FEASIBILITY STUDY

TRACY AVENUE
BENTON AVENUE TO VERNON AVENUE
ROADWAY IMPROVEMENTS

IMPROVEMENT NO. BA 368

February 6, 2012

ENGINEERING DEPARTMENT
CITY OF EDINA

I hereby certify that this feasibility study was prepared by me or under my direct supervision, and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Andrew J. Plowman, PE	44200 Reg. No.	2/6/12 Date

Approved_____

Wayne D. Houle, PE City Engineer	Date

FEASIBILITY STUDY – BA 368
ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

LOCATION: The project is located along Tracy Avenue from Benton Avenue to Vernon Avenue as shown in Figure 1 below.

Figure 1. Project Location Map

Tracy Avenue consists of the following roadway characteristics:

- Classified as a Collector
- Posted Speed Limit – 30 mph
- Concrete pavement constructed in 1961
- Width = 36’ (curb face to curb face)
- 8’ parking lane on the east side
- 5’ boulevard and 5’ sidewalk on the east side
- ADT = 4,200 to 6,000 vehicles per day
- Length = 2,200’ (0.42 miles)

INITIATION & ISSUES: The Tracy Avenue project was initiated by the Engineering Department as part of the City's street reconstruction program and identified in the Capital Improvement Program. This project addresses updating aging infrastructure issues associated with the pavement condition, storm water, sanitary sewer, and watermain systems.

All Engineering projects are reviewed for compatibility with the City of Edina 2008 Comprehensive Plan Update, Comprehensive Bicycle Transportation Plan, and the Comprehensive Water Resource Management Plan.

City of Edina 2008 Comprehensive Plan Update

Sidewalk Facilities
Chapter 7 of the plan addresses locations of proposed sidewalk facilities and funding options within the City. As shown in Figure 7.10 of Appendix N, there is an existing sidewalk on Tracy Avenue. There are no proposed additional sidewalk facilities shown along the corridor.

Bicycle Facilities
Chapter 7 of the plan addresses locations of proposed bicycle facilities within the City as part of the Comprehensive Bicycle Transportation Plan. As shown in Figure 7.11 of Appendix N, Tracy Avenue is a designated a primary bike route.

Staff Identified Issues

The following issues were identified by staff during the preliminary scoping of the project:

- Poor condition of existing concrete pavement
- Offset intersection at Benton Avenue and Tracy Avenue
- Localized drainage issues
- Parking constraints
- Lack of bicycle accommodations
- Pedestrian access issues
- Storm sewer trunk line capacity issues to Hawkes Lake
- Sanitary sewer and watermain deficiencies

Resident Input

A street reconstruction informational letter was distributed on November 24, 2011, to 34 property owners that are adjacent to the proposed street reconstruction area from Benton Avenue to Vernon Avenue. An informational meeting was held at the Public Works and Park Maintenance Facility on November 28, 2011. A presentation was given explaining the street reconstruction process and described the existing conditions of the roadway corridor as well as the design criteria for the roadway given that it is a designated Municipal State Aid roadway. The meeting was attended by

approximately 20 residents representing 16 properties. Input from this meeting and comments received are included in Appendix G.

This meeting was followed up with a questionnaire sent to the property owners on November 30, 2011. The questionnaire was distributed to ascertain the residents' preference regarding pedestrian accommodations, on-street bicycle facilities, on-street parking, street light upgrades, traffic management issues, and the Benton Avenue and Tracy Avenue intersection. The questionnaire also inquired if the resident had drainage problems and/or private underground facilities, such as pet containment or irrigation systems.

A return rate of 94%, or 32 of the 34 residents, responded to the questionnaire. A tabulation of the responses has been completed and can be found in Appendix C.

Below is a summary of a few key questionnaire responses:

Surveys Sent	**Surveys Returned**	**Pedestrian Issues**	**Bike Lane Issues**		**Benton & Tracy Intersection**		**On-Street Parking**
		West Side Sidewalk	Importance of Bike Lanes	25 MPH Speed Limit**	Traffic Control Issue Exists		Importance of on street Parking
		Important=5 to Not Important=1	Important=5 to Not Important=1	Important=5 to Not Important=1	Yes	Yes, but no safety issue***	Important=5 to Not Important=1
34	32	1.34	1.66	2.28	15	5	2.50
% of Returned* Surveys		**100%**	**100%**	**100%**	**58%**	**20%**	**100%**

** Percentages are based on responses of returned questionnaires and may not equal 100% if questions were not answered.*
*** Interest in Bike Lanes if it allows the speed to be lowered to 25 MPH, which is allowed with on-street bike lanes.*
**** Some residents responded the intersection is confusing, but the confusion leads to drivers to be more cautious than a standard intersection.*

Table 1. Results from Questionnaire #1

Key issues, from the questionnaire, that residents wanted to be addressed were traffic management at the Benton Avenue and Tracy Avenue intersection, speed control, and maintaining parking. Residents were not in favor of on-street bicycle lanes or upgrading street lights.

A second neighborhood meeting was held on December 19, 2011, to discuss the results of the questionnaire, the preliminary project design, and the estimated assessments to properties. The meeting was attended by approximately 30 residents representing 17 properties. Comments and correspondence received subsequent to this meeting have been included in Appendix G.

A second questionnaire was sent out on January 20, 2012. Input was received at the December 19 informational meeting that residents may have answered differently knowing the impacts associated with the design. The questionnaire was completed and summarized by three separate groups:

1. Residents along Tracy (from Benton to Vernon)
2. Residents along Tracy Avenue (from TH 62 to Benton Avenue)
3. Other residents in Edina, not on Tracy Avenue

The results are tabulated in Appendix E. An overall survey response map is included in Appendix O, which represents the properties from which questionnaires were received.

		Is Proposed Section Most Appropriate?		Maintain Parking (East Side)		If resident could eliminate one cross section component?			West Side Sidewalk		Is Roundabout Appropriate?			
													If No, which is most appropriate?	
Group		Yes	No	Important	Not Important	Bike Lane	Parking Lane	Leave As Proposed	Important	Not Important	Yes	No	Realign	Leave As Is
Tracy Avenue (Benton to Vernon) (25 of 34) 74% Responses	Answered	6.5*	17.5*	11	14	13	8	3	3	21	7	17	7	10
	Percent**	27%	73%	44%	56%	54%	33%	13%	12%	88%	29%	71%	41%	59%
Tracy Avenue (TH 62 to Benton) (19 of 38) 50% Responses	Answered	7	11	6	13	5	9	5	2	16	10	9	4	4
	Percent**	39%	61%	32%	68%	26%	47%	26%	11%	89%	53%	47%	50%	50%
Non-Tracy Avenue*** 18 Responses	Answered	6	12	5	12	7.5	8	2.5	7	11	2	16	5.5	10.5
	Percent**	33%	67%	29%	71%	42%	44%	14%	39%	61%	11%	89%	34%	66%

** Half responses are indicated if household was split (i.e., husband and wife disagreed on their answer)*
*** Percentages are based on those who answered a particular question, some residents left answers blank.*
**** Questionnaires were sent out via email through the Countryside Neighborhood Group, it is unknown the number of questionnaires that were distributed*

Table 2. Results from Questionnaire #2

EXISTING CONDITIONS: Roadway

Tracy Avenue between Benton Avenue and Vernon Avenue is a concrete roadway that was constructed in 1961 and consists of a two-lane roadway with parking allowed on the east side of the street. The width of Tracy Avenue is 36 feet, from curb face to curb face. There is an existing 5' boulevard and 5' sidewalk on the east side of the street.

The existing right-of-way is 60' wide. The sidewalk on the east side is generally 1' from the east right-of-way line. The west curb is generally 12-13' from the west right-of-way line.

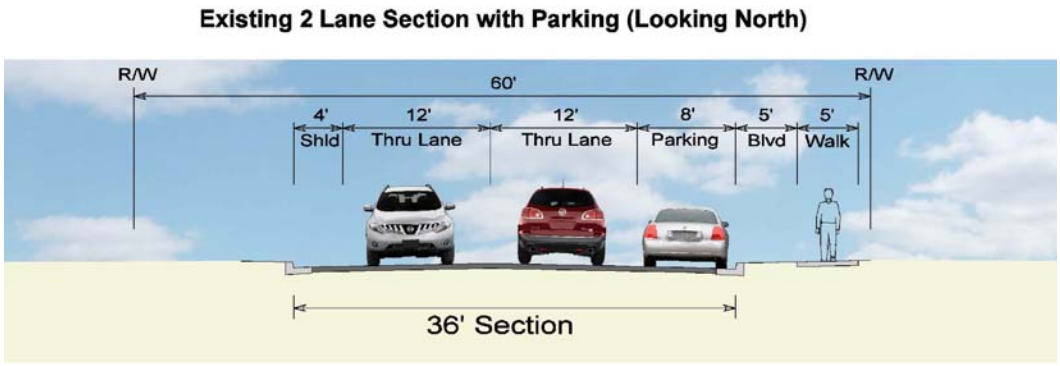


Figure 2. Existing Typical Section

The concrete pavement and integral curb are in very poor condition. The existing pavement has significant cracking and the crown of the roadway is inverted in many locations due to settlement. Generally, the sidewalk is in fair condition. However, some segments of the sidewalk are structurally deficient.

Photo 1 – Pavement Condition (cracked and settled)

Photo 2 – Sidewalk and Parking on East Side Only

Tracy Avenue/Benton Avenue Intersection

The east and west legs of Benton Avenue at Tracy Avenue are offset approximately 70' (center to center), see Photo 3 below. The west leg serves as the primary access to Countryside Elementary School. We believe the offset intersection creates driver and pedestrian confusion and decreases intersection efficiency, especially during school opening and closing hours. Although there is not a history of crashes at this intersection, we believe the existing intersection has a potential safety issue. According to the MnDOT Access Management Manual offset (or overlapping) intersections should be avoided, unless the access points can be separated by sufficient distance to allow back-to-back left turns. Not only is there not sufficient distance for back-to-back, left-turn lanes, the intersection is also treated as a four-way stop condition as if the legs were aligned.

Photo 3 – Benton Avenue/Tracy Avenue Offset Intersection

Bus-turning movements are difficult, to nearly impossible, see Photo 4 below. This is especially true when vehicles are stopped at the west leg stop sign. This causes some of the bus drivers to continue north to Grove Street to Stuart Avenue to access the school rather than make the difficult maneuver.

Photo 4 – Difficult Bus Turning Movements at Benton/Tracy

Countryside Elementary School provides crossing guards when school begins and ends, see Photo 5 below. The crossing guard team is usually made up of one to two staff volunteers and one to two student volunteers, according to conversations with Countryside staff and from observing the intersection when school adjourns.

Photo 5 – Crossing Guards Assists Students Cross Intersection

Photo 6 (below) shows a near accident between a commuter bicyclist and a vehicle making a left turn from southbound Tracy Avenue to westbound Benton Avenue. The silver vehicle had to wait in the intersection to complete the left turn, due to a previous vehicle not yielding right-of-way. This photo is a clipped screen shot from a video taken at the intersection.

Photo 6 – Driver Confusion at Benton/Tracy

There is an existing parking bay for parents to pick up children along the west side of Tracy Avenue, south of Benton Avenue. As indicated in Photo 7, several parents will make U-turns in the middle of the street to access the parking bay. This maneuver is considered to not be safe and is made worse by the crest vertical curve near the south end of the parking bay.

Photo 7 – U-Turn Maneuvers by Parents Accessing Parking Bay

Crash History

The crash data indicates no accidents along the corridor in the past three years, with the exception of three accidents at the Tracy Avenue/Vernon Avenue intersection.

Geotechnical Information

A geotechnical evaluation report for the corridor was completed and indicates that the soil conditions of the roadway consist of sandy loams, loamy sands, and sandy clay loams with minimal aggregate base under the existing 7-8" of concrete pavement.

Municipal State Aid Street

Tracy Avenue, from Benton Avenue to Vernon Avenue, is a designated Municipal State Aid Street (MSA) and is eligible to receive funding through the State gas tax. The purpose of this fund is to help local governments construct and maintain collector and arterial roadways. The State Aid office of MnDOT has established clearly defined design requirements for MSA streets.

Bicycle Accommodations

According to the City of Edina's Comprehensive Bicycle Transportation Plan, Tracy Avenue is currently a favored street for connection and movement to destinations within and outside of Edina and has been designated as a primary route for cyclists. The primary goal of the Bicycle Transportation Plan is to provide a safe and convenient bicycle transportation network. The report recommends that in the short and medium term, the City sign the bicycle route, repair curb-pavement joints, remove certain areas of on-street parking, and provide striping of bicycle lanes.

Public Utilities

Sanitary Sewer: The trunk sanitary sewer system along Tracy Avenue has been televised and has been evaluated. The sanitary system consists of 9-inch diameter clay pipe. The televising has indicated some minor root intrusion, settlement, and breaks. Manhole inspections have been completed for the corridor.

Watermain: The existing watermain is a 12-inch, unlined, cast iron pipe, constructed in 1959. The City has experienced relatively few watermain breaks or service calls for the area. The hydrants in the area are not standard City hydrants.

Storm Sewer: In general, storm water runoff is channeled along curb and gutter where it is captured in storm sewer catch basins and routed into Hawkes Lake. Capacity issues in the existing outlet to Hawkes Lake via Warden Avenue have been identified for the 100-year storm event.

Localized drainage issues have been identified by the residents via the questionnaire. Additional catch basins will need to be added to bring Tracy Avenue up to State Aid Standards.

Private Utilities

Private utilities extend within the roadway rights of way and consist of overhead electric and cable, and underground gas, telephone, cable, and fiber optics.

Street lighting consists of "cobra head" lights mounted to the electrical poles at the west side of each intersection.

Landscaping

Some properties have vegetation, hardscapes (such as boulders and retaining walls), or other landscaped items within the City right-of-way. Many of these landscape items are located directly behind the curb or around existing fire hydrants. Some of these landscape items will need to be removed in order to complete the necessary reconstruction work.

PROPOSED IMPROVEMENTS:

Roadway

The pavement section is proposed to be completely reconstructed to the subgrade. The roadway width is proposed to be increased from 36' to 40'. The additional 4' width being added to the west side of the street, where right-of-way is available.

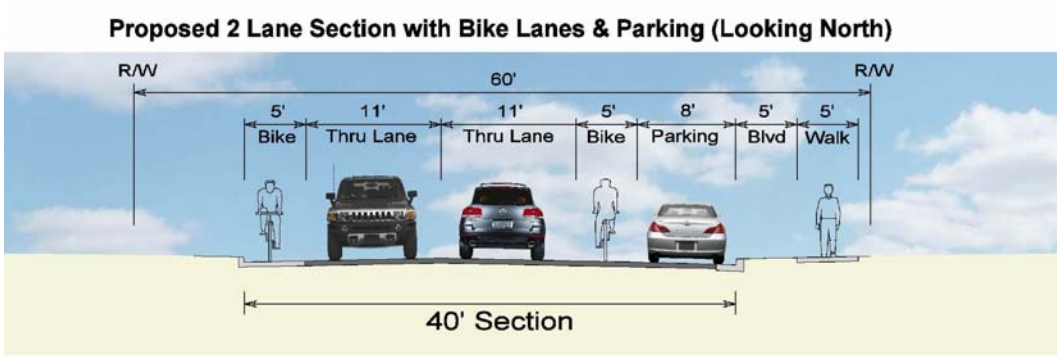


Figure 3. Proposed Typical Sections

Roadway Components Proposed

1. **Driving Lanes**: The existing driving lanes are 12'; the minimum state aid standard is 11'. It is proposed to reduce the lane width to the minimum width allowed.

2. **On-Street Bike Lanes:** 2-5' on-street bike lanes are proposed for the corridor. The following are the factors considered for this proposal:

- Tracy Avenue is a Primary Bike Route in the City's Comprehensive Plan.
- The MnDOT Bikeway Guidelines recommend 5' bike lanes for this roadway classification and traffic volume.

*The west side bike lane is proposed to be constructed with a B660 Design concrete curb and gutter (5' gutter pan), which matches the eastbound bike lane used on W. 70th Street. See Appendix K for the memo - "B660 Bike Lane Comparison Cost" for further information regarding reasoning and cost comparison for this option.

Photo 8- 70th Street Bike Lane

3. **On-Street Parking (East Side):** Several factors were considered when determining proposal for an 8' on-street parking lane on the east side of the street, made up of 28 parking stalls. These factors include:
   - Resident input
   - Sidewalk locations for access to parking
   - Existing side tree locations
   - Existing parking on east side
   - MSA requirement for 8' parking lane width
   - Ability to put in "bump outs" for traffic calming

4. **Sidewalk (East Side):** Three factors were considered when determining proposal to maintain the existing 5' sidewalk and 5' boulevard on the east side of the street. These factors include:
    - Resident Input
    - Existing sidewalk condition is adequate, meaning less removal and reconstruction.
    - 5' boulevard and 5' sidewalk matches the existing City standard.

Roadway Components Considered (Not Proposed)

The following components were considered but ultimately not recommended by staff.

1. **On-Street Parking (West Side)**: An 8' parking lane on the west side was considered but ultimately not recommended due to the following reasons:
    - Resident Input – residents felt the parking lane on the east side was adequate. Some residents did not want a parking lane at all, see Appendix C.
    - Existing Stalls are Adequate – From parking counts and anecdotal evidence, it does not appear the demand is present for additional parking space.
    - The increased width would cause the need for both temporary and permanent easement along a majority of the west side of Tracy Avenue.

2. **Sidewalk (West Side):** A 5' sidewalk and 5' boulevard on the west side was considered but ultimately not recommended as due to the following:
    - Impact to residences
    - Temporary Easement Needed
    - Probable addition of numerous retaining walls
    - Xcel Energy Power Poles to be relocated to boulevard
    - Difficulty matching driveway grades

Additional Roadway Enhancements

The following components are additional proposed enhancements to the corridor.

1. **Parking Bump Outs**: Bump Outs are areas where the curb offset decreases from centerline (as shown below). The overall roadway width decreases from 40' to 33.5' (from curb face to curb face).

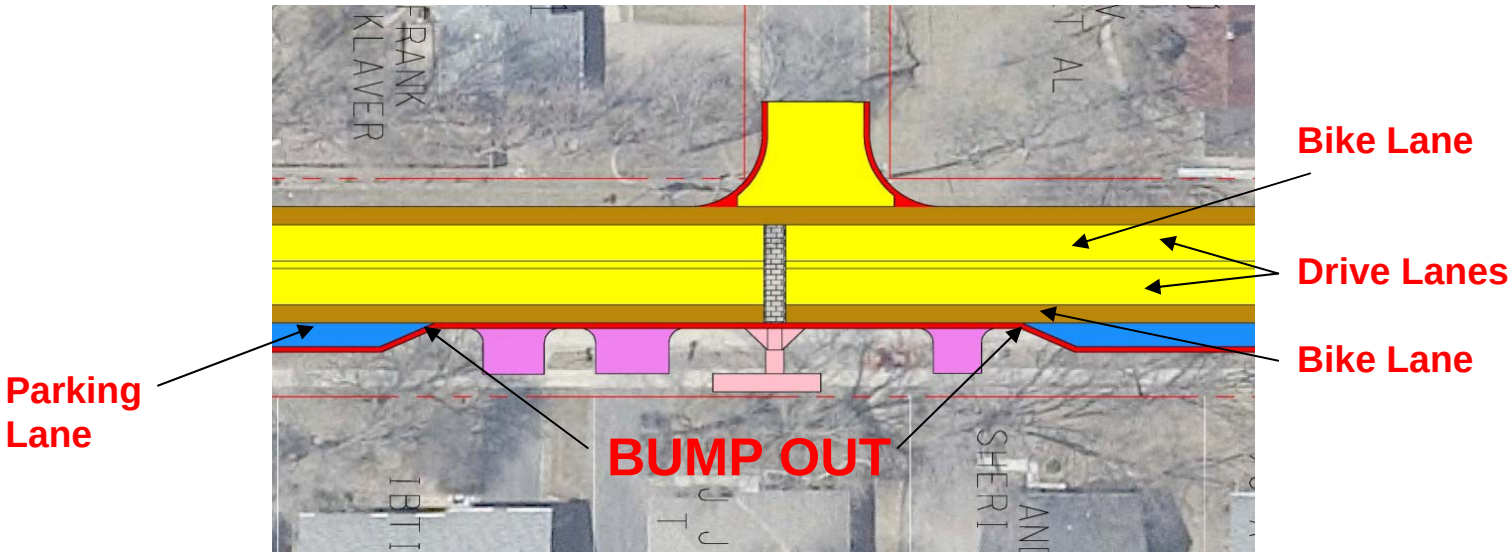


Figure 4. Example Bump Out Configuration

Bump-Out Advantages

- Creates Visual Friction – Feeling roadway width is decreasing which is a traffic calming device to reduce speeds.
- Improves Pedestrian Visibility
- Decreases Crosswalk Distance

2. **Enhanced Crosswalks:** It is proposed to add "in-laid" pavement markings and signage to enhance the visibility of the crosswalks (see below).

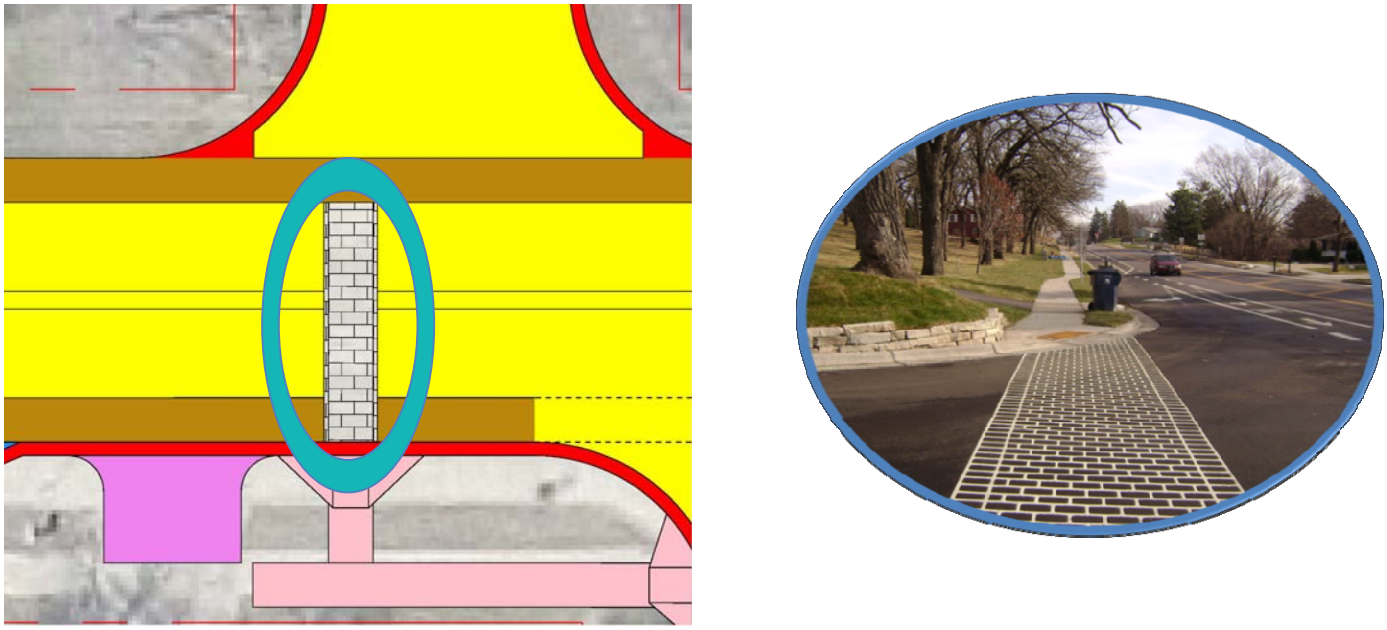


Figure 5. "In-Laid" Crosswalk and Example (70th Street)

Widening to the West

The 4' widening is proposed all on the west side of the roadway with the existing east curb line staying in the same location. The factors that determined widening to the west include:

- City standard boulevard next to a sidewalk is 5', which is the current boulevard width on the east side.
- The existing east sidewalk is structurally adequate and 1' from the existing right-of-way line. Widening would not be possible without reconstructing sidewalk and purchasing additional right-of-way.
- There is adequate right-of-way on the west side.
- The existing storm sewer trunk line is on the east side of the street, thus reducing reconstruction costs to the storm sewer network and potential conflicts with private utilities.

Tracy Avenue and Benton Avenue Intersection

The existing intersection of Tracy Avenue and Benton Avenue is confusing due to the offset alignment of the intersection. This creates operational problems and potential safety issues as well. These problems are especially prevalent during the hours the Countryside School day commences and adjourns.

Three alternatives were analyzed for the Tracy Avenue/Benton Avenue intersection.

1. Leave Intersection as is

Figure 6. "Leave As Is" Option

2. Realign West Leg of Benton Avenue

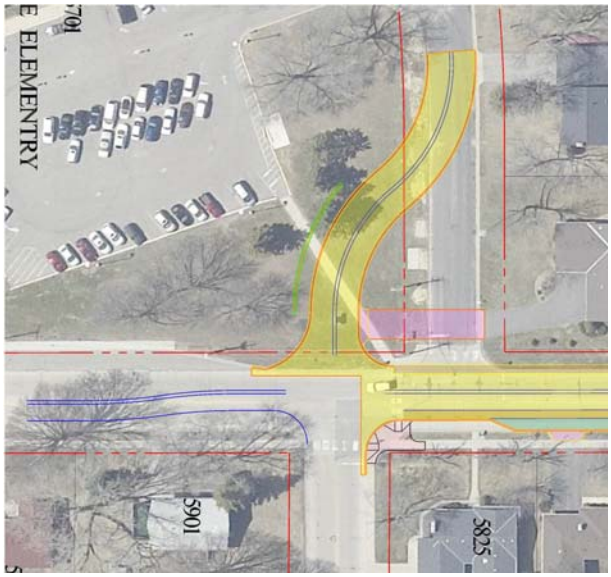


Figure 7. Realign West Leg Option

3. Roundabout

Figure 8. Roundabout Option

Recommended Intersection Alternative

The roundabout intersection is the proposed option recommended by staff. We gathered input from parties that will be affected by the proposed roundabout to understand concerns with the current intersection and with the proposed roundabout. Below is a summary of the coordination activities and a list of the interested parties:

1. **Countryside Elementary School:** Staff met with principal Karen Bergman, bus operations manager Dave White, and additional members of the school district to initially discuss the roundabout concept. The roundabout was unanimously accepted as a beneficial option. The project team was invited to give a presentation to the Countryside Elementary School Site Council and PTO on January 10 (see Appendix L for a copy of the presentation). Those in attendance were in support of the roundabout and thought it would enhance the operations of the intersection and provide a safe environment for pedestrians, specifically the students. The information regarding the project and roundabout will be brought to the school board and any additional correspondence will be included in future submittals (i.e., Edina Transportation Commission and City Council Packets).

2. **Edina Police Department:** Edina Police Chief, Jeff Long, provided a support letter for the proposed roundabout, see Appendix H. He indicated officers were skeptical about roundabouts before they were installed in Edina, but that feeling changed after they were installed. Police Chief Long indicated the roundabouts have been helpful with the flow of traffic and reducing accidents. He also indicated that, although the intersection of Tracy Avenue and Benton Avenue does not have a high number of car accidents, there is congestion with the “out of place” four-

way stop. He stated the Edina officers are very supportive of implementing additional roundabouts and strongly encourage the use of them on Tracy Avenue.

3. **Fire Department:** In conversations with the City of Edina Fire Chief, Marty Scheerer, Marty explained concern with roundabouts in general, due to a feeling of being unable to negotiate them efficiently and having an increase in response time. We analyzed the movements of fire trucks through this proposed roundabout at Tracy Avenue and Benton Avenue, See Appendix J, "Fire Truck Memo". Our conclusion was that a fire truck can adequately maneuver through the intersection (without the use of the truck apron), and a negligible increase in response time.
   Information was also gathered from the City of Carmel, Indiana's Fire Chief, Keith Smith. The City of Carmel, Indiana has in excess of 60 roundabouts, and many more planned, for a City with a population of 80,000 people. See Appendix H for Fire Chief Smith's responses regarding fire trucks and roundabouts. He states that their response times have not increased since the roundabouts have been installed, in fact, they are in the middle of the process to become an Accredited Agency through the Center for Public Safety Excellence (CPSE), and incident response times are a critical measurement.

4. **Project Comments:** See Appendix F and Appendix G regarding comments from residents.

The following are factors that influenced the decision to recommend the roundabout intersection:

Traffic Calming: Residents indicated speed is an area of concern along the corridor. Roundabouts are designed to slow traffic.

Safety: Although there is not a history of accidents at this intersection, the unusual configuration leads to confusion that has a potential for safety issues. Since the intersection is located right at the Countryside Elementary School entrance, pedestrian safety is also a primary concern. The following are reasons roundabouts are considered safer than a four-way stop controlled intersection:

- Crossing One Direction at a time – Need to only look one direction.
- Slower Vehicle Speeds
- Refuge Island provided
- Shorter Crossing Width – 16' versus 36'
- Multi-Stage Vehicle Recognition – Meaning a vehicle entering the roundabout first identifies pedestrians before coming to the yield line, removing an extra task in the decision making process.

Reduced Footprint and Cost: The realignment option requires a greater footprint and higher cost due to a necessary retaining wall. The figure below shows the footprint comparison between the two options.

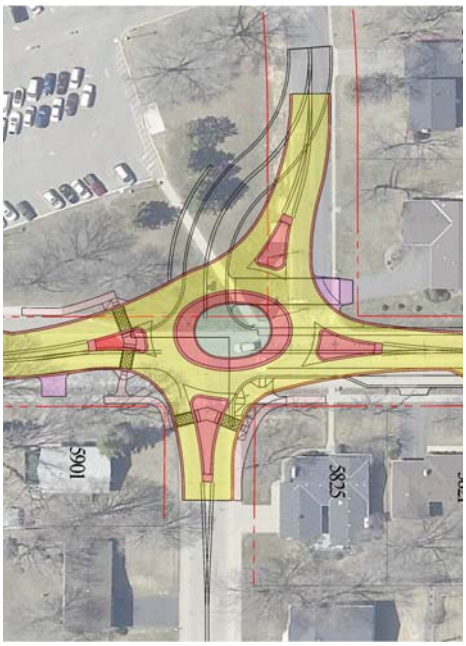


Figure 9. Footprint Comparison

Resolve Bus Turning Issues: Most of the school buses usually enter from the east leg of Benton Avenue. This maneuver is very difficult, and at times impossible if a vehicle is positioned at the west leg stop sign. This appears to cause some buses to use Grove Street (the next street to the north) to enter the school. Bus turning movements have been performed for the proposed roundabout option, and are shown in Figure 10:

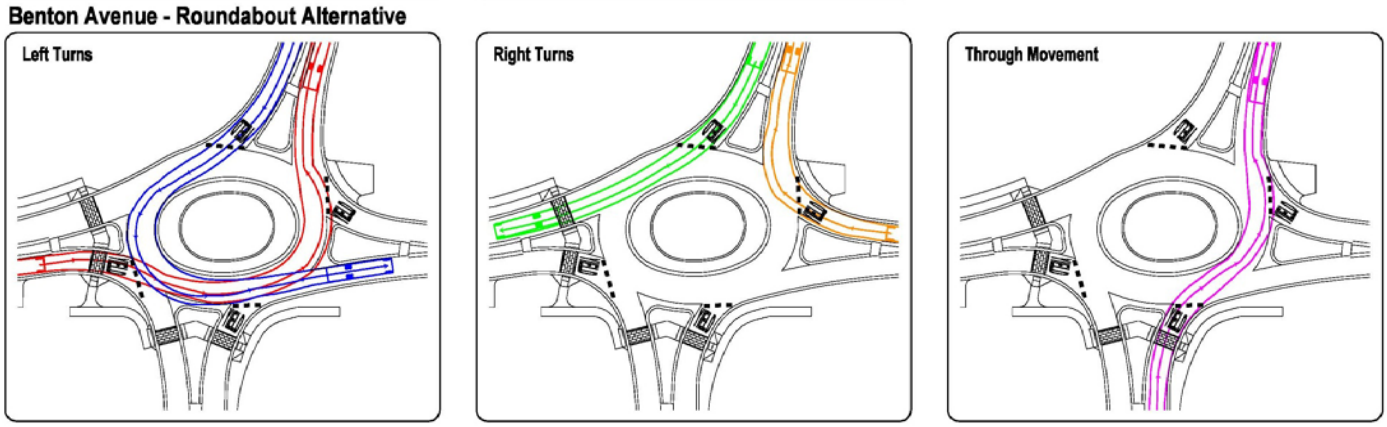


Figure 10. Bus Turn Movements

U-Turn Ability: There is currently a parking bay for parents to pick up students at the school. Many parents make a U-turn in the middle of the street to access the parking bay, which can be dangerous. The roundabout allows the parents to make a legal and safe U-turn to enter the parking bay.

Increased Efficiency: There is a lot of confusion with the current intersection resulting in the need for a great deal of eye contact to decide which vehicle has the right-of-way. The current operation is not efficient and results in significant backups when school is starting and finishing. The roundabout will allow traffic to keep moving, thus improving operations.

Decrease in Emissions: In one study, replacing traffic signals and stop sign intersections with roundabouts reduced carbon monoxide emissions by 32 percent, nitrous oxide emissions by 34 percent, carbon dioxide emissions by 37 percent, and hydrocarbon emissions by 42 percent[1].

Metro Transit: Metro Transit currently has a bus line 578 that traverses from westbound Benton Avenue to southbound Tracy Avenue in the AM and northbound Tracy Avenue to eastbound Benton Avenue in the PM . A bus stop currently exists at the southeast quadrant of Benton and Tracy. Staff has discussed the project with Metro Transit. They are currently evaluating this line and are considering re-routing this line. Metro Transit has acknowledged that they will work with staff during design to ensure their needs are considered during construction and long term. See Appendix H for Metro Transit correspondence.

Edina Public Utilities

Sanitary Sewer: The sanitary sewer pipe system has been evaluated. Pipe repair work has been identified and is proposed to be completed with the project.

Watermain: City staff is currently evaluating the watermain system to determine if any areas have a history of breaks. The areas that are deemed deficient will be replaced.

Hydrants within the project area will be replaced with City standard hydrants.

Storm Sewer: The existing storm sewer is proposed to be replaced to meet the capacity needs based on the City of Edina's Stormwater Management Plan and MSA standards. Additional storm sewer piping and catch basins will address the drainage issues within the roadway.

[1] Mandavilli, S.; Russell, E.R.; and Rys, M. 2004. Modern roundabouts in United States: an efficient intersection alternative for reducing vehicular emissions. Poster presentation at the 83rd Annual Meeting of the Transportation Research Board, Washington DC.

It has been identified the existing trunk line along Warden Avenue is inadequate for the 100-year storm event. Instead of replacing the entire trunk line to Hawkes Lake, the system will be upsized within the project limits and once Warden Avenue is reconstructed the remainder of the trunk line can be upsized as well. In addition, a storm water treatment structure will be constructed at Warden Avenue with the project to provide treatment before outleting to Hawkes Lake.

Other Improvements

In addition to the proposed improvement discussed above, several other improvements are being proposed with the project. These include:

Sidewalks: Segments of the existing east side sidewalk will be replaced where they are structurally deteriorating or are trip hazards (more than a 1/2-inch settlement).

Pedestrian crossings at Grove Street, Warden Avenue, Hawkes Terrace (both locations), and the roundabout will be marked with in-laid pavement brick patterned pavement markings similar to other new crossings in the City of Edina.

Pedestrian Curb Ramps: All of the pedestrian curb ramps will be reconstructed to meet the current design standards as dictated by MSA and ADA.

Private Utilities: It is anticipated that CenterPoint Energy will need to make spot repairs to their lines as they are currently within the roadway. It is not anticipated the other buried private utilities will have any significant relocations. Xcel Energy has poles that run along the western right-of-way line that are not impacted, with the exception in the area of the roundabout. Two power poles will require relocation near the roundabout. The relocation will be Xcel Energy's expense and no expense to the City.

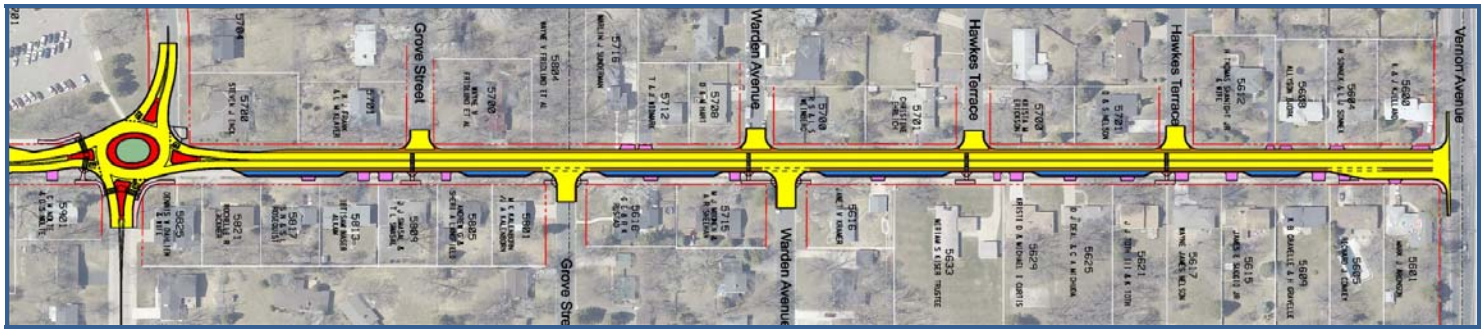


Figure 11 - Proposed Project Layout

RIGHT-OF-WAY & EASEMENTS:

Permanent right-of-way and temporary easement will be needed from the Countryside Elementary School and from the properties at 5825 and 5901 Tracy Avenue. The anticipated right-of-way cost between the two properties

is approximately $7000, based on current property values. It is anticipated the right-of-way needed from Countryside Elementary School will be donated by the Edina School District.

PROJECT COSTS:

The total estimated project cost is $1,287,400 (Table 2). The total cost includes directs costs for engineering, clerical, and construction finance costs from start of the project to final assessment hearing. Funding for the entire project will be from a combination of utility funds, state aid funds, and special assessment. The roadway cost north of Benton Avenue is 80 percent funded by state aid funds and 20 percent funded by special assessments. The special assessment cost in the roundabout area is equivalent to 20 percent of the typical 40' roadway section through the Benton Avenue intersection area. The additional cost of constructing the roundabout is 100 percent funded by state aid funds.

Table 2: Project Costs

PROJECT COSTS			
Item	**City Utility**	**Municipal State Aid**	**Special Assessment**
Roadway			
- **Roadway**		$485,600.00	$121,400.00
- **Roundabout Area**		$165,400.00	$ 20,000.00*
Roadway Total:		$651,000.00	$141,400.00
Utilities			
- **Storm**	$240,000.00		
- **Water**	$90,000.00		
- **Sanitary**	$165,000.00		
Utilities Total:	$495,000.00		
TOTAL PROJECT COST	$ 1,287,400		

***Special Assessment cost is equivalent to 20% of the typical 40' roadway section through the intersection area.*

ASSESSMENTS:

City of Edina Assessments

A special assessment of $141,400 is proposed for this project. The assessments will be levied against the benefitting adjacent properties, see attached preliminary assessment role and map in Appendix M. The methodology used for these assessments are based on the City Council adopted State Aid Assessment Policy. Per the policy, assessments will be based on a Residential Equivalent Unit (REU) and will be 20% of the project cost with the remaining 80% being funded through Municipal State Aid (monies appropriated through the gas tax fund).

There are 32 residential equivalent units (REU); one property is shown as 4 REU's, 9 properties are shown as a 1/3 REU and 25 properties are shown as a 1 REU. The cost per REU is $4,418.75.

School Property:

Countryside Elementary School:
4 REUs = Layout of school property with similar size lots in neighborhood: (4 lots total) / (1 potential access)
Assessment: $17,675.00

FEASIBILITY: The proposed improvements as outlined in this study are found to be necessary, cost effective, and feasible from an engineering standpoint.

PROJECT SCHEDULE: The following schedule is feasible from an engineering standpoint:

Information Meeting #1	November 28, 2011
Information Meeting #2	December 19, 2011
City Council Orders the Public Hearing	January 6, 2012
Countryside Elementary Site Council Presentation	January 10, 2012
Edina Transportation Commission Receives Feasibility Report	February 6, 2012
Edina Transportation Commission Meeting	February 16, 2012
Feasibility Report Received by City Council	February 21, 2012
Countryside Elementary PTO Meeting Presentation	February 21, 2012
City Council Conducts Public hearing and Orders Project	March 6, 2012
City Council and MnDOT approve Plans and Specifications	May, 2012
Receive Bids	May, 2012
Award Contract	June, 2012
Begin Construction	June, 2012
Complete Construction	Fall, 2012
Assessment Hearing	Fall, 2013

Appendix:

A. Information Meeting Letter, Presentation and Sign In Sheet
B. Property Owner Questionnaire #1
C. Questionnaire #1 Results
D. Informational Meeting Letter, Presentation and Sign In Sheet
E. Property Owner Questionnaire #2
F. Questionnaire #2 Results
G. Project Comments & Letters Received
H. Roundabout Correspondence
I. Roundabout Links
J. Fire Truck Memo
K. B660 Bike Lane Comparison Cost Memo
L. Countryside Elementary School Site Council Presentation
M. Preliminary Assessment Roll and Map
N. City Comprehensive Plan Update – Sidewalk and Bicycle Facilities (Fig. 7.10 and 7.11)
O. Survey Response Map
P. Existing Parking Analysis Memo

FEASIBILITY STUDY – BA 368

ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix A

Open House Meeting Letter, Presentation, and Sign In Sheet

City of Edina

November 16, 2011

Tracy Avenue Area Residents
City of Edina

Re: Public Open House – **Monday, November 28 at 7:00 p.m.**
Tracy Avenue Infrastructure Rehabilitation Project

Dear Resident:

The City of Edina has initiated the process of roadway and utility improvements for Tracy Avenue in the summer of 2012 from Vernon Avenue to Benton Avenue. You are invited to attend a public open house on Monday, November 28, at 7:00 p.m., at the Public Works Facility, located at 7450 Metro Boulevard, Edina (see back of letter for map).

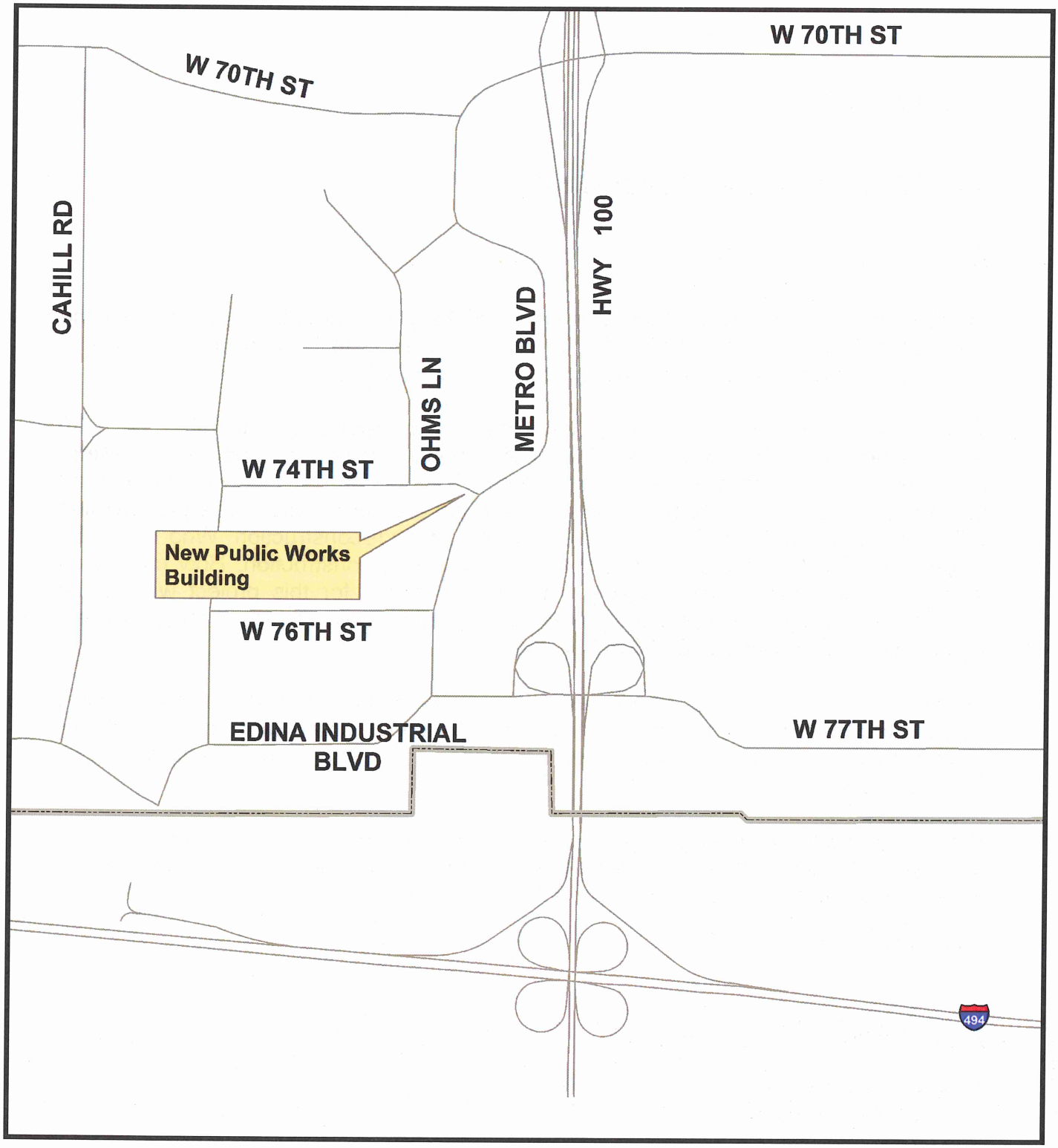
The public open house will consist of a brief presentation that will be given shortly after 7:00 p.m. followed by an informal question-and-answer session. The presentation will explain the City of Edina's street reconstruction process, the existing conditions of the infrastructure, and what the design criteria may be for the corridor. The actual design of project and costs will be prepared for a second informational meeting to be held in mid December. City staff from Edina, along with the City's consultant, WSB & Associates, Inc., will be available to answer any questions or concerns you may have regarding the project.

To prepare for the meeting, please review the enclosed brochure, "A Guide to Edina's Street Reconstruction Process". Also, for additional information on our Street Reconstruction process visit our website at
http://www.ci.edina.mn.us/Departments/L5-17a_ConstructionProjects_future.htm

If you are unable to attend and would like more information on the project, please feel free to call Andrew Plowman with WSB & Associates, Inc. at 763-287-7149 or myself at 952-826-0445.

Jack D. Sullivan, P.E.
Assistant City Engineer

Enclosure



City of Edina
New Public Works Building
7450 Metro Blvd
Edina, MN 55439

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S

A Guide to Edina's Street Reconstruction Process

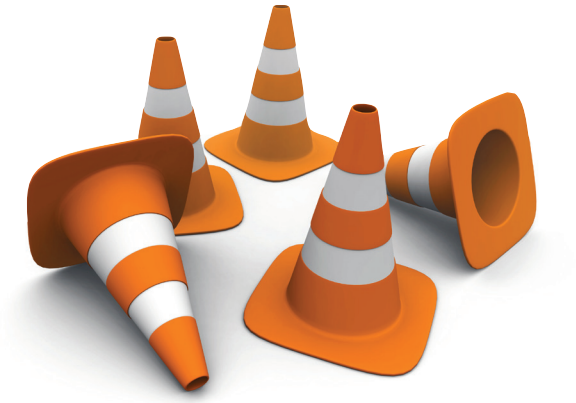
Edina's Vision 20/20 calls for Edina to be the preeminent place for living, learning, raising families and doing business as distinguished by five objectives, including a sound public infrastructure. A sound public infrastructure encourages a stable private infrastructure, leading to an enhancement of the sense of quality that Edina has and will enjoy.

City of Edina
Public Works & Engineering Departments
7450 Metro Blvd.
Edina, MN 55439
952-826-0371
Fax 952-826-0392
www.CityofEdina.com/Engineering
edinamail@ci.edina.mn.us

The City of Edina prioritizes neighborhood streets and utilities for reconstruction in conjunction with the five-year Capital Improvement Plan approved by Council.

This "Guide to Edina's Street Reconstruction Process" explains:

- How are streets selected for reconstruction?
- Who selects the neighborhood streets for reconstruction?
- How can I petition the City Council for neighborhood streets reconstruction?
- What happens after the streets are selected?
- How are the residents notified of the neighborhood streets reconstruction?
- Who funds the project?
- What do my taxes pay for?
- What other costs are associated with neighborhood street reconstruction?
- When do I pay the special assessment for the project?
- How do I pay the special assessment?
- How will staff communicate with property owners?
- How can I give input and stay informed?
- What can I expect during construction?
- What can I do to prepare for the project?



TYPICAL TIMELINE

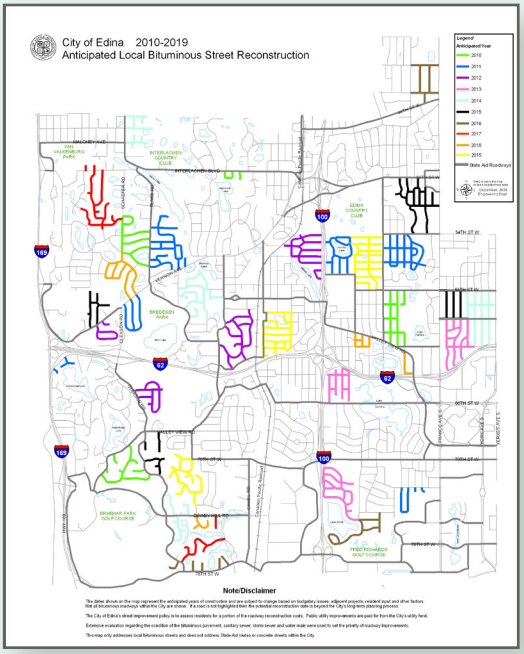
August	Kick-off Informational Letter to residents
Mid-September	Open House (for preceding two years)
Mid-October / November	Neighborhood Informational Meeting
December	Feasibility Report/Public Hearing
January / February/ March	Plan/Preparation/Bidding
April / May	Construction starts
October / November	Construction finishes
Spring	Warranty work
Summer / Fall	Final Assessment Hearing

How are Streets Selected for Reconstruction?

All City streets that are not built to current standards (including concrete curb and gutter) will be subject to major rehabilitation at some time during the life of the streets. Priority is given to streets or groupings of streets that have the highest need.

Streets are prioritized based on the Pavement Condition Index (PCI), water main/service breaks, storm sewer/drainage and sanitary sewer deficiencies. Repairing streets with low PCI ratings using standard maintenance procedures such as patching, crack-sealing and seal-coating is very expensive and ineffective on a long-term basis. Reconstruction is usually the most cost-effective solution. Streets are grouped together in neighborhoods for major reconstruction and future maintenance measures to help prolong the life of the pavement and to maximize the economics of construction.

A map showing anticipated street reconstruction for approximately 10 years can be viewed at **www.CityofEdina.com/ConstructionProjects**. Please be aware that the dates shown on the map represent the anticipated years of construction and are subject to change based on budgetary constraints, adjacent projects, residents' input and other factors.



Who selects the neighborhood streets for reconstruction?

The City's Engineering Department determines which neighborhood streets have the highest priority based on good engineering judgment. Residents can petition the City Council to have their streets reconstructed sooner if they so desire.

How can I petition the City Council for Neighborhood Street Reconstruction?

Residents can petition the City Council to conduct a feasibility report for neighborhood street reconstruction. Residents are responsible for collecting signatures from as many adjoining property owners using the official petition form, which is available from the City Clerk's office, the Engineering Department or at www.CityofEdina.com. When the completed petition is returned, it is considered by City Council and may be referred to the Engineering Department for a feasibility study.

What Happens After the Streets are Selected?

Infrastructure improvements, including streets and utilities, are approved by Council in the 5-year Capital Improvement Plan (CIP), and each year a specific dollar amount is approved for these improvements. Whether petitioned by residents or staff initiated, under the authority granted by Minnesota Statutes, Chapter 429, staff begins the process of determining the feasibility of the project.

The following is a typical outline of the process from start to end:

1. Staff performs preliminary design work including evaluation of the neighborhood's utility infrastructure (concrete curb and gutter, water main, storm and sanitary sewer), street-lighting system and pedestrian accessibility (sidewalks).
2. A neighborhood information meeting is held to discuss the issues listed above, including traffic management issues.
3. Staff completes the feasibility study.
4. Public hearing is held and residents are notified per State Law.
5. Council hears proposed project and decides on the issue. Residents can speak publicly (on record) regarding the project.

If Council orders the project:

6. Construction documents are drafted, project is publicly advertised and bids are accepted.
7. Council awards the project to the lowest bidder.
8. Construction begins.
9. Final assessment hearing is held after project completion and final costs are known.

The typical process from start to finish is one to two years.

How Are Residents Notified of the Neighborhood Streets Reconstruction?

Residents will first be notified one to two years in advance of their project through an invitation to an open house. After the open house, a questionnaire will be mailed, asking for information relating to the proposed project. Once this information is gathered, an invitation to a neighborhood informational meeting will be sent. Included in this notice will be the estimated special assessment to each property owner, along with important dates such as the public hearing. The first open house, along with the neighborhood meeting, will allow residents to start discussing the project and to ask questions. **However, please do not feel that you must wait for the open house to have your question or concern answered. You are welcome to call or visit the Engineering office at any-time.**

Using the information gathered, staff completes the feasibility report to present to the City Council at a public hearing. At least 10 days before the public hearing, property owners along the streets being considered for reconstruction are notified. At the public hearing, staff provides the City Council and property owners with the findings of the feasibility report, which includes information about preliminary design, estimated project costs, and preliminary special assessment (all of which is discussed with residents during the informational meeting(s).) Property owners have the opportunity to address the City Council either in writing or in person at the public hearing. After the public hearing is closed, the City Council votes to determine whether or not the project goes forward.

Who Funds the Project?

The project is paid for by special assessment to property owners and the respective utility funds. Special assessments are based on the concept that when land is benefited from a particular improvement, a portion of the costs of the improvement should be levied against those properties to finance such improvements.

Special assessments typically include the roadway surface, decorative streetlights, sidewalks, traffic-calming measures and landscaping. Curb and gutters are funded through the Utilities Fund.

See the Special Assessment Policy at **www.CityofEdina.com/SpecialAssessment.** Property owners are not assessed for ongoing maintenance (sealing coating, etc.) needed to prolong the life of a street.

What Do My Taxes Pay For?

It is typical for residents to ask "what do my taxes pay for?" Approximately 20 percent of your property tax goes to the City of Edina for expenses related to police, fire, parks and public works for snowplowing, pothole repairs, sealcoating, and other street maintenance. **Your taxes do not pay for street reconstruction.**

What other Costs are Associated with a Neighborhood Streets Reconstruction?

All of the utility work (concrete curb and gutter, sanitary and storm sewer, and water main) is done at no direct cost to the property owner. These costs are paid from the respective utility funds.

During project design, the City encourages each private utility company (gas, electric, telephone and cable TV) to upgrade or

repair its utilities within the streets along the project area. This approach helps reduce street excavations and disturbances to the neighborhood in the future.

If you've ever considered burying your private overhead utility lines, this is an opportune time to do so. If you are interested, please contact the Engineering Department and we will give you contact information for the respective private utility company.

When Do I Pay The Special Assessment For the Project?

A final assessment hearing is typically held one year after the completion of the project. The one-year timeframe is necessary to allow time for warranty work and final payment to close out the project. You will be notified of the final assessment hearing at least 14-days prior to the final assessment hearing.

How Do I Pay the Special Assessment Payment?

Special Assessment payments are due Nov. 29* of the calendar year in which it is levied. There are four ways to pay the special assessment:

1. Pay the entire balance by Nov. 29 and avoid finance charges.

2. A minimum partial payment of 25 percent is allowed. The balance will automatically be certified to Hennepin County and be payable over the next 10 years on the same schedule as your property taxes, plus finance charges.

3. Have the entire special assessment certified to Hennepin County and make annual payments over the next 10 years on the same schedule as your property taxes, plus interest. This option will be done automatically if you do nothing by Nov. 29.

4. Deferral on Special Assessment of Homesteads Owned By Persons 65 Years Of Age Or Older. Under provisions of Minnesota Statutes Section 435.193 to 435.195 the City may, at its discretion, defer the payment of assessments for any homestead property owned by a person 65 years of age or older for whom it would be a hardship to make the payments. The procedures to apply for such deferment are available from the Assessor's office. Deferment applications must be filed with the Assessor's office by Nov. 15. See *http://www.CityofEdina.com/Departments/AssessingDeferrals.htm* for complete detail.

Property owners who elect option 2 or 3 may pay off the assessment during any year by paying the remaining principal amount and finance charges (interest) to the City by the close of business on Nov. 15*.

If this is a weekend day, payments are due by the close of business the last business day prior to this date.

How Will Staff Communicate with Property Owners?

Letters via Regular Mail

Staff will send an informational letter to property owners in the neighborhoods whose streets may be reconstructed the next two consecutive years (e.g., 2011 and 2012). Other letters will be sent out as necessary informing you of project plans and schedules, open house(s) and public hearing(s). Once construction is underway, you will receive construction update letters via mail.

Edina *Sun-Current*

Public hearings will be published in the Edina *Sun-Current*. The Edina *Sun-Current* is published every Thursday.

Resident Questionnaires

During the feasibility phase, staff may need to gather residents' input to help formulate a decision. This may be in the area of style of lighting for the neighborhood, etc.

"City Extra" Email

This service is free and allows individuals to sign up to receive email messages from the City on a variety of topics. We use this email to send out weekly construction updates.

To sign up for the service, go to the City Extra website at **http://cityextra.cityofedina.com** and place a check mark in the box next to your neighborhood's project name. Please contact the City at **952-927-8861** if you have trouble signing up for City Extra.

Hand-delivered letters

Letters may be hand-delivered to inform you of a time-sensitive event such as water shut-off the next morning.

How Can I Give Input and Stay Informed?

Visit our website on a regular basis, www.CityofEdina.com.

All the information that is mailed and discussed at the open houses, informational meetings and public hearings is archived under the neighborhood's project name on the Engineering Department's webpage.

Send an email

edinamail@ci.edina.mn.us

Call us

If you cannot find what you're looking for on the website, call us at 952-826-0371, between 7 a.m. and 3:30 p.m.

Drop in

You can drop in at any time Monday through Friday between 7 a.m. and 3:30 p.m. We are located at 7450 Metro Blvd.

Schedule an appointment

If you believe your question or concern will take more than just a few minutes, it is advisable to call and schedule a meeting with the appropriate staff, 952-826-0371.

What Can I Expect During Construction?

Communication

Once construction begins, you will receive a monthly construction update letter via regular mail and weekly construction updates via email through City Extra. We strongly encourage everyone to sign up for City Extra, as this method of communicating will be utilized most often. The utility companies (gas, electric, cable, telephone) will be in the neighborhood first, upgrading their utilities as they deem necessary. They are required to notify you of their start date.

Construction Activities

As the work progresses, it may be dusty, muddy, noisy and inconvenient; however, we do have requirements to deal with the nuisances. For example, watering trucks will be available to keep the dust down and the contractor must adhere to the City's noise ordinance. You may be asked to limit your water use and flushing of the toilet while the sanitary sewer is being repaired. You may be connected to temporary water in a hose that

will run on the boulevard or have temporary water shut-offs while the water main is being repaired. Your irrigation and pet containment system may be damaged if they are located in the City's right-of-way. They will be restored only if you indicate that you have these systems on your returned questionnaires. You may not be able to access your driveway for up to seven days and the roadway for a few hours up to a few days while certain compounds are curing; however, the contractor will accommodate those with special needs.

You will receive advance notices of these occurrences so that you can plan accordingly; however, while we try to give advance notices, there are instances that limit how much notice we can provide. One such instance may be an accidental water main break that interrupts your water service. Weather is also a factor that could change plans with limited notification.

Landscaping in Boulevards

Prior to construction, property owners will be given an opportunity to remove plantings and other landscaping items from the boulevard. All boulevard areas will be restored with grass regardless of previous plantings or landscaping items.

Street without curb and gutter

Construction typically starts in May, depending on our fickle weather, and runs through October or November. Once the work is completed, some items are warranted until the following spring. Sod, for example, is planted in the fall and property owners are given detailed instructions how to water it. If the sod does not make it through the warranty period, the company will replace it. **If the sod dies after the warranty period, it is your responsibility to replace the dead sod.** You will be notified via regular mail of the sod warranty expiration.

This is typically about six weeks.

Street with curb and gutter

What Can I Do to Prepare for the Project?

- Ask questions; inform staff of your concerns.
- Complete questionnaries to provide feedback.
- Sign-up for City Extra.
- Coordinate landscaping, driveway replacement and house remodeling projects with the reconstruction schedule.
- Begin financial planning for the assessment.

Neighborhood Informational Meeting

Tracy Avenue

(Benton Ave to Vernon Ave)

November 28, 2011

CITY OF EDINA

AGENDA

- Introductions
- Typical Roadway Reconstruction
- Tracy Avenue Information
- Existing Conditions
- Design Criteria
- Communications / Preparing
- Next steps
- Questions

WH

CITY OF EDINA

TYPICAL ROADWAY RECONSTRUCTION

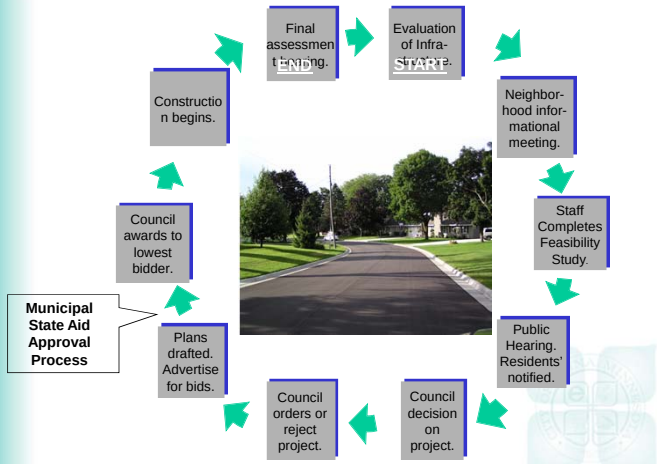
Video – can also be found on City web site:

http://www.cityofedina.com/Departments/L5-17a_ConstructionProjects_future.htm

WH

CITY OF EDINA

PROCESS FROM START TO END



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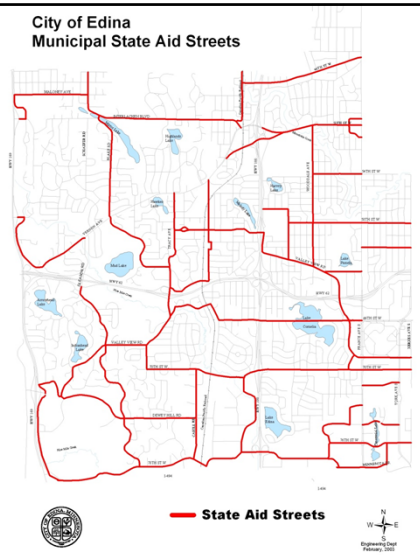
CITY OF EDINA

Edina Municipal State Aid Roadways



WH

CITY OF EDINA

EDINA MUNICIPAL STATE AID FUNDING

80/20 Split:

- 80% of roadway costs funded through Municipal State Aid – "Gas Tax Monies"
- 20% of roadway costs funded through Special Assessments:
  - Based on Residential Equivalent Unit (REU)
    - Each home is an REU
    - Businesses are assigned REU's based on trip generation.

WH

CITY OF EDINA

FUNDING

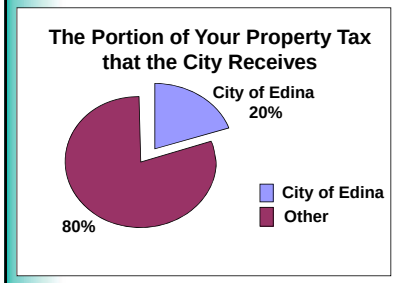
Utility Fund - 100% of the following:

- Curb & Gutter
- Sanitary Sewer – main line only
- Storm Sewer – main line only
- Water main – main line only
- Drain tile – if needed for residents to connect sump pumps and down spouts

WH

CITY OF EDINA

WHAT DO YOUR TAXES PAY FOR?



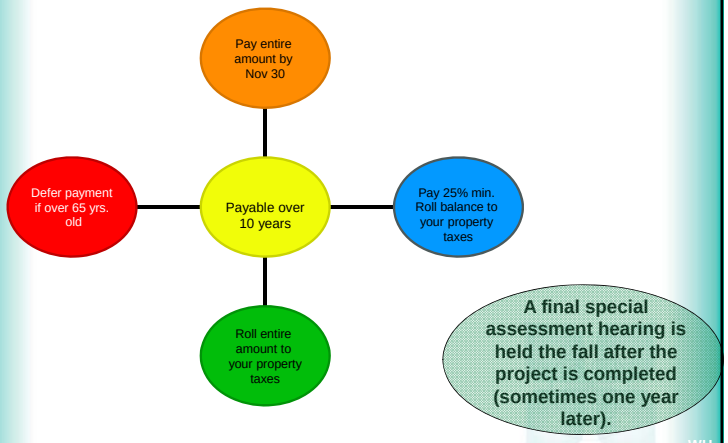
Allocation

- Police
- Fire
- Parks
- Public Works
  - Snowplowing
  - Pothole Repairs
  - Seal coating
  - Other Street Maintenance

WH

CITY OF EDINA

SPECIAL ASSESSMENT PAYMENT OPTIONS



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CITY OF EDINA

RESIDENT QUESTIONNAIRE

The property owners questionnaire generally gathers information on the following topics:

- **Sump Pump Discharge Service Line?**
- **Residential Roadway Lighting?**
- **Pedestrian Issues – what are the issues?**
- **Private Underground Utilities – do you have underground lawn irrigation and pet containment?**
- **Local Drainage Problems – have you noticed drainage issues in the neighborhood?**

WH

CITY OF EDINA

BOULEVARD AREAS

Property owner items located within the City's right of way may be damaged during construction:

- **Irrigation and pet containment systems will only be restored if indicated on the resident questionnaire.**
- **Prior to construction, residents will be given an opportunity to remove plantings and other landscape features in the boulevard.**
- **Boulevards will be restored with grass – regardless of previous planting or landscaping.**

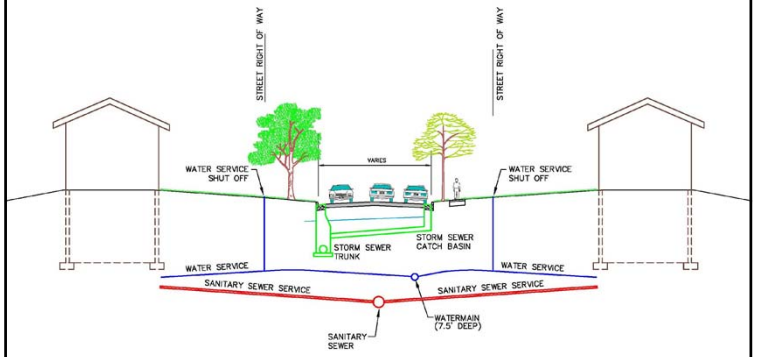
WH

CITY OF EDINA

Project Location – Tracy Avenue

SB

Typical Street Section



SB

Existing Corridor Conditions

Roadway conditions:

- Concrete Pavement placed in 1961
- Prevalent cracking & deterioration of pavements
- Pavement Inverted caused by settlement

SB

Existing Corridor Conditions

Sidewalks

- Structurally inadequate
- Varying widths

SB

Existing Corridor Conditions

Storm sewer system

- Maintain existing drainage patterns
- Existing system does not meet design standards

CITY OF EDINA

Existing Corridor Conditions

Sanitary Sewer

- Built in 1950s
- Typical issues : root intrusion, cracked segments
- Infiltration

Watermain

- Built in 1950s
- Watermain breaks – to be evaluated
- Service issues – to be evaluated
- Water quality – to be evaluated

SB

CITY OF EDINA

Design Criteria

State Aid Requirements

- Min. roadway width
  - 40 feet
    - 2 - 11ft through lanes
    - 1 - 8 ft parking lane
    - 2 – 5 ft bike lanes
- Parking allowed on one side of roadway
- Variance needed for "width"

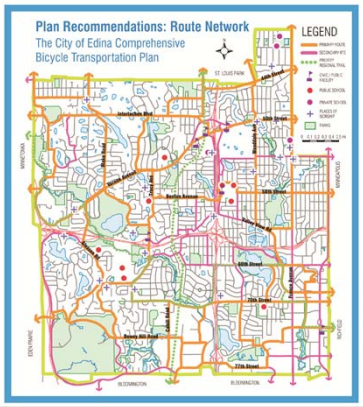
SB

CITY OF EDINA

Design Criteria

Edina Comprehensive Plan

- Bike Plan



SB

CITY OF EDINA

Design Criteria

Private Utility Companies

- Potential gas main rehabilitation
- Potential burying of overhead power lines

SB

COMMUNICATING WITH YOU

CITY OF EDINA

Our first contact with you is when we inform you of the informational meeting, followed by public hearings notification; open house; surveys; project plans and schedules; and construction update letters via regular mail. Our last communication to you is the notice of final special assessment hearing.

Public hearings will be published in the Edina *Sun-Current*.

Questionnaires will be sent during the early planning stage to help staff formulate a decision in areas such as street lighting and style of street lighting.

Weekly construction updates will be sent via the "City Extra" email. Stay in the loop by signing up for this free service.

Letters may be delivered to inform you of time-sensitive events such as water shut-off the next morning.

WH

HOW CAN YOU GIVE INPUT AND STAY INFORMED?

CITY OF EDINA

- **www.CityofEdina.com**
  Visit our website regularly. Information from open houses and other communications are archived on our website.
- **edinamail@ci.edina.com**
  Drop us an email
- **952-826-0371**
  Call us; office hours are 7:00-3:30 p.m.
- **Stop by the office**
  Public Works and Engineering Departments
  7450 Metro Boulevard
- **Schedule an appointment**
  952-826-0371

WH

WHAT CAN YOU DO TO PREPARE FOR THE PROJECT?

CITY OF EDINA

- Begin financial planning for the assessment.
- Coordinate landscaping, driveway replacement and house remodeling projects with the reconstruction schedule.
- Complete questionnaire to provide feedback
- Ask questions; inform staff of your concerns
- Sign-up for "City Extra" to receive updates via email notification

WH

Next Steps

CITY OF EDINA

1. Resident Questionnaire
   - Decorative Street Lighting
   - Parking
   - Sidewalk
2. Next Meeting in December
   - Preliminary design drawings
   - Estimated costs / assessments

WH

CITY OF EDINA

Questions?

WH/SB

TRACY AVENUE
PUBLIC OPEN HOUSE
NOVEMBER 28, 2011

	NAME	ADDRESS	Do you have the following? Y or N	
			SUMP DRAIN	PET FENCE
1	Tom Widmark	5712 Tracy Ave. Edina	No	Yes
2	Tom & Gretchen Shanigit	5612 Tracy Ave	No	NO
3	KEN KJELLAND	5400 TRACY	NO	NO
4	Bill Rodgers	6100 Arbour Ln	YES	NO
5	Wayne V. Fridlund	5712 Grove Street	NO	NO
6	Rick Conkey	5605 Tracy Ave	No	No
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TRACY AVENUE
PUBLIC OPEN HOUSE
NOVEMBER 28, 2011

	NAME	ADDRESS	Do you have the following? Y or N	
			SUMP DRAIN	PET FENCE
1	Dorothy Kerzner	5828 Jeff Place Edina		
2	Ray & Lois Voss	5716 Benton	~~Y~~N	N
3	Judith Pedersen	6100 Arbour LN	Y	N
4	Brenda Clymer	5701 Grove St		Y
5	Kenneth Frank	5701 Grove St		Y
6	Bill Cosgrove	6104 Tracy Ave. So.	No	No
7	Julie Appel	5820 Jeff Pl.	Y	N
8	Dave Nelson	5701 Hawkes Terrace	Y	N
9	SUSAN CHANDLER	5709 HAWKES DRIVE	N	N
10	Barbara Jorgenson	5829 Jeff Place	N	N
11	KENT GRAVELLE	5609 TRACY AVE.	N	N
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FEASIBILITY STUDY – BA 368
ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix B

Property Owner Questionnaire #1

November 30, 2011

RE: Tracy Avenue (Benton Avenue to Vernon Avenue) – Resident Questionnaire

Dear Resident:

The City of Edina has initiated the process of roadway and utility improvements for the summer of 2012 for your neighborhood. The first step was to hold an open house on November 28, 2011, for you to become familiar with the street reconstruction process. A second meeting will be held on December 19, 2011, where preliminary design drawings of the roadway will be presented. You will receive a separate notice by mail for this meeting.

The next step is to get feedback from you regarding a number of key components of the project. The information you share with us is essential in determining certain aspects of the project that may be constructed. Please read the information below before you complete the questionnaire.

Things to know and consider:

- Residents in Edina pay a portion of the overall project cost in the form of a special assessment. Tracy Avenue is a Municipal State Aid route, in which the City is eligible to receive funding from MnDOT for the street improvements as long as it meets their design standards. The City of Edina's assessment policy identifies that 20% of the street improvement costs for the project are specially assessed to the adjacent benefitting properties. Special assessments are based on a Residential Equivalent Unit (REU) or, per property, and are payable over 10 years.

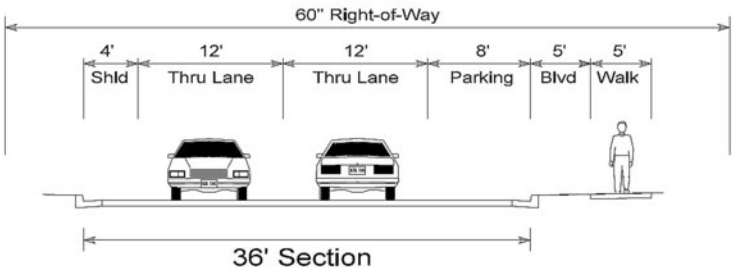
  The estimated special assessment for your neighborhood will not be determined until after information has been gathered from the questionnaires and a feasibility report is completed, which is planned to be complete in January 2012. An estimated range of the assessment amount will be provided to you at the December 19, informational meeting. If the project is completed during the summer of 2012, the special assessment for your property will not be levied until fall 2013.

- Special assessments for roadway projects in the City of Edina typically fund roadways, sidewalks, and street lights. Other utility upgrades such as water main, sanitary sewer, storm sewer, and concrete curb and gutter are funded through the utility fund and are not special assessed.

- Construction typically starts in spring/early summer and end in late fall of the same year.

Questionnaire:
The following information explains the questionnaire that is enclosed. A map showing the boundaries of the area to be reconstructed is attached to this letter. After reading this letter completely, please complete the questionnaire and return by **December 12, 2011**, in the self-addressed stamped envelope.

It should be noted, the questionnaire asks you about your feelings about the design characteristics of Tracy Avenue, such as adding or removing parking lanes, bike lanes, and sidewalks. The following figure shows the existing typical section of the roadway. The addition and/or removal of lanes or sidewalks will mean the footprint of the corridor may be changed and may add significant impacts that may not be feasible.



Design Characteristics

I. Pedestrian Issues

Presently, there is a 5' sidewalk on the east side of the street. Let us know your feelings about the importance of pedestrian facilities and whether you feel a sidewalk is needed on both sides of the street. In addition, we would like to hear your input regarding pedestrian crossings and safety for pedestrians along the corridor.

II. Bike Lane Issues

Tracy Avenue is designated a primary bike route by the City of Edina. Currently, there is no signed or striped designation along Tracy Avenue related to that. We would like to know how you feel about on-street bike lanes. The MnDOT Bikeway Facility Design Manual requires a minimum 5' bike lane and recommends a 6' bike lane adjacent to a parking lane.

II. Benton/Tracy Intersection

The east and west legs of Benton Avenue at the intersection of Tracy Avenue are currently offset by a distance of 70' from centerline of the west leg to centerline of the east leg. As part of the design, we will be analyzing this intersection. We would like to know your input in terms of safety, traffic, sight distance, pedestrian facilities, and any other additional items that would be helpful to know while proceeding with the design.

III. Traffic Management

During street reconstruction projects the issue of vehicle speed or volume within the project limits are typically raised by residents. We would like to know if you feel that your roadway has any traffic issues. Please tell us about it in the traffic management section of the questionnaire.

V. On-Street Parking

Currently, on-street parking is only permitted on the east side of Tracy Avenue. We are looking for your feedback in the questionnaire to gauge the importance of parking along the corridor. Parking is not required, however if park is desired MnDOT requires parking lanes to be a minimum of 8' wide for streets with the design speed and traffic volume characteristics of Tracy Avenue.

VI. Residential Streetlights

As part of all reconstruction projects, staff typically asks if residents favor upgrading their streetlight system. Funding for streetlights are currently through special assessment for residents.

In the residential streetlight option section of the questionnaire, are examples of the different styles of street lighting that could be installed along Tracy Avenue. Please rank your style preferences. Please note that ranking your style preferences does not necessarily mean you are in favor of streetlights.

Property Inquiry

VII. Drainage Service Connection

Do you use a sump pump or have you considered installing one? Do you currently have a footing drain? The project could include a sump drain system along the roadway to collect groundwater, storm water runoff, and discharges from private sump pumps, roof drains or any other runoff from private property.

A typical sump pump discharges onto a homeowner's lawn. This can cause problems with your lawn, your neighbor's lawn, your basement if your lawn drains back to your home or with the street if the sump pump constantly runs down the gutter line promoting algae growth. Discharging the sump pump into the sanitary sewer system such as floor drains or laundry tubs is against the law, both City Ordinance and State Statute.

If the topography and final street designs favor a City sump drain system, we will need to know if you currently have a sump pump or a footing drain. The line from the home to the City sump drain system would be your responsibility including any plumbing modifications needed to connect your sump pump. The City of Edina's sump drain system is funded through the storm sewer utility fund.

We also would like to know about any local drainage problems. This might be an opportunity for the sump drain system to correct these issues.

VIII. Local Drainage Problems
Does storm water runoff stand in the street or sidewalk in front of your house? As part of the storm sewer and sump drain design process, we would like to know if this or similar situations are occurring in your area. If so, please describe it in the local drainage problems section of the questionnaire. We will review them for possible corrective action.

IX. Private Underground Utilities
Some residents install private underground utilities in the City-owned boulevards, also called the right-of-way (ROW). These utilities are usually lawn irrigation or pet containment systems. Utility and roadway reconstruction can damage these utilities. If they are damaged, they will be restored only if you indicate that you have these systems on your returned questionnaire in the private underground utilities section. Additionally, if the contractor knows the location of these private utilities, they can attempt to avoid damaging them during construction.

Receive Project Updates via the City Extra
If you sign up for our "City Extra" e-mail notification service, you will receive project updates as they occur. During this stage of the project, such updates are usually notifications of upcoming meetings. Later, if the Council chooses to proceed with construction of this project, the updates will occur weekly. During construction, the updates will include information such as when access to your driveway might be limited or when to have your contractor repair your private lawn irrigation system if it was damaged by construction activities.

The City Extra service is free and allows you to sign up to receive messages from the City regarding this project and any other project of interest. To sign up for the service, go to the City Extra website at http://cityextra.cityofedina.com. Follow the instructions to sign up and then select **"Tracy Avenue – Benton Avenue to Vernon Avenue"** from the list of projects under Public Works. Any information you provide will be confidential, and only specific information you request will be sent to you. Your subscriptions are protected by your own personal password. Please note, the City of Edina website is currently being reconstructed. If the Tracy Avenue project is unavailable, please try again after a few days.

If you do not have access to e-mail or the internet, please call me at 952-826-0371, and I will have hard copy of correspondences sent to you.

Questions
If you have questions after reading this letter, please feel free to call Andrew Plowman with WSB & Associates, Inc. at 763-287-7149 or myself at 952-826-0445.

Sincerely,
Jack Sullivan, P.E.
Assistant City Engineer

Enclosures: Map
Questionnaire
Self-Addressed Envelope

PROPERTY OWNERS QUESTIONNAIRE

November 30, 2011

Tracy Avenue (Benton Avenue to Vernon Avenue) • City of Edina

Please do not answer these questions until after you have read the entire newsletter. Please complete and return this survey by **December 12, 2011**, using the self-addressed stamped-envelope.

DESIGN CHARACTERISTICS

I. Pedestrian Issues:

A. There is currently a sidewalk on the east side of Tracy Avenue, how satisfied are you with the condition of the existing sidewalk?

Not Satisfied ❒ ❒ ❒ ❒ ❒ **Satisfied**
1 2 3 4 5

Additional Comments: _____

_____

B. How important is it to you to have a sidewalk on the east side and construct a new sidewalk on the west side of the street?

Not Important ❒ ❒ ❒ ❒ ❒ **Important**
1 2 3 4 5

Additional Comments: _____

_____

II. Bike Lane Issues:

A. Tracy Avenue is a primary bike route within the City of Edina. Currently, there is no signed bike lane, how important is it to you to have two – one way bike lanes, knowing this may require no on-street parking or require the street to be widened from the existing footprint?

Not Important ❒ ❒ ❒ ❒ ❒ **Important**
1 2 3 4 5

Additional Comments: _____

_____

B. How interested are you in having bike lanes if it allows the City to post the speed limit at 25 mph?

Not Interested ❒ ❒ ❒ ❒ ❒ **Interested**
1 2 3 4 5

Additional Comments: _____

_____

III. Benton/Tracy Intersection:

A. Please share your thoughts regarding the Tracy Avenue and Benton Avenue intersection (i.e. safety, traffic, sight distance, etc.)

Comments: _____

_____

VI. Traffic Management

A. Do you feel your neighborhood or roadway has any traffic issues? ❒ Yes ❒ No

B. Do you feel your neighborhood has any safety issues? ❒ Yes ❒ No

If yes, what is it and where does it occur?

_____

_____

V. On-street Parking

A. Parking is currently permitted on the east side of the roadway. How important is it to have parking in front of your home or property?

Not Important ❒ ❒ ❒ ❒ ❒ **Important**
1 2 3 4 5

Additional Comments: _____

_____

B. How important is it to you to have parking on both sides, knowing that the addition of a parking lane may require the street to be widened from the existing footprint?

Not Important ❒ ❒ ❒ ❒ ❒ **Important**
1 2 3 4 5

Additional Comments: _____

_____

C. If parking could only be allowed on one side of the street, which side of the street would you prefer parking be allowed?

❒ West Side ❒ East Side

Additional Comments: _____

_____

VI. Residential Streetlights:

A. Do you favor upgrading your streetlights (there would be a special assessment cost to your property)? ❒ Yes ❒ No

B. If the streetlights are upgraded, which style do you prefer? Please rank all the styles from 1 to 5, with 5 being most liked. Please answer even if you answered "No" in section VI. A.

Acorn:
Style can be viewed along Concord Ave from Valley View Rd to South View Ln, Edina.

Dislike ❒ ❒ ❒ ❒ ❒ **Like**
1 2 3 4 5

Arlington Lantern:
Style can be viewed in the Country Club neighborhood, just north of West 50th St along Wooddale Ave, Edina.

Dislike ❒ ❒ ❒ ❒ ❒ **Like**
1 2 3 4 5

Coach:
Style can be viewed in the Sunnyslope neighborhood, just north of Edina City Hall, Edina.

Dislike ❒ ❒ ❒ ❒ ❒ **Like**
1 2 3 4 5

Shoebox:
Style can be viewed on W 70th St between TH 100 and France Ave.

Dislike ❒ ❒ ❒ ❒ ❒ **Like**
1 2 3 4 5

VII. Other Design Comments:

_____

_____

_____

_____

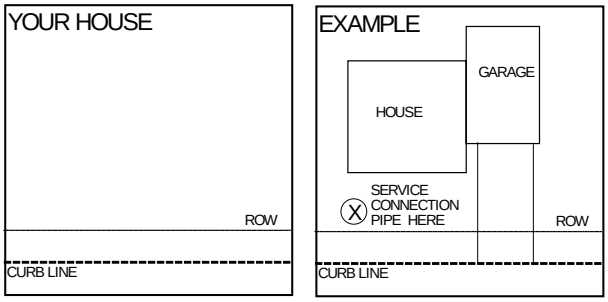
PROPERTY INQUIRY

VIII. Drainage Service Connection:

A. Does your home have a drain tile/footing drain?	❒ Yes	❒ No	❒ Unknown
B. Does your home have a sump pump?	❒ Yes	❒ No	❒ Unknown
C. Would you be willing to connect your sump pump up to a City drain if provided (at your own cost)?	❒ Yes	❒ No	
D. Would you be willing to connect your roof drains up to a City drain if provided (at your own cost)?	❒ Yes	❒ No	

Please sketch in the space to the right: your house, garage, driveway, sump pump discharge location and approximately where along the right-of –way (ROW) line you would like the service connection pipe located.

If you do not provide this information, the City cannot guarantee that a City drain will be provided with the construction project.



IX. Local Drainage Problems — please list specific surface water drainage problems in your neighborhood:

_____

_____

_____

_____

X. Private Underground Utilities

A. Do you have an underground lawn irrigation system in the City's right-of-way? (The right-of-way varies between 10' to 15' behind the roadway.)	❒ Yes	❒ No
B. Do you have an underground electric pet containment system in the City's right-of-way?	❒ Yes	❒ No

If you have these systems an do not indicate yes, the City cannot guarantee that these systems will be repaired or replaced with the construction project and would therefore be at your cost.

Thank you for taking time to complete this very important survey. Your feedback is essential to make this project a success. Please return this questionnaire in the enclosed self-addressed, stamped-envelope. Please complete all questions and return to the City of Edina by **December 12, 2011**.

FEASIBILITY STUDY – BA 368
ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix C

Questionnaire #1 Results

Data Entered By: Dean Chamberlain
Last Date Data Entered: 30-Dec-11
Due Date: 4-Jan-11
Questionnaires Sent Out: 34
Questionnaires Returned: 32
Percent Returned: 94%
Data Checked By/Date: Andrew Plowman

Questionnaire #1 Tabulation

	I. Pedestrian Issues				II. Bike Lane Issues				III. Benton Tracy Intersection		IV. Traffic Management						V. On-Street Parking						VI. Residential Street Lights						VII. Other Design Comments
	Condition of Existing Sidewalk		West Side Sidewalk		Importance of On-Street Bike Lanes		Bike Lanes if 25 MPH is posted				Do you feel your neighborhood or roadway has traffic issues			Do you feel your neighborhood or roadway has safety issues			Importance of Parking -		Parking Both Sides		East Side or West Side		Favor Upgrading Street Lights		Preferred Styles - Like=5, Dislike=1				
	5, Unsatisfied - 1	Comments	Important - 5, Not Important - 1	Comments	Important - 5, Not Important - 1	Comments	Interested - 5, Not Interested - 1	Comments	Comments	Quantify	Yes	If Yes, Explain	No	Yes	If Yes, Explain	No	5, Not Important - 1	Comments	5, Not Important - 1	Comments	East or West	Comments	Yes	No	Acorn	Arlington Lantern	Coach	Shoebox	Comments
	5		1	Do not put a sidewalk on the west side	1	Poor Question. I would like bike lane but DO NOT want the street widened.	5	Very Interested			X			X	From Vernon and/or Benton it is all downhill to our address at 5712 Tracy. Therefore people speed up going down hill and max out at our address.		1		1	No Parking on West Side	East			X	1	1	1	1		
	5		1		1	Is it a primary bike route because Tracy is a primary arterial roadway for the entire street - to the Crosstown and Vernon corridors?	1	Not enough room for parking on both sides of street and bike lanes on each side	Traffic backs up with drivers confused as to right of way rules of the road, thankfully it is a 4 way stop. If Tracy and Warden, would also work since that intersection is offset also. It would also slow the traffic on Tracy.	C	X	Also, heavy traffic from Good Samaritan Church which uses Warden heavily.		X	Excessive speed when cars pass Warden on Tracy. Even school buses exceed 40 mph daily. There is limited viewof cars southbound on Tracy for traffic westbound on Warden.		1		1		East			X	3	4	5	1	
	5		1		1		3		The intersection currently causes drivers to use more caution.	C				X	Drivers need to be encouraged to treat this as a residential street. Lighting that suggests "neighborhood" and crosswalk would help promote better driving behavior.		5	As a homeowner, it is very important to have available parking on-street. This is a neighborhood. Parking impacts value.	1		East	Parking should be on the sidewalk side of the street.	X						
	5	Sidewalk on that side is fine.	1	We are opposed to a sidewalk on the west side	1	We are not in favor of any widening.	1	No Interest in bike lanes at all.	Most Consistent Problem at intersection is rolling stops.	P	X	Issues are congestion when school is starting and letting out.				X	5		1	No Widening	East	Where it is now		X	5	1	4	2	Not interested in paying more for City Lights.
	5	I appreciate the plowing of the sidewalk in the winter.	1		1		1		Poor Design, often driving south on Tracy to turn east on Benton, I have been indicating my turn but cars heading North of Tracy proceed ahead of me.	P	X	See above. Also, many cars and school buses use Benton and Tracy intersection morning and time school is out.		X			3		1		East			X				4	During heavy rain, water accumulates between driveways of 5633 and 5629, even though there is a drain.
	5		1	Like sidewalk on east side, please retain it. No need for sidewalk on west side.	1	Need to retain on-street parking and cannot widen road due to small front yards.	1				X	7000 cars a day pass our home. Many too fast traffic often blocks up during rush hour.		X			5		1		East			X	3	5	4	1	
	2	Would like to see the sidewalk and curb all in one like on Benton Avenue. We are on the corners of Benton and Tracy	3	Or one side only.	3		4		Terrible, lived on corner for 37 years - the fact that it is not a normal 4 way stop has always been confusing for drivers.	P			X			X	5	No parking on Benton, this would really limit us.	3		East		X		5	4	5	1	
	3	My sidewalk is not bad, but several other homes have really bad sidewalks.	3	New sidewalk on the east would be nice.	1		1		I think this is a bad intersection and not safe for people or cars, sight is very poor.	P	X	During rush hours the traffic gets heavy and people speed on Tracy.				X	3		1	I don't want to have the street widen so everyone loses more land for the road.	East			X	5	3	4	1	I don't want to have the road redone and get a high special assessment just to make it pretty.
	5		1	Leave sidewalk configuration as is.	1	Don't want sidewalk if it means street will be wider.	1		Fact that intersection is unusual means drivers are overly cautious as is - no need to change.	C			X			X	1	Have gone 27 years without, no need to change now.	1	Don't want to lose portion of my front yard as any widening would probably be on west side.	East	Least costly option - have been in effect for many years - no need to change.		X	2	1	3	4	

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	Condition of Existing Sidewalk 5, Unsatisfied - 1	Comments	West Side Sidewalk Important - 5, Not Important 1	Comments	Importance of On-Street Bike Lanes Important - 5, Not Important - 1	Comments	Bike Lanes if 25 MPH is posted Interested - 5, Not Interested 1	Comments	Comments	Quantify	Do you feel your neighborhood or roadway has traffic issues: Yes	If Yes, Explain	No	Do you feel your neighborhood or roadway has safety issues: Yes	If Yes, Explain	No	Importance of Parking - 5, Not Important - 1	Comments	Parking Both Sides 5, Not Important - 1	Comments	East Side or West Side East or West	Comments	Favor Upgrading Street Lights: Yes	No	Preferred Styles - Like=5, Dislike=1: Acorn	Arlington Lantern	Coach	Shoebox	Comments
	5		3		1		1		I don't see any problem with the current Tracy/Benton intersection.	F			X			X	5		1		East		X		3	3	3	5	
	3		1		1	In favor of one bike lane and no on-street parking rather than widening.	1	Lower speed limit would be wonderful if it is enforced. The 30 mph speed limit is not currently enforced. But even slower traffc woudl be unacceptable if closer to my house.	Not enough room for a roundabout? Would be nice. If drivers were alert and courteous the intersection would be ok as is. But that is an unrealistic expectation in all cases.	P	X			X	Speeding is a big issue. Even the school buses exceed 30 mph. Speed limit is not enforced.		1	I enjoy on-street parking occasionally, but it is not vital.	1	I would hate to live here if traffic were any closer to my front door @ 5625 Tracy.	East		X		3	2	5	1	Should street be widened beyond existing footprint please widen on west side as much as possible.
	4	Are you talking about physical condition now? The condition of the existing concrete?	1	This seems to be two separate questions. East side works well now, West side not necessary.	3		4		Move Benton Ave (west) onto school property (sign now there), align intersection. Possibly route buses out of south end of existing parking lot to enter Tracy away from that	P	X			X	Speeding at midpoint Grove Street to Warden downhill from both directions.		1		1		East		X					5	Two 13 ft lanes, two bike lanes 5'. Total = 36'
	4		1		5	Only if street is not widened.	4		Intersection is fine as a 4-way stop.	F	X	There is too much traffic.		X	Fire trucks go too fast.		1		1		West			X	5	5	5	1	
	3	It is broken and raised in many locations	1	Not important to have two sidewalks, the existing walk is	1	Again, how about just one lane?	1	25 mph is too slow	Would love to see the streets aligned.	P			X			X	4		1		East			X	2	3	5	4	
	5		1	There is negligible pedestrian traffic on Tracy. One sidewalk is ample. There is no destination for walkers besides the school, so pedestrian traffic is unlikely to increase.	1	There is negligible bike traffic on Tracy, and there is no bike destination accessed by Tracy so bike traffic is unlikely to increase.	1		People appear more cautious or move hesitant to enter traffic because of the non-conforming intersection. It probably enhances safety.	C			X			X	1		1	Parking on Tracy is used by service vehicles, the post office, school events and minimally by residents.	East			X	4	3	5	1	The expanded plan eliminates trees and does not allow for new trees. We will lose a dozen to 17 trees depending upon the plan. This loss creates a wasteland of asphalt and concrete that discourages walkers,
	5	We only need one sidewalk	1	We only need one sidewalk	1	We need parking, no bike lanes.	1	No Bike lanes	It's fine, leave it.	F	X			X	Speeding and no crosswalks		5		1	One side is enough, Don't change Tracy Avenue.	East			X	5	4	3	1	
	4		1		1		1				X	Yes, Tracy Ave is very loud. I hope you do not put cement back down.				X	1		1		East		X		5	3	4	1	

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	4	It's choppy and needs repair, but it's not awful.	1	Why?? Isn't one sidewalk enough? My elementary school age daughter crosses Tracy Avenue each day and walks to Countryside School just fine on teh existing sidewalk. We walk our dog & ride bikes on it too.	1	I fail to see any significant bike usage that would warrant creating a special bike lane. Cares should take priority in having a place to park versus bikes having a special lane to ride in.	1	Posting a 25 mph speed limit won't stop people from driving faster w/ or w/o bike lanes. Tracy is a major street and people use it to drive fast to connect to 62 or Vernon.	It's busy, especially during school opening/closing hours. A traffic light here would make a lot of sense and be safer for children walking home. There is adequate school parking on Tracy Avenue at the spot opposing the parking lot.	P				X	The hill from Benton Avenue to Warden Avenue causes vehicles to accelerate and its difficult seeing them approaching if you are crossing the street from Hawkes Drive to the east side walk. If the base of the hill could be re-graded due to visibility from both drivers and pedesterians would improve, a potentially serious accident might be prevented.		1	Parking in front of my house occurs on Hawkes Drive, not Tracy Avenue, so having Tracy Avenue parking doesn't change things for me.	1	If this occurs I will need my 2 year old fence replaced, a major tree removed and sound proofing added to teh east side of my house because cars will now be <10 feet from my headboard. It's already difficult sleeping w/ all the noise right outside my bedroom. This will only increase it. Winter snowplows are the worst, then firetrucks.	East	I empathize w/ residents who live on the east side and have parked cars in front of their homes, but at least they are used to it because its been this way for a long time. They also have driveways that connect to Tracy, so they need parking on their side of the street.		X	3	5	4	1	Why aren't the remaining residents on Hawke's Drive and Hawkes Terrace sharing in the assessment cost? They all have to use Tracy Avenue to enter and exit their streets unlike other streets that have more than one connection. This fee should be shared by them too. Bringing my cost to beard down some. Everyone on Hawkes Drive and Terrace uses Tracy Avenue --> everyone should have to pay.
	5		5	Safer for the school bus students at the bus stop across from us.	1		1	This speed will adversely affect all of the emergency vehicles and slow them in arriving to help whomever.	Needs better lighting, possibly a signal light.	P	X	Extreme congestion at the beginning and ending of school hours at Countryside.					5		1	We don't want to lose any of our property.	East	As it currently is, is fine.	X			5			
	5		1		1		1		Works ok as is.	F			X			X	1		1		East			X					
	4		1		1		1							X	Need stop lights at Tracy & Hwy 62 exit ramps!		5		1		East			X	1	1	5	1	
	5		1		5		5		Seems fine as is	F	X			X	The speed on Tracy should be reduced; drivers seem to think it is a 40 mph like Vernon.		1		1		East		X		1	5	5	1	
	2		2		4		5		Confusing for drivers - unclear whether it's a 4-way or not. Going west on Benton & corssing to	P	X	People speed a LOT going up & down Tracy. Angry drivers pass in the		X	Some folks drive very close to the curb - my wife was almost hit getting mail from the mailbox.		2		1		East			X	4	3	5	1	
	3		1		1		5		Unsafe and confusing	P	X			X	Tracy & Vernon, people turning on Tracy from Vernon try to see how fase they can speed down the hill.		3		1		East							
	4		1		1		4		4-way stop is just fine.	F	X	Too much traffic going too fast.				X	1		1		East			X	5	5	5	1	
	5		1		3	Prefer one lane & NOT widening street	5	VERY INTERESTED as drivers go too fast on parts of Tracy right now.	Very confusing & NOT SAFE particularily when school is opening & closing.	P	X	Drivers go way too fast right before light on Vernon & Tracy.		X	They also speed up way too much after they turn onto Tracy from Vernon.		1		1		East		X		2	4	5	1	
	2	Like location of sidewalk; ok in front of our house but bad south of us.	1	Don't need on both sides of street.	1	Need parking, no widening. Bikers use street anyway.	3	If speed limit was slower that would be nice.	It's a problem, what do you say. It's goofy.	P	X			X	Velocity of cars coming through. We are at bottom of hill in both directions & people are flying. Volume of traffic also an issue.		3	We use occasionally. Nice to have 1 side w/ parking but also use Warden.	1	Don't need on both, would rather not widen street	East		X		1	5	1	1	

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Data Checked By/Date: Andrew Plowman

Questionnaire #1 Tabulation

	I. Pedestrian Issues				II. Bike Lane Issues				III. Benton Tracy Intersection		IV. Traffic Management						V. On-Street Parking						VI. Residential Street Lights							VII. Other Design Comments
	Condition of Existing Sidewalk 5, Unsatisfied - 1	Comments	West Side Sidewalk Important - 5, Not Important 1	Comments	Importance of On-Street Bike Lanes Important - 5, Not Important - 1	Comments	Bike Lanes if 25 MPH is posted Interested - 5, Not Interested 1	Comments	Comments	Quantify	Do you feel your neighborhood or roadway has traffic issues: Yes	If Yes, Explain	No	Do you feel your neighborhood or roadway has safety issues: Yes	If Yes, Explain	No	Importance of Parking - 5, Not Important - 1	Comments	Parking Both Sides 5, Not Important - 1	Comments	East Side or West Side: East or West	Comments	Favor Upgrading Street Lights: Yes	No	Preferred Styles - Like=5, Dislike=1: Acorn	Arlington Lantern	Coach	Shoebox	Comments
	4		1		2		2				X	The cement street is very loud and hard to drive on.				X	1		1		East		X		4	4	5	1	
	5		1		1		1						X			X	1		1		East			X	4	3	5	1	
	5	Although there are a few cracks, this is 2011 & we need to choose wisely between needs and wants.	1	Totally opposed as unneccessary.	1	There is not enough bike traffic to warrant special lanes or widening.	1	Although the limit may get lowered, this does not mean that traffic will slow.	If all parties proceed with caution and respect, the existing intersection is fine.	C	X	Speed on Tracy is too fast. Installing a couple of 4-way stops (signs) would help.				X	3	We are lucky ot live on a corner so we have options. There are those totally fronting Tracy (both east & west) who need the add'l parking.	1	East side only is sufficient	East	As it is today.		X					is speed. We have two students who have to cross Tracy at an unregulated point to reach their bus stop. So far, we've had no issues. But it only has to happen once. Also, we have
	3	Raised panels make it hard for the plow. Good design, however.	1	We live on the west side & have a long front yard - if our neighbors with much less space want it, we would not be opposed	1		1	Cars go too fast regardless of the posted limit. People routinely go 40+ especially during rush hour, going to school, and on Benton	Realignment of the intersection would be great - anything to promote safety for the kids, walkers, etc.	P	X			X	Speed of traffic and pedestrian crossing - church traffic will not stop to let people cross the street or drive out of their own driveways. Mowing and snow-blowing is dangerous		3	East side parking works great!	1		East				5			5	Need to "define" our street is part of a neighborhood, not a highway.
	4		1		4		5		Realign	P	X			X	Speed		1		1		West			X					
Returned	**32**		**32**		**32**		**32**		26		**22**		**7**	**18**		**13**	**32**		**32**		**30**	**EAST**	**11**	**19**	**24**	**24**	**23**	**26**	
Score	**133**		**43**		**53**		**73**										**80**		**34**		**2**	**WEST**			**81**	**82**	**96**	**48**	
Average Score	**4.16**		**1.34**		**1.66**		**2.28**										**2.50**		**1.06**						**3.38**	**3.42**	**4.17**	**1.85**	
Percent Answered	**100%**		**100%**		**100%**		**100%**		**81%**		**76%**		**24%**	**58%**		**42%**	**100%**		**100%**				**37%**	**63%**	**75%**	**75%**	**72%**	**81%**	

Returned	**32**
SCORE	
AVERAGE SCORE	
Returned 32 Response	**100%**
34 Surveys Sent Out	**94%**

(F)	FINE AS IS	6
	FINE PERCENT	23%
(P)	PROBLEM	15
	PROBLEM PERCENT	58%
(C)	CAUTIOUS	5
	CAUTIOUS PERCENT	19%

FEASIBILITY STUDY – BA 368

ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix D

Informational Meeting Letter, Presentation, and Sign In Sheet

WSB & Associates, Inc.

Engineering ■ Planning ■ Environmental ■ Construction

701 Xenia Avenue South
Suite 300
Minneapolis, MN 55416
Tel: 763 541-4800
Fax: 763 541-1700

December 7, 2011

Re: Informational Meeting #2 – **Monday, December 19 at 7:00 p.m.**
Tracy Avenue Reconstruction Project

Dear Resident:

The City of Edina held an open house on November 28, 2011, explaining the typical street reconstruction process, as well as describing the existing conditions and design criteria for the proposed reconstruction of Tracy Avenue between Benton Avenue and Vernon Avenue. Following that meeting, a questionnaire was mailed to residents to obtain feedback on various components of the proposed project to use in the design process. If you have not yet returned your questionnaire, please do so as soon as possible. Be sure to include your name and address on the questionnaires. If you have already submitted your questionnaire, but did not include your name or address, please call me at 763-287-7149.

Staff has incorporated the discussion from the November 28, meeting and the returned questionnaires to formulate a preliminary design of the roadway. The next step is to hold an informational meeting to review the preliminary project design and then discuss the next steps to move forward with the project.

You are invited to attend an informational meeting on Monday, December 19, at 7:00 p.m. The meeting will be held at the Public Works and Park Maintenance Facility located at 7450 Metro Boulevard, Edina. A brief presentation will begin shortly after 7:00 p.m., followed by an informal discussion of the project to address any questions or concerns you may have. City staff from Edina, along with the city's consultant - WSB & Associates, Inc., will be available at the meeting.

If you are unable to attend but would like more information on the project, please feel free to contact me at 763-287-7149.

Sincerely,

WSB & Associates, Inc.

Andrew Plowman, PE
Project Manager

cc: City of Edina, Jack Sullivan, PE

Neighborhood Informational Meeting No. 2

Tracy Avenue

(Benton Avenue to Vernon Avenue)

December 19, 2011

CITY OF EDINA

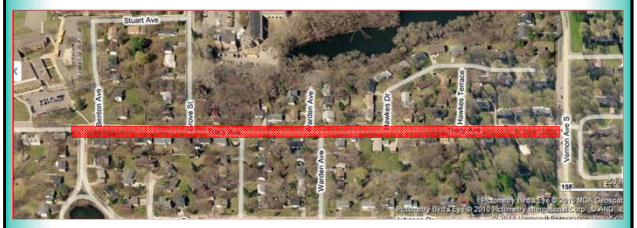
Agenda

1. Introductions
2. Survey Results
3. Proposed Improvements
4. Costs/Assessments
5. Next steps
6. Questions

JS

CITY OF EDINA

Project Location – Tracy Avenue



AP

CITY OF EDINA

Questionnaire Results

62% Returned (21 of 34)

- Pedestrian Issues
  - Existing Sidewalk Condition

Unsatisfied — Satisfied

1 — AVG. = 4.33 — 5

  - West Side Sidewalk

Not Important — Important

1 AVG. = 1.48 — 5

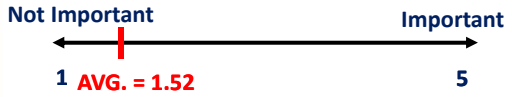
AP

CITY OF EDINA

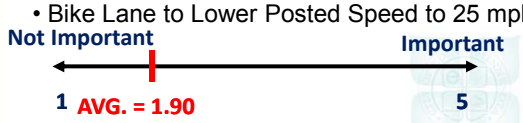
Questionnaire Results

Results Cont.'

- Bike Lane Issues
  - Importance of On-Street Bike Lanes



  - Bike Lane to Lower Posted Speed to 25 mph



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Questionnaire Results

Results Cont.'

- Tracy/Benton Intersection
  - 18 of 21 commented
  - 56% -- Intersection is a Problem
    - Suggested Realignment or Other alternative
  - 22% -- Intersection is Fine
  - 22% -- Unusual Alignment Causes Driver Cautiousness → Safe Intersection

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Questionnaire Results

Results Cont.'

- Traffic Management
  - 68% -- Traffic Congestion Issues
    - Most Comments were related to congestion at school
  - 55% -- Safety Issues
    - Most Comments were related to speed

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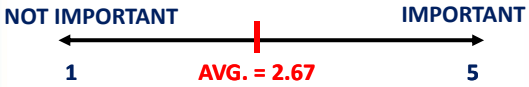
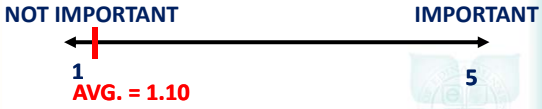
Questionnaire Results

Results Cont.'

- On-Street Parking



- Parking Both Sides



- 19 of 21 want Parking to Remain on East Side

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Questionnaire Results

Results Cont.'

- Upgrade Street Lights
  - 33% were in favor of upgrading Street Lights

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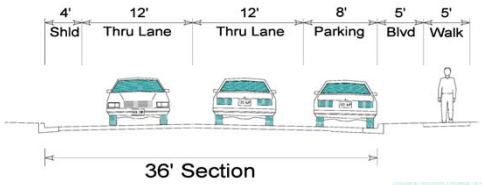
Proposed Street Improvements

Existing Street Section

•Typical Section

- Existing (36' Section)



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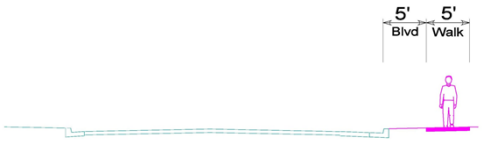
Proposed Street Improvements

Proposed Street Components

•Sidewalk and Boulevard

- Maintain Existing Sidewalk and Boulevard



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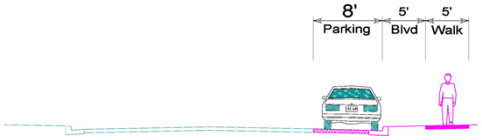
Proposed Street Improvements

Proposed Street Components

•Parking Lane

- Based on Questionnaire Results



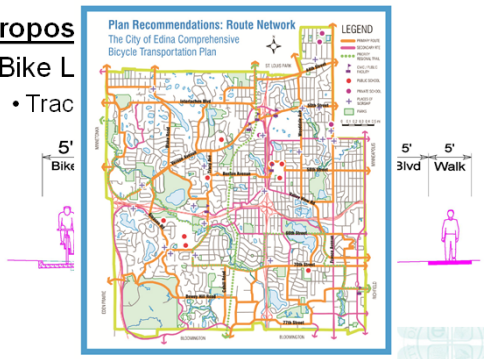
AP

Proposed Street Improvements

CITY OF EDINA

Propos

- Bike L
  - Trac



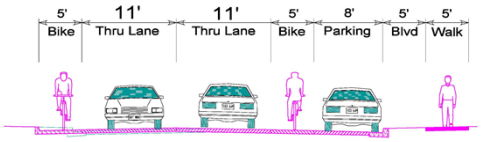
AP

Proposed Street Improvements

CITY OF EDINA

Proposed Street Components

- Thru Lanes
  - Reduce Lanes from 12' to 11'



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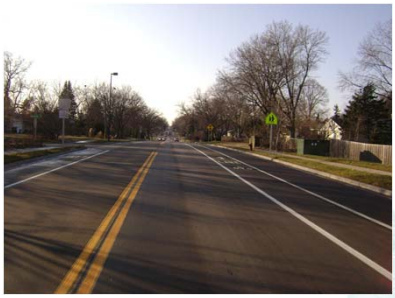
Proposed Street Improvements

CITY OF EDINA

Proposed Street Section

- Typical Section



AP

Proposed Street Improvements

CITY OF EDINA

Tracy Avenue Layout

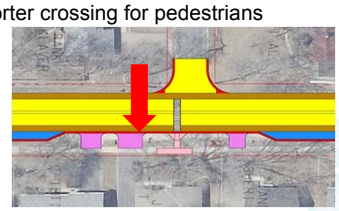
AP

CITY OF EDINA

Proposed Street Improvements

Traffic Calming/Safety Enhancements

- Parking Bumpouts
  - Slows Speeds due to narrowing (constricting) roadway width
  - Improve driver visibility of pedestrians
  - Shorter crossing for pedestrians



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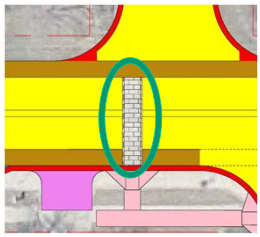
Proposed Street Improvements

Enhanced Crosswalks



AP

CITY OF EDINA

Proposed Intersection Improvements

Tracy/Benton Intersection

Roundabout

Benefits

- Elliptical Shape
  - Minimizes Impact to Residences
  - Allows Benton Legs to remain offset
- Traffic Calming
- Safety
  - Pedestrians
  - Vehicles
- Capacity
  - More efficient than 4 – way stop due to continuous motion

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Proposed Improvements

Storm Sewer Improvements

- Upgrade pipes and catch basins to meet standards
- Address local drainage issues identified in survey

Sanitary Sewer

- Manhole and pipe repairs
- Currently evaluating system

Watermain

- Currently evaluating system

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Costs/Assessments

Street Improvement Costs

Edina Residents

- Total Estimated Street Reconstruction Costs = $880,000
- Assess 20% - $176,000
- Spread over 32 Residential Equivalent Units (REU's) ≈ $5,500 per REU
- Countryside Elementary has 4 REUs
- Does not include the respective utility funds

AP/JS

CITY OF EDINA

Costs/Assessments

Property Assessment Map

AP/JS

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Next Steps

Project Schedule

Feasibility Report Complete…....January 4, 2012
Public Hearing (tentative).....February 21, 2012
Approve Plans and Specifications……. April, 2012
Receive Bids……...May, 2012
Award Contract……June, 2012
Begin Construction……...June, 2012
Complete Construction……..Fall, 2012
Assessment Hearing……..Fall, 2013

JS

CITY OF EDINA

Project Contact Information

http://www.ci.edina.mn.us/Departments/L5_ConstructionProjects_TracyAvenue.htm

•Andrew Plowman- WSB & Associates
763-287-7149 or
aplowman@wsbeng.com

AP

CITY OF EDINA

Questions?

TRACY AVENUE
PUBLIC OPEN HOUSE
December 19, 2011

	NAME	ADDRESS	Do you have the following? Y or N	
			SUMP DRAIN	PET FENCE
1	Judith Rodgers	6100 Arbour LN	N	N
2	Bill Rodgers	6100 Arbour LN		
3	Tom Widmark	5712 Tracy Ave	N	N
4	Kay Kjelland	5600 TRACY AVE	N	N
5	[illegible]	5701 Grove St	N	N
6	Sheri + Andrew Langfield	5805 Tracy Ave	N	N
7	Bill Cosgrove	6104 Tracy Ave.	N	N
8	Janet Kramer	5616 W Arden Ave	N	N
9	Marlin Sundermun	5716 Tracy Ave	N	N
10	Steve Nelson	5701 Hawkes Ter	N	N
11	KEN + HOLLY GRAVELLE	5609 TRACY AVE	N	N
12	STEVE ENCK	5700 Benton	N	N
13	Rick Conkey	5605 Tracy	N	N
14	Lynda + Mike Sonnek	5604 Tracy	N	N
15	CHRISTINE EHRLICH	5701 Tracy	N	N
16	Joni Bennett	4003 Lynn		
17	Larry Tvstad	5616 Grove St	N	N
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

Sprinkler

FEASIBILITY STUDY – BA 368
ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix E

Property Owner Questionnaire #2

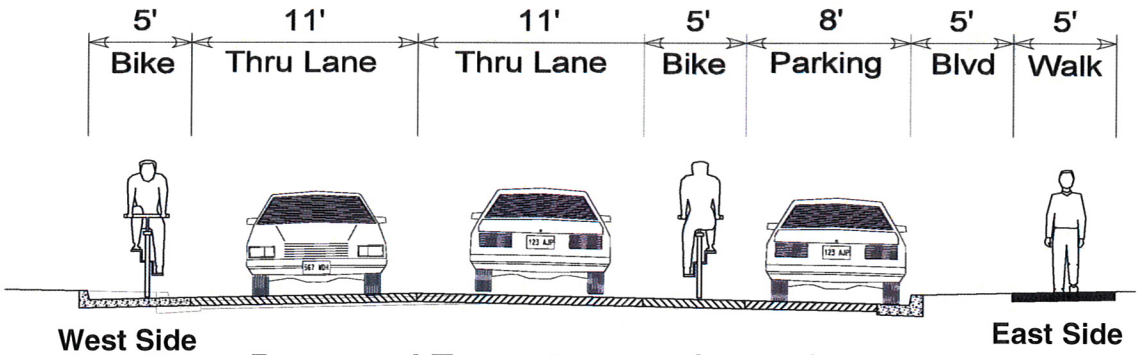
City of Edina

January 20, 2012

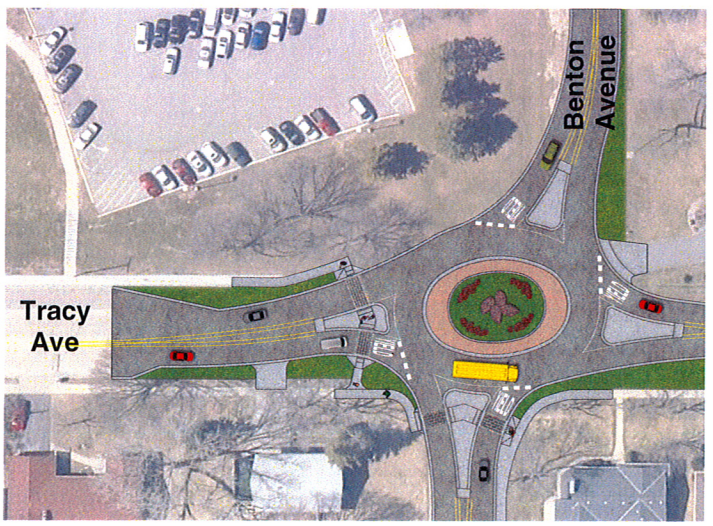
RE: Tracy Avenue (Benton Avenue to Vernon Avenue) – Resident Questionnaire

Dear Resident:

At the second informational meeting on December 19, 2011, the City brought forward a proposed design that showed the proposed cross section of the street and a roundabout at the intersection of Benton Avenue and Tracy Avenue (shown below).



Proposed Tracy Avenue Cross Section



Proposed Roundabout at Tracy Avenue and Benton Avenue

City Hall
4801 WEST 50TH STREET
EDINA, MINNESOTA 55424-1394

www.cityofedina.com

952-927-8861
FAX 952-826-0390
TTY 952-826-0379

Staff is suggesting this configuration based on verbal comments at the first informational meeting, the City's Comprehensive Plan, results from the previous questionnaire and State Aid standards and guidelines. The roadway configuration, in the cross section (on the previous page), increases the roadway width from 36' to 40' (measured to face to face of curb). The increased 4' width is all being constructed to the west side of the road due to available right of way.

To help show how staff developed this concept, we have split the road characteristics into two categories; "Required" and "Optional". The required items are characteristics that need to be implemented in the plan based on standards or the City's Comprehensive Plan. The optional items are characteristics that are not required to be part of the plan but have support from the previous questionnaire.

Required

- Drive Lanes: 11' driving lanes is the acceptable minimum.
- Bike Lanes: MnDOT Bikeway Facility Design Manual recommends 5' on-street bike lanes, guidelines recommend 6' adjacent to parking lanes. Parking is not a required component of the roadway.
- Staff will recommend bike lane on this project based on the Comprehensive Plan.
- Sidewalk and Boulevard on the East Side: 5' sidewalk and 5' boulevard is the City standard. Most residents were happy with the condition of the existing sidewalk, therefore we anticipate spot repairs only and thus reducing the cost of the project.

Optional

- Parking Lanes: State Aid minimum for a roadway with the volume of traffic and speed on Tracy Avenue is 8'.
- West Side Sidewalk: 5' concrete sidewalk and 5' boulevard. If the sidewalk on the west side is not built the staff is recommending enhanced crosswalks at selected locations.

At the second informational meeting, we heard that many of you might have answered the questionnaire differently if you had a better understanding how the roadway components affected the overall design. Therefore, we are asking some additional questions to get updated results based on this proposed design.

Please answer the questions on the enclosed questionnaire and return to WSB & Associates, Inc. with the enclosed stamped envelope by January 30, 2012. If you have additional questions or comments, feel free to contact me, Andrew Plowman, at 763-287-7149 or email me at aplowman@wsbeng.com.

Sincerely,
Andrew Plowman
WSB & Associates, Inc.
Project Manager

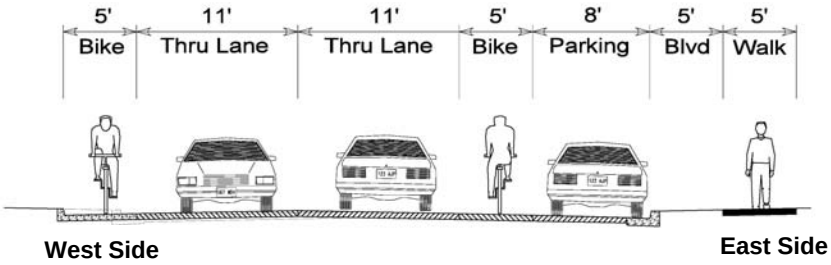
Enclosures: Questionnaire
Self-Addressed Envelope

PROPERTY OWNERS QUESTIONNAIRE #2

January 20, 2012

Tracy Avenue (Benton Avenue to Vernon Avenue) • City of Edina

Please do not answer these questions until you have read the entire newsletter. Please complete and return this survey by **January 30, 2012**, using the self-addressed, stamped envelope.



I. Roadway

Do you agree the 40' roadway section: Bike Lane/Drive Lanes/Sidewalk/Parking/Sidewalk (as shown above), is the most appropriate design for this corridor (knowing the road will be widened by 4' on the west side)?

- ❒ Yes
- ❒ No

II. Roadway Components

Parking

How important are parking lanes on the east side of the street to you, knowing that the 4' of roadway width will be added to the west side of the current roadway to accommodate the parking?

Not Important ❒ Important ❒

Cross Section

If you could eliminate one component of the design (to limit the proposed width) what would it be?

- ❒ Bike Lanes
- ❒ Parking Lane (East Side)
- ❒ No Elimination - Leave section as shown above

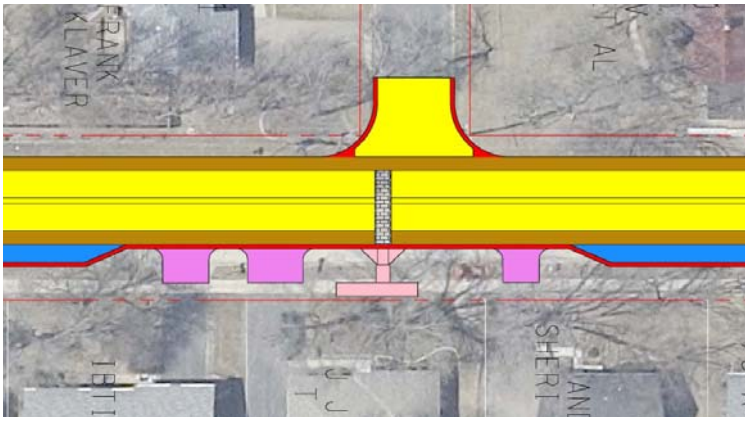
Sidewalk

How important is the addition of a sidewalk on the west side of the street knowing it will add 10' of width to the project?

Not Important ❒ Important ❒

If a sidewalk is not proposed on the west side of the street do you feel placing "bumpouts" and enhanced crosswalks (as shown) is an appropriate alternative in creating a safer pedestrian environment?

Yes ❒ No ❒



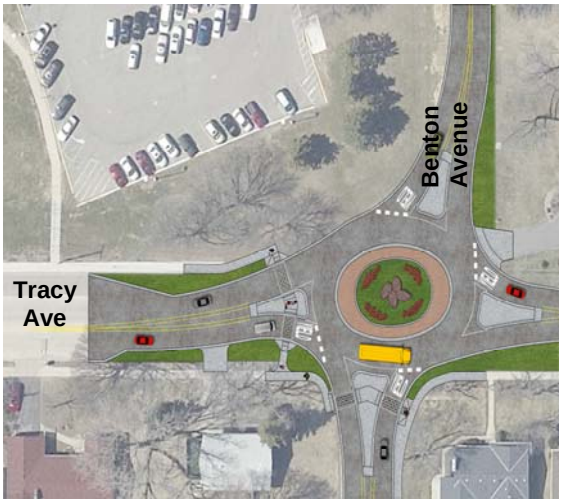
Additional Comments: _____

_____

III. Benton/Tracy Intersection

A. Do you agree the proposed Roundabout is the correct solution to the Benton/Tracy offset intersection?

❒ Yes
❒ No



B. If you answered no, please select which option you believe is most appropriate.

❒ Leave the intersection as it is

❒ Realign West Leg

Realigned West Leg of Benton Avenue

❒ Other:

Explain:_____

_____

FEASIBILITY STUDY – BA 368
ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix F

Questionnaire #2 Results

Data Entered By: Dean Chamberlain
Last Date Data Entered: 2-Feb-12
Due Date: 30-Jan-12
Questionnaires Sent Out: 34
Questionnaires Returned: 25
Percent Returned: 74%
Data Checked By/Date: Andrew Plowman

Questionnaire #2
Tracy Avenue Residents: Benton to Vernon

		I. Roadway			Roadway Components												Benton/Tracy Intersection					
		Do you Agree Proposed is the Most Appropriate?			Importance of Maintaining Parking (East Side)			If you could Eliminate One Cross Section Item?				Importance of Adding west side Sidewalk			Are "Bumpouts" an enhancement?			Is Roundabout Correct Solution?					
Returned Survey		Yes	No	Comments	Important	Not Important	Comments	Bike Lane	Parking Lane	Leave Section As Is	Comments	Important	Not Important	Comments	Yes	No	Comments	Yes	No	If No, Which Option Is Most Appropriate? As Is	Realign West Leg	Other	Comments
X			X		X			X			Also eliminate blvd on east side; eliminate mailboxes and make it a walking route; have sidewalk at curb like on Benton Ave. Bike lanes would be better on quieter streets - even though Tracy is a direct route, the high volume of traffic makes bike riders a liability.		X		X				X	Y	Y		
X			X			X		X			There is absolutely no cycling occurring on Tracy Ave that warrants this kind of design and expense. If I actually witnessed cyclists I would not vote otherwise, but this is an awful waste of taxpayers money! I'd rather put my $ into my children's education in Edina.		X			X	Bumpouts are not the solution to an unsafe pedestrian envirnment - enforced speed limit is!		X		X		With new, visible pedestrian crosswalks. This will stop traffic completely so children may safely cross the street without the fear of constantly moving traffic coming toward them and multiple cross points to contend with.
X			X	No bike lanes!!	X		Very	X					X	No sidewalk on west side. The one on the east			What is a bumpout?		X	X			I have lived here for 51 years! It is fine as is - leaveit alone. Stop trying to jack up the price!
X		X			X					X			X		X			X					
X		X				X		X					X			X		Y	Y		Y		
X		X			X					X			X		X			X					We agree with this proposal
X			X			X			X				X		X				X		X		
X		X				X		X					X				I do not understand the diagram.	X					
X			X			X		X				X				X			X	X			
X			X			X					Eliminate 4' of boulevard to accomplish 40' roadway section		X			X	Why must property on west side lose 4' when there is a 5' boulevard which could be		X	X			Putting a roundabout near an elementary school is inviting disaster, especially since existing intersection has been accident free. What are you thinking??
X			X		X			X			One half dozen bike commuters per day, six months a year do not justify the added expense and heartache. There is no official bike lane on either Vernon (north end) or at the bridge (south end). This would be a bike lane for no reason. Striping the road to create a shoulder should be plenty for a 30 mph zone.		X						X	X			The current offset intersection forces drivers to be aware, courteous, and respectful which inherently adds safety to this intersection which is necessary near a school/playground. Installing a roundabout to increase N-S throughput endangers children who use the schoolgrounds after school, on weekends, and during summers when there would be no crossing guard. The focus of this intersection should be safety, not saving a couple minutes from someone's commute.
X			X	I do not want to lose 4' off the front of my yard.		X			X				X			X	I do not want to lose 4' of my front yard.		X		X		A roundabout is a waste of precious space!
X			X			X			X				X			X			X	Y	Y		Either leaving it as is or realigning west leg are better options than roundabout.

Data Entered By: Dean Chamberlain
Last Date Data Entered: 2-Feb-12
Due Date: 30-Jan-12
Questionnaires Sent Out: 34
Questionnaires Returned: 25
Percent Returned: 74%
Data Checked By/Date: Andrew Plowman

Questionnaire #2
Tracy Avenue Residents: Benton to Vernon

Returned Survey		I. Roadway			Roadway Components												Benton/Tracy Intersection					
		Do you Agree Proposed is the Most Appropriate?			Importance of Maintaining Parking (East Side)			If you could Eliminate One Cross Section Item?				Importance of Adding west side Sidewalk			Are "Bumpouts" an enhancement?			Is Roundabout Correct Solution?					
																			If No, Which Option Is Most Appropriate?			
		Yes	No	Comments	Important	Not Important	Comments	Bike Lane	Parking Lane	Leave Section As Is	Comments	Important	Not Important	Comments	Yes	No	Comments	Yes	No	As Is	Realign West Leg	Other	Comments
X			X		X			X					X		X				X			- No accidents or problems with the intersection for past 38 years. Keep stop signs for safety. - The intersection of Tracy and Benton cannot be
X		X			X			X				X				X	An enhanced crosswalk would still be a good idea. See the arrows [drawn on		X		X		
X		Y	Y	[Answered "Maybe"]		X				X													
X		X			X			X					X		X				X		X		[No box selected for "Is roundabout correct solution" option, but resident selected "Realign West Leg" option, sp it is assumed the resident would select
X			X			X			X				X		X		Love this idea!	X					
X			X			X			X				X		X				X	X			
X			X			X			X				X										We've done some study of the "roundabout" and think it is a good solution. We also strongly think the bike lanes are important. We think people will use
X			X			X			X				X		X				X		X		
X			X	Why do bike lanes have to be 5'? Could they be 4'? Do we need a boulevard? Grass does not grow well there.		X			X				X		X			Y	Y		Y		What about putting in a stoplight? Why are we not discussing street lights for a more neighborhood feel?
X			X		X			X				X			X			X					
X			X		X		But leave road width as it is currently	X					X			X	Not necessary - have there been any pedestrian accidents?		X		X		
X					X			X					X		X				X		X		
25	**Returned**	**6.5**	**17.5**		**11**	**14**		**13**	**8**	**3**		**3**	**21**		**12**	**9**		**7**	**17**	**7**	**10**		
	Percent	**27%**	**73%**		**44%**	**56%**		**54%**	**33%**	**13%**		**13%**	**88%**		**57%**	**43%**		**29%**	**71%**	**41%**	**59%**		
	Total Answered	24			25			24				24			21			24					
	Percent of Returned	96%			100%			96%				96%			84%			96%					

Data Entered By: Dean Chamberlain
Last Date Data Entered: 2-Feb-12
Due Date: 30-Jan-12
Questionnaires Sent Out: 38
Questionnaires Returned: 19
Percent Returned: 50%
Data Checked By/Date: Andrew Plowman

Questionnaire #2
Tracy Avenue Residents
(TH 62 to Benton)

		I. Roadway			Roadway Components												Benton/Tracy Intersection					
		Do you Agree Proposed is the Most Appropriate?			Importance of Maintaining Parking (East Side)			If you could Eliminate One Cross Section Item?				Importance of Adding west side Sidewalk			Are "Bumpouts" an enhancement?			Is Roundabout Correct Solution?					
Returned Survey		Yes	No	Comments	Important	Not Important	Comments	Bike Lane	Parking Lane	Leave Section As Is	Comments	Important	Not Important	Comments	Yes	No	Comments	Yes	No	If No, Which Option Is Most Appropriate? As Is	Realign West Leg	Other	Comments
X			X			X				X		X			X				X				
X			X			X	Parking on Tracy not needed.		X				X	Unneeded		X	No sidewalk & no bumpouts on the west; the existing sidewalk on the east handles the foot traffic well. The "bumpouts" are a wasted expense. "Enhanced" crosswalks (if not raised) may help to make it clear where crossing is safest.		X		X		The proposed roundabout may speed traffic flow ut pedestrian safety will be comprimised - especially when school is starting and ending. The roundabout as proposed cuts into the property on the NW corner of Benton & Tracy & will create new traffic problems for drivers coming out of W. Benton - particularly the corner house. Most bike lanes in Edina are not marked nor are they 5 ft wide. Make the Tracy bike lanes 4 ft. Take 2' from the lawns on the west and 2' from the lawns on the east (making the east blvd 3' which is fine for growing grass when there is a bike lane beside it). Eliminate the parking & the bumpouts.
X		X			X			X					X			X			X		X		Pedestrian safety would be improved by straightening Benton. This [realign west leg option] is the safest for all of the pedestrian traffic - most importantly the children!!! This option will also best maintain the existing environment/setting for the neighborhood. Thanks!
X		X			X					X			X		X			X					
X			X			X			X				X		X			X					We are hoping we will not be assessed for this.
X			X		X					X			X		X			X					
X		X				X		X					X		X			X					
X			X			X		X					X			X	Widening the road will encourage higher speeds and more traffic on Tracy Ave. My mailbox is hit by a car every winter. Cars have skidded onto my lawn every winter. It is very difficult to get out of my driveway between 7:15 to 9:15 am everyday as it is now.		X	X			Traffic speeds and volume of traffic is unbearable the way it is now. Making any of these proposed changes will cause long-term hardship to the property owners along Tracy Ave.
X			X			X			X				X	There is a sidewalk there already on the west side in front side of the school	X		I think that there is not a need for parking on the east side of Tracy currently. There is already parking on the west side.		X		X		I think that straightening out Benton on the west side to match the east side of Benton would make it less confusing to drivers at the 4-way stop and for the walkers at school time.
X			X			X			X				X			X			X	X			
X			X		X			X			Adult bike lanes on Olinger Rd			Communication cables are beneath where		X			X		X		In the summer bike clubs (20-40 bikes at a time) use Tracy Ave. That number going through a roundabout would be a [unreadable - 2 words]. Ground water could do great damage. Water rushing down Tracy along
X			X			X			X				X			X	Not sure what "bumpouts" are - enhancing/improving crosswalks is a good idea.		X	X			I have lived at my address since 1975, and I have never thought that the intersection was a problem for pedestrians or vehicles.

Data Entered By: Dean Chamberlain
Last Date Data Entered: 2-Feb-12
Due Date: 30-Jan-12
Questionnaires Sent Out: 38
Questionnaires Returned: 19
Percent Returned: 50%
Data Checked By/Date: Andrew Plowman

Questionnaire #2
Tracy Avenue Residents
(TH 62 to Benton)

		I. Roadway			Roadway Components												Benton/Tracy Intersection					
		Do you Agree Proposed is the Most Appropriate?			Importance of Maintaining Parking (East Side)			If you could Eliminate One Cross Section Item?				Importance of Adding west side Sidewalk			Are "Bumpouts" an enhancement?			Is Roundabout Correct Solution?					
Returned Survey		Yes	No	Comments	Important	Not Important	Comments	Bike Lane	Parking Lane	Leave Section As Is	Comments	Important	Not Important	Comments	Yes	No	Comments	Yes	No	If No, Which Option Is Most Appropriate? As Is	Realign West Leg	Other	Comments
X		X			X			X				X					I don't understand the illustration	X					
X						X			X				X		X			X					
X			X			X				X			X	There is a really nice sidewalk on the east side!	X				X	X			It will be a nightmare to control traffic when children are present!
X		X			X					X			X		X			X					
X			X			X			X				X		X		Speed is a big problem. Most people go 40 mph on Tracy. Hard to get out and in to	X					
X		X				X			X				X		X			X					
X		X				X			X				X		X			X					
19	**Returned**	**7**	**11**		**6**	**13**		**5**	**9**	**5**		**2**	**16**		**12**	**6**		**10**	**9**	**4**	**4**		
	Percent	**39%**	**61%**		**32%**	**68%**		**26%**	**47%**	**26%**		**11%**	**89%**		**67%**	**33%**		**53%**	**47%**	**50%**	**50%**		
	Total Answered	**18**			**19**			**19**				**18**			**18**			**19**					
	Percent of Returned	**95%**			**100%**			**100%**				**95%**			**95%**			**100%**					

Data Entered By: Dean Chamberlain
Last Date Data Entered: 2-Feb-12
Due Date: 30-Jan-12
Questionnaires Sent Out:
Questionnaires Returned: 18
Percent Returned:
Data Checked By/Date: Andrew Plowman

Questionnaire #2
Non-Tracy Avenue Residents

		I. Roadway			Roadway Components												Benton/Tracy Intersection					
		Do you Agree Proposed is the Most Appropriate?			Importance of Maintaining Parking (East Side)			If you could Eliminate One Cross Section Item?				Importance of Adding west side Sidewalk			Are "Bumpouts" an enhancement?			Is Roundabout Correct Solution?					
Returned Survey		Yes	No	Comments	Important	Not Important	Comments	Bike Lane	Parking Lane	Leave Section As Is	Comments	Important	Not Important	Comments	Yes	No	Comments	Yes	No	If No, Which Option Is Most Appropriate? As Is	Realign West Leg	Other	Comments
x			X	Only if more stop signs are placed along the already busy roadway - how about stop signs on Tracy at Hwy 62?		X	Not important to me - I live on Benton Ave. Those who live on Tracy not on a corner lot would be at a disadvantage - no nearby parking. We lost parking on Franklin Ave in Mpls. The loss of road & parking access to our home which was in the middle of the block on Franklin created many issues and lowered the value of our house.		X		But I don't live on Tracy		X	Because it's unneccesary			Hard to know where this is		X		X		I hate roundabouts! But it's pretty. Way too much confusion as to who has the right of way and what to do about pedestrians. Realign - simple and safe 4 stop signs as today.
x			X		X			X					X			X			X	X	X	We don't need concrete/blacktop covering all of Edina. It used to be a nice community. Now it is becoming like downtown Mpls. Roundabouts are dangerous.
x		X				X			Y	Y			X		X				X	Y	Y	Need to address safety of crosswalks at Tracy and Benton. Concern about pedestrian safety with roundabout, drivers will be focused on other cars rather than children and pedestrians walking.
x			X			X		X					X			X			X	X		If you had to pay for this out of your pocket would you? Seriously?
x		X			X					X		X			X			X				
x		X			X			X					X			X			X			
x			X			X		Y	Y				X		X		"Please do not answer these questions until you have read the entire newsletter": was this advice meant for 3rd graders?		X		X		
x			X			X	Ther eare very few cars parked there now.		X				X		X				X		X		
x			X			X			X				X		X				X		X	People don't know how to drive on them by the Galleria. I am very concerned about kids crossing the roundabout without a stop sign. Very unsafe to me. I understand the reason behind the realignement.
x		X				X			X			X			X		The city needs a better understanding of how students travel by foot from surrounding neighborhoods to Countryside School. It's difficult to know what's important when there has been inadequate assessment of current conditions and inadequate planning for the complete picture.		X		X		Uncertainty makes drivers slow down. This is a nintersection where we need drivers to proceed cautiously and the roundabout design seems to improve traffic flow. Whether or not you live along Tracy Ave is not the only condition that should be considered as input is gathered on this design. Tracy is a corridor I travel daily, and it is the corridor along which my children would travel on foot or by bike to get to their grandmother's house independently. I want Edina to be a city where my kids can travel 1.5 miles to their grandma's house on their own power! We need bike lanes and sidewalks on Tracy Ave.
x			X			X		X				X				X			X			
x			X			X			X			X			X				X			Roundabouts are ok in some areas but not appropriate here where there is a high level of pedestrian traffic.
x			X					X			Why ruin peoples yards and spend the money? Bikes lanes are not necessary - when I ride I leave Edina ASAP because the roads are so bad - has nothing to do with bke routes. The roads are just fine for biking. If people are afraid these lanes won't help.		X				Sidewalks on one side of the road are enough - why would anybody expect both sides? A total waste of money & space.		X	X			The intersection is one of the safest I have seen. I jog through there several times a week and cars always give me the right of way. Roundabouts would be confusing. Leave the intersection as is - don't spend money just to spend money.
x			X			X	There are very few cars parked on Tracy - just occassionally and for school events.		X		Addition of a parking lane is unnecessary and creates a wider throughfare that would encourage faster traffic which I would like to		X		X				X		X		Roundabouts would be very difficult with all the school bus traffic.
x			X			X		X					X			X			X		X	
x			X		X			X					X			X			X	X		Don't fix what is not broken

Data Entered By: Dean Chamberlain
Last Date Data Entered: 2-Feb-12
Due Date: 30-Jan-12
Questionnaires Sent Out:
Questionnaires Returned: 18
Percent Returned:
Data Checked By/Date: Andrew Plowman

Questionnaire #2
Non-Tracy Avenue Residents

		I. Roadway			Roadway Components												Benton/Tracy Intersection					
		Do you Agree Proposed is the Most Appropriate?			Importance of Maintaining Parking (East Side)			If you could Eliminate One Cross Section Item?				Importance of Adding west side Sidewalk			Are "Bumpouts" an enhancement?			Is Roundabout Correct Solution?					
Returned Survey		Yes	No	Comments	Important	Not Important	Comments	Bike Lane	Parking Lane	Leave Section As Is	Comments	Important	Not Important	Comments	Yes	No	Comments	Yes	No	If No, Which Option Is Most Appropriate? As Is	Realign West Leg	Other	Comments
x		X			X					X		X			X				X	X			
x		X				X			X			X			X			X					Making the bicycle lanes 6' would be the only improvement I can think of. The bicycle lanes are important for this north-south route. Thank you for your considerations.
18	**Returned**	**6**	**12**		**5**	**12**		**7.5**	**8**	**2.5**		**7**	**11**		**10**	**6**		**2**	**16**	**5.5**	**10.5**		
	Percent	**33%**	**67%**		**29%**	**71%**		**42%**	**44%**	**14%**		**39%**	**61%**		**63%**	**38%**		**11%**	**89%**	**34%**	**66%**		
	Total Answered	18			17			18				18			16			18					
	Percent of Returned	100%			94%			100%				100%			89%			100%					

FEASIBILITY STUDY – BA 368

ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix G

Project Comments and Letters Received

QUESTION / COMMENT CARD Tracy Ave. Reconstruction Mtg., 11/28/11, 7450 Metro, 7 p.m.

A good forum for citizen input + community involvement — thanks. Some major issues came up during the very effective presentation and, especially the Q+A session that directly affect Tracy residents who will have to live with the construction results for many years:

WIDTH: Please do NOT widen the present 36'. Narrow if possible to slow down traffic.
N.B. In the last 4 years we have seen 6-8 spin-outs at the end of the dog-leg on south Tracy that have brought vehicles into our + our neighbors yards (6104 + 6108) knocking down mailboxes + requiring towing out.

SIDEWALK: There is no need for additional sidewalks. The few people using the present one on south Tracy are dog-walking. If there were one on the west side of Tracy by us, winter spin-outs could cause serious injuries to pedestrians.

~~Name~~ PARKING: No need for additional ~~Address~~ parking + little need for present parking on east side.
PLEASE PRINT There are virtually never any cars parked ~~PLEASE PRINT~~ here on the south end of Tracy by us.

(Over, please)

Name: Bill Cosgrove Address: 6104 Tracy Ave. So., Edina

BIKE LANES: Please consider carefully all exigencies here: Safety, present traffic speed, widening to accommodate bike lanes will contribute to increased traffic speed, on busy streets bike lanes often become additional driving lanes for cars, in my experience.

P.S. We've already had one serious spin-out this season after the mere 2" snowfall Nov. 19, 2011. The southbound car took out the city "No Parking" sign in front of 6108 Tracy, corkscrewed around for 50 feet in two different yards, and ended up almost back in Tracy Ave. on the west side facing north. With bikers or pedestrians nearby this could have been serious.

Andrew Plowman

From:
Sent: Wednesday, January 25, 2012 12:19 PM
To: edinamail@ci.edina.mn.us; jsullivan@ci.edina.mn.us; Andrew Plowman
Subject: ROUNDABOUT AND BIKE LANE INFORMATION

From:

Attached is some additional information, from another resident, relating to the Tracy Avenue rehabilitation Project.

Please pass this e-mail on to the City Council.

Does the City Manager get these e-Mails also?

Thanks,

Bill Rodgers

Begin forwarded message:

From:

Date: January 25, 2012 11:17:33 AM CST

To:

Subject: ROUNDABOUT AND BIKE LANES

I agree wholeheartedly that although the current intersection is a bit unusual, it does force drivers to proceed with additional caution and respect, which is inherently a good thing for an intersection near a school/playground. Also, keep in mind that if a roundabout is installed, there would not be a crossing guard in the evenings, on weekends, and over the summer months, when neighborhood kids use the playground, sledding hill, etc.

One other thing…

Regarding the proposed bike lanes, it seems a bit odd to me that they would install bike lanes from the bridge over 62 to Vernon. Neither the roadway south of the bridge, the bridge itself, or Vernon have bike

lanes. Vernon does have a striped shoulder which varies in width as you travel east towards Jerry's. But there is no official markings indicating this roadway to be a bike lane. Therefore, my point is they want to build a bike lane which does not connect to any other bike lanes for a very few bike commuters for 6 months of the year. As I said in the second meeting, it seems like a lot of heartache to satisfy these very limiting conditions. Why not simply "stripe" the side of the road to create an official shoulder which could be used by the serious bikers.

Greg Rustad

Andrew Plowman

From:
Sent: Wednesday, January 25, 2012 1:15 PM
To: Andrew Plowman
Subject: Tracy/Benton Intersection

Andrew,

While I do not live on Tracy, I do drive thru the Benton intersection one or more times per day.

While I would usually like the idea of a roundabout to ease traffic flow, its use on this intersection creates too many issues with adjacent properties and school safety crossings. I vote to leave it as is since there are no known accidents at this point.

Thanks for allowing our input on this project.

Ron Fraboni
5505 Grove St.
Edina

Andrew Plowman

From:
Sent: Friday, January 27, 2012 11:59 AM
To: Andrew Plowman
Subject: RE: Tracy Avenue construction project

Thank you for getting back to me in regard to my questions. I will take them in to consideration.
Molly Urbanski

From: Andrew Plowman [mailto:APlowman@wsbeng.com]
Sent: Thursday, January 26, 2012 10:51 PM
To: Molly Urbanski
Subject: RE: Tracy Avenue construction project

Ms. Urbanski,

Thank you for your time and your well written questions regarding the Tracy Avenue project. I will answer these questions and when applicable refer to an attachment or links that I have added.

1) Yes, buses can navigate the roundabout and was actually one of the reasons a roundabout was considered at this location. (See attachment). I have been present many times in the past couple of months when the buses come and in and depart for the day. Based on those visits I have seen the chaos that ensued. Basically, creating a situation where the ability for a bus to make the tight turns (especially when vehicles are present is virtually impossible) causing them to make the turn to Grove and subsequently to Stuart. In our meetings with the Countryside Elementary school we invited the head of the bus operations, he (and the rest of the folks from the school) were pleased at the ability the buses would have to enter the school with the roundabout and how it would improve the operations. We also presented a power point presentation to the Site Council at the school that shows video of the cumbersome operations, I would attach that file but I know it is way too large. If you would like I could get you a flash drive with the video on it?

2) I think #1 answers most of the questions related to this. But, you also asked about the children. I have been getting a lot of feedback related to the fact that people have the misconception a roundabout is not safe for pedestrians. There is a lot of information on the internet about the safety of roundabouts at schools.
http://www.modestogov.com/pwd/transportation/streets/roundabouts/videos.asp
This link shows operations of a roundabout near a school.
http://www.walkinginfo.org/pedsafe/casestudy.cfm?CS_NUM=49
This link is a case study discussing the skepticism of a roundabout near a middle school and elementary school that turned out as a success.
http://www.ci.edina.mn.us/Departments/L5_ConstructionProjects_TracyAvenue.htm
This link is to the Tracy Avenue Construction project and has a paper downloaded to it related to roundabout myths. Specifically look at Myth #5 starting on page 9.
We intend the pedestrian operations to work just as they do today. When I get you the power point presentation, it presents the reasons why roundabouts are safer for pedestrians.

3) I believe the roundabout solves the issue of why some drivers feel they have to turn down Grove. To reiterate, the turning movements become very difficult from the east leg of Benton to the west leg of Benton.

4) The lack of available parking is more of a school operations issue. Although we are proposing to maintain the parking on Tracy, I don't know if this is going to have much of an impact on folks still parking on the side streets during functions. The roundabout will neither hurt or help that issue, other than improve the operations for people to get to or leave the function more efficiently.

5) The issue of the buses I believe will be solved, for the most part. They no longer are forced into using Grove to Stuart. At least as it relates to negotiating the intersection at Tracy and Benton.

Again, thank you for your questions and I hope I did an adequate job at answering them. Your questions were clear, concise and valid and go to the core of one of the reasons we are considering a roundabout at this intersection. Again, let me know if you would like a copy of the Countryside presentation. I anticipate we will try to upload this to the website soon as well.

Thank you,
Andy

Andrew Plowman, PE
Transportation Project Manager
d: 763-287-7149 | c: 612-360-1311
WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 | Minneapolis, MN 55416

Engineering • Planning
Environmental • Construction

From:
Sent: Thursday, January 26, 2012 9:38 PM
To: Andrew Plowman; jsullivan@ci.edina.mn.us
Subject: Tracy Avenue construction project

I am writing in regard to the Tracy Avenue construction project. I apologize for coming late to the party but was not informed of this project due to not residing on Tracy itself.
I live at 5800 Stuart Avenue which is approximately one block in from Tracy via Grove Street. I have taken the time to review the different presentations and surveys in regard to this project. In all of the information I have looked at I did not find any mention in regard to the bus traffic to and from Countryside Elementary School as well as busses to and from the middle school and high school. I have several concerns in regard to this –
1.) Is it possible for buses to navigate the round about that is being proposed? If not what route would the buses be instructed to take to get in and out of Countryside or in and out of the neighborhood?
2.) If the buses are to be re-routed through the surrounding neighborhoods how will the City determine what these routes would be? Also, children in the neighborhood walk to and from school – how would they be guaranteed a safe route?
3.) As it stands now, although Benton is a far wider street, buses choose to use cut down the far narrower streets of Grove to Stuart to access Countryside School.
4.) When there are school functions or several class functions in a day, there is not enough parking available in the school lot so parking overflows onto both sides of Stuart Avenue. It is near impossible for a car or a bus to maneuver down the middle of the street. I could not imagine what would happen if there was an emergency and medical vehicles had to attempt to get through as well.
5.) There is also the extreme degeneration of Stuart Avenue's road material due to the excessive weight of the buses on the road that is not rated to handle such weights. It is especially destructive to the outer edges by the curbs.
I am concerned that this issue has not been addressed in regard to the construction project. I realize that surveys have been sent out for neighborhood input and meetings have been held but before a decision in regard to this project is set in stone I would like to know that all aspects of this project be looked at.
I look forward to your response.
Thank you for your time,
Molly Urbanski

5800 Stuart Avenue
Edina, MN 55436

S1

Andrew Plowman

From:
Sent: Friday, January 27, 2012 12:09 PM
To: Judith Rodgers; Lynette Biunno
Cc:
Subject: In support of bike lanes on Tracy

Bill, Lynette - I am a resident of Countryside neighborhood and strongly support the proposed bike lanes on Tracy. My family likes to bicycle in the neighborhood but if we want to go North/South, Tracy is the only viable route. We are forced to ride on the sidewalk on Tracy rather than the street due to the speed of cars, and lack of visibility in key stretches. The sidewalk is safer than the street, but still quite dangerous to other pedestrians, dog walkers, and cars coming out of driveways.

Dave Henry in a prior email also has similar conclusions about bike safety on Tracy.

Further, there aren't many good alternate routes for North/South travel if one wants to go from Garden Park to Countryside Park on bike, or to use the playground at Countryside Elementary.

I would much rather have dedicated bike lanes on Tracy Ave than ride on the dangerous sidewalk or even more dangerous uncontrolled street.
I believe more families would bike in our part of the city if the available routes were safer.

Thanks

Tom Kluis
5824 Lyle Cir
Edina, MN

Andrew Plowman

From:
Sent: Saturday, January 28, 2012 4:11 PM
To: Andrew Plowman
Subject: Fwd: Edina Resident/Biker's Opinion Whether Tracy Ave Needs Bike Trails

Andrew - Here is the letter from Mr. Henry I referred to:

On Wed, Jan 25, 2012 at 9:19 PM, Barbara Hoganson wrote:

Please find an Edina resident and avid biker's email to City Hall regarding his opinion on whether Tracy Avenue needs bike lanes, and some alternatives.

January 24, 2012

Jack Sullivan

Andrew Plowman

Wayne Houle

City Hall

48OI WEST 5OTH STREET

EDINA, MINNESOTA 55424-1394

I am a resident of Edina and commute daily (year-round) to downtown Minneapolis on my bicycle.

I believe existing road right-of-ways in Edina offer a great opportunity to encourage safe, convenient commutes for bicyclists with minimal additional investment by the City and no additional taking of land for right of way. Existing streets already connect our communities homes, schools, stores, places of employment, parks and other amenities. Existing streets are already illuminated after dark and have traffic control pavement markings, signs and signals. Existing streets are already patrolled, maintained and plowed. Existing streets are where Edina's homeowners expect to find vehicles, bikes and on the side of the right of way, pedestrians. New off road trails do not offer any of this and are extremely expensive to build and in our community don't make the connections the majority are seeking. (However if the rail line abandons or sells the north/south Dan Patch corridor, a new bike trail would be much easier on the environment and community, in addition to allowing some really useful and convenient connections.)

I have attached an aerial outlining a particular road segment that is currently very unsafe for travel (cars or bikes) with an idea on how this area could be made much more safe for all. This segment is a small portion of my daily commute.

On the aerial the "Bike Kill Zone" is indicated on Tracy Avenue between Olinger Blvd to just north of Highland Road. This Kill Zone is hazardous for a number of reasons you are already aware of:

1. Extreme curvature of the Tracy Avenue right-of-way limiting lines of sight and requiring aggressive steering maneuvers.

2. Three "T" intersections in the arc of the curve in the right of way.

3. High Speed for a residential area between two parks and next to a school (30 MPH)

4. High Traffic volume (numerous studies show increases of traffic through Edina's neighborhoods when traffic slows on Hwys 169, 62 and 100)

5. Future additional unmitigated traffic volume (The City's collaboration with the Shelter's Assisted Living Development adding 425 vehicles per day to the immediate neighborhood without any traffic mitigation or improvements being installed at the Developer's expense).

6. Routine speeding on City Streets. (You don't need to be a cop to know that most vehicles on Tracy Avenue exceed the posted 30 MPH limit, especially south of Hwy 62)

With a parking lane allocated to the roadway on the east side of the street (northbound travel for vehicles and bikes) there is plenty of room for vehicles to pass bikes. The bikes are moving slowly do to the slight uphill grade in this area. During the past four years I have only observed one car parked, one day in this entire area on the east (northbound) side of Tracy Avenue during the am and pm commute.

However the issue is very different on the west side (southbound) lane of traffic on Tracy Avenue. On this side of the street there is No Parking and with the curb, no shoulder. The painted double yellow centerline of the street is very close to the curb, resulting in a very narrow traffic lane. In the "Bike Kill Zone", given the distance from the raised 6" curb to the double yellow centerline, there is not enough room for a bike to be legally overtaken by a car (with the bike a safe distance from the curb – out of the snow and/or gravel next to the curb AND the car passing the bike with the State required 36" minimum clearance (MN Statue 169.18 Subd. 3. (3)). As a result, southbound cars routinely pass bikes by drifting across the double yellow centerline, into the northbound lane of traffic. Given the curves in the road, limited sight lines, intersecting streets this illegal driving is extremely dangerous for oncoming traffic, bike riders and scofflaws themselves. I spend only about a total of 4.5 minutes a week in the Kill Zone heading southbound, but at least twice a week I am passed by a vehicle being operated in this very dangerous and illegal manner.

A couple of years ago I mentioned this issue to Wayne and as a result the City tried to paint the double yellow centerline in a manner that increased the width of the southbound lane. It helps, but with the southbound

direction of travel dropping downhill, bikes are able to get very close to the speed limit (30 MPH) in this area resulting in the impatient, reckless drivers now adding an aggressive speeding violation to their illegal pass, exacerbating the danger to all.

Low Cost Solutions:

1. Make no lane changes. Simply add four evenly spaced "DO NOT PASS BICYCLES ZONE" signs along the west (southbound) lane in the "Bike Kill Zone". Speed Limit 25 MPH in the "Bike Kill Zone".

2. Eliminate the never used parking lane on the east (northbound) side of the street and paint the double yellow centerline exactly halfway between the 6" raised curbs. Speed Limit 25 MPH in the "Bike Kill Zone".

The remaining segments of Tracy Avenue offer much better sight lines and wider traffic lanes. With the exception of the deteriorated road surface, biking is relatively easy. Speeding & inattentive drivers are the greatest threat to bikes, as they are anywhere else.

Please feel free to contact me with any questions.

Sincerely,

Dave Henry

Edina, MN

Andrew Plowman

From:
Sent: Monday, January 30, 2012 3:49 PM
To: Andrew Plowman
Cc:

Subject: Tracy/Benton Redesign

I live on Oak Lane and thus regularly drive through the intersection of Tracy and Benton from one direction or another. I have seen the proposal for a roundabout at that intersection, and spoken with one of the residents most immediately affected by the plan. **I do not think that Tracy needs a roundabout or indeed any reconfiguration along its length.**

The current width of the street accommodates automobile traffic, bicycles and parking very well. Painting in bike lanes would actually reduce the flexibility that allows cars and bikes to co-exist so comfortably.

As to the roundabout, it seems to be a solution in search of a problem. Yes, sometimes cars coming in from different angles have to maneuver around each other, but there appears to be no history of accidents. And school buses may get backed up when it is time to drop off or pick up, but this is for a brief period a couple of times a day, when school is in session. This certainly doesn't warrant the creation of a costly roundabout that would make life harder for people living on the intersection.

Cost is another reason not to proceed with this plan. Asking people on Tracy to pay over $5000 for "improvements" they neither want nor need would be very unfair.

Thank you for respecting the wishes of the neighborhood.

Janet Conn
5804 Oak Lane
Edina

Andrew Plowman

From:
Sent: Monday, January 30, 2012 8:39 PM
To: Andrew Plowman
Subject: Re[2]: Re[2]: Re[2]: Tracy questionaire

Thanks Andy,

Good and vigorous debate.

Have a great evening!

Bert

---- Original Message ----
From: Andrew Plowman <APlowman@wsbeng.com>
To:
Sent: Mon, Jan 30, 2012, 8:25 pm
Subject: RE: Re[2]: Re[2]: Tracy questionaire

Thank you again for your comments. I just wanted to comment on a couple of additional items related to your email.

I believe as engineers we do need to keep up with the education at roundabouts. For some reason, the older driving public has a lot of problems with new features. I believe in 20 years they will be so common place that they will be treated just as signals. I have heard many horror stories like you shared about the elderly lady. I have also seen similar incidents in my time designing and analyzing roundabouts. I have also seen the benefits as well, and have heard the feedback after they were placed about how well they work.

It is true, there doesn't appear to be a history of accidents at this intersection. That is according to the City records, we are also checking with the State to be certain. Many people do feel the confusing nature of the intersection causes people to be more conscious of their actions. I think that is great and is valid, but I also know that often offset intersections do create safety issues and that is the reason they aren't proposed and fixed by engineers when given the opportunity. Few people disagree that the intersection is cumbersome and not efficient during school start and ending times. The other issue is the difficulty the buses have negotiating the turns from east Benton to west Benton when there are vehicles everywhere. Some buses are forced to use Grove Street.

One other items that should be mentioned is the funding for the roundabout. We do not plan on assessing for the roundabout, but instead plan on using State Aid funds. Residents would only be assessed on the equivalent intersection cost. Meaning, if we put back exactly what was there, what would they pay? The difference would be covered 100% by State Aid. If you are not familiar, State Aid funds are from the gas tax. In which case you, me, my mom and everybody who drives are paying for that.

Again thank you for having this discussion and listening to my viewpoints as well. Have a good day.
Andy

Andrew Plowman, PE
Transportation Project Manager
d: 763-287-7149 | c: 612-360-1311

WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 | Minneapolis, MN 55416

From:
Sent: Monday, January 30, 2012 8:00 PM
To: Andrew Plowman
Subject: Re[2]: Re[2]: Tracy questionaire

Completly agree with your comments; 100%. The issue is the speed limit isn't 25mph and your drivers aren't a 23 yr. old female and a 73 yr. old male in these two cities. I think the ones at Cornelia and between Target and Pittsburgh Blue work well. The ones that are only three way are only traffic slow mechanisms. Not that this is bad but I think many "speed bump" devices don't work so good or tear the bottom out of your car at even 5mph like at the high school. I agree with the traffic flow concept in even a 50% perfect world. Wait until you are behind a car that stops instead of yields; I'm certain you've been there or seen this. It's a driving nightmare. The other day we were backed up for as far as we could see on 66th by the airpoort in Richfield. When we finally got to the roundabout the older lady was still sitting there waiting for her turn. It was very sad for her but when introducing a new traffic pattern this type of situation can, and will occur. Just a thought.

I did read that the Benton intersection has not had an accident in decades. Not sure if that is correct. I do dislike it. it does howefer, keep the driver at full alert. Right now though it's really not worth the money. If this was on our block you'd be kicking us out of our home as we just wouldn't be able to come up with the money. Voted for the last referendum; wishing I hadn't.

I know the engineers really like this design but it's likely they don't live there. I was an architect by education; not anymore as I didn't listen to my customer.

Just some thoughts.

Again, I really appreciate that you are requesting feedback. Even though we disagree on this topic I really do like that you are reading and listening to this information.

Thanks too for your response!

Sorry if this is a little dis-jointed; trying to cook dinner at the same time! :)

Bert
---- Original Message ----
From: Andrew Plowman <APlowman@wsbeng.com>
To:
Sent: Mon, Jan 30, 2012, 7:27 pm
Subject: RE: Re[2]: Tracy questionaire

Thank you for providing that information and feedback.

Roundabouts are definitely a polarizing topic amongst many. I disagree with you completely, as the track record is there supporting how they provide safety benefits, relieve traffic congestion and calm traffic speeds (to name a few of the benefits). Many residents indicated the intersection was confusing and a problem. Viewing the intersection in operation when school adjourns, those indications were confirmed. That is why we considered the alternatives we did.

Many of the intersections in Paris and the New England area are rotaries or traffic circles and are actually quite different from modern roundabouts, which is the traffic control being proposed at Tracy and Benton. For instance, the Arc de Triomphe is a traffic circle and operates much differently than the United States modern roundabout. Many of the old rotaries or traffic circles in New England are being retrofitted to modern roundabouts.

You are not alone in your skepticism. We do appreciate the feedback and it will be added to the feasibility report.

Thank you,
Andy

Andrew Plowman, PE
Transportation Project Manager
d: 763-287-7149 | c: 612-360-1311
WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 | Minneapolis, MN 55416

From:
Sent: Monday, January 30, 2012 6:58 PM
To: Andrew Plowman
Subject: Re[2]: Tracy questionaire

Yes!

Bert Finsand, 6404 Limerick Drive, Edina, MN 55439. I drive this route on average three to four times a day.

Frankly, I think the roundabout is a terrible choice; that is unless you want drivers to avoid this street. Driving on 70th is kind of a joke so we now we stay away. Why would we emmulate traffic solutions from arguably the two worst places to drive in the world; Paris and Boston? Repave is fine; the rest, leave it alone.

Thanks again for doing the research.

Bert

---- Original Message ----
From: Andrew Plowman <APlowman@wsbeng.com>

Andrew Plowman

From:
Sent: Tuesday, January 31, 2012 9:36 AM
To: Andrew Plowman
Cc: Barbara Hoganson
Subject: Fwd: A roundabout way of decreasing pedestrian safety » Ren Thomas

Andy - Here is an article on roundabouts that I hope you consider.

Please share it with Wayne.

Bill Rodgers

Subject: A roundabout way of decreasing pedestrian safety » Ren Thomas

Roundabouts are not considered safe for children, adults with disabilities and especially those visually impaired. They prioritize cars over pedestrians and bicyclists.

Please read the attached article by Dr Ren Thomas.

Thank you,

Bill Rodgers

- Bio
- Teaching
- Publications
- Presentations
- Service
- Blog
- Categories

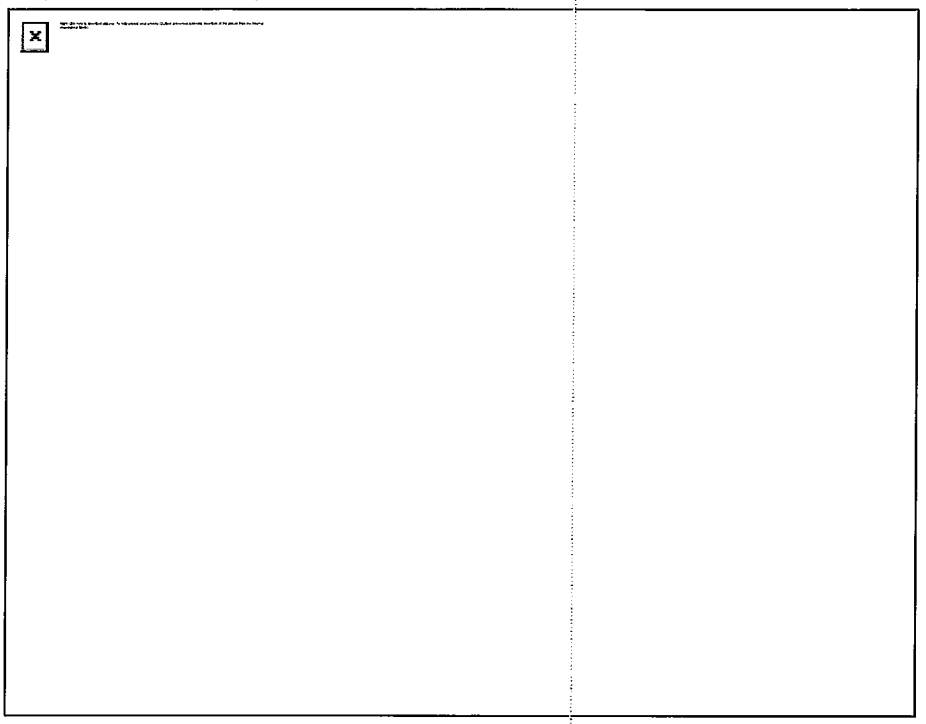
Ren Thomas

M.A., Ph.D. (Planning)

A roundabout way of decreasing pedestrian safety

Like many cities in North America, Vancouver is in a love affair with roundabouts. And why not: traffic engineers tell us they improve vehicle safety, increase roadway capacity and efficiency, reduce vehicular delay and emissions, provide traffic-calming effects, and

mark community gateways. But hang on…isn't this just another road design that prioritizes cars over pedestrians and cyclists?



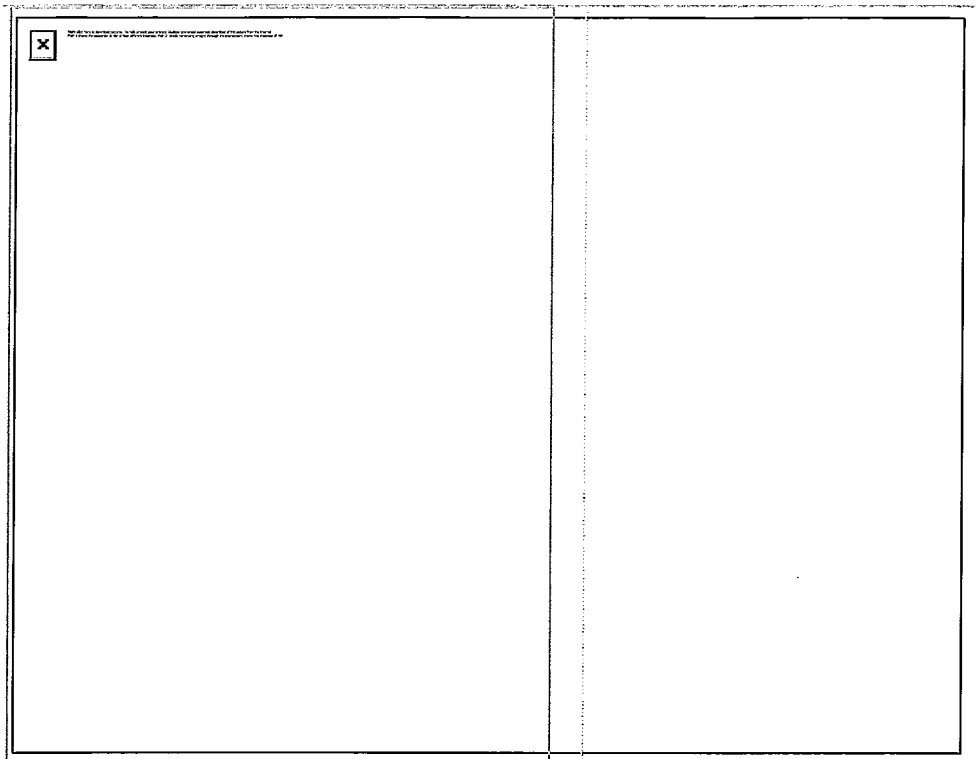
At a roundabout, pedestrians must wait until there is a gap in traffic to cross, placing them at a considerable disadvantage from traditional stop signs and stop lights. There is no designated time for pedestrians to cross, like a walk signal, which means at a busy intersection you can wait several minutes. And there are reasons to fear for pedestrian safety as well.

Studies shows that while the risk of serious vehicle collisions is decreased, this is mainly because they reduce collisions where cars run red lights/stop signs or drivers misjudge the gap in oncoming traffic while turning. The US Access Board, a Federal agency committed to accessible design, writes that "the research findings on pedestrian safety at roundabouts are less clear. There have been relatively few studies, mostly conducted in Europe, concerning pedestrians and roundabouts." Little is known about the effects of roundabouts on the particular demographic groups, such as the

elderly, children, and those with accessibility issues. Many drivers do not yield to pedestrians at crosswalks, and it might be difficult to tell if they plan to yield; as the traffic volume increases, the number of "crossable gaps" decreases.

The design of a roundabout also pushes the crosswalks away from the intersection, creating travel paths that are inconvenient for pedestrians, according to the New Urban News. New Urbanists have been promoting roundabouts for many years as a traffic calming measure, despite any evidence that they increase pedestrian safety.

In England, where roundabouts are commonplace, drivers are reasonably vigilant and yield to pedestrians. Nevertheless, the real advantage of roundabouts is that cars are not required to stop. Drivers generally like them for this reason; it reduces their travel time. But what does this do for pedestrians? It again places them at the bottom of the pecking order, and places them at considerable risk. It also lengthens their travel time considerably, as they must cross several directions of traffic, waiting for gaps each time. Compare this to a regular four-way signalled intersection, where the pedestrian gets a clear walk signal and does not have to determine whether it is safe to cross. In other words, the problem that cars supposedly have at four-way intersections (trying to judge the gap in traffic) is transferred to the pedestrian, who is not encased in steel for protection.



Path 1 here shows the pedestrian encountering traffic in two instances; Path 2 shows the pedestrian must cross four lanes of traffic. In all cases, since this is a roundabout, traffic does not stop and pedestrian paths are greatly increased from a traditional four-way signalled intersection.

Interestingly, public opinion on roundabouts is divided. Many drivers I know detest them, and find them difficult and confusing to use. A cab driver recently told me that he hated the new roundabouts in Vancouver, but one friend of mine defended them. She hails from England and says that the problem is simply public education: North American drivers just don't know how to use roundabouts. When the issue of pedestrian safety is raised, she said, "I see nothing wrong with pedestrians having to wait a few minutes to cross the street. There's way too much encouragement of pedestrians getting the right of way all the time, even when it's unsafe."

I wonder what experts like Barry Wellar, a retired University of Ottawa professor who studies public safety and testifies at trials where pedestrians and cyclists are injured, thinks about roundabouts. Wellar developed the Pedestrian

Safety Index, which some municipalities have been using to evaluate their busiest intersections. Similarly, John Pucher of Rutgers University discusses the many innovations in Europe designed for pedestrian safety, including advanced crossings for pedestrians, scatter crossings, grade-separations and separate pedestrian and cyclist signals. One of Pucher's main arguments is that pedestrians and cyclists increase in number with increased safety precautions; he also argues that penalties for striking a pedestrian or cyclist are much harsher in Europe.

Surely we should be examining all the different safety aspects of roundabouts if they are to be applied everywhere from quiet residential streets to major intersections such as the one pictured in this article. My guess is the UBC roundabout, which was converted from a signalized intersection last year, will prove treacherous to the pedestrians (many of them seniors) crossing the intersection at 16th and Wesbook Mall to access the new grocery store, community centre, school, and housing in the area. But UBC already has plans for another roundabout, and like many municipalities seems content to let traffic engineers' reports lead the way.

The US Access Board makes several suggestions for improving roundabouts for blind pedestrians, including:

- Landscaping, planters, pedestrian channelization, bollard-and-chain separation, railings, and other architectural features can delineate paths that lead to the crosswalk and prevent or discourage crossing at locations other than the crosswalk; a distinctive edge such as a raised curb
- Traffic calming measures to ensure vehicles are travelling at low speeds, which influences whether or not they will yield to a pedestrian

- Raised crossings to discourage vehicle acceleration
- 'Smart' signals that can sense and signal a pedestrian's presence
- 'Splitter' islands with a detectable surface, which can be used as a pedestrian refuge
- Public awareness campaigns encouraging drivers to yield to pedestrians

These measures can help counterract some of the pedestrian safety issues associated with roundabouts, but the fundamental question of whether they are advantageous for all transportation modes is not addressed. Pedestrians and cyclists are considerably disadvantaged by roundabouts as compared to traditional street crossings, proving once again that traffic engineers have a tendency to prioritize cars' needs over non-motorized transportation modes. Hopefully we learn more about roundabouts through research and not pedestrian and cyclist fatalities.

August 2, 2009 |
Tags: pedestrians, planning, Transportation, Vancouver, walking infrastructure| 2 Comments »

2 Responses to "A roundabout way of decreasing pedestrian safety"

1.  *Achim* says:

September 5, 2010 at 5:12 pm

In my opinion, the roundabout at UBC is a large improvement for slowing down vehicles and severity of collisions, and emissions caused by start and stop traffic. Roundabouts have been in use in Europe and also Hong Kong for a long time. For issues of pedestrian safety, this could be addressed by installing crossing signals, i.e. the flashing amber lights which notifies the motorist to yield. Also in Hong Kong, most roads are fenced off (except for designated crossings, and high medians to discourage jay walking), and includes an fenced island in the middle of the road. Some larger intersections also have pedestrian underpasses and overpasses, and may even include an elevator

at both sides of the overpass for people with disabilities. Cyclysts there all know how to navigate a roundabout, and there are even roundabouts that are made only for bicycle traffics. Parking is also discouraged by placing knee to hip-high planter boxes / fences right next to the curb so even if someone parks they will not be able to get out, in which case would allow for better line of sight for both motorists and pedestrians. Roundabouts are great and we need more of them. In places that lack space, a mini-roundabout can also be used, which is just a white painted circle in the middle of the intersection allowing larger trucks and busses to go over them, but to address pedestrian / cyclist safety, education is a key issue along with other components mentioned (over/underpass/elevators/splitter islands/amber signals/bike-only roundabouts to familiarize cyclists without motor vehicle traffic etc...)

At last, I would encourage anyone to explore the road design in Hong Kong through Google Earth, as I do believe they have a very safe and efficient system there.

2.  *Greg Alexander* says:

May 25, 2011 at 9:18 am

Roundabouts do not reduce emissions.

When you are wearing trousers, if you gain weight, then eventually the trousers will pinch your belly. And you may say, "the problem is that my belly is pinched," and therefore the solution is trivial, "I will buy looser trousers." Then you are free to gain more weight. Since gaining weight wasn't actually your original goal, though, and in fact the problem was the weight and not the trousers.

This is literally the same problem with the car. The car makes you fat, angry, and impatient. These are the problems with the car. It also pollutes, in rough proportion to how many times you stop and start, but that's just an auxiliary effect. If you reduce the number of times you stop and start the car then it will seem more convenient, as one of the downsides will be removed. So you'll drive it more, and longer distances, which will in turn make you fatter, angrier, and more impatient. The primary ills of the car for the society are increased, and ultimately so are the emissions because people substitute longer drives for shorter ones.

That is to say, the emissions reduction of a roundabout is true only if the traffic patterns do not change in response to the increase in perceived vehicular convenience. However, if you did not expect traffic patterns to change then why would you make an additional investment in infrastructure in the first place?

Go ahead, loosen your belt, it'll cure your obesity.

- Greg

Leave a Reply

Name (required)

Mail (will not be published) (required)

Website

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Andrew Plowman

From:
Sent: Tuesday, January 31, 2012 10:28 AM
To: edinamail@ci.edina.mn.us; Andrew Plowman; sneal@ci.edina.mn.us; KKurt@ci.edina.mn.us
Cc: Barbara Hoganson; julie appel; susan peterson;
Subject: Why Bike Lanes are a Bad Idea

Please forward to the City Council

Thanks,

Bill Rodgers

Mayor James Hovland
Joni Bennett
Mary Brindle
Josh Sprague
Ann Swenson

Here are some reasons, in this link, of why bikers do not like bike lanes.

http://www.tpg1.com/protest/city/nobike/van_bikelanesbad.htm

Here are some reasons why some residents don't support bike lanes on Tracy Avenue:

Tracy Avenue is not a safe street for bikes. Hansen Rd and Olinger Rd are safer routes for bikers

Why do we need this bike route when there will be a new safer bike trail within 1/2 mile also Bredesen Park has great safer bike trails for families.

It is not fair to the residents to be assessed for bike lanes that they do not feel are necessary.

The bike lanes constitute 25% of the roadway and will probably be utilized by less than 5% of Edina residents.

If the bike lanes are so important find another way to pay for them.

Reduce the cost of the Tracy Project. Project Costs can probably be reduced by 15% of the total cost of the project by eliminating the bike lanes.

Bill Rodgers
6100 Arbour Lane
Edina, MN 55436

Andrew Plowman

From:
Sent: Tuesday, January 31, 2012 10:34 AM
To: edinamail@ci.edina.mn.us; Andrew Plowman; sneal@ci.edina.mn.us; KKurt@ci.edina.mn.us
Cc: Barbara Hoganson; julie appel; susan peterson;
Subject: In Support of Bike Lanes/Routes?

Please forward to the City Council

Thanks,

Bill Rodgers

Mayor James Hovland
Joni Bennett
Mary Brindle
Josh Sprague
Ann Swenson

There are apparently many residents in Edina that support Bike lanes on city streets.

This statistic can be found on pages 27-28 of the City of Edina Comprehensive Bicycle Transportation Plan:

- 66% of respondents said walking and biking trails were among the top three actions they would be willing to support with tax dollars; 44% ranked walking and biking trails as their first choice to support with tax dollars, the highest percentage for any action

What else did the report indicate? "89% of respondents were supportive of the City developing walking and biking trails; 65% were very supportive". See http://www.ci.edina.mn.us/PDFs/Edina%2520Bike%2520Plan%2520Final%25202007.pdf

The results of this survey need to be implemented. Or the survey should be repeated because times have changed. In 2007 the economy was at its highest. Today the economy is at its lowest.

If the 2007 results are repeated (66% of all respondents willing to pay taxes to implement the bike routes) I believe if the city engineers looked at the comprehensive plan and determined what all the bike route and bike lanes cost and divided it over all the taxpayers in the city there wouldn't be as much of an issue over bike lanes. Also why do we need a bike route within a 1/2 mile of the proposed new bike trail?

This is not an issue of NIMBY **Not In My Back Yard**. It is one of PDDTTM **Please Don't Do This To Me**. Don't expect a few residents to pay for the bike lanes of a few die hard cyclists. Assessing residents on a street for bike lanes that are 10-feet wide by 1 mile long is not fair. That's 25% of a 40- foot wide street. We need to share the pain with those that are willing to support walking and bike trails by paying taxes to build them. Then I wouldn't mind sharing the road.

Could the engineers determine the actual costs of all the bike lanes/routes that are in the comprehensive plan? This would be an interesting cost to know and easy to determine.

Thanks again,

Bill Rodgers
6100 Arbour Lane
Edina, MN 55436

Andrew Plowman

From:
Sent: Tuesday, January 31, 2012 11:24 AM
To: edinamail@ci.edina.mn.us; Andrew Plowman; sneal@ci.edina.mn.us
Cc: Barbara Hoganson; julie appel; susan peterson
Subject: Richard Bernstein Challenges Traffic Roundabouts

Please forward to City Council

This is an issue that needs to be considered.

Bill Rodgers

http://callsam.com/bernstein-media-center/richard-bernstein-videos/roundabouts-lawsuit/richard-bernstein-challenges-traffic-roundabouts

Andrew Plowman

From:
Sent: Tuesday, January 31, 2012 1:20 PM
To: edinamail@ci.edina.mn.us; KKurt@ci.edina.mn.us; sneal@ci.edina.mn.us; Andrew Plowman
Cc: karbergman@edina.k12.mn.us; Barbara Hoganson ; Steve and Linda Enck; ; Kent Gravelle; William Cosgrove;

Subject: Federal Disability Lawsuit Challenges Traffic Roundabouts

Please forward to the Mayor and City Council.

Thanks,
Bill Rodgers

Here are several links and comments related to roundabouts.

I am not against roundabouts. I think they are great in the right place. Is the corner of Benton and Tracy in Edina the right place? Is it the right thing to do?

The existing intersection is unusual/different. Apparently we are used to it. There hasn't been an accident there in over 30 years. Talk to residents in the corner houses some have lived there for over three decades

If it isn't broke don't fix it. We could have more problems with a roundabout than what we haven't had with what we have.

Also, how many roundabouts have you seen in the front yards of private homes? It is pretty awesome and personal. Have you thought how that would affect you? Our city engineers sure haven't. I'm sure they have read all the positive information about roundabouts and see roundabouts as a solution for all intersection issues.

Please take the time to look at these links and consider carefully what you do.

Thanks again for listening

Bill Rodgers
6100 Arbour Lane
Edina, MN 55436

http://gazettextra.com/news/2011/nov/15/roundabout-plan-detoured/
We have not had an accident at this intersection in over 30 years. If it isn't broke don't fix it. Listen to the residents.

http://www.dailytribune.com/articles/2008/03/10/localnews/20080310-archive1.txt?viewmode
Do we want to put this roundabout in and find out that we need to add signals? We will be back to a four way stop with a circle in the middle.

http://callsam.com/bernstein-media-center/richard-bernstein-news-fighting-for-justice/federal-disability-lawsuit-challenges-traffic-roundabouts
Click on the news video lower in the article.

05-13-2010, 09:24 AM

MI-Roger
Senior Member

Join Date: Oct 2007
563 posts, read 836,377 times
Reputation: 366

So, M-DOT is beginning to have second thoughts regarding Roundabouts?

I saw an article in the annarbor.com electronic newspaper last night that included a link to a special survey being conducted by Wayne State University for M-DOT regarding roundabouts.

After forcing these things upon the citizens of Michigan for the past few years, I am guessing they are receiving enough public pressure to reassess their position.

Personally, I don't like them. I agree they can be a big benefit for low speed low traffic volume routes. But in this use they are like the "Yield" signs that were removed from rural intersections years ago because they were proven to be ineffective at preventing crashes.

My biggest complant with Roundabouts is MDOT's crusade to place these traffic circles in moderate speed (45mph to 50mph) heavily travelled roads. I project a huge increase in side-swipe collisions at these installations.

Think about it. The average MI driver had 15 years of traffic rule observation, followed by classroom training, then followed by supervised driving in a dual brake vehicle to learn how to properly execute the traditional stop style intersections and accompanying rules. Now we find ourselves on tight circular roundabouts with no instruction on their proper use. Even if I consider myself competent at using traffic circles, how can I have any comfort at knowing the abilities and knowledge of the other drivers?

Shoot; look at how many drivers use 4-way stops improperly, and how many jump the Green Light when executing a left hand turn in front of oncoming traffic! We are to assume these same fools know how to use roundabouts correctly?

MDOT's decision to remove servicable intersections and replace them with roundabouts, then install so many "Right Turn Only" signs and yellow/black chevron billboards that sight lines of oncoming traffic are completely blocked (Lee Rd at US23) is a foolish waste of our State's scant financial resources.

[+] Rate this post positively

Read more: http://www.city-data.com/forum/michigan/974667-so-m-dot-beginning-have-second.html#ixzz1l3gpEACl

Andrew Plowman

From:
Sent: Wednesday, February 01, 2012 6:38 PM
To: Janet Conn; Andrew Plowman
Cc:

Subject: Re: Tracy/Benton Redesign-Grove St Resident :)

Hello Andrew Plowman,

We have a very involved neighborhood, here on Grove Street. This is a response from one of them and I'd like to agree and reiterate her thoughts as follows.

I too considered all the proposals, diagrams, etc on-line at City Hall, and really feel roundabouts are a nuisance. They look so good on paper, I know! But I drive the ones over near Target and Galleria *daily* and truly wonder what in the world our City Planners were thinking. Accidents just WAITING to happen! Seriously, please just repair and neaten up Tracy and we'll all be fine. I'm also a big biker, (even in winter). I'd love a little lane, if possible. (Edina is sorely missing bike links...btw) And it'd be good for the kids too. But please please please, no roundabout.

Thank you.
Sincerely,

Leanne Montgomery
5400 Grove St.

From:
To: aplowman@wsbeng.com

Sent: Monday, January 30, 2012 3:49 PM
Subject: Tracy/Benton Redesign

I live on Oak Lane and thus regularly drive through the intersection of Tracy and Benton from one direction or another. I have seen the proposal for a roundabout at that intersection, and spoken with one of the residents most immediately affected by the plan. **I do not think that Tracy needs a roundabout or indeed any reconfiguration along its length.**

The current width of the street accommodates automobile traffic, bicycles and parking very well. Painting in bike lanes would actually reduce the flexibility that allows cars and bikes to co-exist so comfortably.

As to the roundabout, it seems to be a solution in search of a problem. Yes, sometimes cars coming in from different angles have to maneuver around each other, but there appears to be no history of accidents. And school buses may get backed up when it is time to drop off or pick up, but this is for a brief period a couple of times a day, when school is in session. This certainly doesn't warrant the creation of a costly roundabout that would make life harder for people living on the intersection.

Cost is another reason not to proceed with this plan. Asking people on Tracy to pay over $5000 for "improvements" they neither want nor need would be very unfair.

Thank you for respecting the wishes of the neighborhood.

Janet Conn
5804 Oak Lane
Edina

Andrew Plowman

From:
Sent: Tuesday, January 31, 2012 4:44 PM
To: Andrew Plowman
Cc:
Subject: RE: Two completed Surveys - Tracy Ave project

Andy - Thanks for the well thought-out reply.

Tom

On Jan 31, 2012 4:37 PM, "Andrew Plowman" <APlowman@wsbeng.com> wrote:
Tom,

I have not read through the entire report either. I will start from the other direction to say why, in my opinion, a roundabout is the most ideal solution and how we came upon this solution.

When starting this project we asked residents (that lived on the corridor) several items. Two items that were of concern to residents were; speed and confusion at the Benton/Tracy intersection. We reviewed the conditions of the intersection and noticed, that despite a lack of crashes historically, the intersection does not operate well and there appears to be a potential for accidents given the confusing nature of the intersection.

At that point we analyzed options. We first thought about realigning the west leg. This option is viable, however cost was a consideration as well. This impact would necessitate a large retaining wall on the south side of the realigned roadway as well as increased limits of construction to match in with the existing roadway. In addition, there were issues with increasing the NW corner property's driveway well over 70'. In addition, the operations of the intersection during school closing and opening hours would not be completely fixed since roundabouts are more efficient than stop controlled intersections.

The next option we analyzed was a roundabout. Our first look of it, we thought there was probably not a way of doing this without taking someone's house. That is something we did not want to do. After laying it out and making the roundabout more elliptical in shape, we were able to accomplish most of our goals; 1. Increase intersection efficiency, 2. Minimize additional cost, 3. Provide a traffic calming measure and 4. And create a safe pedestrian and vehicle intersection. We realized after further coordination with the school and being on-site that the roundabout also provides parents a way to safely pick up their children by allowing a U-turn maneuver at the intersection for parents coming from the south and wanting to access the parking bay.

The roundabout in Richfield at 66th and Portland had similar concerns due to the proximity to the community pool and the amount of children that walk to get there. It has been in operation for 3 years and there are 0 reported pedestrian crashes. And, that is a dual lane roundabout situation.

In my professional opinion, the lack of yielding simply means longer potential wait times to find gaps or vehicle recognition, it isn't indicating near misses and/or actual accidents. I believe it recognizes the fact that pedestrians and motorists are both paying attention to one another before the move is made. I do believe pedestrians are given a false sense of security when crossing at a signal or 4 way stop controlled intersection.

That is a brief summary of how we go to where we are.

I do thank you for your interest.

Andrew Plowman, PE
Transportation Project Manager
d:763-287-7149 | c:612-360-1311
WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 | Minneapolis, MN 55416

-----Original Message-----
From:
Sent: Tuesday, January 31, 2012 4:01 PM
To: Andrew Plowman
Cc:
Subject: Re: Two completed Surveys - Tracy Ave project

Andy - While I certainly did not read the entire report in depth, a review of several chapters turned up some concerning data.

In reading the report (http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_572.pdf), I have some large questions about the viability of such a roundabout in a residential location next to a busy elementary school and playground.

Table 62: Pedestrian behavior at common intersection-type crosswalks.- Table shows that at a stop sign intersection, 100% of the time pedestrians proceeds as normal. I infer from that data that 100% of the time vehicles yield. This seems like the ideal situation.

Table 63: Motorist behaviors by traffic control type. - Table shows that in a roundabout, only 68% of vehicles yielded to a pedestrian.
32% did not. (The article states that 1-lane roundabouts increases the amount of yielding. Still 17% of vehicles did not yield to a pedestrian when they should have).

Analysis of Findings : "What is the yielding behavior of motorists when they encounter a pedestrian who is crossing or waiting to cross?
On average across all sites, approximately 30% of the motorists did not yield to pedestrians who were crossing or waiting to cross." That said, there did not seem to be imminent danger - "In all but one case, the pedestrians were waiting to cross, so there was no imminent risk."

Conclusion - Safety performance "Motorists not yielding to pedestrians ranged from 48% at uncontrolled locations to 32% at roundabouts to 15% at signalized locations to 4% at stopcontrolled sites. Crossings in which the behavior of the pedestrian was considered to be normal were 70%, 85%, 90%, and 100% for uncontrolled, yield-controlled, signalized, and stop-controlled locations, respectively "

This data leads me to believe that a roundabout causes vehicles to yield less to pedestrians compared to the existing 4-way stop.An 8 fold increase in vehicles not yielding to pedestrians doesn't seem to be a worthwhile change in a neighborhood setting next to an elementary school.

What is the goal of the roundabout? If the intersection needs to be changed, I support rerouting the west leg of Benton. However, I am still not in support of a roundabout due to pedestrian safety compared to other options

(or compared with leaving the intersection as-is).

Thanks,
Tom Kluis

On 1/31/12, Andrew Plowman <APlowman@wsbeng.com> wrote:
> Tom,
>
> http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_572.pdf
>
> This is kind of a boring piece of text, but analyzes roundabouts in
> regards to pedestrian safety.
>
>
>
> Andrew Plowman, PE
> Transportation Project Manager
> d:763-287-7149 | c:612-360-1311
> WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 |
> Minneapolis, MN
> 55416
>
> -----Original Message-----
> From
> Sent: Tuesday, January 31, 2012 9:57 AM
> To: Andrew Plowman
> Cc:
> Subject: Re: Two completed Surveys - Tracy Ave project
>
> Andy - The first linked document compared roundabouts with signaled
> intersections where traffic speed can be drastically higher. However,
> I did not see any comparisons with 4-way stops where traffic seems
> substantially slower as all directions need to stop. I would think a
> roundabout versus 4-way stop would increase the average speed of traffic.
>
> Do you have any studies comparing roundabouts with 4-way stops,
> especially near schools or with elderly drivers?
>
>
>
> On 1/31/12, Andrew Plowman <APlowman@wsbeng.com> wrote:
>> Tom,
>>
>> Thank you for the surveys. I will print off your email and get your
>> answers incorporated.
>>
>> I want to take a moment to address one of Kristin's comments
>> regarding pedestrian safety at the roundabout. It has been a common
>> concern amongst residents that roundabouts are not safe for pedestrians.
>> However, data has shown that they are very safe for pedestrians and

>> have been implemented successfully at elementary schools. I will
>> direct you to a couple of sites if either of you would like to read
>> up on some of that.
>>
>> http://www.ci.edina.mn.us/PDFs/EngineeringProjects/TracyAvenue/RAB_My
>> t
>> hs.pdf
>>
>> The link above will take you to a document titled, "Common Modern
>> Roundabout Myths". This document was completed by a company known as
>> DLZ out of Michigan. They provided the peer review on a roundabout
>> we worked on in Savage. If you go to Myth #9, it addresses
>> pedestrian safety at roundabouts and discusses some of the locations
>> near schools where roundabouts have been put in.
>>
>> http://www.modestogov.com/pwd/transportation/streets/roundabouts/vide
>> o
>> s.asp
>>
>> The next link is out of Modesto, CA. The first link they show is a
>> video of a roundabout in operation when a local school is adjourning
>> for the day.
>> You will be able to see the crossing guard and how the drivers and
>> pedestrians interact.
>>
>> Again, thank you for the time to fill out the survey. Sorry your
>> scanner didn't work, but this will work just the same.
>>
>> Thank you,
>> Andy
>>
>>
>>
>> From:
>> Sent: Tuesday, January 31, 2012 7:33 AM
>> To Andrew Plowman
>> Subject: Re: Two completed Surveys - Tracy Ave project
>>
>> Barbara, Andrew - Well, it looks like my scanning didn't go as
>> anticipated.
>> I'll just list the results here for brevity's sake:
>>
>> Tom:
>> I: Yes
>> II-Parking: Not Important
>> II-Cross Section: Parking Lane
>> II-Sidewalk: Not Important
>> II-Bumpouts: Yes
>> III-A:Roundabout: No
>> III-B: Leave as-is
>> III-C: Comments: Need to address safety of crosswalks at Tracy and Benton.

>>
>> Kristin:
>> I: Yes
>> II-Parking: Not Important
>> II-Cross Section: Leave As-is
>> II-Sidewalk: Not Important
>> II-Bumpouts: Yes
>> III-A:Roundabout: No
>> III-B: Realign West Leg
>> III-C: Comments: Concern about pedestrian safety with roundabout,
>> drivers will be focused on other cars rather than children and
>> pedestrians walking.
>>
>> Thanks and sorry for the issue with the blank surveys.
>>
>> Tom
>>
>> On Mon, Jan 30, 2012 at 8:02 PM, Tom Kluis
>> .
>> Andrew, Barbara - Please see two competed surveys from my wife and me
>> regarding the Tracy Avenue project.
>>
>> Thanks.
>>
>> Tom Kluis
>> 5824 Lyle Cir
>>
>>
>>
>>
>> Andrew Plowman, PE
>> Transportation Project Manager
>> d: 763-287-7149 | c: 612-360-1311
>> WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 |
>> Minneapolis, MN 55416
>>
>> [cid:image6fc5aa.JPG@96851776.46b3ded7]<http://www.wsbeng.com>
>>

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>>

FEASIBILITY STUDY – BA 368

ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix H

Roundabout Correspondence

City of Edina

February 1, 2012

Jack Sullivan, Assistant City Engineer
7450 Metro Blvd.
Edina, MN 55439

Re: Roundabouts

Mr. Sullivan,

I am writing to express support, from the police department, with regards to adding additional roundabouts in the City of Edina. In particular, we strongly back the use of roundabouts on Tracy Ave.

Just like other members of our community, our officers were skeptical about roundabouts when they first appeared in Edina. However, we have found roundabouts very helpful with the flow of traffic and the reduction in accidents.

The Minnesota Department of Transportation indicates that roundabouts show a 39 percent decrease in accidents and an 89 percent decrease in fatal crashes. Although I don't have the exact count in Edina, those roundabout numbers are consistent with what we observe in Edina.

In addition, our officers note an improved traffic flow with roundabouts versus stop signs and stop lights.

Although we do not have an outrageously high number of car accidents at Tracy Ave and Benton Ave, we do have congestion with the "out of place" four way stop. Drivers are often confused and agitated as they try to figure out who has the right of way.

Our officers are very supportive of implementing additional roundabouts and strongly encourage the use of them on Tracy Avenue.

Please let me know if you have any questions or if I can be of service in any way.

Sincerely,

Jeff Long

Police Chief

Edina Police Department
4801 West 50th Street
Edina, Minnesota
55424-1394

Administration (952) 826-1610
Fax (952) 826-1607
Police 24 hr. and TDD Line (952) 826-1600

Andrew Plowman

From:
Sent: Thursday, January 19, 2012 3:24 PM
To: Andrew Plowman
Cc: Brainard, James C; McBride, Mike T
Subject: RE: Question Regarding Fire Trucks through Roundabouts

Hi Andrew
Your questions are common, coming from communities that are just now considering roundabouts, I get three or four inquiries annually from fire chiefs in the Midwest. The community of Carmel has over 60 roundabouts that have in most cases taken the place of intersections. Roundabouts have been common in our community over the last four or five years. The Carmel Fire Department makes over 5,000 emergency responses annually and roundabouts are a non-issue in response times. I will answer your questions in the order you asked them:

First, to add to my comment above regarding response times, our Department is in the middle of a process to become an Accredited Agency through the Center for Public Safety Excellence (CPSE) and incident response times are a critical measurement. Our response times have not increased because of street and access issues including the use of roundabouts.

Safety is a major benefit! Our fire trucks and firefighters are not rushing through a 4 way intersection which is always hazardous even using Opti-Com signal controls. In a 4way stop intersection is was always confusing for other drivers who didn't understand how to get out of the way of an emergency vehicle. In a roundabout situation you are focused straight ahead and not side to side as in an intersection. Roundabouts keep traffic moving so it is easy to get out of the way of emergency vehicles. Our police department has a bit better statistics on this issue than us…but our vehicle accident responses by both agency's is 30% less in a roundabout than a typical intersection. Firefighters will tell you they feel safer negotiating a roundabout than any tradition intersection.

Some of our roundabouts are two lanes and some are one lane and some have access ramps for right turns only. Our apparatus do not have problems negotiating any layout. The secret of course is speed and if they try to use a roundabout at normal street speed … then they will find it harder to maneuver.

Of course there were skeptics because of the unfamiliarity. After driving them for a while and watching traffic flow easily, I believe people begin to wonder why no one considered them before. I have not heard of any cry to return to a signaled intersection.

Roundabouts are a bit of a challenge to motorist initially. But it doesn't take long before a comfort level set in with the drivers. We at first thought people getting out of the way on a roundabout would be a problem… but that didn't materialize simply because traffic is able to flow quickly and evenly.

If the fire chief in the community of Edina MN needs to talk to me personally, I would be happy to have that conversation. I have also included in this response, our Mayor, James Brainard, who is the visionary behind the initiative, and our city engineer Mike McBride who has a vast knowledge concerning roundabouts including design.

I hope you find the reply useful. Best of luck in your endeavor!

Respectfully,

Keith D. Smith
Fire Chief
Carmel Fire Department
Carmel Indiana 46032

From: Andrew Plowman [mailto:APlowman@wsbeng.com]
Sent: Thursday, January 19, 2012 3:00 PM
To: Smith, Keith
Subject: Question Regarding Fire Trucks through Roundabouts

Mr. Smith,

My name is Andrew Plowman and I am a Civil Engineer in Minnesota. The reason I am contacting you is to gather your thoughts concerning roundabouts and specifically how you feel the operations for fire trucks work through roundabouts as opposed to other intersection types.

I am working on a project in Edina, MN, where we are proposing a roundabout. The intersection currently is a 4 way stop, and has safety and operational issues. There is some concern because this corridor is down the road from the fire station and this is a primary route for the fire engines to take. I figured the best thing to do was gather information from people that have to negotiate through roundabouts all the time and their feelings towards having to do so, compared to signals or stop signs.

Some of the specific questions I am wondering about are the following:

- Do you notice a big impact on response time?
- Do you feel safer by having this form of control over a signal or stop sign?
- Do the fire trucks use the truck apron?
- Were you skeptical towards roundabouts before they were put in? Did your viewpoint change after they were put in?
- Do other motorists correctly operate the roundabout and get out of the fire truck's way? more so than signals or stop signs?

Any feedback you provide would be greatly appreciated. If you prefer contacting me by phone to discuss this, my information can be found below.

Thank you so much for your time,
Andy

Andrew Plowman, PE
Transportation Project Manager
d: 763-287-7149 | c: 612-360-1311
WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 | Minneapolis, MN 55416

Engineering • Planning
Environmental • Construction

Andrew Plowman

From:
Sent: Wednesday, January 25, 2012 9:31 AM
To: Andrew Plowman
Cc: Johnson, Lisa M; Russell, Jay; Benson, Bob; Miller, Sheila
Subject: RE: Benton Avenue

Andy,

Metro Transit operates express route 578 through the intersection of Benton and Tracy each weekday. In the mornings there are two buses before 700am that travel west on Benton and turns south on Tracy. In the afternoon two buses after 500pm travels north on Tracy and turns east onto Benton Avenue. A total of four buses throughout the day.

With the construction of a round-about at that intersection, buses would either have to be allowed through the area with the turning movements unhindered during construction or we would need to get the City of Edina's approval to go around the block to the south of the intersection of Tracy and Benton. Going around the block would be physically possible although these are residential streets that have had no buses on them in the past.

With the completion of the round-about, it would have to be build so it could handle the turning movement of a full size or articulated 60 foot bus. Also, with the completion of the round-about, we would like to have our two bus stops reinstalled just before the round-about at the crosswalk that is ADA accessible. The two current bus stops are on WB Benton at Tracy and on NB Tracy at Benton.

Brad Smith
Transit Supervisor
Metro Transit

From: Andrew Plowman [mailto:APlowman@wsbeng.com]
Sent: Tuesday, January 24, 2012 11:51 AM
To: Smith, Brad
Subject: RE: Benton Avenu

Brad,

In addition to the construction activities and how the buses run during that time, we are wanting a letter of acknowledgement from Metro Transit regarding the bus stop long term operation. Basically, whether the current location is anticipated to stay and how it will operate with the roundabout. Sort of a memo that Metro Transit has looked at the proposed project and talk about the construction activities and the long term location of the bus stop.

Is that something that we could get from you?

I think you may need some more information from me, give me a call and we can discuss it.

Andrew Plowman, PE
Transportation Project Manager
d: 763-287-7149 | c: 612-360-1311
WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 | Minneapolis, MN 55416

From: Smith, Brad
Sent: Tuesday, January 24, 2012 10:48 AM
To: Andrew Plowman
Subject: Benton Avenu

Andy,

I believe we are playing phone tag. But then again you probable could use my e-mail. Yes, the express Rt. 578 runs along Benton and along Tracy. Two AM buses and two PM buses. I would love to be involved with this project as I was with 70th Street. If Benton is closed, I will need to find a different way through the neighborhood. Perhaps Vernon to southbound Tracy in the AM and the reverse in the PM. Northbound Tracy to Vernon. Let's stay in touch.

Brad Smith
Transit Supervisor
Metro Transit

Andrew Plowman

From: Smith, Brad
Sent: Wednesday, January 25, 2012 10:03 AM
To: Andrew Plowman
Subject: FW: Benton roundabout
Attachments: MAP_587_2012-12-03-Idea.pdf

Andy,

I just ran this by our Service Development people to make sure they didn't have some other plans on the table. They are interested in seeing the roundabout plans. Have you got them that you could send? I really think we can work around the bus stop issues if we adjust any routes. Thanks.

Brad Smith
Transit Supervisor
Metro Transit

From: Dillery, John
Sent: Wednesday, January 25, 2012 9:49 AM
To: Miller, Sheila
Cc: Smith, Brad
Subject: RE: Benton roundabout

Brad, Sheila,

I would like to have an opportunity to review the round about plans soon please. Does anyone have a set of plans here?

I have a route re-design idea that would have some affect on bus stops at the intersection. It is based on the assumption that we will have a park & ride near Eden & Vernon Ave.
This possibility is looking more likely now that the city's "GrandView" small area plan recommends a park & ride on city property.

Please see map of proposed Route 587 with new B branch.
Maybe the best idea would be to see if we could have a bus stop on eastbound Benton Ave farside of Tracy to allow us flexibility in setting our route alignment.

Route 578C would no longer need to operate on Benton Ave with this idea and would be cut back to loop on Colonial Way, a few blocks to the south of Benton Ave.

John Dillery
Senior Transit Planner
Service Development
Metro Transit

From: Miller, Sheila
Sent: Wednesday, January 25, 2012 9:36 AM

To: Dillery, John
Cc: Smith, Brad
Subject: FW: Benton roundabout

Brad & I thought you would be interested; do you anticipate any route changes in this area?

From: Smith, Brad
Sent: Wednesday, January 25, 2012 9:31 AM
To: 'Andrew Plowman'
Cc: Johnson, Lisa M; Russell, Jay; Benson, Bob; Miller, Sheila
Subject: RE: Benton Avenue

Andy,

Metro Transit operates express route 578 through the intersection of Benton and Tracy each weekday. In the mornings there are two buses before 700am that travel west on Benton and turns south on Tracy. In the afternoon two buses after 500pm travels north on Tracy and turns east onto Benton Avenue. A total of four buses throughout the day.

With the construction of a round-about at that intersection, buses would either have to be allowed through the area with the turning movements unhindered during construction or we would need to get the City of Edina's approval to go around the block to the south of the intersection of Tracy and Benton. Going around the block would be physically possible although these are residential streets that have had no buses on them in the past.

With the completion of the round-about, it would have to be build so it could handle the turning movement of a full size or articulated 60 foot bus. Also, with the completion of the round-about, we would like to have our two bus stops reinstalled just before the round-about at the crosswalk that is ADA accessible. The two current bus stops are on WB Benton at Tracy and on NB Tracy at Benton.

Brad Smith
Transit Supervisor
Metro Transit

From: Andrew Plowman [mailto:APlowman@wsbeng.com]
Sent: Tuesday, January 24, 2012 11:51 AM
To: Smith, Brad
Subject: RE: Benton Avenu

Brad,

In addition to the construction activities and how the buses run during that time, we are wanting a letter of acknowledgement from Metro Transit regarding the bus stop long term operation. Basically, whether the current location is anticipated to stay and how it will operate with the roundabout. Sort of a memo that Metro Transit has looked at the proposed project and talk about the construction activities and the long term location of the bus stop.

Is that something that we could get from you?

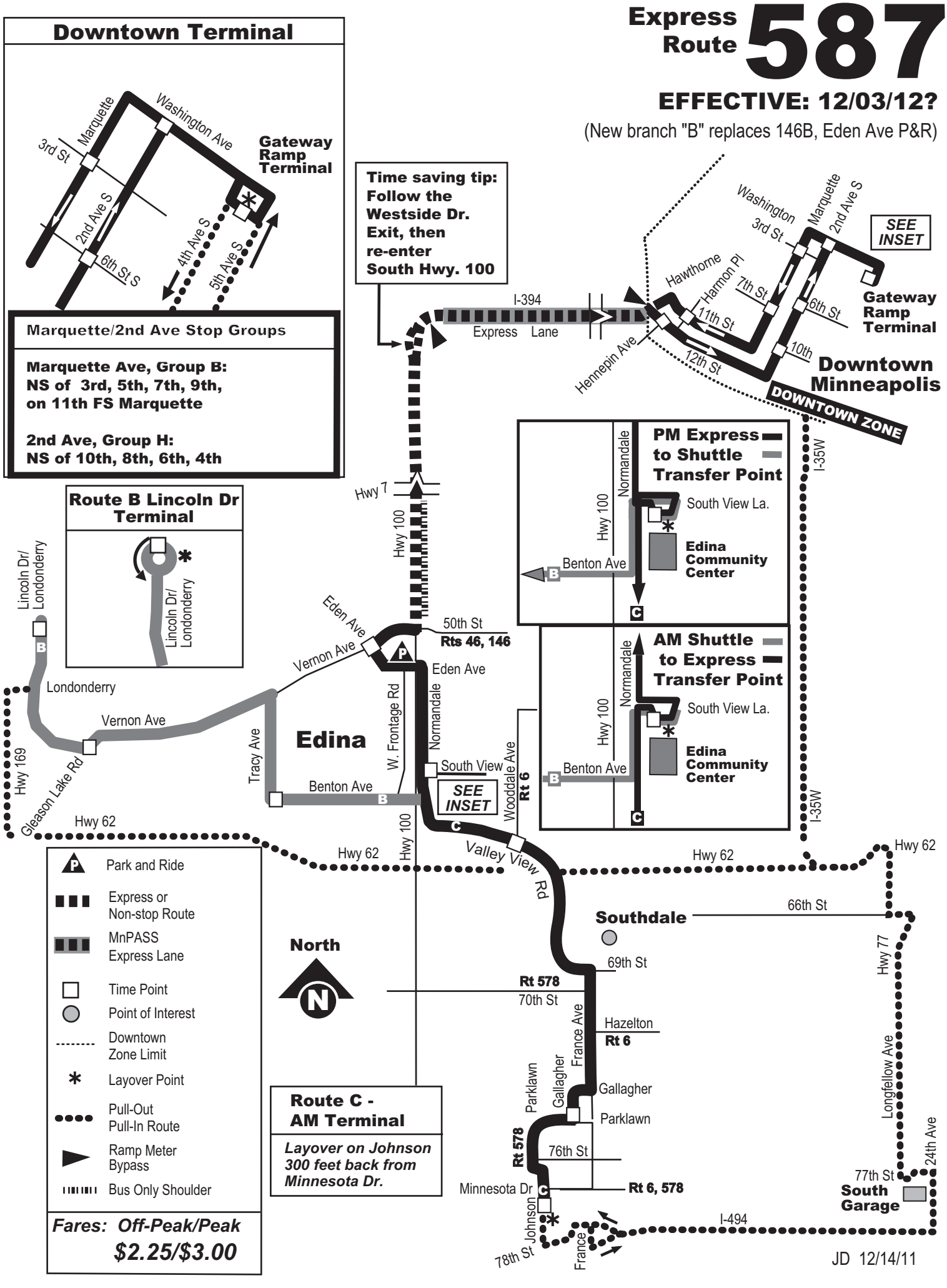
I think you may need some more information from me, give me a call and we can discuss it.

Andrew Plowman, PE
Transportation Project Manager

Express Route 587

EFFECTIVE: 12/03/12?

(New branch "B" replaces 146B, Eden Ave P&R)



FEASIBILITY STUDY – BA 368

ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

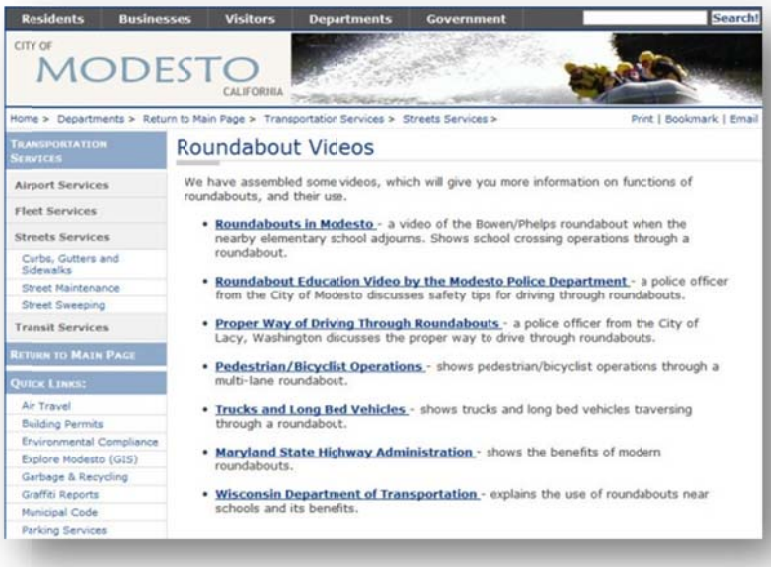
Appendix I

Roundabout Links

Roundabout Links:

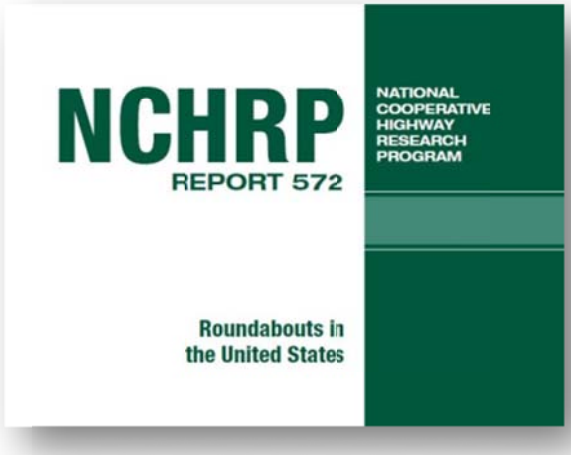
1. *Description: Link to videos on City of Modesto, California website. First video is a roundabout near an elementary school when school adjourns.*

http://www.modestogov.com/pwd/transportation/streets/roundabouts/videos.asp



2. *Description: NCHRP Report 572, Roundabouts in the United States. Discusses safety performance of Roundabouts, including pedestrian safety.*

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_572.pdf

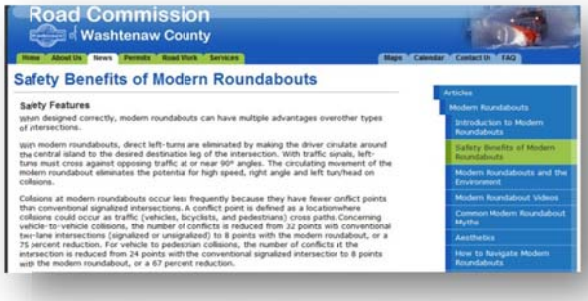


3. *Description: School zone roundabout case study in Howard, Wisconsin. The roundabout alternative was met with public skepticism. The roundabout implementation turned out to be a success.*

http://www.walkinginfo.org/pedsafe/casestudy.cfm?CS_NUM=49

4. *Description: Washtenaw County Roundabout site, provides safety benefits of roundabouts.*

http://www.wcroads.org/news/roundabouts/safety.htm

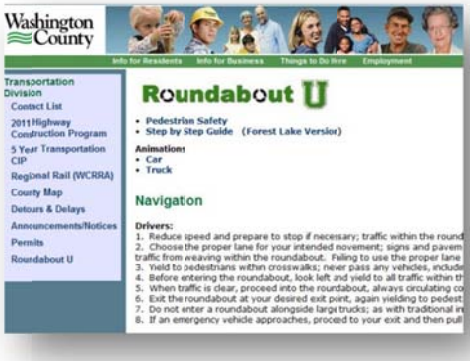


5. *Description: 45 foot ladder truck through roundabout in Washington County, Wisconsin*

http://www.youtube.com/watch?v=d5dxB-nFEZA

6. *Description: Washington County, MN: Roundabout U Website. Discusses safety benefits and advantages of roundabouts.*

http://www.co.washington.mn.us/info_for_residents/transportation_division/roundabout_u/



FEASIBILITY STUDY – BA 368

ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix J

Fire Truck Memo

WSB & Associates, Inc.

Infrastructure ■ Engineering ■ Planning ■ Construction

701 Xenia Avenue South
Suite 300
Minneapolis, MN 55416
Tel: 763 541-4800
Fax: 763 541-1700

Memorandum

To: ***Wayne Houle, City Engineer, City of Edina***
Jack Sullivan, Assistant City Engineer, City of Edina

From: ***Andrew Plowman, WSB & Associates, Inc.***

Date: ***January 24, 2012***

Re: ***Fire Truck Turning Movements at Proposed Roundabout Tracy Avenue and Benton Avenue***
Tracy Avenue Reconstruction Project
Edina, MN
WSB Project Number 01686-25

This memo serves as a summary of the Edina Fire Engine turning movement analysis through the proposed roundabout at the intersection of Tracy Avenue and Benton Avenue. We analyzed the turning movements through the roundabout. We were told the primary movement to emergency calls is the northbound movement, originating at Fire Station 1, located at 6250 Tracy Avenue which is approximately ½ mile south of the intersection of Tracy Avenue and Benton Avenue. We analyzed this movement for the ability for the truck to use only the driving lanes (and not the truck apron) and analyzed the response time loss due to the roundabout compared to the current stop configuration condition.

In summary, the fire truck does not need to use the truck apron to navigate the proposed roundabout intersection and conservatively the response time is increased by 4.5 seconds compared to the existing 4 way stop condition. The assumptions used for the response time calculation is conservative in nature, it is anticipated actual response time change will be minimal.

Proposed Roundabout:

Below (Figure 1) is a rendering of the proposed roundabout. A few of the reasons for proposing a roundabout at this location are the following:

- Improve safety for pedestrians and motorists
- Improve efficiency of the intersection
- Allow for U-Turns at the intersection
- Eliminate the confusing nature of the existing intersection

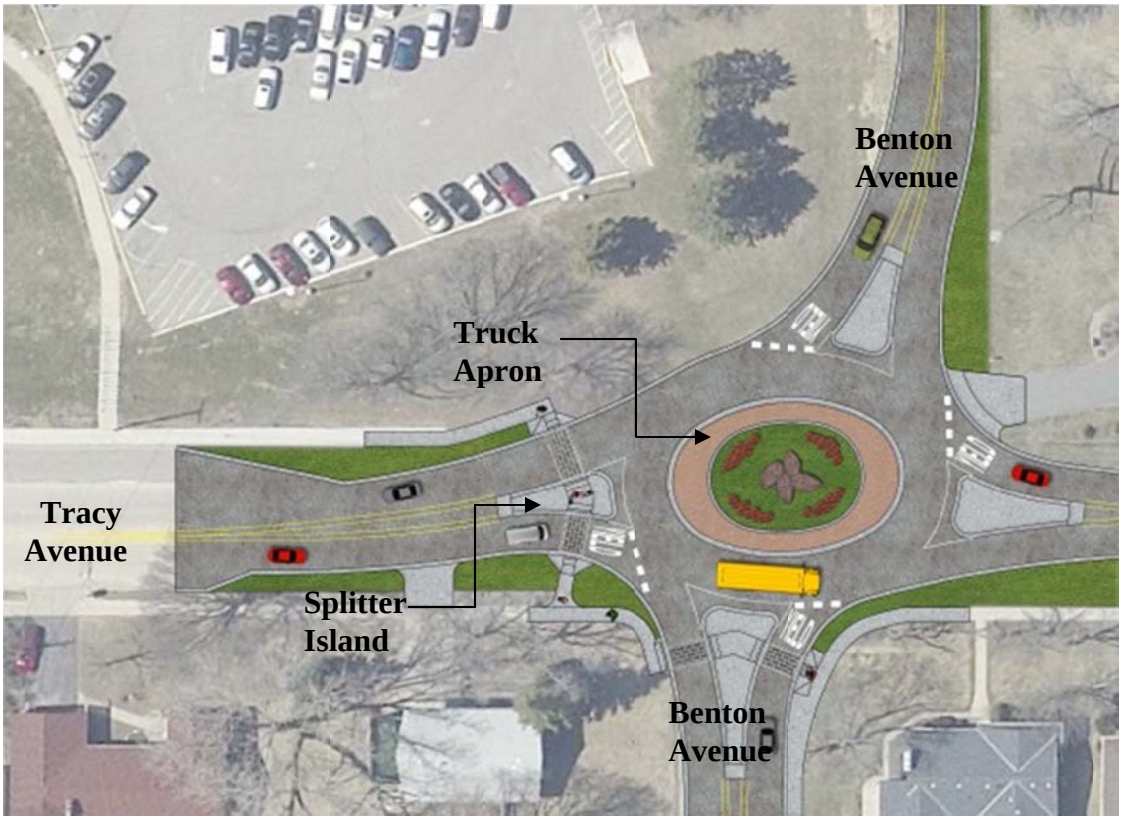


Figure 1

Turning Movement Analysis:

The design vehicle used is a 47' long fire truck, which we are told is the longest fire truck in the City of Edina's fleet. The primary movement for emergency calls is the northbound movement. We analyzed the truck turning movement with the intention of not having to use the truck apron. The truck apron is usually needed for large semi-trucks to make the turns at the intersection. Figure 2, below, shows the outside envelope of the truck turning movement for the northbound and southbound thru movements. Analysis was conducted for the other directions as well, but not shown. The fire truck is able to make all the necessary movements.

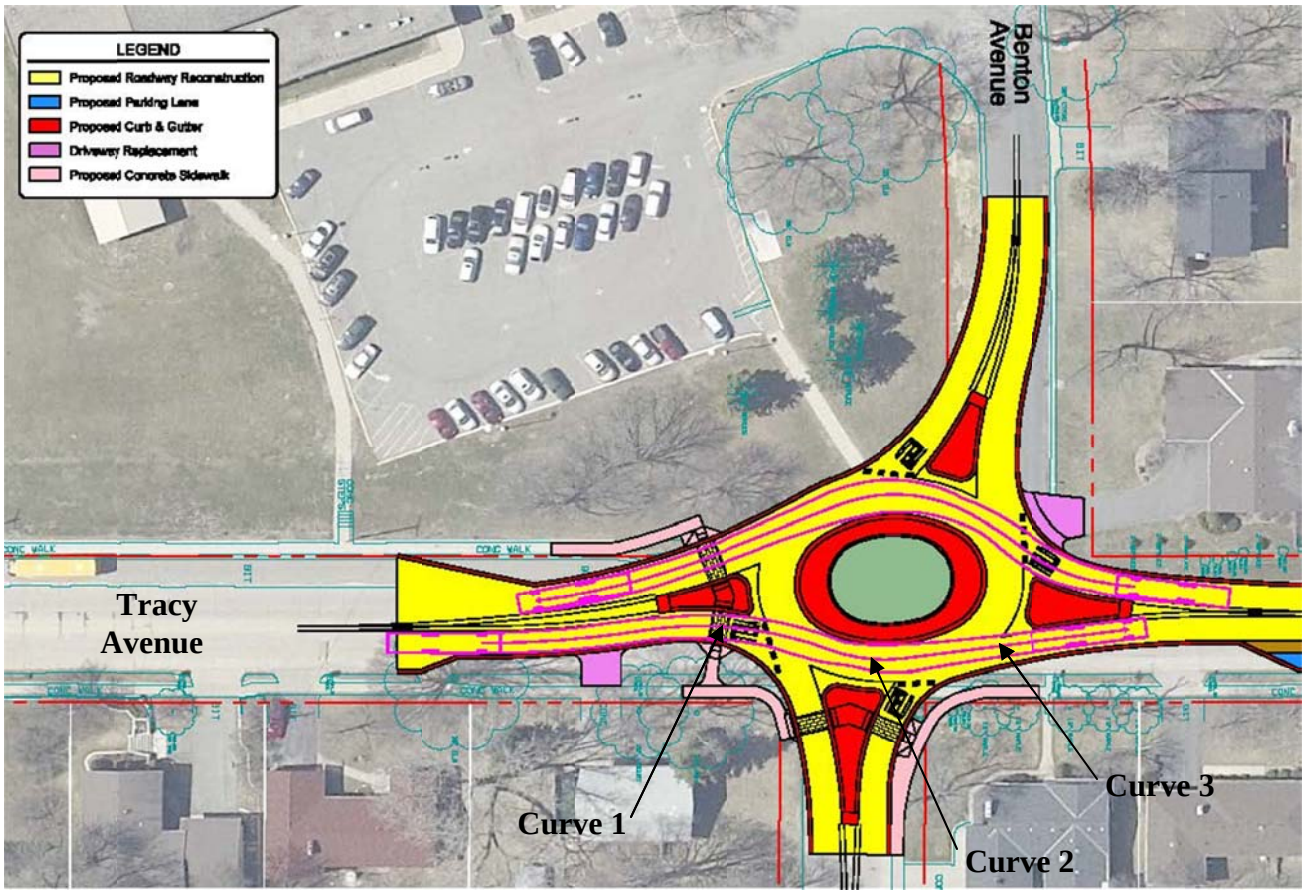


Figure 2

Response Time Loss Analysis:

We analyzed the potential loss of response time based on the intersection changing from a 4-way stop controlled intersection to a roundabout intersection. The roundabout intersection includes a series of 3 consecutive curves (labeled Curves 1, 2 and 3 in Figure 2) to maneuver the through the intersection.

Speed is correlated to the curve radius, which is the reason vehicles cannot go as fast on curved roadways. Roundabouts are designed to slow traffic, which happens with the introduction of a median island (splitter island) in the roadway and a central island in the middle of the roundabout. The splitter island curves at the entrance of the roundabout, used to deflect (or curve) drivers at the entry. The tightest radius is the second radius in the turn (the turn around the central island curb, labeled Curve 2). The radius is 125', approximately. To put this radius into perspective, the radius north of Olinger Boulevard is 233'.

Based on the speed-radius relationship, a typical automobile is able to negotiate a 125' radius at 20 mph. It is assumed a fire truck will not be able to negotiate these curves at the same speed as a car, therefore a conservative speed of 15 mph was used.

Fire trucks are able to legally drive through stop controlled intersections without stopping. However, they are required to use caution when driving through said intersections. We assume the maximum speed through this intersection is 30 mph, as a conservative assumption.

The approximate length to negotiate through the 3 curves of the roundabout is 200'. The corresponding time based on 15 mph, to traverse this distance, is 9.1 seconds. The corresponding time to negotiate 200' in length, based on 30 mph, is 4.6 seconds. The additional travel time to negotiate the roundabout is 4.5 seconds.

Travel Time 4 way stop:

30 mph = 44 ft/s;
200 (ft) / 44 (ft/s) = 4.5 seconds

Travel Time Roundabout:

15 mph = 22 ft/s;
200 (ft) / 22 (ft/s) = 9.1 seconds

Additional Travel Time = 9.1s – 4.5s = 4.6s

Andrew Plowman

From: Smith, Keith
Sent: Thursday, January 19, 2012 3:24 PM
To: Andrew Plowman
Cc: Brainard, James C; McBride, Mike T
Subject: RE: Question Regarding Fire Trucks through Roundabouts

Hi Andrew
Your questions are common, coming from communities that are just now considering roundabouts, I get three or four inquiries annually from fire chiefs in the Midwest. The community of Carmel has over 60 roundabouts that have in most cases taken the place of intersections. Roundabouts have been common in our community over the last four or five years. The Carmel Fire Department makes over 5,000 emergency responses annually and roundabouts are a non-issue in response times. I will answer your questions in the order you asked them:

First, to add to my comment above regarding response times, our Department is in the middle of a process to become an Accredited Agency through the Center for Public Safety Excellence (CPSE) and incident response times are a critical measurement. Our response times have not increased because of street and access issues including the use of roundabouts.

Safety is a major benefit! Our fire trucks and firefighters are not rushing through a 4 way intersection which is always hazardous even using Opti-Com signal controls. In a 4way stop intersection is was always confusing for other drivers who didn't understand how to get out of the way of an emergency vehicle. In a roundabout situation you are focused straight ahead and not side to side as in an intersection. Roundabouts keep traffic moving so it is easy to get out of the way of emergency vehicles. Our police department has a bit better statistics on this issue than us…but our vehicle accident responses by both agency's is 30% less in a roundabout than a typical intersection. Firefighters will tell you they feel safer negotiating a roundabout than any tradition intersection.

Some of our roundabouts are two lanes and some are one lane and some have access ramps for right turns only. Our apparatus do not have problems negotiating any layout. The secret of course is speed and if they try to use a roundabout at normal street speed … then they will find it harder to maneuver.

Of course there were skeptics because of the unfamiliarity. After driving them for a while and watching traffic flow easily, I believe people begin to wonder why no one considered them before. I have not heard of any cry to return to a signaled intersection.

Roundabouts are a bit of a challenge to motorist initially. But it doesn't take long before a comfort level set in with the drivers. We at first thought people getting out of the way on a roundabout would be a problem… but that didn't materialize simply because traffic is able to flow quickly and evenly.

If the fire chief in the community of Edina MN needs to talk to me personally, I would be happy to have that conversation. I have also included in this response, our Mayor, James Brainard, who is the visionary behind the initiative, and our city engineer Mike McBride who has a vast knowledge concerning roundabouts including design.

I hope you find the reply useful. Best of luck in your endeavor!

Respectfully,

Keith D. Smith
Fire Chief
Carmel Fire Department
Carmel Indiana 46032

From: Andrew Plowman [mailto:APlowman@wsbeng.com]
Sent: Thursday, January 19, 2012 3:00 PM
To: Smith, Keith
Subject: Question Regarding Fire Trucks through Roundabouts

Mr. Smith,

My name is Andrew Plowman and I am a Civil Engineer in Minnesota. The reason I am contacting you is to gather your thoughts concerning roundabouts and specifically how you feel the operations for fire trucks work through roundabouts as opposed to other intersection types.

I am working on a project in Edina, MN, where we are proposing a roundabout. The intersection currently is a 4 way stop, and has safety and operational issues. There is some concern because this corridor is down the road from the fire station and this is a primary route for the fire engines to take. I figured the best thing to do was gather information from people that have to negotiate through roundabouts all the time and their feelings towards having to do so, compared to signals or stop signs.

Some of the specific questions I am wondering about are the following:

- Do you notice a big impact on response time?
- Do you feel safer by having this form of control over a signal or stop sign?
- Do the fire trucks use the truck apron?
- Were you skeptical towards roundabouts before they were put in? Did your viewpoint change after they were put in?
- Do other motorists correctly operate the roundabout and get out of the fire truck's way? more so than signals or stop signs?

Any feedback you provide would be greatly appreciated. If you prefer contacting me by phone to discuss this, my information can be found below.

Thank you so much for your time,
Andy

Andrew Plowman, PE
Transportation Project Manager
d: 763-287-7149 | c: 612-360-1311
WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 | Minneapolis, MN 55416

Engineering • Planning
Environmental • Construction

FEASIBILITY STUDY – BA 368
ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix K

B660 Bike Lane Comparison Cost Memo

WSB & Associates, Inc.
Infrastructure ■ Engineering ■ Planning ■ Construction

701 Xenia Avenue South
Suite 300
Minneapolis, MN 55416
Tel: 763 541-4800
Fax: 763 541-1700

Memorandum

To: *Wayne Houle, City of Edina*

From: *Andrew Plowman, WSB & Associates, Inc.*

Date: *January 24, 2012*

Re: ***B660 Curb and Gutter versus 5' Bituminous Bike Lane with B618 Curb and Gutter***
Tracy Avenue Reconstruction Project
Edina, MN
WSB Project Number 01686-25

This memo is intended to compare the costs of two alternatives to on-street bike lane designs; B660 Curb and Gutter and five foot of bituminous pavement adjacent to B618 Curb and Gutter. In summary, the cost between the two options in terms of construction costs is virtually the same price per linear foot, which is in the range of $24 and $25 based on prices from the 2011 construction season.

Options:

According to the Mn/DOT Bikeway Facility Design Manual, dated March 2007, Chapter 4-3.3.1 states, "The longitudinal joint between the gutter pan (the curb and gutter) and roadway surface can be hazardous to a cyclist." "In locations with greater than 10 percent truck traffic, and at higher traffic speeds and traffic volumes as indicated in Table 4-1, a minimum bicycle width of 1.8 m (6 ft) is preferred, **with a minimum width of 1.5 m (5 ft) of smooth, rideable surface provided."** This means either having a full concrete gutter pan of 5' (B660 C & G) or providing 5' of bituminous surface next to standard city gutter pan of 1.5' (B618 C & G). See Figure 1.

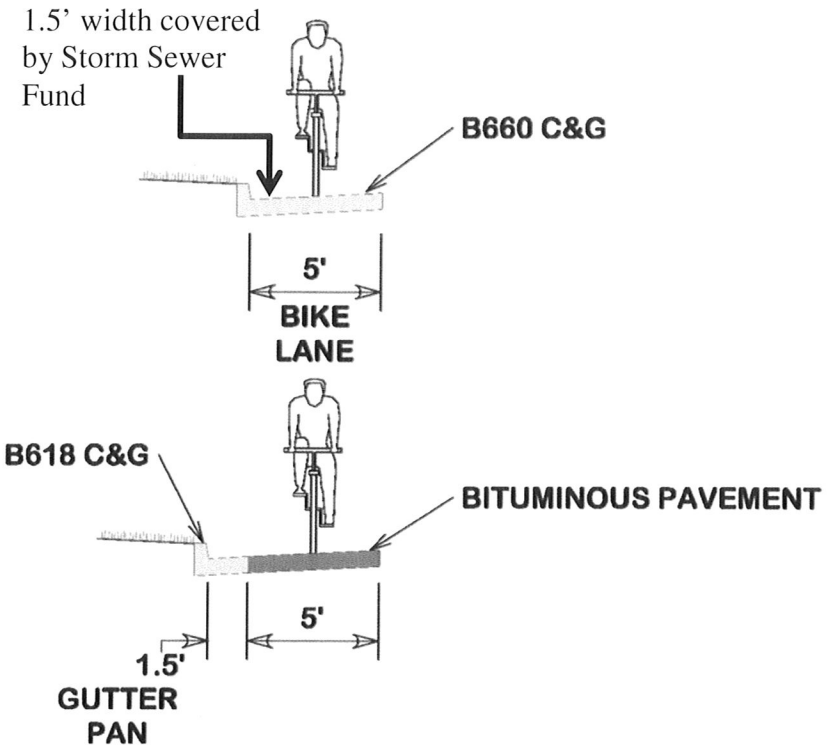


Figure 1

Costs

The costs are based on 2010 and 2011 average bid prices and the average of the bids taken from Edina's 70th Street Reconstruction project where over 7000' of B660 curb and gutter was placed.

B660 Option: **$25.00/LF (linear foot)**

B618 Option: **$25.38/LF**

- 5' Bituminous Pavement: Assume 7" of bituminous pavement
  - 0.22 tons/foot*$60/ton = **$13.20/LF**
- Additional Aggregate below 1.5' Gutter (assume 6" aggregate base)
  - 0.028 cu. yd./foot*$18/cu. yd. = **$0.50/LF**
- B618 C & G: **$11/LF**
- Additional Excavation: Assume 1' excavation depth
  - 0.17 cu. yd./foot*$4/cu. yd. = **$0.68/LF**

- Additional Treatment: The additional quantity of impervious pavement over a 2200' length of roadway is 3300 square feet (0.08 AC). Additional impervious area may require additional drainage and treatment structures, resulting in higher costs.

Summary

When reviewing only the construction costs, the options are very similar. The prices may vary depending on the contractor, time of year and price of materials. If maintaining existing width is a priority, the B660 option saves 1.5' of total roadway width and results in a lower construction cost as well.

FEASIBILITY STUDY – BA 368
ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix L

Countryside Elementary School Site Council Presentation

Countryside Elementary School
Site Council Meeting

Tracy Avenue

(Tracy Avenue/Benton Avenue Intersection)

January 10, 2012

CITY OF EDINA

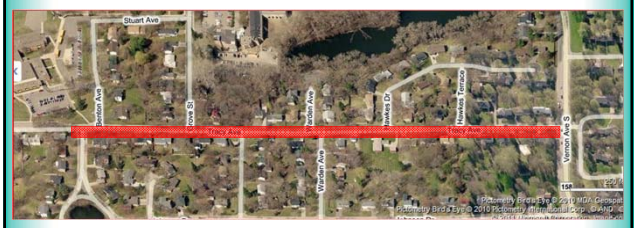
Agenda

1. Introductions
2. Tracy Avenue Project Overview
3. Existing Intersection
4. Alternatives Considered/Chosen
5. Roundabout Advantages
6. Questions

JS

CITY OF EDINA

Project Location – Tracy Avenue



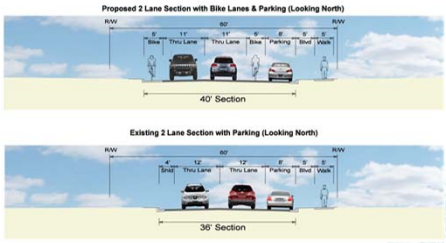
AP

CITY OF EDINA

Proposed Street Improvements

Proposed Street Section

- Widen from 36' to 40'
- Widening all on West Side



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Existing Intersection

Benton Avenue Offset Alignment

- 70' Offset
- 4 – Way Stop Condition
- Confusion at Intersection
  - Capacity Issues
  - Potential Safety Issues
  - Bus Turn Issues

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Existing Intersection

Example of Difficulty at Intersection

AP

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Alternatives Considered

Leave As Is

- Leave as 4 Way Stop, Enhance Crosswalks

Realign West Leg

- Use 20 mph curves

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Alternatives Considered

Roundabout

AP

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Roundabout Advantages

Roundabout Advantages

Summary

- Safety
  - Pedestrians
  - Vehicles
- Elliptical Shape Minimizes Impacts
  - Less Impact to Residents/School
  - Allows Benton Legs Offset
- Traffic Calming
- Resolves Bus Turning Issues
- U-Turn Capabilities
- Increased Capacity/Efficiency

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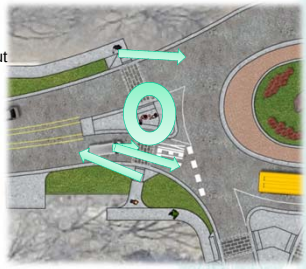
Roundabout Advantages

Safety Advantages

- Only Look One Direction
- Slower Vehicle Speeds
  - 15 mph through Roundabout
- Refuge Island
- Shorter Crossing Width
  - 16' versus 36'
- Multi-Stage Vehicle Recognition



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Roundabout Advantages

Bus Turning Movements

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Roundabout Advantages

Bus Turning Movements

AP

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Roundabout Advantages

Student Pickup

AP

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Roundabout Advantages

U-Turn Capability

AP

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Roundabout at School Example

Modesto, CA

JS/AP

CITY OF EDINA

Questions?

JS/AP

FEASIBILITY STUDY – BA 368

ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix M

Preliminary Assessment Roll and Map

PENDING ASSESSMENT ROLL
TRACY AVENUE IMPROVEMENT BA-368

	STREET	PID	LEGAL LOT	LEGAL BLOCK	HOUSE NO	OWNER	ASSESSABLE REU	ASSESSMENT AMOUNT
	BENTON AVENUE							
1		3211721420004			5700	STEVEN J ENCK	**1/3**	$ 1,472.92
2		3211721420054			5701	ISD 273 (Countryside School)	**4.0**	$ 17,675.00
								$ -
	GROVE STREET							$ -
3		3211721130014			5616	GREG & ROSEMARY K RUSTED	**1/3**	$ 1,472.92
4		3211721420029			5700	VICTOR FRIDLUND JR	**1/3**	$ 1,472.92
5		3211721420006			5701	KENNETH J FRANK & LINDA M KLAVER	**1/3**	$ 1,472.92
								$ -
	HAWKES DRIVE							$ -
6		3211721130023			5700	VINCENT & KRISTA ERICKSON	**1/3**	$ 1,472.92
7		3211721130031			5701	CHRISTINE EHRLICH	**1/3**	$ 1,472.92
	HAWKES TERRACE							$ -
8		3211721130018			5701	DAVID & SUSAN NELSON	**1/3**	$ 1,472.92
	TRACY AVENUE							$ -
9		3211721130040			5600	KENNETH & JEANNINE KJELLAND	**1.0**	$ 4,418.75
10		3211721130069			5601	MARK ARONSON	**1.0**	$ 4,418.75
11		3211721130041			5604	MICHAEL & LYNDA SONNEK	**1.0**	$ 4,418.75
12		3211721130070			5605	RICHARD CONKEY	**1.0**	$ 4,418.75
13		3211721130042			5608	ALLYSON PEARSON	**1.0**	$ 4,418.75
14		3211721130071			5609	KENT & HOLLY GRAVELLE	**1.0**	$ 4,418.75
15		3211721130060			5612	THOMAS & GRETCHEN SHANIGHT	**1.0**	$ 4,418.75
16		3211721130082			5615	JAMES SUCCIO JR	**1.0**	$ 4,418.75
17		3211721130076			5621	KATHLEEN & JAMIES TOTH	**1.0**	$ 4,418.75
18		3211721130057			5625	DARA & CARLEEN MICHUDA	**1.0**	$ 4,418.75
19		3211721130056			5629	MICHAEL & KRISTI CURTIS	**1.0**	$ 4,418.75
20		3211721130066			5633	MIRIAM KISER	**1.0**	$ 4,418.75
21		3211721130001			5708	MICHELE & DARREL HART	**1.0**	$ 4,418.75
22		3211721130002			5712	THOMAS & JANE WIDMARK	**1.0**	$ 4,418.75
23		3211721130009			5715	MICHAEL & ANDREA SHEEHAN	**1.0**	$ 4,418.75
24		3211721130063			5716	MARLIN SUNDERMAN	**1.0**	$ 4,418.75
25		3211721130073			5617	WAYNE JAMES NELSON	**1.0**	$ 4,418.75
26		3211721420038			5801	MICHELLE & JASON KALENBORN	**1.0**	$ 4,418.75
27		3211721420037			5805	SHERI & ANDREW LANGFIELD	**1.0**	$ 4,418.75
28		3211721420039			5809	TAMMY & JESSE SMASAL	**1.0**	$ 4,418.75
29		3211721420040			5813	WALID & IBTISAM ABDELAL	**1.0**	$ 4,418.75
30		3211721420041			5817	SCOTT & SANDRA ROSEQUIST	**1.0**	$ 4,418.75
31		3211721420042			5821	ROCHELLE LACKNER	**1.0**	$ 4,418.75
32		3211721420043			5825	NANCY & DENNIS DAHLIEN	**1.0**	$ 4,418.75
33		3211721420056			5901	CLARICE NOLTE	**1.0**	$ 4,418.75
	WARDEN AVENUE							$ -
33		3211721130008			5616	JANET KRAMER	**1/3**	$ 1,472.92
34		3211721130032			5700	RICHARD & LAINE WEINBERG	**1/3**	$ 1,472.92

Total **32**

PRELIMINARY ASSESSABLE ROADWAY COST	**$ 792,400.00**
TOTAL ASSESSMENT REU	32
ASSESSMENT COST (NON-STATE AID)	$141,400.00
AVERAGE COST PER REU	**$ 4,418.75**

Tracy Avenue Improvements
Preliminary Assessments
BA-368
City of Edina

Legend

- 1/3 REU
- 1 REU
- School Property (4 REU)
- Project Location

N

0 250 500 Feet

January 30, 2012

WSB & Associates, Inc.

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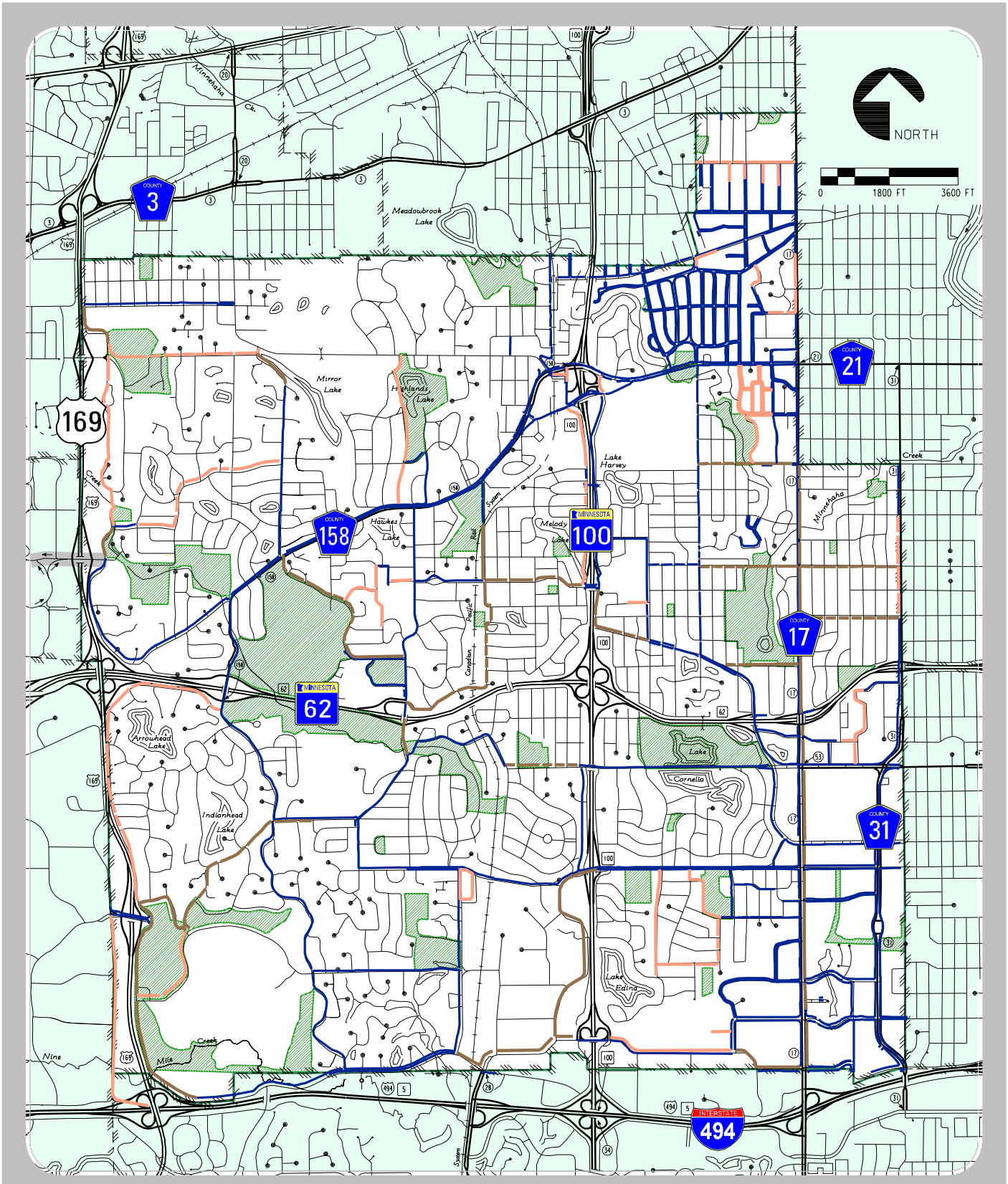
FEASIBILITY STUDY – BA 368
ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix N

City Comprehensive Plan Update – Sidewalk and Bicycle Facilities (Fig. 7.10 and 7.11)



LEGEND:

- Existing Sidewalk
- Proposed School / Business Sidewalk
- Proposed State-Aid Sidewalk

Note: Park Pathways are included on Figure 7.11

City of Edina
2008 Comprehensive Plan Update

Sidewalk Facilities

Figure 7.10

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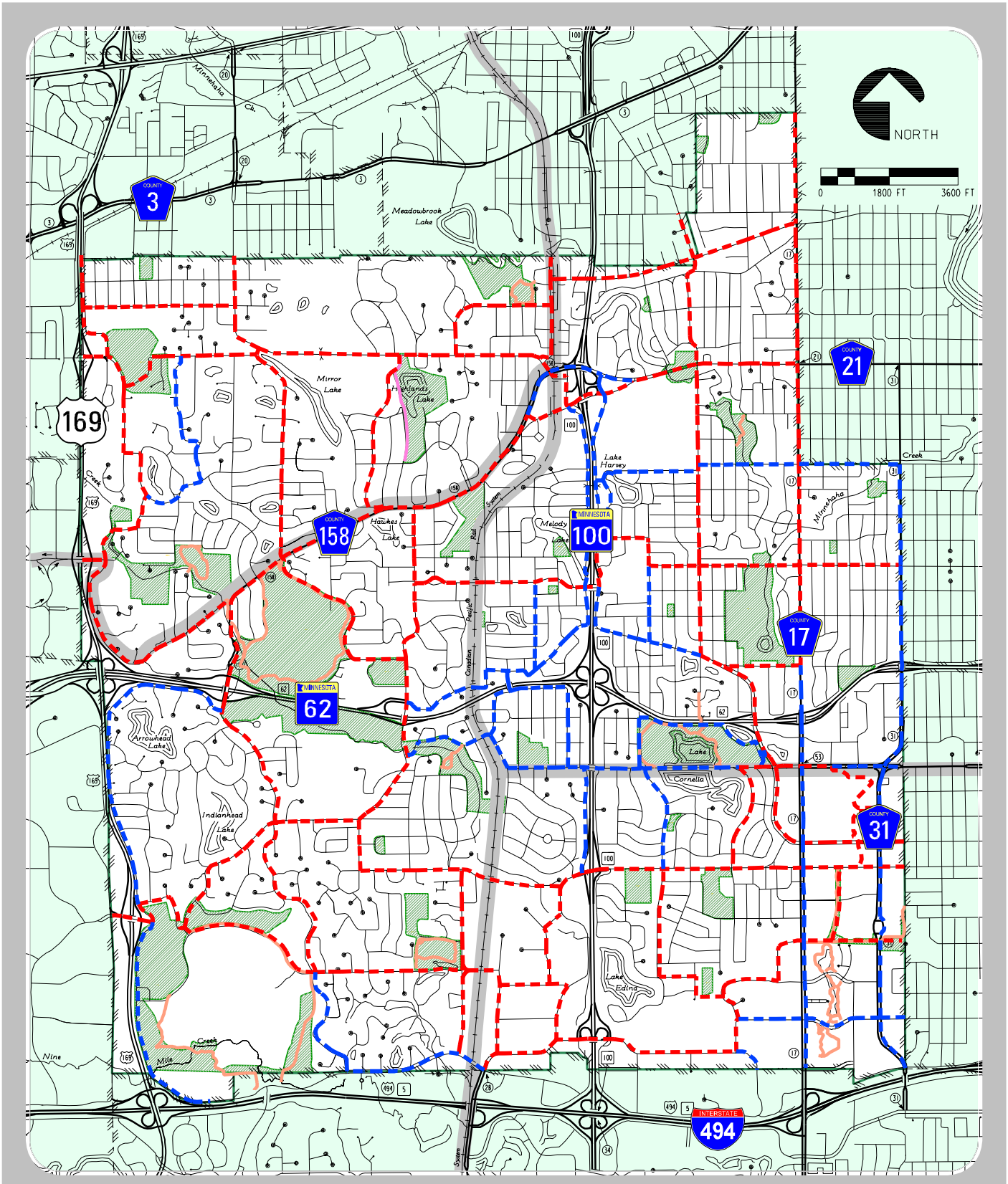

LEGEND:

- Existing Park Pathway
- Existing Hennepin County Corridors
- Proposed Park Pathway

From the 2007 Edina Comprehensive Bicycle Transportation Plan

- Primary Route
- Secondary Route

City of Edina
2008 Comprehensive Plan Update

Bicycle Facilities

Figure 7.11

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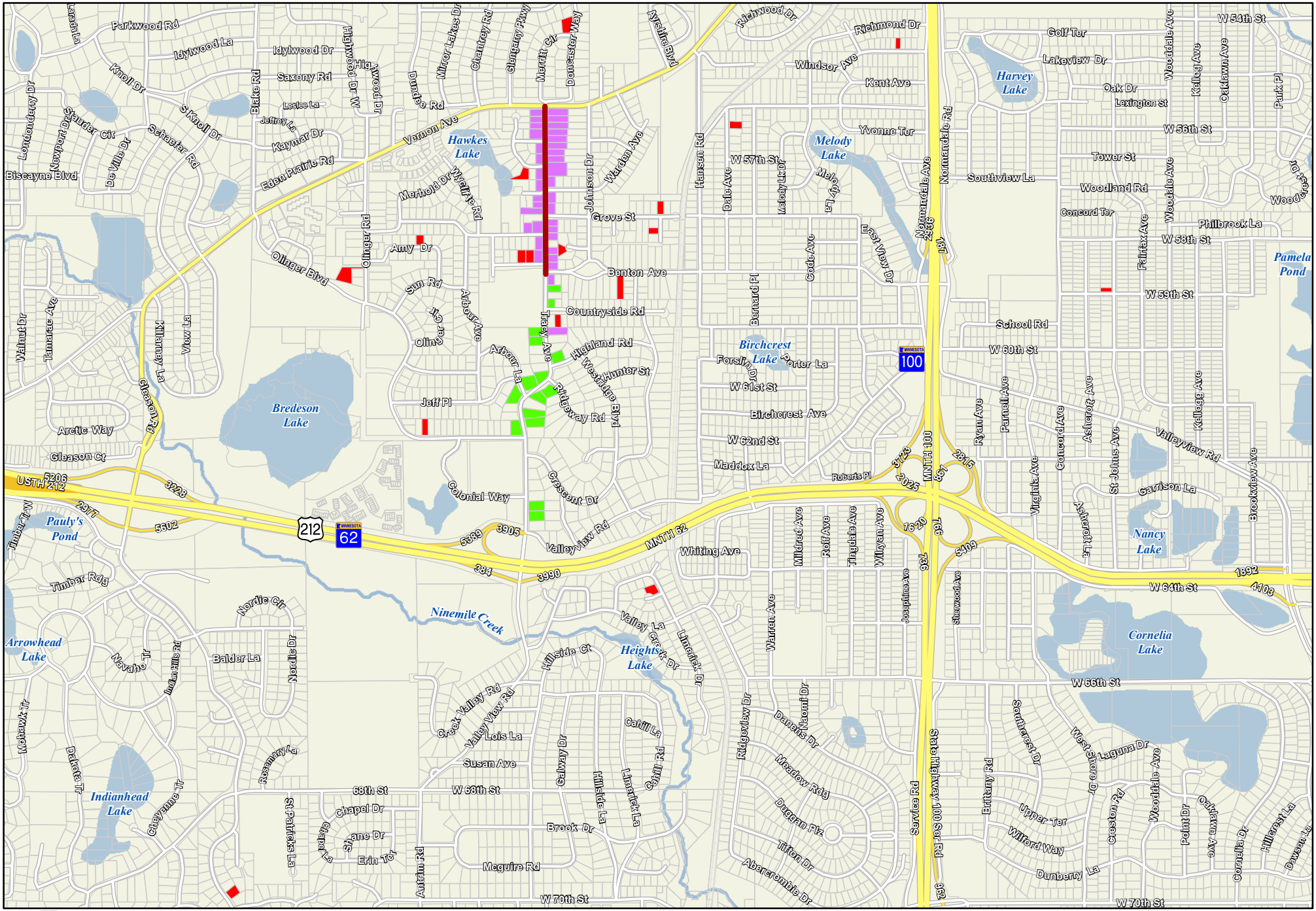
FEASIBILITY STUDY – BA 368

ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix O

Survey Response Map



Tracy Avenue Improvements
Survey Responses
BA-368
City of Edina

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FEASIBILITY STUDY – BA 368

ENGINEERING DEPARTMENT
CITY OF EDINA

STREET IMPROVEMENTS
Tracy Avenue – Benton Avenue to Vernon Avenue
February 6, 2012

Appendix P

Existing Parking Analysis Memo

WSB & Associates, Inc.

Infrastructure ■ Engineering ■ Planning ■ Construction

701 Xenia Avenue South
Suite 300
Minneapolis, MN 55416
Tel: 763 541-4800
Fax: 763 541-1700

Memorandum

To: ***Wayne Houle, City of Edina***

From: ***Andrew Plowman, WSB & Associates, Inc.***

Date: ***February 1, 2012***

Re: ***Analysis of Existing Parking Conditions on Tracy Avenue (Benton Avenue to Vernon Avenue)***
Tracy Avenue Reconstruction Project
Edina, MN
WSB Project Number 01686-25

This memo is intended to answer questions raised in an email from Jennifer Janovy to Wayne Houle, dated Wednesday, February 1, 2012 (see attached).

The distance from each home on Tracy (Vernon to Benton) to the closest side street parking (even if across the street):

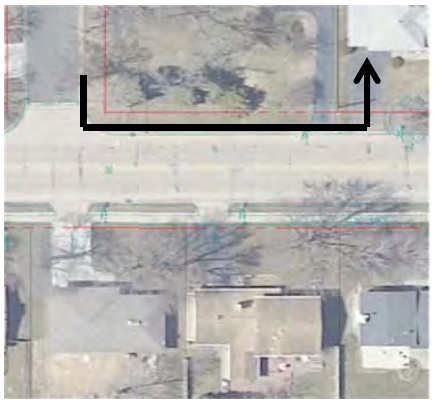
The distance to the nearest side street was measured for each residence along the corridor, even if the residence's driveway was off a side street. See Figure 1 for a summary at each property.

The measurement, for residences east of Tracy Avenue, assumed the following walking trip;

1. Begin from the side street (20' from Tracy Avenue),
2. Crossing Tracy Avenue perpendicular to traffic;
3. Turning perpendicular along the sidewalk;
4. Turning perpendicular up the driveway or house sidewalk.

The measurement for residences west of Tracy Avenue (with driveways along Tracy Avenue, assumed the following walking trip:

1. Begin from the side street (20' from Tracy Avenue),
2. Turn perpendicular on the existing west shoulder,
3. Turn perpendicular up the driveway.



The number of on-site parking spaces (including garage) for each home:

The number of on-site parking spaces was measured by assuming all available driveway pavement could be used for parking and there would be no encroachment on the lawn. The minimum parking dimension for a vehicle in this configuration was assumed to be 22' length and 8' width per vehicle.

See Figure 1 for the summarized results per property.

The number of on-street parking spaces on Tracy currently (and size of each space as a rule):

The criteria used for the amount of on-street parking spaces that currently exist along Tracy Avenue are;

1. Edina City Code 1400.10, Subd. 1: Additional Parking Rules. No person shall stop, stand or park a vehicle, except when necessary to avoid conflict with other traffic or in compliance with the directions of a police officer or traffic control device, in any of the following places:….
   B. Within five feet of the intersection of any public or private driveway or alley with any street or highway;….

2. The City of Edina does not have a code regarding parking lane length along City Streets. The AASHTO, 2004 "A Policy on Geometric Design of Highways and Streets", page 375, Exhibit 4-31, shows parking lane lengths of 22' – 26'. For the purposes of this analysis we assumed 22' needed for a parking space. Due to the numerous driveways and irregular spacing of the driveways, often additional length beyond the 22' would be available once the 5' setback was taken into account.

Based on the criteria above, we measured 54 total parking spaces, See Figure 2.

Areas currently posted "NO PARKING":

Currently, the only streets with posted no parking signs within the corridor is the west side of Tracy Avenue and the east leg of Benton Avenue.

Cost to Construct a Typical Parking Space:

The following is a summary of the cost of a typical parking space. But in reality, reflects the reduced cost of a project if less pavement was needed for a parking lane. Costs such as removals, curb and gutter, storm sewer, etc. would still be part of the project even if the parking lane wasn't constructed, or in this case, reconstructed.

The typical parking stall is 8' wide and 22' in length. However, 1.5' of the 8' is curb and gutter. Thus the parking stall width is 6.5' wide and 22' in length. This results in the following area:

22' x 6.5' = 143 sf = 15.9 sy

Assume a 7" bituminous section over 6" aggregate base section
Pavement Cost:

15.9 sy x 7" x 113 lbs/sy/in = 6.3 tons x $60/ton = $378/parking stall
2000 lbs/ton

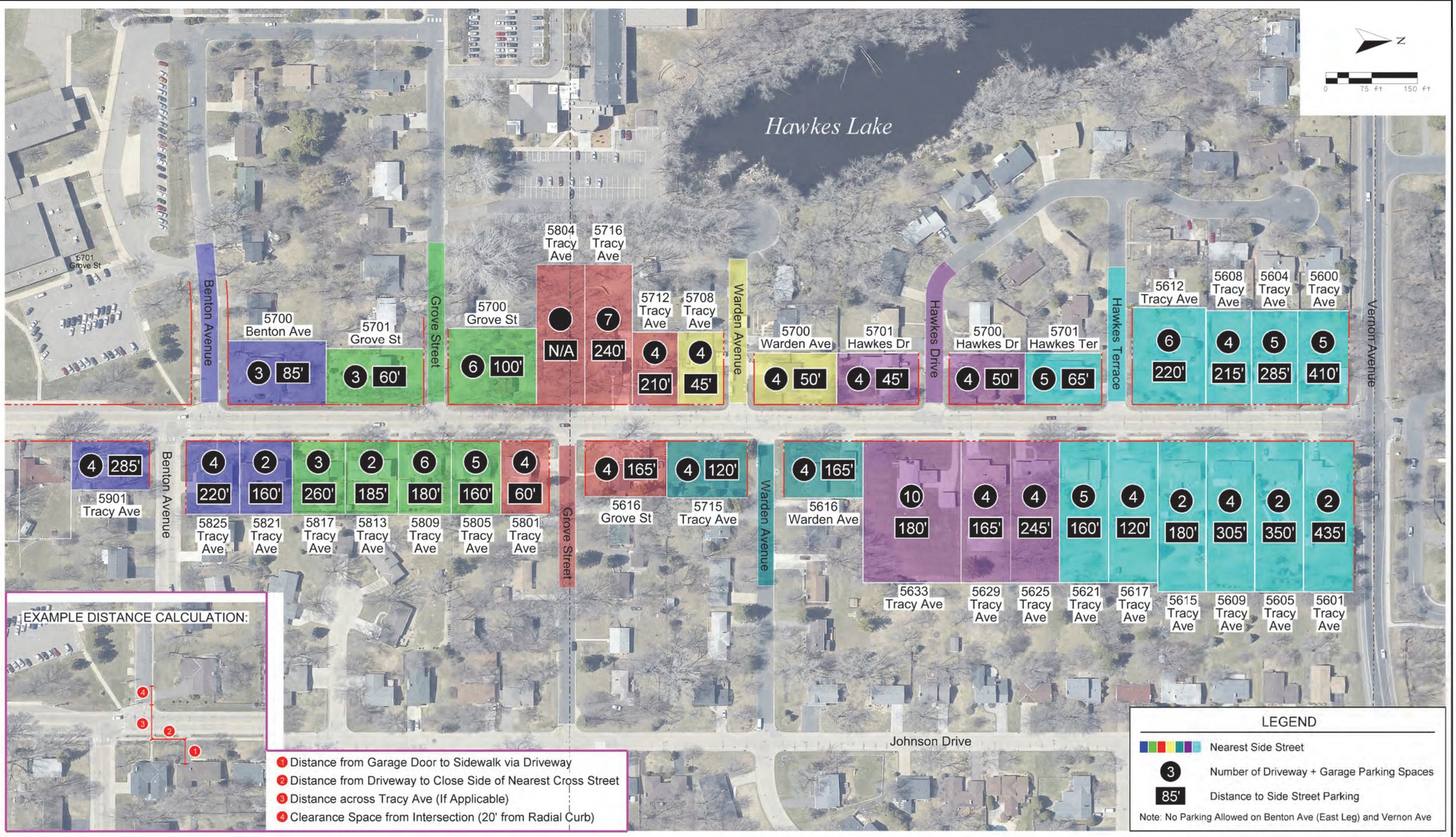
Aggregate Base Cost:

15.9 sy x 0.17 yard = 2.65 cubic yard x $20/cy = $53/parking stall

Total Cost per parking stall = $431

As an Engineer, do you have an opinion about whether there would be safety benefits associated with removing parking on the curve areas of Tracy (for example, if there are bike lanes)?

Provided a curve is designed and constructed according to a designated design speed, we do not believe there is any added safety benefit to removing a parking lane.



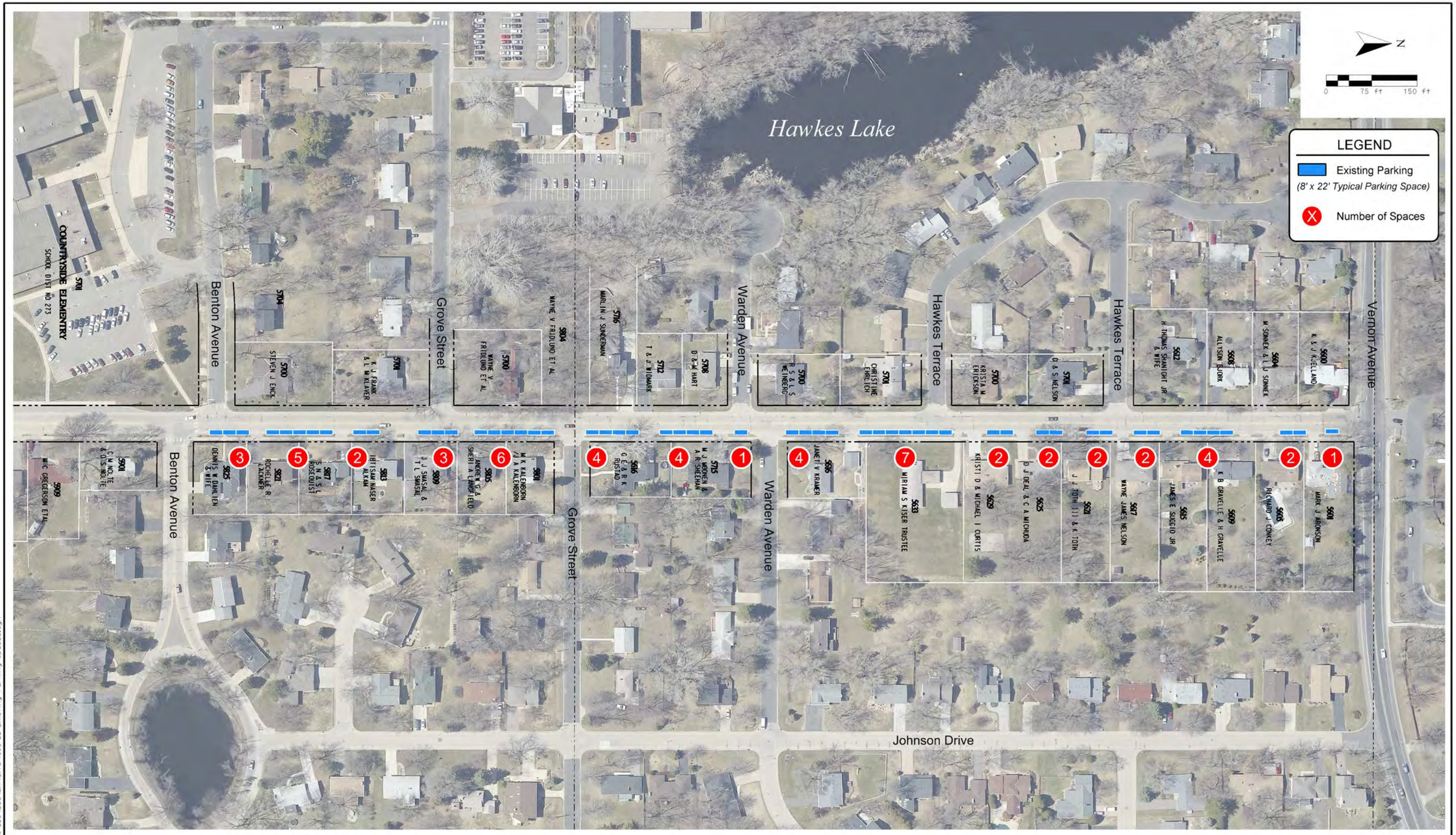
Tracy Avenue Improvements

City of Edina, Minnesota

Property Parking Summary

Figure 1

Date Printed: 2/3/2012
WSB Filenames: K:\0686-250\Cad\Exhibits\686-25 Driveway and Parking.dgn



Date Printed: 2/2/202
WSB Filename: K:\0686-250\Cad\Exhibits\686-25 Existing Parking Spaces.dgn

Tracy Avenue Improvements

City of Edina, Minnesota

Existing Parking Spaces

Figure 2

Andrew Plowman

From: Wayne Houle <WHoule@ci.edina.mn.us>
Sent: Wednesday, February 01, 2012 9:57 AM
To: Jennifer
Cc: Andrew Plowman
Subject: Re: Tracy and general parking questions

I'll talk to Andy at WSB and have them provide this information.

Sent from my Motorola phone.

----------Original Message----------

From: Jennifer
Sent: Wed Feb 01 09:34:05 CST 2012
To : Wayne Houle <WHoule@ci.edina.mn.us>
Subject: Tracy and general parking questions Hi, Wayne. Following up on my earlier email about on street residential convenience parking, is it possible to get the following information? These same questions were asked during W. 70th and bike boulevard discussions and were not answered (although number of parking spaces and NO PARKING areas on W. 70th were eventually provided).

The distance from each home on Tracy (Vernon to Benton) to the closest side street parking (even if across the street); The number of on-site parking spaces (including garage) for reach home; The number of on street parking spaces on Tracy currently (and size of each space as a rule); Areas currently posted "NO PARKING"'; and Cost to construct a typical parking space.

I understand the parking discussion is not really one that staff has wanted to have, but I think ETC members would like to have an informed discussion. I don't assume it will necessarily lead to a recommendation to remove parking on Tracy, but do think this discussion is going to come up more frequently as decisions need to be made about how available road space/right of way is used.

Lastly, as an engineer do you have an opinion about whether there would be safety benefits associated with removing parking on the curve areas of Tracy (for example, if there are bike lanes)?

Please let me know. This would be a high priority going into the February 16 ETC meeting.

Thanks.

Jennifer