

Project Application for 2008-2011 HIGHWAY SAFETY IMPROVEMENT PROGRAM

DESIGN ID:	TIED PROJECT IDs:
RELATED ID(s) (R/W) (CONST)	

Project Description

1. NAME OF ROAD/INTERSECTION S. 27th St. from a point n/o W. Kinnickinnic River Pkwy. to a point n/o W. Howard Av.		HWY NO. STH 241/STH 36
COUNTY Milwaukee	CITY OF Milwaukee	TOWN OF
NAME OF THE MPO THE PROJECT IS REPRESENTED BY Southeast Wisconsin Regional Planning Commission (SEWRPC)		

Is the estimated cost of the project less than \$25,000? Yes No
 If YES, be sure to complete Box 6 in addition to the rest of this form.

2A. SEGMENT Current Average Daily Traffic 38,787	Project Length 1.10 Miles	
Roadway Width 4-11' to 6-11' Lanes	Crash Rate 356.3	Shoulder Width None

2B. INTERSECTIONS	Crash Rate:	Entering Vehicle Volume:
S. 27th St. and W. Kinnickinnic River Pkwy.	0.87	35,142
S. 27th St. and W. Oklahoma Av.	1.19	57,263
S. 27th St. and W. Ohio Av.	0.74	46,560
S. 27th St. and W. Morgan Av.	1.09	52,092
S. 27th St. and W. Loomis Rd.	0.62	48,759

Identification of Hazard

2C. Explain identified hazards such as: Visibility Restrictions, Curves, Hills, Intersection Problems, Bike/Ped Conflicts, Narrow Shoulders, Rutting, Etc.

The following hazards were identified in a corridor and intersection safety audit performed by Hamilton and Associates which was commissioned by the American Automobile Association (AAA):

Throughout the entire project length of S. 27th St., median openings are present, creating conflicts with opposing traffic and increasing the number of right-angle mid-block crashes as well as increasing the number of rear-end and side-swipe crashes because of inadequate storage or unexpected stops. In addition, many of these openings are present within or near left turn lanes.

At S. 27th St. and W. Kinnickinnic River Pkwy. there were 39 crashes from January 2002 to September 2005. There were high numbers of rear-end (12) and northbound left-turning (17) crashes. The left turn lanes have poor offsets, reducing visibility at the intersection and the use of post mounted median signals, 8" lenses, and incandescent signals reduce signal visibility. The absence of painted crosswalks on the southbound and westbound approaches increase driver and pedestrian conflicts, the absence of stop bars on all four approaches causes vehicles to encroach into crosswalks where painted, and the absence of large overhead street signs on S. 27th St. increases driver confusion.

At S. 27th St. and W. Oklahoma Av. there were 82 crashes from January 2002 to September 2005. There were high numbers of rear-end (32), right-angle (21), and left-turn opposing crashes (18). In addition, there were 2 pedestrian-related crashes at the intersection and 14 crashes were identified as occurring on wet/icy pavement. Signal visibility is limited by the use of median post mounted signals in all directions, the absence of overhead mast arm mounted signals eastbound and westbound, the use of 8" signal lenses and incandescent signals indications. The southbound approach is severely rutted, increasing stopping distance. The absence of stop bars on all four approaches causes vehicles to encroach into crosswalks and the absence of large overhead street signs increases driver confusion.

At S. 27th St. and W. Ohio Av. there were 44 crashes from January 2002 to September 2005. There were high number of right-angle (22) and rear-end (10) crashes. There is reduced signal visibility caused by the lack of overhead mast arm mounted signals for northbound and southbound traffic, the use of 8" lenses, and the use of incandescent signal indications. The visibility of opposing vehicles for left-turning vehicles on S. 27th St. is limited by poor offsets of the left turn lanes. The driveway ramp on the eastbound approach increases driver and pedestrian conflicts because there a poorly defined pedestrian crossing on the approach and reduced vehicle safety as vehicles slow down suddenly. The absence of stop bars on the northbound, southbound, and westbound approaches causes vehicles to encroach into crosswalks and the absence of large overhead street signs on S. 27th St. increases driver confusion.

At S. 27th St. and W. Morgan Av. there were 73 crashes from January 2002 to September 2005. There were high numbers of rear-end (27) and right-angle (23) crashes. There were 14 crashes during wet/icy pavement. The signal visibility is limited by the absence of overhead mast arm mounted signals in all four directions, the use of 8" lenses, and the use of incandescent signal indications. The absence of stop bars on all four approaches causes vehicles to encroach into crosswalks and the absence of large overhead street signs increases driver confusion.

At S. 27th St. and W. Loomis Rd. there were 39 crashes from January 2002 to September 2005. There was a high number of rear-end crashes (26) at the intersection. The signal visibility is reduced by the lack of an overhead mast arm mounted signal for southbound traffic, the use of 8" lenses, and the use of incandescent signal indications. The absence of stop bars on the eastbound approach causes vehicles to encroach into the crosswalk and the absence of large overhead street signs on S. 27th St. increases driver confusion. In addition, the absence of a pedestrian crossing on the south leg increases pedestrian-vehicle conflicts.

Proposed Improvement

3. In some detail, describe the proposed project and how it will address the identified hazard.

The following improvements were recommended in a corridor and intersection safety audit performed by Hamilton and Associates which was commissioned by the American Automobile Association (AAA):

Median openings will be closed in left turn lanes on S. 27th St. north/south of W. Oklahoma Av., north of W. Ohio Av., south of W. Morgan Av., and south of W. Loomis Rd. In addition, to prevent mid-block crashes between W. Oklahoma Av. and W. Euclid Av. where extensive queuing occurs during peak periods, the median opening in front of Leon's will be partially closed to prevent southbound U-turns and the median opening in the left turn lane north of W. Euclid Av. will be closed. To reduce rear-end and side-swipe crashes in the area of median opening in front of Kohl's at 3737 S. 27th St., a left turn lane will be constructed to provide left turn storage for northbound traffic.

At S. 27th St. and W. Kinnickinnic River Pkwy., the left turn lanes on S. 27th St. will be reconfigured to increase visibility of opposing traffic and prevent far side signals for left-turning vehicles from being blocked by opposing traffic. The southbound approach will be striped three lanes from a point 150' north of the intersection, and crosswalks and stop bars will be painted on all four approaches. The traffic signals on S. 27th St. will be upgraded to 12" lenses and all signals will be installed with LED indications, backplates with reflective borders will be installed on far side signal indications on S. 27th St. approaches to maximize signal visibility to reduce right-angle and rear-end crashes. Pedestrian indications will be upgraded to 12" combination walk/don't walk housings and countdown timers will be installed on the north and south crosswalks across S. 27th St. to ensure pedestrians enter and clear the intersection safely. Lastly, oversized street name signs will be installed on mast arms for northbound and southbound traffic to minimize driver confusion.

At S. 27th St. and W. Oklahoma Av., stop bars will be painted on all four approaches and the southbound approach will be striped three lanes from W. Kinnickinnic River Pkwy. to W. Oklahoma Av. The southbound approach will be resurfaced to reduce stopping distance on the approach and the deteriorated median on the

north leg of the intersection will be reconstructed. The traffic signal lenses will be upgraded to 12" LEDs, backplates with reflective borders will be installed on all far side signal indications, overhead mast arm mounted signals will be installed on the W. Oklahoma Av. approaches, and additional signal housings will be installed for left-turning vehicles to maximize signal visibility to reduce right-angle and rear-end crashes. Pedestrian indications will be upgraded to 12" combination walk/don't walk housings and countdown timers will be installed on all four crosswalks to ensure pedestrians enter and clear the intersection safely. Lastly, oversized street name signs will be installed on mast arms for traffic on all four approaches to minimize driver confusion.

At S. 27th St. and W. Ohio Av., the west leg of the intersection will be reconstructed to remove the driveway ramp to increase pedestrian safety by clearly defining the roadway crossing, reduce unexpected slowing of traffic for southbound right-turning vehicles, northbound left-turning vehicles, and eastbound vehicles. The left turn lanes on S. 27th St. will be reconfigured to increase visibility of opposing traffic and prevent far side signals for left-turning vehicles from being blocked by opposing traffic. The traffic signals on S. 27th St. will be upgraded to 12" lenses and all signals will be installed with LED indications, backplates with reflective borders will be installed on far side signal indications on S. 27th St. and overhead mast arm mounted signals will be installed on S. 27th St. approaches to maximize signal visibility to reduce right-angle and rear-end crashes. Pedestrian indications will be upgraded to 12" combination walk/don't walk housings and countdown timers will be installed on the north and south crosswalks across S. 27th St. to ensure pedestrians enter and clear the intersection safely. Lastly, oversized street name signs will be installed on mast arms for northbound and southbound traffic to minimize driver confusion.

At S. 27th St. and W. Morgan Av., stop bars will be painted on all four approaches. All traffic signals will be upgraded to 12" LED lenses, backplates with reflective borders will be installed on all far side signal indications and overhead mast arm mounted signals will be installed on northbound, southbound, and westbound approaches to maximize signal visibility to reduce right-angle and rear-end crashes. Pedestrian indications will be upgraded to 12" combination walk/don't walk housings and countdown timers will be installed on all four crosswalks to ensure pedestrians enter and clear the intersection safely. Lastly, oversized street name signs will be installed on mast arms for traffic on the northbound, southbound, and westbound approaches to minimize driver confusion.

At S. 27th St. and W. Loomis Rd., to increase pedestrian safety, a south crosswalk will be installed including a curb ramps and concrete walk. A stop bar will be painted on the eastbound approach and a south crosswalk will be painted. All traffic signals will be upgraded to 12" LED lenses, backplates with reflective borders will be installed on far side signal indications on S. 27th St. and an overhead mast arm mounted signal on the southbound approach of S. 27th St. to maximize signal visibility to reduce right-angle and rear-end crashes. Pedestrian indications will be upgraded to 12" combination walk/don't walk housings and countdown timers will be installed on all crosswalks to ensure pedestrians enter and clear the intersection safely. Lastly, oversized street name signs will be installed on mast arms for traffic on the northbound and southbound approaches to minimize driver confusion and yield signs will be installed for the southbound right turn bypass.

Project Cost

4. Estimate project costs in today's dollars)	FY 2008	FY 2009	FY 2010	FY 2011
Preliminary Engineering-Design (-00)*: Include state review	\$40,500			
Construction (-70)		\$189,000		
Traffic Signals and Signs (-90)		\$117,000		
Street Lighting (-91)		\$15,300		
Forestry (-97)		\$43,200		
Other Costs		\$0		
** TOTAL	\$40,500	\$364,500		

* Ineligible cost for Small Local HES Project (less than \$25,000).

** The project sponsors will be responsible for any project costs in excess of the approved project cost.

6. PRIMARY CONTACT PERSON or AGENCY		
NAME <i>Jeffrey S. Polenske, P.E.</i>	TITLE <i>City Engineer</i>	
ADDRESS <i>841 N. Broadway, Room 701</i>	TELEPHONE <i>(414) 286-2400</i>	
MUNICIPALITY <i>Milwaukee</i>	STATE <i>WI</i>	ZIP <i>53202</i>

Complete this box only for projects less than \$25,000:

5. Will project affect or use land from a property on the National Register of Historic Places? Yes No
- Will project require the use of any publicly-owned land from a public park, recreation area, or wildlife and waterfowl refuge? Yes No
- Is your municipality adequately staffed and equipped to do the work? Yes No
- Does your municipality have prior commitments that would impair your performance of this work? Yes No

7. SIGNATURE, LOCAL APPROVING AUTHORITY	DATE

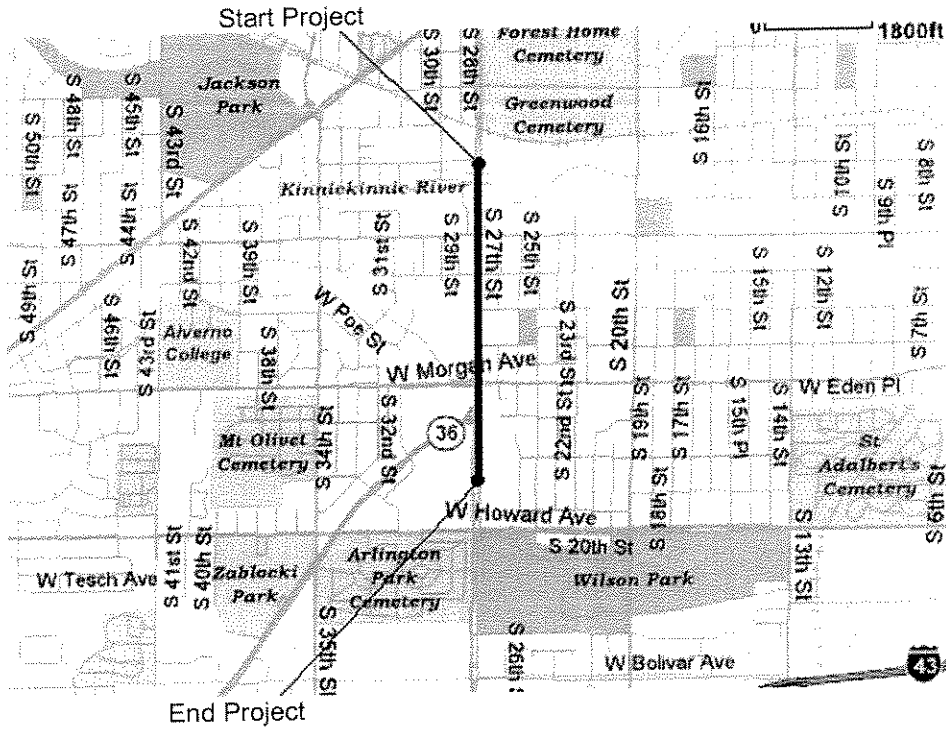
WisDOT Information – Shaded areas to be completed by WisDOT staff only.

A. Environmental Documentation Type		B. Hazard Elimination Type	
C. PMSID	D. Functional Class	E. PEF	

DISTRICT APPROVAL Project Supervisor	Date
Planning Supervisor	Date

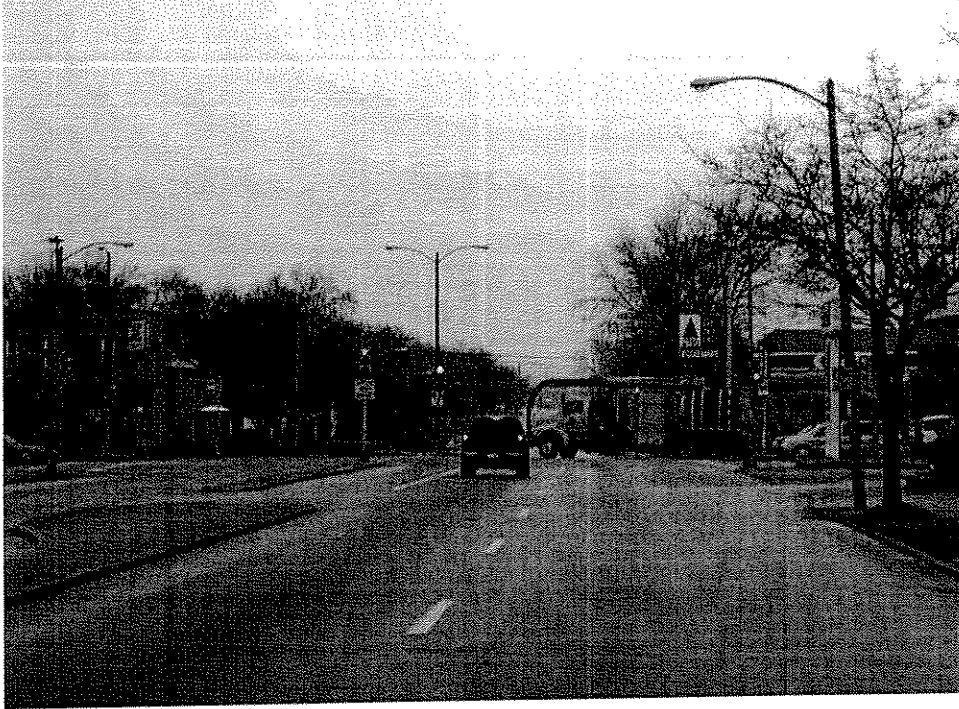
C.O. Concurrence	Approved _____ Disapproved _____
Approving Authority	Date

PROJECT LOCATION MAP



**INTERSECTION PICTURES
W. OKLAHOMA AV. AND S. 35TH ST.**

Facing North



Facing South

