



Request for City Council Committee Action From the Department of Public Works

Date: May 18, 2010

To: Honorable Sandra Colvin Roy, Chair Transportation & Public Works Committee

Subject: **NTP Bicycle Operations Project**

Recommendation:

- a. Approve project layouts for bicycle boulevard projects on 5th Street NE, 22nd Avenue NE and Bryant Avenue S
- b. Approve federal aid design exceptions for signing and striping projects on 1st Avenue S, 15th Street W, Como Avenue SE, Fremont Avenue N

Previous Directives:

- September 25, 2007 – Accepted 17 Bicycle Operations grant awards
- March 9, 2007 – Approved the City's ranking criteria for Round 1 NTP applications

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Approved by:

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

Presenter: Shaun Murphy

Reviews

Permanent Review Committee	NA
Civil Rights	NA
Policy review Group (PRG) Approval	NA

Financial Impact

Action is within current department budget

Community Impact

Neighborhood Notification: All project area neighborhoods have been notified
City Goals: Satisfies multi-modal transportation goals
Comprehensive Plan: Not Applicable
Zoning Code: Not Applicable

Background

In 2007 the City of Minneapolis received an award of 17 grants from the Non-Motorized Transportation Pilot Program (NTP), a source of federal funding aimed at increasing bicycling and walking and decreasing driving. These 17 grants are intended to improve conditions for bicycling along approximately 25 miles of streets. These projects are collectively known as the “Bicycle Operations” project, as they will improve the operation of streets for bicycles through changes to striping, signing, signal operations, and curbs. The projects are as follows (note that P1 and P2 represent Phase 1 and Phase 2 projects – see project schedule on page 5):

- 1st/Blaisdell Avenues S (P2), \$150,000
- 5th Street NE, \$50,000 (P2)
- 7th Street/10th Avenue N (P2), \$100,000
- 10th Avenue SE, \$100,000 (P1)
- 14th/15th/16th Streets E and W (P2), \$150,000
- 19th Avenue S (P1), \$100,000
- 22nd Avenue NE (P2), \$50,000
- 27th Avenue SE (P1), \$100,000
- Bryant Avenue S (P2), \$150,000
- Como Avenue SE (P2), \$50,000
- Emerson/Fremont Avenues N (P2), \$100,000
- Franklin Avenue E (P2), \$50,000
- Glenwood Avenue (P1), \$150,000
- Minnehaha/20th Avenues S (P1), \$150,000
- Plymouth Avenue N/8th Avenue NE (P2), \$150,000
- ~~Riverside Avenue – Eastern Segment, \$150,000~~
- ~~Riverside Avenue – Western Segment, \$150,000~~

See Attachment A for a map of the Bicycle Operations project. Note that the Riverside Avenue project has been struck. Since Riverside Avenue is scheduled for reconstruction in 2011, the NTP funding for this project is being reallocated to enhance the remaining 15 projects. In late 2009 Riverside Avenue was striped with bicycle lanes by City crews to test the experience for motorists and bicyclists before this street is rebuilt.

Neighborhood & Interagency Review Process

The neighborhood review process for these projects has been extensive. Eight public meetings have been held to date with two additional meetings on the horizon. Feedback was collected and information was provided at tens of neighborhood organization meetings. Six working group (pedal) tours were held with bicyclists. Hundreds of comments were collected from residents, business owners, motorists, bicyclists, and other interested parties. Comments were also received from Hennepin County, Transit for Livable Communities, MnDOT, the Minneapolis Park & Recreation Board, and Metro Transit. The result is a project which makes lengthy strides to improve conditions for bicycling, while at the same time respects the needs of neighborhoods and other agencies.

Recommendations and City Council Approvals

Since the majority of the recommended solutions for these Bicycle Operations Projects are traffic signing and striping changes, the approval process will take the form of “To the Record” letters to the respective Council Members, in whose ward individual projects reside. According to the State and City provisions, the “To the Record” letters include the parking, signing, and lane changes which have arisen out of the neighborhood and interagency review process.

Several innovative changes are being proposed, included colored conflict zones, enhanced shared lane markings, advisory bike lanes, colored trail crossings, and buffered bike lanes. See Attachment B for example photographs of these innovative treatments. These innovative treatments are piloted

for some of the projects, where they meet the project need and fit within the project budget. These innovations have been discussed with our citizen, neighborhood, and agency partners.

Approval of Project Layouts for Bicycle Boulevard Projects

Three of the 15 projects will be “bicycle boulevards” -- 5th Street NE, 22nd Avenue NE, and Bryant Avenue S. A bicycle boulevard is a quiet residential street which is enhanced for bicycling. Bicyclists and motorists share the same space. Bicycle boulevards feature:

- Added bicycle boulevard symbols on the street pavement
- Added bicycle way finding signs and replaced “bicycle street name signs” to mark the corridor
- Added traffic calming devices to encourage or retain slow speeds by motorists
- Changed stop signs to expedite movement for bicycling
- Retrofitted traffic diverters to allow through movement for bicycling
- Improved crossings at busy streets

Bicycle boulevard project elements were selected through the community input process. Ballots were created so that citizens could prioritize their needs within the project budget available.

Detailed plan sheets of these specific layouts can be obtained from Public Works staff. The Attachment C maps of the bicycle boulevards denote the layout changes. Overall, the Public Works recommended layout changes are listed below for the City Council layout approval.

<i>Project</i>	<i>Curb Change</i>	<i>at Intersecting Street</i>
5 th Street NE	Retrofitted traffic diverter	Broadway Street NE
	Added traffic circles and removed north-south stop signs	15 th Avenue NE, 17 th Avenue NE
	Narrowed intersection due to offset intersection and old trolley turn around	22 nd Avenue NE
	Retrofitted traffic diverter	(intersection of) 26 th Avenue NE & 4 th Street NE
	Added traffic signal and pedestrian curb ramps	Broadway Street
	½ block alley connection and replaced alley surface	(intersection of) 26 ½ Ave NE & University Ave NE
Bryant Avenue S	Added curb extensions	29 th , 28 th , & 26 th Streets W
	Added median	Franklin Avenue W
	Added raised pedestrian crosswalk	29 th Street W
	Added curb ramp	(intersection of) Aldrich Ave S & Minnehaha Parkway Trail
22 nd Avenue NE	Added speed bumps and removed east-west stop signs	4 th St NE, Jackson St NE
	Added speed bumps	Buchanan St NE

Approval of Federal Aid Design Exceptions

The NTP was developed as a federal experimental pilot project. As part of the project development process, Public Works has identified design exceptions for some of the bicycle signing and striping projects. The purpose of these design exceptions is to allow striped bicycle lanes where they would otherwise not be feasible without widening the street (moving curbs). The design exceptions have been discussed in community meetings and with FHWA, MnDOT and TLC partners.

Design exceptions are recommended on four of the projects. These include 1st Avenue S, 15th Street W, Como Avenue SE, and Fremont Avenue N. A design exception is an approval granted by FHWA and MnDOT for a requirement which is different from the accepted federal or state standard. The five types of design exceptions requested include:

- A 10.5' travel lane (where 11' is the minimum),
- A 7' or 7.5' parking lane (where 8' is the minimum),
- Allowing 2 sided parking on weekends for a 37' street (where one sided parking is the minimum),
- A curb reaction distance of 1' or 1.5' (where 2' is the minimum), and
- a bicycle lane considered as a travel lane on one-way streets (where two travel lanes is the minimum).

Public Works, FHWA and MnDOT have thoroughly reviewed these design exceptions and considered each exception on its own merit. As a condition of these design exceptions, Public Work will regularly monitor and document various traffic operational and safety considerations to understand the implications of the designs. For example, observations will be made on traffic crashes, motorist speeds, traffic volumes, and bicyclist riding location in relation to parked cars (where applicable).

In the future if Municipal State Aid funds are involved in a repaving or reconstruction project, a variance would be required at that future date to continue these designs.

The recommended federal aid design exceptions are as follows:

<i>Project</i>	<i>Segment (Length)</i>	<i>Design Exception Recommended</i>	<i>Minimum Rule</i>
1 st Avenue S	Franklin Avenue to 28 th Street (0.5 miles)	12' to 12.5' travel lane adjacent to a curb	13' travel lane adjacent to a curb (11' travel lane plus 2' reaction distance)
		7' parking lane on a 2-way street	8' parking lane on a 2-way street
	33 rd Street to 40 th Street (0.5 miles)	A bike lane considered as a travel lane on a one-way street	Two travel lanes on a one-way street
		2 sided parking on weekends on a street less than 37' in width	1 sided parking on a street less than 37' in width
15 th Street W	Oak Grove Street to LaSalle Avenue (0.4 miles)	10.5' travel lane	11' travel lane
	Oak Grove Street to Nicollet Avenue (0.5 miles)	7' to 7.5' parking lanes on a 2-way street	8' parking lanes on a 2-way street
Como Avenue SE	11 th Avenue to 15 th Avenue (0.3 miles)	10.5' travel lane	11' travel lane
		7' parking lanes on a 2-way street	8' parking lanes on a 2-way street
Fremont Avenue N	Plymouth Avenue to Lowry Avenue (1.5 miles)	A bike lane considered as a travel lane on a one-way street	Two travel lanes on a one-way street
	33 rd Avenue to Webber Parkway (0.9 miles)	7' parking lane on a 2-way street	8' parking lane on a 2-way street

Project Schedule

The Phase 1 projects are in their final approval process and are planned for implementation this summer from June to August of 2010.

The Phase 2 project draft plan sets have been submitted to MnDOT for review. The project is scheduled for bidding in July of 2010 and proposed construction between August and October of 2010.

Attachments

Attachment A: Map of the Bicycle Operations Project

Attachment B: Example Photographs of Innovative Treatments

Attachment C: Map of Bicycle Boulevard Changes

Cc: Council Member Reich, Ward 1
Council Member Gordon, Ward 2
Council Member Hofstede, Ward 3
Council Member Johnson, Ward 4
Council Member Samuels, Ward 5
Council Member Lilligren, Ward 6
Council Member Goodman, Ward 7
Council Member Glidden, Ward 8
Council Member Schiff, Ward 9
Council Member Tuthill, Ward 10
Council Member Hodges, Ward 13
Don Elwood, Greg Schroeder, and Larry Veek; Transportation Planning & Engineering
Mike Kennedy, Transportation Maintenance & Repair
Steve Mosing, Traffic & Parking Services