

TH 252
CORRIDOR
STUDY



2/16/2016

Final Report

Interim and Long Term Improvements in Brooklyn Center

TH 252 Corridor Study Public Hearing

City of Brooklyn Center
City Council Regular Mtg
March 14, 2016

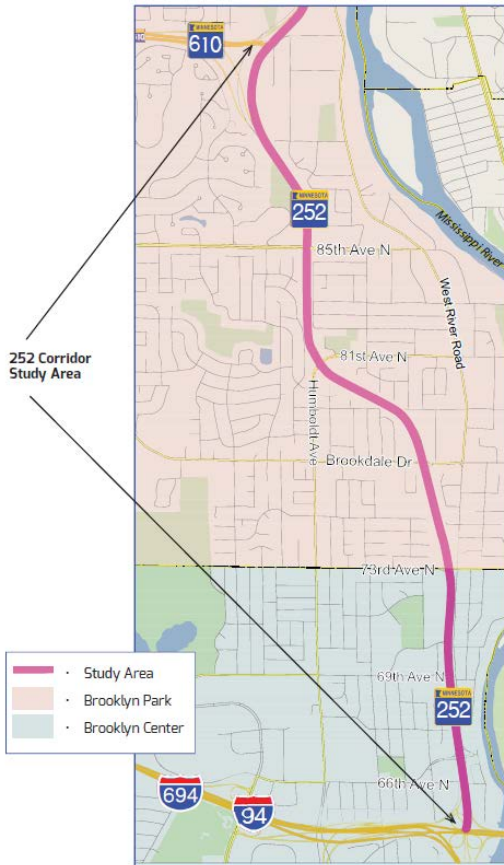


Corridor Study from I-694 to TH 610



Purpose of the Study

- Address motor vehicle, pedestrian and bicycle safety, congestion, and connectivity concerns in the corridor
- Guide future improvements to TH 252



Corridor Study from I-694 to TH 610



Study Goals and Objectives

Goals

- Establish the **long-term vision** for TH 252
- Identify **interim improvements** to address existing congestion, safety, and neighborhood connectivity issues at 66th, 70th, and 73rd Aves

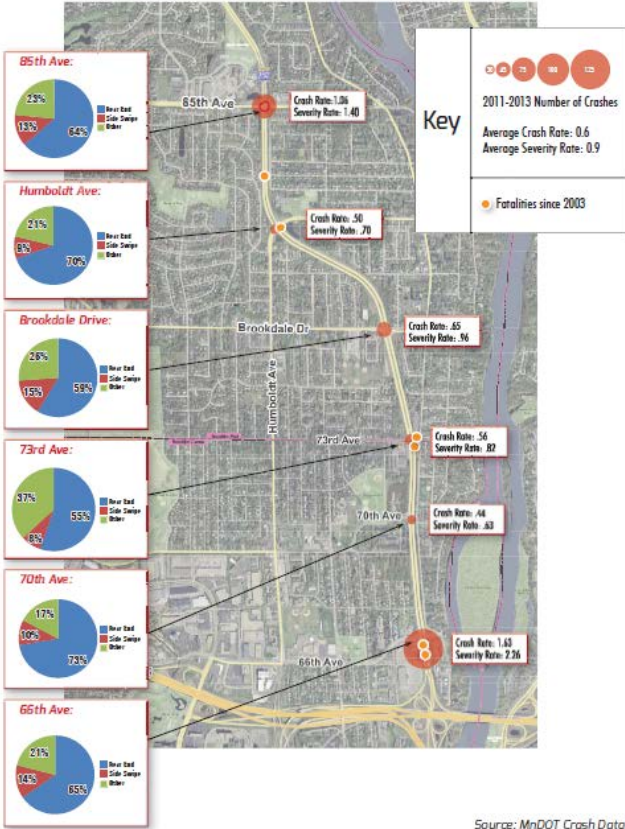
Objectives

- Identify expressway or freeway options for future vision
- Identify interim safety improvements
- Document proposed transit improvements
- Recommend project for future competitive federal funding programs
- Develop recommendations for implementing interim and long-term improvements



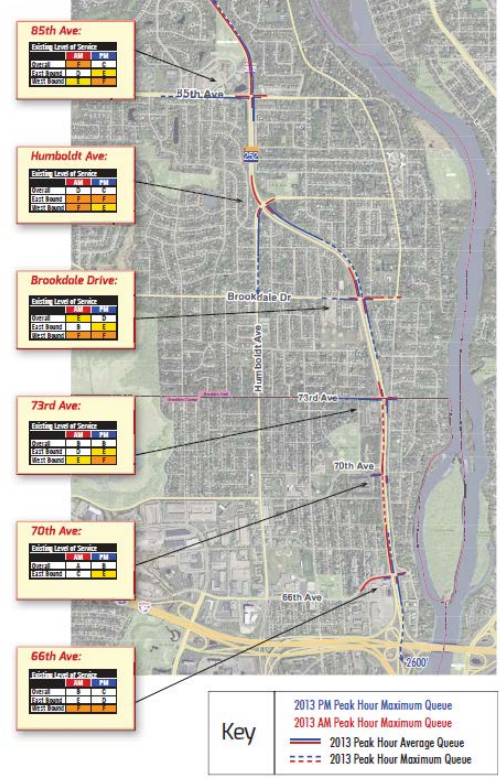
Issues – Existing Conditions

Crash Summary: 2011-2013



Source: MnDOT Crash Data

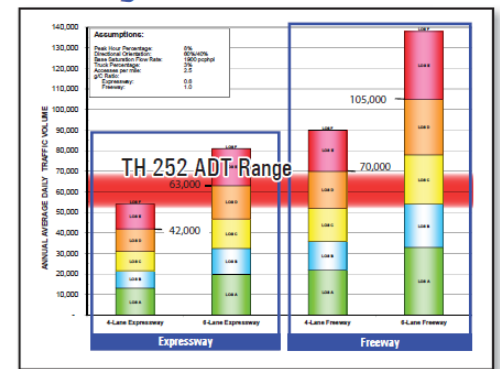
Operations analysis results: Existing Intersection Conditions



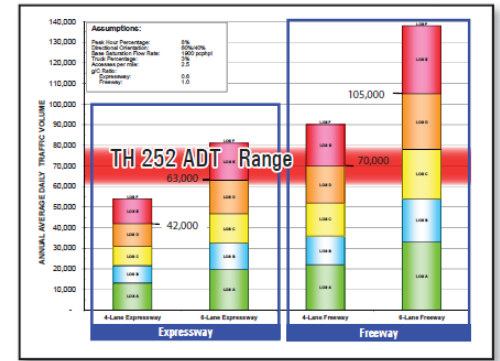
Corridor Capacity



Existing



Future



Corridor Study from I-694 to TH 610



Questionnaire

City of Brooklyn Center
Trunk Highway (TH) 252 - Questionnaire

Rev. January 21, 2016

1. Which area do you live in? (See map on back)

A B C D E F Other – please describe

2. Do you believe that there are safety and/or congestion problems at the intersections along TH 252?

Yes No

3. Should TH 252 be a freeway similar to TH 100, remain as is (traffic signals, limited pedestrian/bicycle facilities), or is there another option that should be considered?

Freeway Remain as is Other – please describe

4. Of the alternatives presented/developed to date

A B D Other

Why? _____

_____ you believe to be the best option:

5. What street/access location would you prefer to use to access TH 252 in Brooklyn Center?

66th Avenue 70th Avenue 73rd Avenue Other – please describe

6. If you believe that improvements are needed, when do you think they should be implemented?

3 – 5 years 5 – 10 years 10+ years No improvements needed

7. Please provide additional comments below (attach additional pages if necessary):

Please return by **February 1, 2016**, to the City of Brooklyn Center via email: publicworks@ci.brooklyn-center.mn.us or mail to: City of Brooklyn Center Engineering Division, 6301 Shingle Creek Parkway, Brooklyn Center, MN 55430.
Thank you for your response!

72 Questionnaires Returned

2. Do you believe that there are safety and/or congestion problems at the intersections along TH 252?

| | |
|-----|----|
| Yes | 63 |
| No | 5 |

3. Should TH 252 be a freeway similar to TH 100, remain as its is, or is there another option that should be considered?

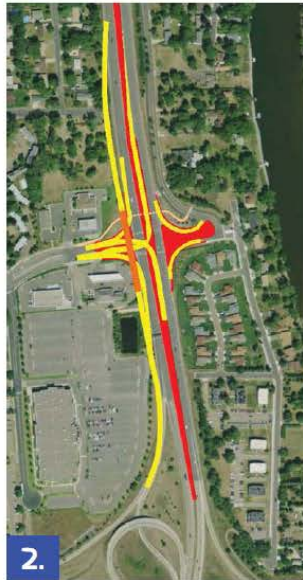
| | |
|--------------|----|
| Freeway | 44 |
| Remain as is | 15 |
| Other | 4 |



Intersection Alternatives and other solutions - Evaluated



1. Green "T" with "J" Turn



2. Green "T" with southbound Flyover



3. Folded Diamond



4. Folded Diamond with Buttonhook



5. Quadrant Interchange



6. Quadrant Interchange with Roundabouts

Note: Alternatives 3-6 require closing or modifying access to 70th Avenue N



Intersection Alternatives and other solutions - Evaluated



Option 1:
Close 70th
Avenue N,
provide
pedestrian
crossing



Option 2:
Overpass or
Underpass



Option 3:
Interchange



Option 1: Half Diamond Interchange



Option 2: Overpass or Underpass



Intersection Alternatives and other solutions - Evaluated

Table 1: Evaluation of 66th Avenue and TH 252 Alternatives

| Evaluation Criteria | Alternatives | | | | | | | |
|------------------------------------------------|-------------------------|---------------------------|-------------------------------|---------------|-----------------------------------|---------------------------------------|---------------------------|---------------------------------|
| | At-Grade | Partial Grade Separation | Grade Separated at 66th Av 2/ | | Grade Separation North of 66th Av | | Access Closure at 66th Av | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Green "T" with "J" Turn | Green "T" with SB Flyover | Folded Diamond | Buttonhook | Quadrant Interchange | Quadrant Interchange with Roundabouts | 66th Av Underpass | Closure of East Side of 66th Av |
| Level of Service | Low-Moderate | Moderate | High | High | High | High | High | Low-Moderate |
| Safety/Crash Reduction | Moderate | Low-Moderate | High | Moderate-High | Moderate-High | Moderate-High | High | Low-Moderate |
| Compliance with Design Standards | Moderate-High | Moderate | Moderate-High | Moderate | Moderate-High | Moderate-High | High | Moderate |
| Construction Cost | \$2-\$4 Million | \$11-\$13 Million | \$17-\$23 | \$17-\$23 | \$8-\$12 | \$8-\$12 | | |
| Potential for Regional Funding Grants | High | Low-Moderate | High | High | Moderate | Moderate | High | High |
| Minimize Right-of-way Impacts | High | Moderate | Low | Moderate | Moderate | Moderate | Low | High |
| Access | Low-Moderate | Low-Moderate | High | High | Moderate-High | Moderate-High | Low | Moderate |
| Pedestrian/Bicycle Connectivity/Safety 1/ | High | High | High | High | Moderate-High | Moderate-High | High | High |
| Development Impacts/Potential | Low-Moderate | Low-Moderate | Moderate-High | Moderate-High | Moderate-High | Moderate-High | Low | Moderate |
| Transit Service | Moderate | Low | High | Low | Moderate | Moderate | Moderate | High |
| Compatibility with Long-Term Vision for TH 252 | Low | Low | High | High | Moderate-High | Moderate-High | High | Low |
| Neighborhood Connectivity Benefits | Low | Low | High | High | Moderate-High | Moderate-High | Low | Low |
| Minimize Environmental Impacts | High | Low-Moderate | Low-Moderate | Low-Moderate | Moderate | Moderate | Moderate | High |
| Total Score | 27 | 18 | 34 | 33 | 32 | 32 | 28 | 27 |

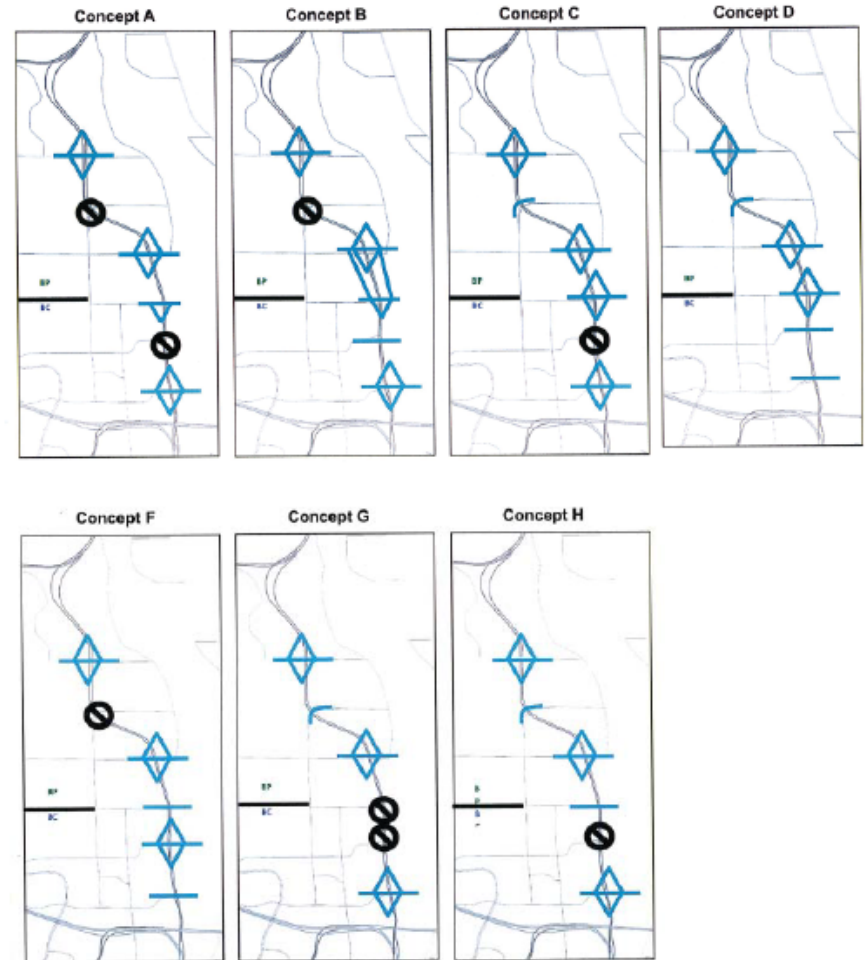
Recommendation:

Grade Separation →
Freeway Conversion

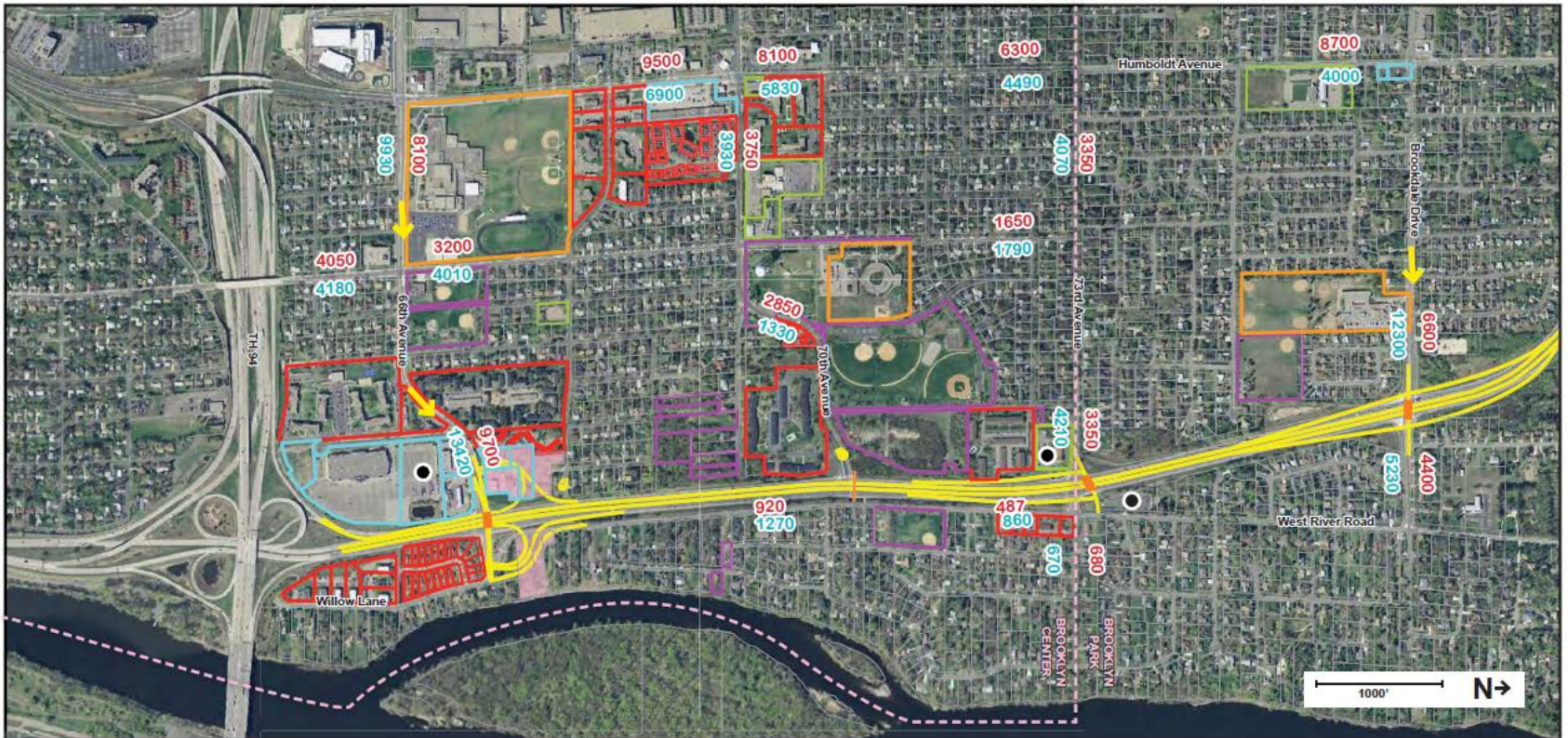
TH 252

Access Options:

MnDOT modelled traffic on local streets



Alternative A



CONCEPT
A

66th Interchange and Partial Access to 73rd Avenue

Legend

- | | | | | |
|---------------------------------|-----------------------|-------------------------|------------|------------------------------|
| 3750 - Existing ADT (2011-2015) | → Increase in Traffic | - City Boundary | - Church | - Commercial |
| 3930 - 2040 ADT Source: MnDOT | ■ - ROW Acquisition | ■ - City Owned Property | ■ - School | ■ - Multi-Family Residential |
| | | | | ● - Park and Ride Lot |

Benefits

- Safe bike and pedestrian crossings of TH 252 at 66th, 70th and 73rd (on bridges)
- Safe vehicle access to TH 252 at 66th and 73rd
- Minimal change in traffic patterns in residential neighborhoods
- Maintains existing access to TH 252 for commercial properties
- Space available to provide screening of highway for residential properties.

Impacts

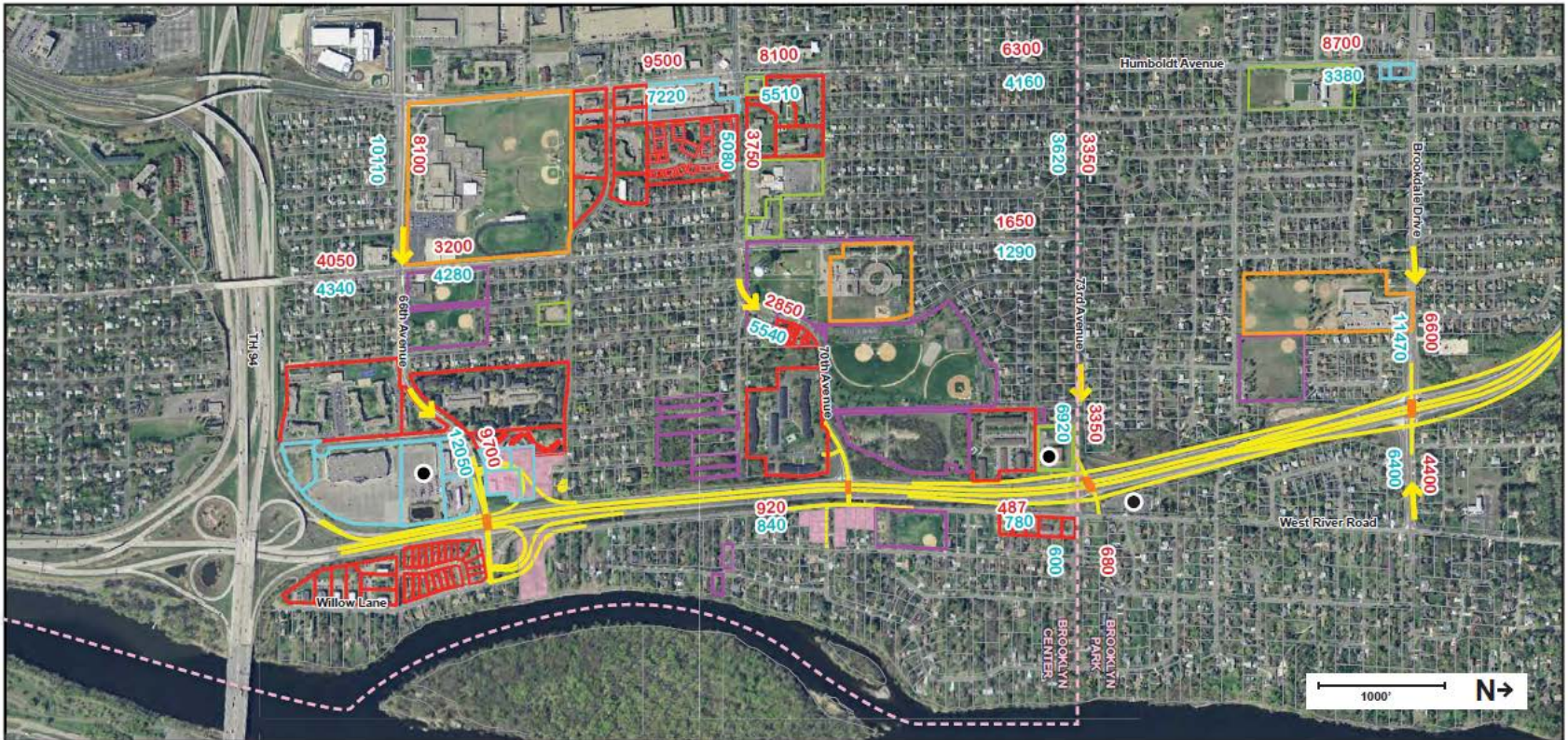
- Requires acquisition of 2-3 properties east of TH 252 and 4 properties west of TH 252
- 70th Avenue traffic access to TH 252 would be rerouted to 65th/66th and 73rd Avenues for access to TH 252
- No northbound TH 252 access at 73rd Avenue



Corridor Study from I-694 to TH 610



Alternative B



CONCEPT

B

66th Street Interchange and Split Diamond 73rd Avenue and Brookdale Drive

Legend

- | | | | | |
|---------------------------------|-------------------------|-----------------|-----------------------|-----------------------|
| 3750 - Existing ADT (2011-2015) | → - Increase in Traffic | - City Boundary | - Church | - Commercial |
| 3930 - 2040 ADT Source: MnDOT | ■ - ROW Acquisition | → - School | - City Owned Property | ● - Park and Ride Lot |
| | | | | |

Benefits

- Safe bike and pedestrian crossings of TH 252 at 66th, 70th and 73rd (on bridges)
- Safe vehicle access to TH 252 at 66th and 73rd
- Minimal change in traffic patterns in residential neighborhoods
- Maintains existing access to TH 252 for commercial properties
- Space available to provide screening of highway for residential properties.
- Frontage road access at 73rd to full interchange access to northbound TH 252 and from southbound TH 252

Impacts

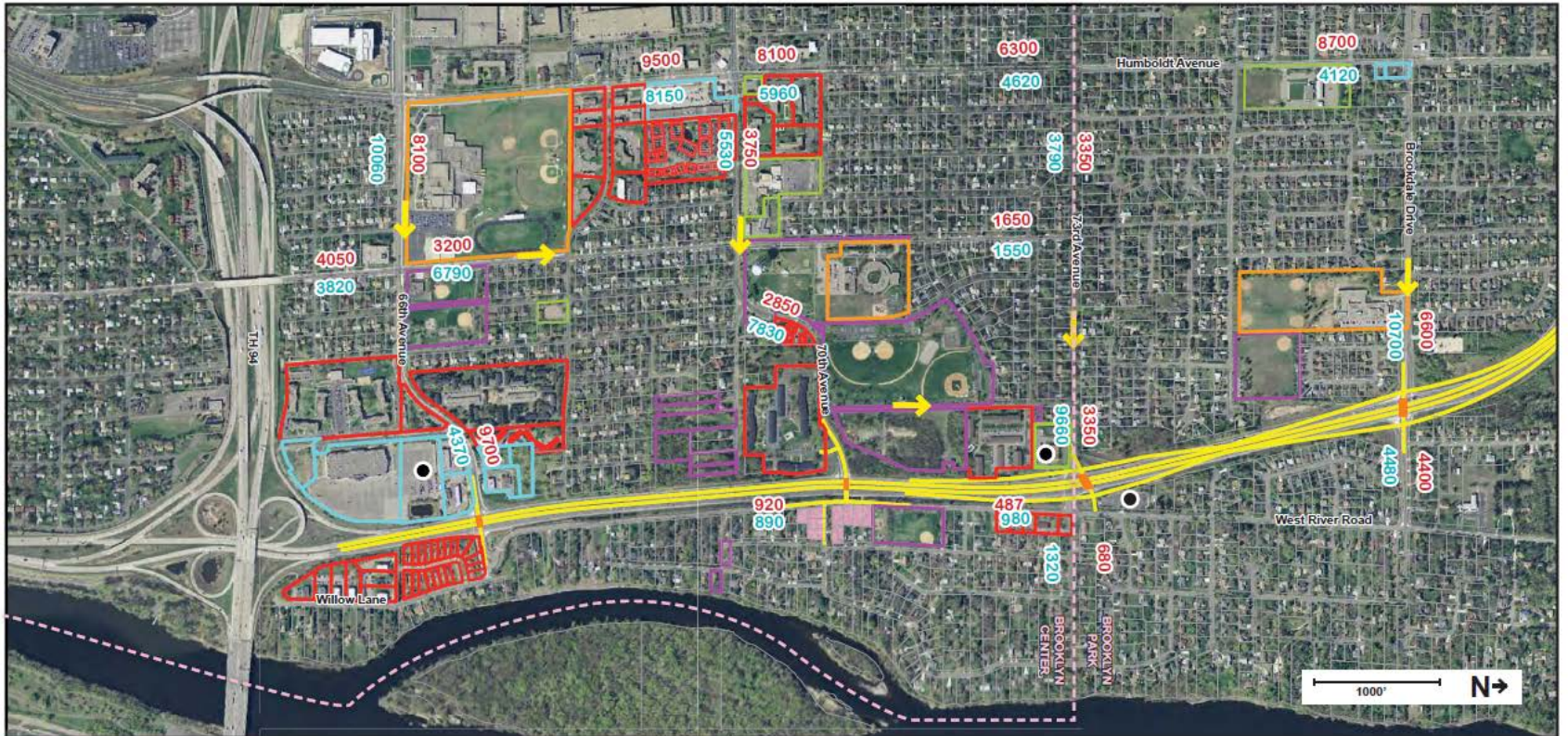
- Requires acquisition of 11-12 properties east of TH 252 and 4 properties west of TH 252
- 70th Avenue traffic access to TH 252 would be rerouted to 65th/66th and 73rd Avenues for access to TH 252
- Additional bridge cost



Corridor Study from I-694 to TH 610



Alternative D



CONCEPT

D

73rd Avenue Interchange

Legend

- 3750 - Existing ADT (2011-2015)
- 3930 - 2040 ADT Source: MnDOT
- City Boundary
- - Increase in Traffic
- ROW Acquisition
- Church
- School
- City Owned Property
- Commercial
- Multi-Family Residential
- Park and Ride Lot

Benefits

- Safe pedestrian and bicycle access across TH 252 at 66th, 70th and 73rd (on bridges)
- Safe vehicle access across and to TH 252 at 70th

Impacts

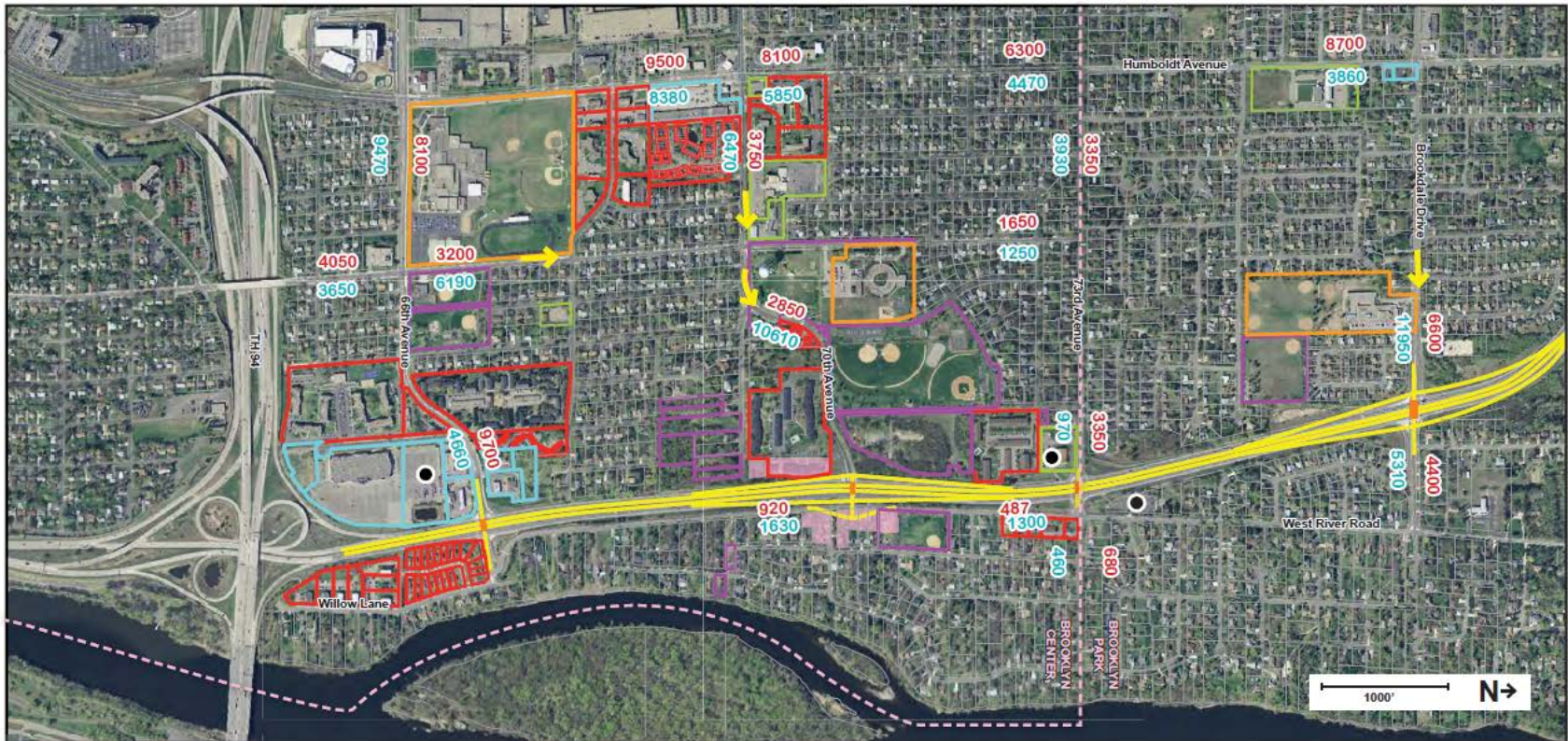
- Requires acquisition of 9 properties east of TH 252 and no properties west of TH 252. Additional roadway easements would also need to be acquired for potential 70th Avenue and 73rd Avenue Improvements.
- Significant change in traffic patterns – more traffic on West River Rd and 70th Avenue, and on neighborhood residential streets leading to 70th Avenue.
- Need to widen 70th Avenue and 73rd Avenue to accommodate increase in traffic
- Loss of access to TH 252 for commercial properties
- Change of Camden Avenue with increase in traffic to collector



Corridor Study from I-694 to TH 610



Alternative F



CONCEPT
F

70th Avenue Interchange

Legend

- 3750 - Existing ADT (2011-2015)
- 3930 - 2040 ADT Source: MnDOT
- City Boundary
- Increase in Traffic
- ROW Acquisition
- Church
- School
- City Owned Property
- Commercial
- Multi-Family Residential
- Park and Ride Lot

Benefits

- Safe pedestrian and bicycle access across TH 252 at 68th, 70th and 73rd (on bridges)
- Safe vehicle access across and to TH 252 at 70th Avenue

Impacts

- Requires acquisition of 9-10 properties east of TH 252 and 1 partial property west of TH 252. Additional roadway easements would also need to be acquired for potential 70th Avenue Improvements.
- Significant change in traffic patterns – more traffic on West River Rd and 70th Avenue, and on neighborhood residential streets leading to 70th Avenue.
- Need to widen 70th Avenue to accommodate increase in traffic
- Loss of access to TH 252 for commercial properties and high density residential properties along 68th. The viability of the commercial properties would be challenging, potentially requiring additional access improvements, west frontage road, etc.



Corridor Study from I-694 to TH 610



Alternatives Evaluation

Table 3: Evaluation of TH 252 Access Alternatives in Brooklyn Center

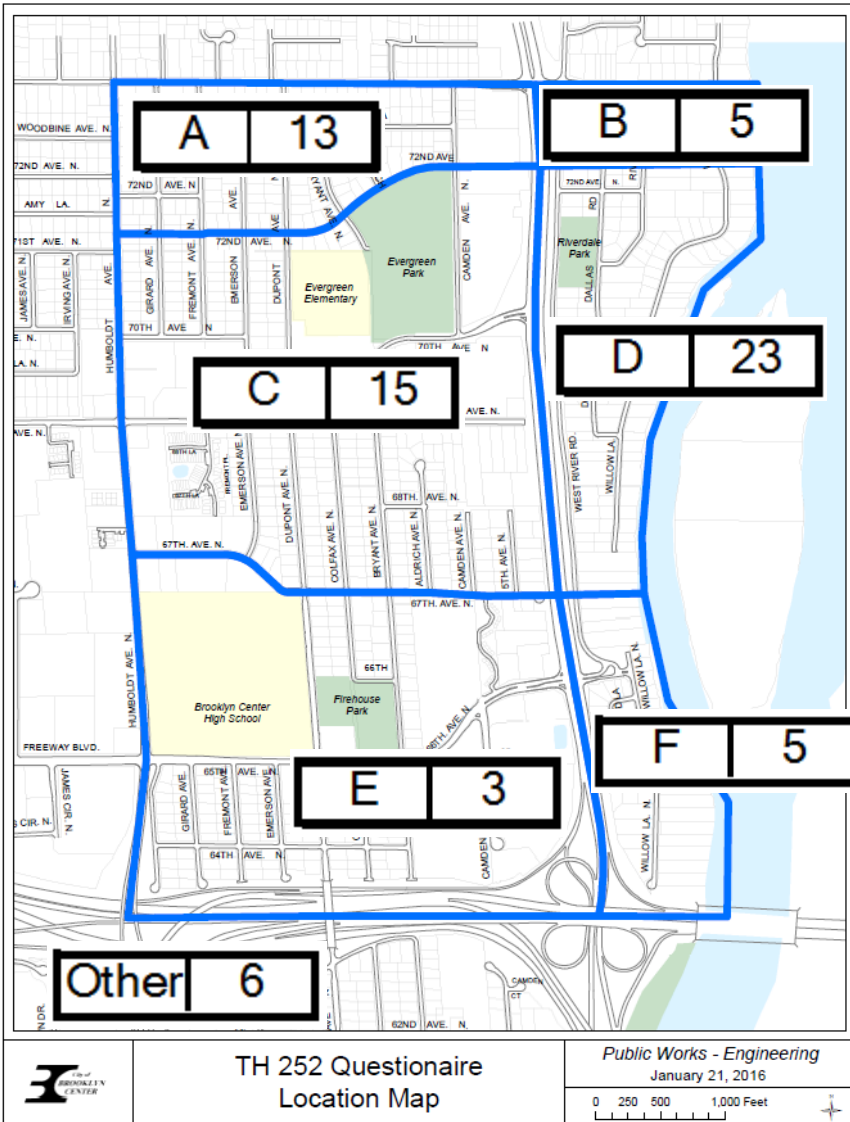
| Evaluation Criteria | Alternatives | | | |
|------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------|
| | Concept A 66th Folded Diamond with 73rd Half Diamond 2/ | Concept B 66th Folded Diamond with 73rd Split Diamond 2/ | Concept D 73rd Avenue Access Only 1/ | Concept F 70th Interchange with Bridges at 66th and 73rd 1/ |
| Level of Service | High | High | High | High |
| Safety/Crash Reduction | High | High | High | High |
| Compliance with Design Standards | High | High | High | High |
| Construction Cost | Low-Moderate | Low | Moderate | Moderate |
| Potential for Regional Funding Grants | High | High | High | High |
| Minimize Right-of-way Impacts | Low-Moderate | Low-Moderate | High | Low |
| Access | High | High | Low | Moderate |
| Pedestrian/Bicycle Connectivity/Safety 1/ | High | High | High | High |
| Development Impacts/Potential | High | High | Low | Low |
| Transit Service | High | High | Moderate | Moderate |
| Compatibility with Long-Term Vision for TH 252 | High | High | High | High |
| Neighborhood Impact and Connectivity Benefits | Low-Moderate | Moderate | Low | Low |
| Minimize Environmental Impacts | Moderate | Moderate | Moderate | Moderate |
| Emergency Response | High | High | High | High |
| Total Score | 59 | 59 | 52 | 49 |



Questionnaire

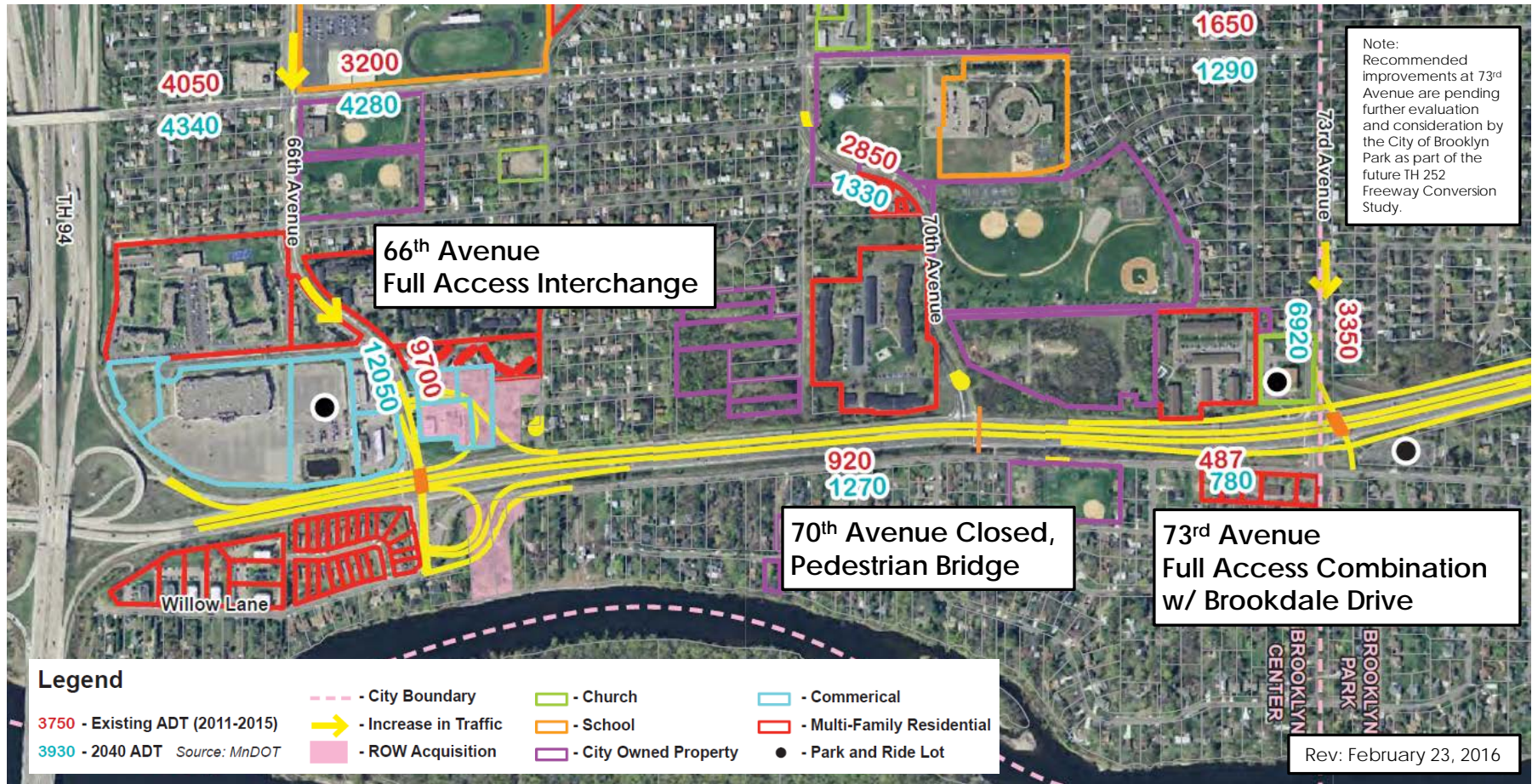
1. Which area do you live in?
(see map)

6. If you believe that improvements are needed, when do you think they should be implemented?



| | |
|------------------------|----|
| 3-5 yrs | 35 |
| 5-10 yrs | 13 |
| 10+ yrs | 9 |
| No Improvements needed | 2 |

Brooklyn Center – TH 252 Recommended Access Configuration



66th Avenue Interchange



This is a rendering based on information available February of 2016 and should not necessarily be interpreted as the exact design of this project.

S.P. 2748-64 TH252 and 66th Avenue North

Visual Simulation Produced by Metro Visual Imaging Unit in Cooperation with Metro Design



66th Avenue Interchange



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S.P. 2748-64 TH252 and 66th Avenue North

Visual Simulation Produced by Metro Visual Imaging Unit in Cooperation with Metro Design



66th Avenue Interchange



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66th Avenue Interchange



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S.P. 2748-64 TH252 and 66th Avenue North

Visual Simulation Produced by Metro Visual Imaging Unit in Cooperation with Metro Design



66th Avenue Interchange



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S.P. 2748-64 TH252 and 66th Avenue North

Visual Simulation Produced by Metro Visual Imaging Unit in Cooperation with Metro Design



Next Steps

- Hold Public Hearing
- Recommendation that City Council adopt the TH 252 Corridor Study as a planning and development guide including the recommended access configuration.
- Then... Interchange Request, pursuit of Funding, continued BC involvement and approval, Freeway Conversion Study for TH 252 [Hennepin County led], Environmental study, etc...



Corridor Study from I-694 to TH 610

