kotke
Mr. Jon Wertjes

Highway Safety Improvement Program Funding Application
6th Street Overhead Signal Additions
Project Locations

1. 6th Street South & 1st Avenue North
2. 6th Street South & Hennepin Avenue South
3. 6th Street South & 3rd Avenue South
4. 6th Street South & 5th Avenue South
5. 6th Street South & Portland Avenue South



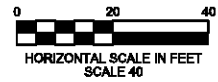
● Project Locations



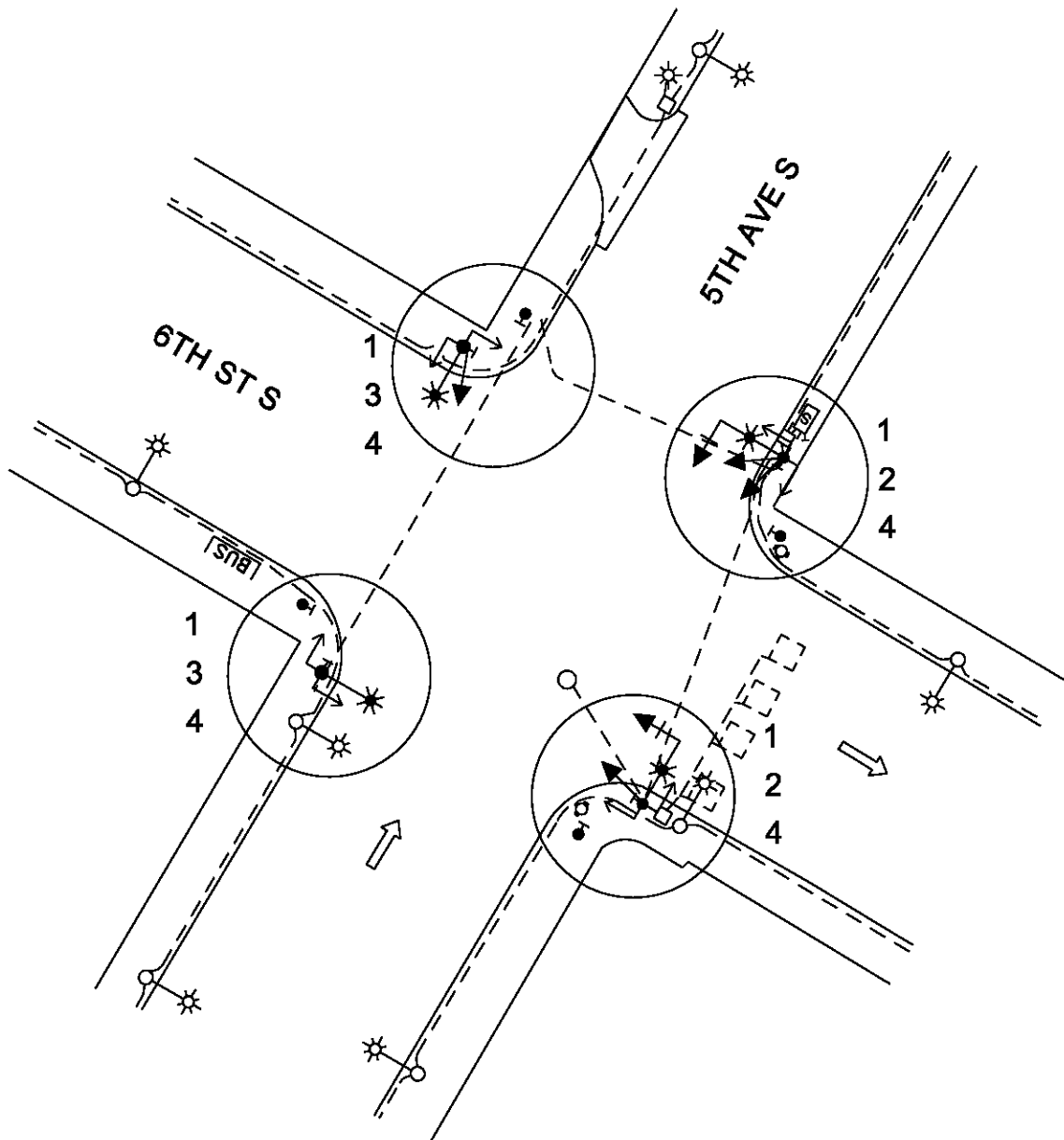
HSIP: 6th Street South Overhead Signal Additions

SCOPE OF WORK

(ON 6TH ST S; TYPICAL AT 1ST AVE N, HENNEPIN AVE, 3RD AVE S, 5TH AVE S, & PORTLAND AVE S)



1. REMOVE EXISTING SIGNAL POLE & NEARBY LIGHT POLE
2. FURNISH & INSTALL SIGNAL POLE WITH ONE SIGNAL HEAD ON MASTARM AND LOW LEVEL SIGNAL INDICATIONS AS REQUIRED: ADD LED LUMINAIRE ON DAVIT ARM
3. FURNISH & INSTALL LIGHTING AND LOW LEVEL SIGNAL INDICATIONS AS REQUIRED
4. FURNISH & INSTALL ACCESSIBLE PEDESTRIAN SIGNAL (APS), COUNTDOWN TIMERS, & ADA COMPLIANT CURB RAMP (CONSTRUCT WITH CURB EXTENSION WHERE NOTED)



Federal HSIP Funding Application (Form 1)

INSTRUCTIONS: Complete and return completed application to Lars Impola, MnDOT, Metro District, 1500 West County Road B2, Roseville, Minnesota 55113. (651) 234-7820. **Applications must be received by 4:30 PM or postmarked on January 7, 2014.** *Be sure to complete and attach the Project Information form. (Form 2)

Office Use Only

I. GENERAL INFORMATION

1. APPLICANT: City of Minneapolis

2. JURISDICTIONAL AGENCY (IF DIFFERENT):

3. MAILING ADDRESS: 300 Border Ave N

CITY: Minneapolis

STATE: MN

ZIP CODE: 55405

4. COUNTY: Hennepin

5. CONTACT PERSON:

Allan Klugman

TITLE:

Sr. Professional Engineer

PHONE NO.

(612) 673-2743

CONTACT E-MAIL ADDRESS: allan.klugman@minneapolismn.gov

II. PROJECT INFORMATION

6. PROJECT NAME: 6th Street South Overhead Signal Additions

7. BRIEF PROJECT DESCRIPTION (Include location, road name, type of improvement, etc... A more complete description can be submitted separately):

Addition of overhead signal indications at five existing signal systems along 6th St S in downtown Minneapolis.

8. HSIP PROJECT CATEGORY – Circle which project grouping in which you wish your project to be scored.

Proactive

Reactive

III. PROJECT FUNDING

9. Are you applying or have you applied for funds from another source(s) to implement this project?

Yes No

If yes, please identify the source(s):

10. FEDERAL AMOUNT: \$ 990,000

13. MATCH % OF PROJECT TOTAL: 10%

11. MATCH AMOUNT: \$ 110,000

14. SOURCE OF MATCH FUNDS: MSA/CSA/NDB

12. PROJECT TOTAL: \$ 1,100,000

15. REQUESTED PROGRAM YEAR(S) :

2017 2018 2019 Any year

16. SIGNATURE:

Allan Klugman

17. TITLE:

Sr. Professional Engineer

PROJECT INFORMATION (Form 2)

(To be used to assign State Project Number after project is selected)

Please fill in the following information as it pertains to your proposed project. Items that do not apply to your project, please label N/A. **Do not send this form to the State Aid Office. For project solicitation package only.**

COUNTY, CITY, or LEAD AGENCY _____

FUNCTIONAL CLASS OF ROAD _____

ROAD SYSTEM _____ (TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET)

NAME OF ROAD _____ (Example: 1st Street, Main Avenue)

ZIP CODE WHERE MAJORITY OF WORK IS BEING PERFORMED _____

APPROXIMATE BEGIN CONSTRUCTION DATE (MO/YR) _____

APPROXIMATE END CONSTRUCTION DATE (MO/YR) _____

LOCATION: From: _____

To: _____

(DO NOT INCLUDE LEGAL DESCRIPTION)

TYPE OF WORK _____

(Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER, STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC)

HSIP worksheet		Control Section	T.H. / Roadway	Location			Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends	
				6th Street South			1st Ave N	Portland Ave S	Minneapolis	1/1/2011	12/31/2013	
Description of Proposed Work		Installation of overhead traffic signal indications along 6th St S between 1st Ave N and Portland Ave S in Downtown Minneapolis.										
Accident Diagram Codes		1 Rear End	2 Sideswipe Same Direction	3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road	8, 9 Head On/ Sideswipe - Opposite Direction		6, 90, 99			
										Pedestrian	Other	Total
Study Period: Number of Crashes	Fatal	F				0						
	Personal Injury (PI)	A				1				1		2
		B					4				4	8
		C	4	1	1	12	1	1	3	2	25	
	Property Damage	PD	5	11	2	21	1	2		5	47	
% Change in Crashes	Fatal	F	-30%	-30%	-30%	-80%	-30%	-30%	-51%	-30%		
	PI	A	-30%	-30%	-30%	-80%	-30%	-30%	-51%	-30%		
		B	-30%	-30%	-30%	-80%	-30%	-30%	-51%	-30%		
		C	-30%	-30%	-30%	-80%	-30%	-30%	-51%	-30%		
	Property Damage	PD	-30%	-30%	-30%	-80%	-30%	-30%	-51%	-30%		
Change in Crashes <small>= No. of crashes X % change in crashes</small>	Fatal	F										
	PI	A				-0.80			-0.51		-1.31	
		B				-3.20			-2.04		-5.24	
		C	-1.20	-0.30	-0.30	-9.60	-0.30	-0.30	-1.53	-0.60	-14.13	
	Property Damage	PD	-1.50	-3.30	-0.60	-16.80	-0.30	-0.60		-1.50	-24.60	
Year (Safety Improvement Construction)		2015										
Project Cost (exclude Right of Way)		\$ 1,100,000	Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit	<div style="background-color: #FFC0CB; padding: 5px; display: inline-block;">B/C= 15.30</div> <i>Using present worth values,</i> B= \$ 16,826,059 C= \$ 1,100,000 <i>See "Calculations" sheet for amortization.</i>				
Right of Way Costs (optional)			F			\$ 10,300,000						
Traffic Growth Factor		3%	A	-1.31	-0.44	\$ 550,000	\$ 240,167					
Capital Recovery			B	-5.24	-1.75	\$ 160,000	\$ 279,467					
1. Discount Rate		4.5%	C	-14.13	-4.71	\$ 81,000	\$ 381,510					
2. Project Service Life (n)		20	PD	-24.60	-8.20	\$ 7,400	\$ 60,680					
			Total			\$ 961,823		Office of Traffic, Safety and Technology September 2014				

Amortizing...

Year	Crash Benefits	Present Worth Benefits	Present Worth Costs
2015	\$ 961,823	\$ 961,823	\$ 1,100,000
2016	\$ 990,678	\$ 948,017	
2017	\$ 1,020,398	\$ 934,409	
2018	\$ 1,051,010	\$ 920,997	
2019	\$ 1,082,541	\$ 907,777	
2020	\$ 1,115,017	\$ 894,746	
2021	\$ 1,148,467	\$ 881,903	
2022	\$ 1,182,921	\$ 869,244	
2023	\$ 1,218,409	\$ 856,767	
2024	\$ 1,254,961	\$ 844,469	
2025	\$ 1,292,610	\$ 832,347	
2026	\$ 1,331,388	\$ 820,400	
2027	\$ 1,371,330	\$ 808,624	
2028	\$ 1,412,470	\$ 797,017	
2029	\$ 1,454,844	\$ 785,576	
2030	\$ 1,498,489	\$ 774,300	
2031	\$ 1,543,444	\$ 763,186	
2032	\$ 1,589,747	\$ 752,231	
2033	\$ 1,637,440	\$ 741,433	
2034	\$ 1,686,563	\$ 730,791	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	
0	\$ -	\$ -	

Totals = \$ 16,826,059 \$ 1,100,000
(B) (C)

year (n)= 1, 2, 3,....
discount rate (i) = 4.5%

$$\text{Crash Benefits (@ year n)} = (\text{Crash Benefits})_{n-1} \times (1 + \text{Traffic Growth Factor})$$












$$\text{Present Worth Benefits (@ year n)} = (\text{Crash Benefits})_n \times 1/(1 + \text{Discount Rate})^n$$

Collision Diagram

6th St N and 1st Av N

2011-2013

Total Accidents = 15

-  Right Angle
-  Head-On
-  Left Turn
-  Rear End
-  Side Swipe
-  Parked Vehicle
-  Parking
-  Pedestrian
-  Bicycle
-  Backing
-  Fixed Object

1st Av N

8/31/11 - C

5/5/11 - C

8/16/13 - C

7/31/11 - PD

1/19/11 - PD

3/10/13 - PD

6th St S

2/26/13 - C

8/10/12 - PD

5/18/11 - C

7/30/13 - PD

6/24/13 - PD

6/15/13 - B



Not to Scale




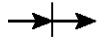



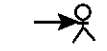
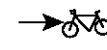

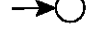
Collision Diagram

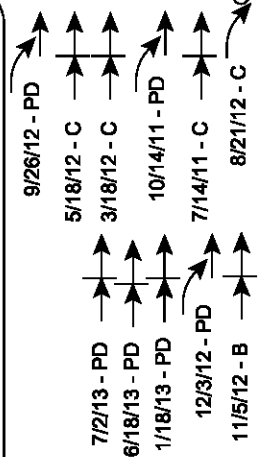
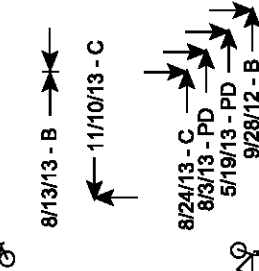
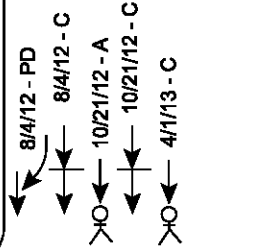
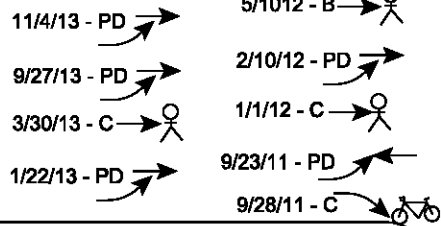
6th St S and Hennepin Av S

2011-2013

Total Accidents = 33

Hennepin Av S

-  Right Angle
-  Head-On
-  Left Turn
-  Rear End
-  Side Swipe
-  Parked Vehicle
-  Parking
-  Pedestrian
-  Bicycle
-  Backing
-  Fixed Object



6th St S














Collision Diagram

6th St S and 3rd Av S

2011-2013

Total Accidents = 15

3rd Av S

-  Right Angle
-  Head-On
-  Left Turn
-  Rear End
-  Side Swipe
-  Parked Vehicle
-  Parking
-  Pedestrian
-  Bicycle
-  Backing
-  Fixed Object

6th St S

9/29/12 - C

1/30/12 - PD

10/28/11 - C

8/1/11 - B

1/30/12 - B
8/6/13 - PD

6/8/13 - PD
4/19/13 - PD
2/4/13 - C
1/13/13 - PD

2/6/13 - PD
1/8/12 - PD
2/2/11 - PD



Not to Scale

Collision Diagram

6th St S and 5th Av S

2011-2013

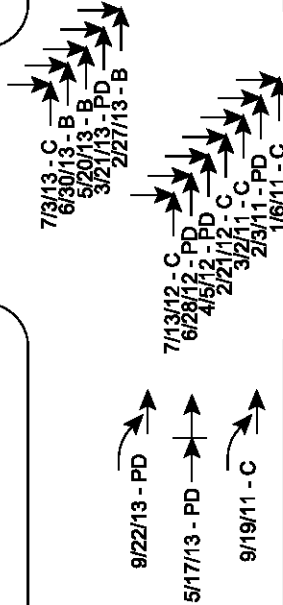
Total Accidents = 21

5th Av S

6th St S

10/29/13 - PD

8/30/13 - PD



- Right Angle
- Head-On
- Left Turn
- Read End
- Side Swipe
- Parked Vehicle
- Parking
- Pedestrian
- Bicycle
- Backing
- Fixed Object



Not to Scale

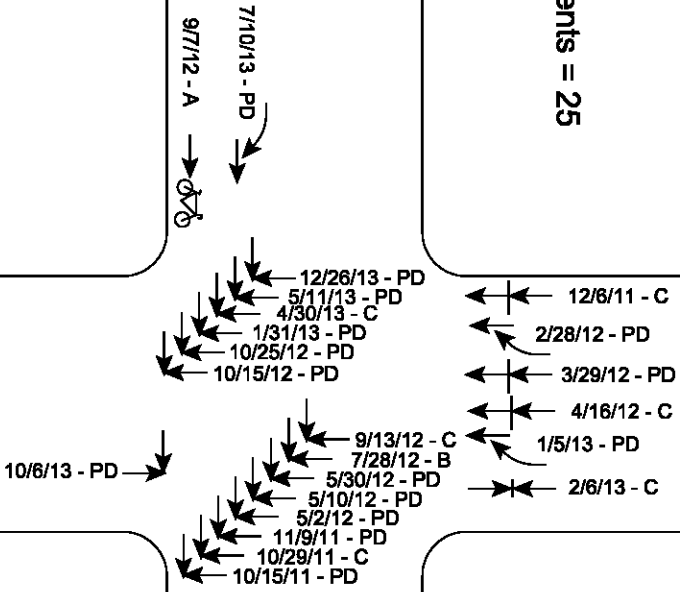
Collision Diagram

6th St S and Portland Av S

2011-2013
Total Accidents = 25

6th St S

Portland Av S



- Right Angle
- Head-On
- Left Turn
- Read End
- Side Swipe
- Parked Vehicle
- Parking
- Pedestrian
- Bicycle
- Backing
- Fixed Object



Not to Scale



CMF / CRF Details

CMF ID: 5272

Install pedestrian countdown timer

Description: Install pedestrian countdown timer

Prior Condition: Unknown

Category: Intersection traffic control

Study: [Evaluating pedestrian safety improvements, Van Houten et al., 2012](#)

Star Quality Rating:

★★★★☆ [\[View score details\]](#)

Crash Modification Factor (CMF)

Value: 0.3

Adjusted Standard Error:

Unadjusted Standard Error:

Crash Reduction Factor (CRF)

Value: 70 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability	
Crash Type:	Vehicle/pedestrian
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	Not specified
Traffic Volume:	
Time of Day:	

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	Not specified
Traffic Control:	Signalized
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	
Municipality:	Detroit
State:	MI
Country:	
Type of Methodology Used:	Time series
Sample Size Used:	449 Sites

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	08-08-2013
Comments:	The study did not adjust the reduction in crashes at the treatment location based on the change in the comparison sites.

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.

EXPLANATION OF CRASH DATA CATEGORIES:

SEVERITY

- 'K' FATAL
- 'A' INJURY - INCAPACITATING INJURY
- 'B' INJURY - NON-INCAPACITATING INJURY
- 'C' INJURY - POSSIBLE INJURY
- 'N' PROPERTY DAMAGE - NO APPARENT INJURY

DIAGRAM

- '00' OFFICER LEFT FIELD BLANK
- '01' REAR END
- '02' SIDESWIPE -- SAME DIRECTION
- '03' LEFT TURN
- '04' RAN OFF ROAD--LEFT SIDE
- '05' RIGHT ANGLE
- '06' RIGHT TURN
- '07' RAN OFF ROAD--RIGHT SIDE
- '08' HEAD ON
- '09' SIDESWIPE OPPOSING
- '90' OTHER
- '98' NOT APPLICABLE
- '99' OFFICER REPORTED THAT DIAGRAM WAS UNKNOWN

VEHICLE DIRECTION

- '01' NORTH
- '02' NORTHEAST
- '03' EAST
- '04' SOUTHEAST
- '05' SOUTH
- '06' SOUTHWEST
- '07' WEST
- '08' NORTHWEST
- '99' UNKNOWN OR NOT APPLICABLE

LIGHT CONDITIONS

- '00' NOT SPECIFIED
- '01' DAYLIGHT
- '02' SUNRISE
- '03' SUNSET
- '04' DARK - STREET LIGHTS ON
- '05' DARK - STREET LIGHTS OFF
- '06' DARK - NO STREET LIGHTS
- '07' DARK - UNKNOWN LIGHTING
- '90' OTHER
- '99' UNKNOWN

WEATHER CONDITIONS

- '00' NOT SPECIFIED
- '01' CLEAR
- '02' CLOUDY
- '03' RAIN
- '04' SNOW
- '05' SLEET, HAIL, OR FREEZING RAIN
- '06' FOG, SMOG, OR SMOKE
- '07' BLOWING SAND, DUST OR SNOW
- '08' SEVERE CROSS WINDS
- '90' OTHER
- '99' UNKNOWN

ROAD SURFACE

- '00' NOT SPECIFIED
- '01' DRY
- '02' WET
- '03' SNOW
- '04' SLUSH
- '05' ICE / PACKED SNOW
- '06' WATER (STANDING, MOVING)
- '07' MUDDY
- '08' DEBRIS
- '09' OILY
- '90' OTHER
- '99' UNKNOWN

EXPLANATION OF CRASH DATA CATEGORIES (CONTINUED):

CRASH TYPE *****	VEHICLE TYPE *****
'01' COLLISION WITH MOTOR VEHICLE IN TRANSPORT	'01' PASSENGER CAR
'02' COLLISION WITH PARKED MOTOR VEHICLE	'02' PICKUP
'03' COLLISION WITH ROADWAY EQUIPMENT--SNOWPLOW	'03' SPORT UTILITY VEHICLE
'04' COLLISION WITH ROADWAY EQUIPMENT--OTHER	'04' VAN OR MINIVAN
'05' COLLISION WITH TRAIN	'05' MOTORHOME, CAMPER, RV
'06' COLLISION WITH PEDALCYCLE	'06' LIMOUSINE
'07' COLLISION WITH PEDESTRIAN	'07' BUS (7-15 SEATS)
'08' COLLISION WITH DEER	'08' BUS (16+ SEATS)
'09' COLLISION WITH OTHER ANIMAL	'09' SNOWMOBILE
'10' COLLISION -- UNDERRIDE, REAR	'10' ATV
'11' COLLISION -- UNDERRIDE, SIDE	'11' MOTORCYCLE
'12' COLLISION WITH NON-FIXED OBJECT OF OTHER TYPE	'12' MOTORSCOOTER, MOTORBIKE
'13' OTHER TYPE OF COLLISION	'13' MOPED, MOTORIZED BICYCLE
'14' COLLISION WITH NON-FIXED OBJECT OF UNKNOWN TYPE	'14' FARM EQUIPMENT
'21' COLLISION WITH CONSTRUCTION EQUIPMENT	'31' 2AXLE, 6TIRE 1UNIT TRUCK
'22' COLLISION WITH TRAFFIC SIGNAL	'32' 3+ AXLE 1UNIT TRUCK
'23' COLLISION WITH RR CROSSING DEVICE	'33' 1 UNIT TRUCK WITH TRAILER
'24' COLLISION WITH LIGHT POLE	'34' TRUCK TRACT. NO TRAILER
'25' COLLISION WITH UTILITY POLE	'35' TRUCK TRACT. SEMITRAILER
'26' COLLISION WITH SIGN STRUCTURE OR POST	'36' TRUCK TRACT. 2 TRAILERS
'27' COLLISION WITH MAILBOXES AND/OR POSTS	'37' TRUCK TRACT. 3 TRAILERS
'28' COLLISION WITH OTHER POLES	'38' HEAVY TRUCK UNKNOWN TYPE
'29' COLLISION WITH HYDRANT	'51' PEDESTRIAN
'30' COLLISION WITH TREE/SHRUBBERY	'52' SKATER
'31' COLLISION WITH BRIDGE PIERS	'53' BICYCLIST
'32' COLLISION WITH MEDIAN SAFETY BARRIER	'54' OTHER NON-MOTORIST
'33' COLLISION WITH CRASH CUSHION	'90' OTHER MOTOR VEHICLE TYPE
'34' COLLISION WITH GUARDRAIL	'99' UNKNOWN
'35' COLLISION WITH FENCE (NON-MEDIAN BARRIER)	
'36' COLLISION WITH CULVERT / HEADWALL	
'37' COLLISION WITH EMBANKMENT / DITCH / CURB	
'38' COLLISION WITH BUILDING / WALL	
'39' COLLISION WITH ROCK OUTCROPS	
'40' COLLISION WITH PARKING METER	
'41' COLLISION WITH OTHER FIXED OBJECT	
'42' COLLISION WITH UNKNOWN TYPE OF FIXED OBJECT	
'51' OVERTURN / ROLLOVER	
'52' SUBMERSION	
'53' FIRE / EXPLOSION	
'54' JACKKNIFE	
'55' LOSS/SPILLAGE NON-HAZ MAT	
'56' LOSS/SPILLAGE HAZARDOUS MAT	
'64' NON-COLLISION OF OTHER TYPE	
'65' NON-COLLISION OF UNKNOWN TYPE	
'90' OTHER TYPE OF CRASH	
'99' CRASH OF UNKNOWN CRASH TYPE	

6th St S & 1st Ave S

MONTH	DAY	YEAR	SEV	TYPE	DIAG	LIT	WTHR1	SURF	DIR 1	DIR 2
6	15	2013	B	7	99	4	1	1	3	98
5	5	2011	C	6	3	1	1	1	3	98
8	31	2011	C	1	1	1	2	1	4	4
3	10	2013	N	1	1	4	3	2	7	7
7	31	2011	N	1	5	1	1	1	4	7
2	26	2013	C	1	5	1	1	2	5	3
7	30	2013	N	2	2	1	1	1	1	
2	21	2013	N	2	2	1	1	1	7	
10	13	2013	C	64	90	4	1	1	UNK	0
8	16	2013	C	6	8	1	1	1	98	0
8	10	2012	N	1	5	1	1	1	5	5
1	19	2011	N	1	1	3	4	3	7	7
1	10	2012	N	1	0	0	0	0	0	0
6	24	2013	N	2	2	1	1	1	1	
5	18	2011	C	1	5	1	1	1	3	1

6th St S & Hennepin Ave

MONTH	DAY	YEAR	SEV	TYPE	DIAG	LIT	WTHR1	SURF	DIR 1	DIR 2
9	27	2013	N	1	2	1	2	1	3	3
2	10	2012	N	1	2	4	1	1	3	0
9	23	2011	N	1	3	4	1	1	3	3
1	22	2013	N	90	2	4	2	1	3	3
11	4	2013	N	1	2	1	2	2	3	3
7	14	2011	C	1	1	1	1	1	1	1
8	21	2012	C	6	5	1	1	1	1	1
9	28	2012	B	1	5	1	1	1	2	8
10	5	2012	N	1	90	4	1	1	1	4
10	21	2012	A	7	2	4	1	1	5	5
11	10	2013	C	1	5	1	1	1	3	5
11	29	2013	N	2	90	4	1	1	3	
9	28	2011	C	6	90	4	1	1	7	3
12	3	2012	N	1	2	1	1	1	1	1
7	2	2013	N	1	1	1	1	1	1	1
8	3	2013	N	1	5	4	1	1	1	3
10	14	2011	N	1	2	3	1	1	1	1
11	5	2012	B	1	1	4	1	1	1	1
9	26	2012	N	1	2	1	1	1	1	1
1	1	2012	C	7	8	4	2	2	1	3
5	10	2012	B	7	98	3	1	1	1	3
8	4	2012	N	1	2	4	3	2	5	5
8	4	2012	C	1	1	4	3	2	5	5
10	21	2012	C	1	1	4	1	1	5	5
1	18	2013	N	1	1	1	1	1	1	1
3	30	2013	C	7	90	4	1	1	1	98
4	1	2013	C	7	3	1	1	1	7	98
6	18	2013	N	1	1	1	1	1	1	1
5	19	2013	N	1	5	90	3	2	1	4
8	13	2013	B	1	8	4	1	1	1	5
8	24	2013	C	1	5	1	1	1	1	3
5	18	2012	N	1	1	1	1	1	1	3
3	18	2012	N	1	1	1	1	1	1	3

6th St S & 3rd Ave S

MONTH	DAY	YEAR	SEV	TYPE	DIAG	LIT	WTHR1	SURF	DIR 1	DIR 2
2	21	2011	N	1	5	1	4	3	3	3
8	1	2011	B	7	5	1	2	1	1	98
10	28	2011	C	1	1	1	1	1	3	3
1	8	2012	N	1	5	1	1	1	3	1
1	30	2012	B	7	8	1	1	1	5	7
1	30	2012	N	1	9	4	90	2	3	3
9	29	2012	C	1	6	4	1	1	3	3
1	13	2013	N	1	5	4	1	1	3	5
6	8	2013	N	1	5	1	2	1	3	5
8	6	2013	N	1	1	3	3	2	5	5
2	4	2013	C	1	5	4	1	2	5	3
2	6	2013	N	1	5	1	4	3	3	1
4	19	2013	N	1	5	1	4	2	5	3
8	17	2013	C	1	5	1	1	1	0	0
7	19	2013	N	28	2	4	1	1	UNK	

6th St S & 5th Ave S

MONTH	DAY	YEAR	SEV	TYPE	DIAG	LIT	WTHR1	SURF	DIR 1	DIR 2
10	29	2013	N	1	2	1	1	1	3	3
2	3	2011	N	1	5	3	2	2	3	1
4	5	2012	N	1	5	1	1	1	1	3
7	13	2012	C	1	5	1	2	1	3	1
2	27	2013	B	1	5	1	2	1	3	1
7	3	2013	C	1	5	1	1	1	3	1
5	17	2013	N	1	1	1	2	1	1	1
9	19	2011	C	1	2	1	1	1	1	1
5	20	2013	B	1	5	1	1	1	1	3
1	29	2011	C	1	5	4	2	1	1	3
3	2	2011	C	1	5	1	1	1	1	3
2	21	2012	C	1	5	1	2	2	3	1
4	18	2012	N	1	90	1	1	1	3	3
6	28	2012	N	1	5	1	1	1	3	1
8	20	2012	N	1	90	4	1	1	2	8
3	21	2013	N	1	5	1	1	1	1	3
2	22	2013	N	1	90	1	2	4	1	3
6	30	2013	B	1	5	4	1	1	3	1
8	30	2013	N	1	9	1	1	1	3	1
9	22	2013	N	1	2	1	1	1	1	1
12	9	2012	N	1	3	1	4	3	2	2

6th St S & Portland Ave S

MONTH	DAY	YEAR	SEV	TYPE	DIAG	LIT	WTHR1	SURF	DIR 1	DIR 2
7	24	2011	C	1	5	2	2	0	4	6
10	15	2011	N	1	5	1	1	1	3	5
10	29	2011	C	1	5	1	1	1	3	5
11	9	2011	N	1	5	1	1	1	3	5
12	6	2011	C	1	1	1	2	1	5	5
5	17	2012	N	2	90	1	1	1	UNK	
4	16	2012	C	1	1	4	3	2	5	5
5	10	2012	N	1	5	1	1	1	5	3
5	2	2012	N	1	5	1	1	1	5	3
7	28	2012	B	1	5	1	1	1	3	3
9	7	2012	A	6	5	1	2	1	3	98
9	13	2012	C	1	5	4	1	1	3	5
10	15	2012	N	1	5	1	2	1	3	5
10	25	2012	N	1	5	1	2	1	3	5
2	28	2012	N	1	2	1	4	2	5	5
3	29	2012	N	1	1	1	1	1	5	5
5	30	2012	N	1	4	3	1	1	3	5
1	5	2013	N	1	2	1	1	1	5	5
1	31	2013	N	1	5	1	2	1	5	3
2	6	2013	C	1	9	4	4	3	5	5
4	30	2013	C	1	7	1	1	1	3	5
5	11	2013	N	1	5	1	1	1	3	5
7	10	2013	N	1	2	3	1	1	3	3
10	6	2013	N	1	5	1	3	2	3	1
12	26	2013	N	1	5	1	2	2	5	3