

# Appendix A

## Public Involvement

---



# US 2/US 81 SKEWED INTERSECTION STUDY

## Public Input Meeting #1

Grand Forks, ND  
April 2019

**Overcoming Barriers    Strengthening Connections**

M.P.O. M.P.O. M.P.O.    Grand Forks - East Grand Forks  
Metropolitan Planning Organization

**Ensuring Opportunities    Planning One Community**



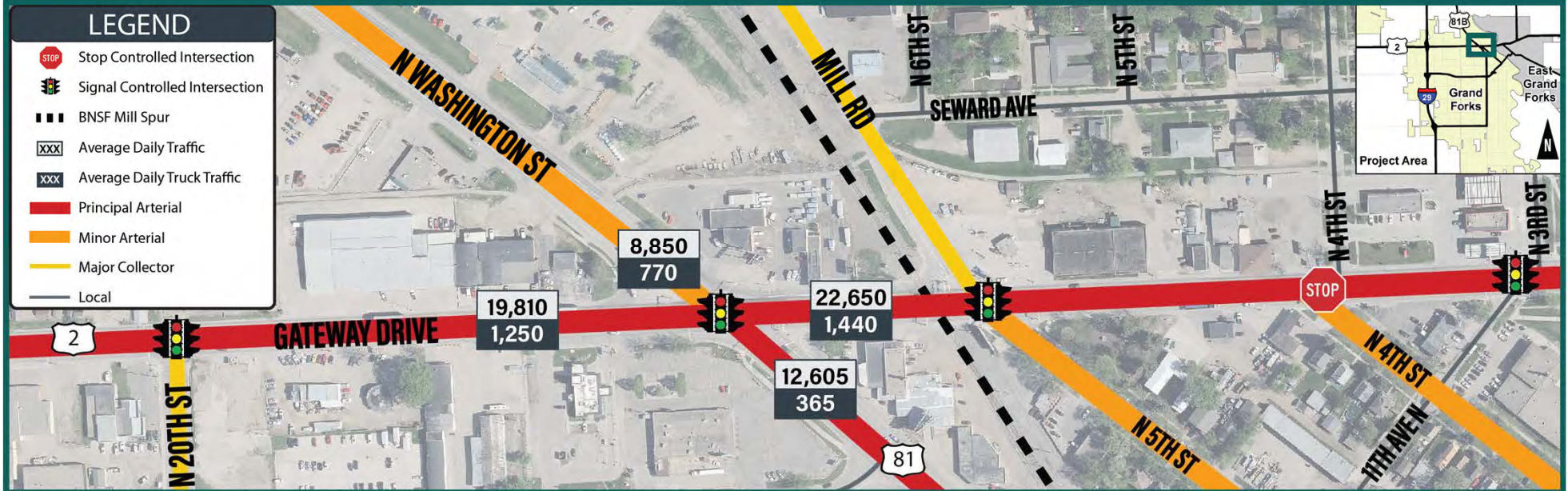
ENGINEERING, REIMAGINED



## AGENDA

- Study Area
- Train Crossings and Blockages
- Vehicular Traffic and Reliability
- Safety
- Pedestrian, Bicycle and Transit
- Environmental Conditions
- Alternatives Brainstorming
- Next Steps

# Study Area



## ➤ Known Issues and Conflicts;

- Mill spur railroad crossing creates traffic blockages and queuing issues.
- Intersection skew makes turning movements for trucks difficult.
- Opportunities for improved pedestrian, bicycle and transit conditions.



# Train Crossings and Blockages

N 20TH ST

N WASHINGTON ST

2



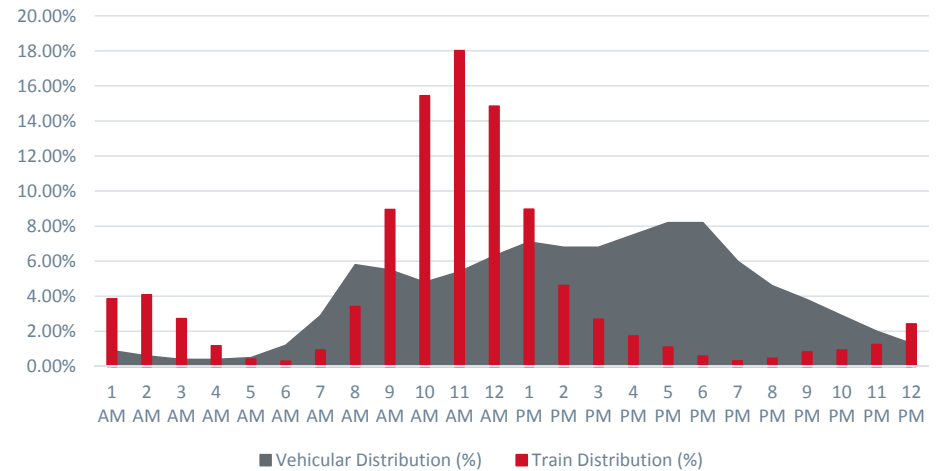
# Mill Spur Crossing

- Safety
  - 12 crashes between 1975-1994
  - No crashes since 1994
- Crash Prediction
  - 0.028 crashes per year (FRA)
  - 5<sup>th</sup> highest rate in City
  - 7<sup>th</sup> highest rate in County

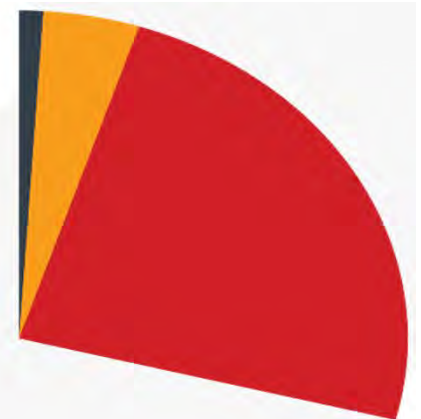


# Train Blockages

- 4 to 5 blockages per day
- 10 MPH or Less
- Rail Delay Estimates
  - 89 Hours/Day
  - 2,670 Hours/Month
  - 32,396 Hours/Year



- *Minimum Delay*  
- 0:21 minutes
- *Average Delay*  
- 2:31 minutes
- *Maximum Delay*  
- 14:14 minutes



# Unit Trains

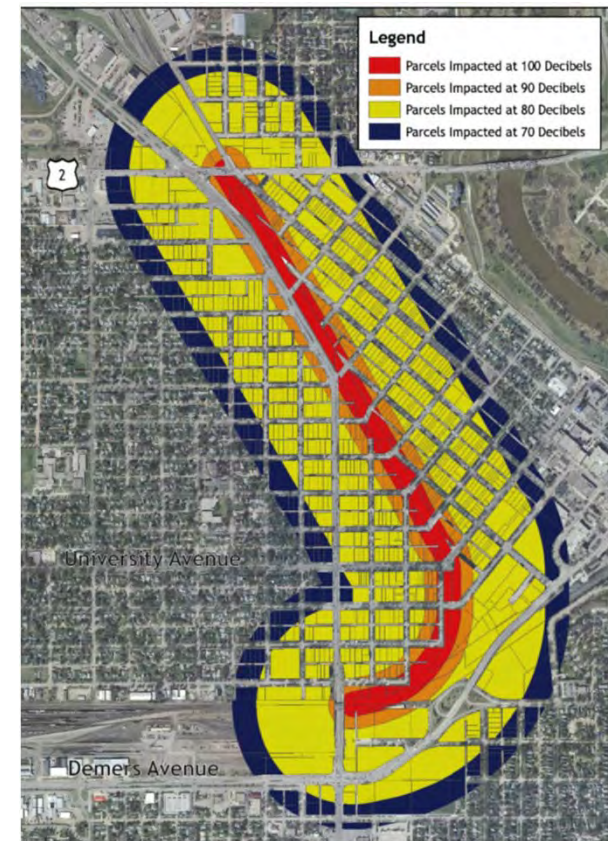
- ND Mill Working to Accommodate Unit Trains
- All crossings will be blocked at the same time.

**4x** Longer than Current Trains

**10-17** Minutes of Delay at Mill Spur Crossings

**4-6** Blockages per Month

## Potential to Occur at Night

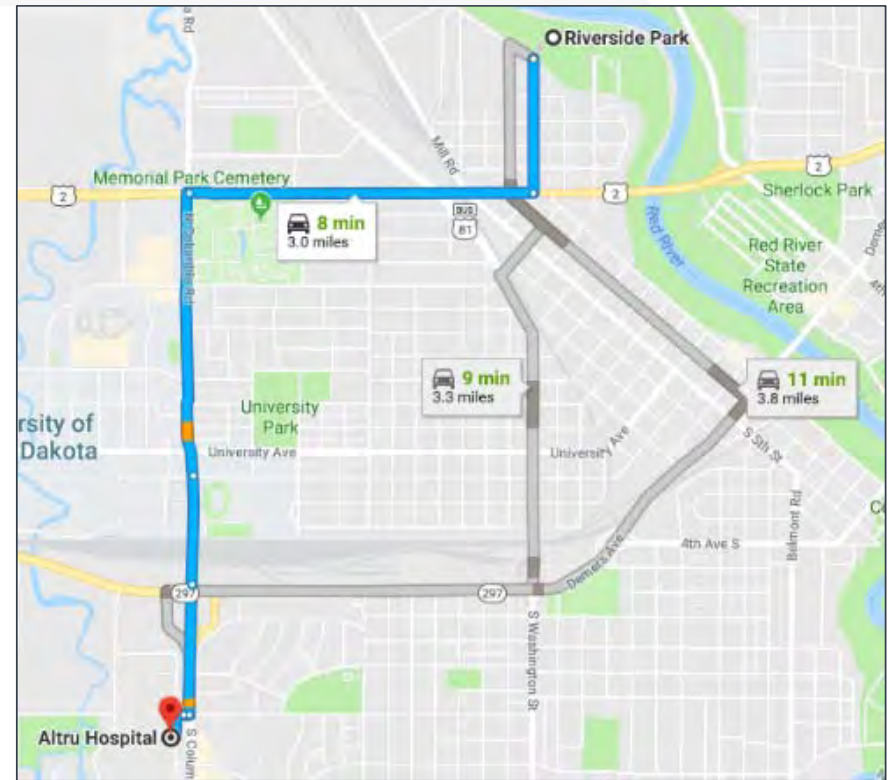




# Emergency Responders

Pg. 8

- Average train blockage is 2:31
  - Brain damage in four to six minutes when heart stops
  - Altru Hospital provides emergency service to East Grand Forks and surrounding area
- Train blockage duration will increase with Unit Trains



# Emergency Responders

- Average train blockage is 2:31
  - Fires can double every 60 seconds
  - Goal to reach every address within four minutes
- Train blockage duration will increase with Unit Trains



An aerial photograph of an industrial or commercial district. The image is dominated by a semi-transparent dark grey rectangular overlay in the center. Overlaid on this rectangle is the title text in white. The background shows various industrial buildings, parking lots filled with cars and trucks, and streets. A road on the left is labeled 'N 20TH ST' vertically. A road on the right is labeled 'N WASHINGTON ST' diagonally. A shield-shaped road sign with the number '2' is visible in the lower-left quadrant of the overlay. In the top right corner of the overall image, there is a small black circle with a white arrow pointing upwards and the letter 'N', indicating North is towards the top of the frame.

# Vehicular Traffic and Reliability

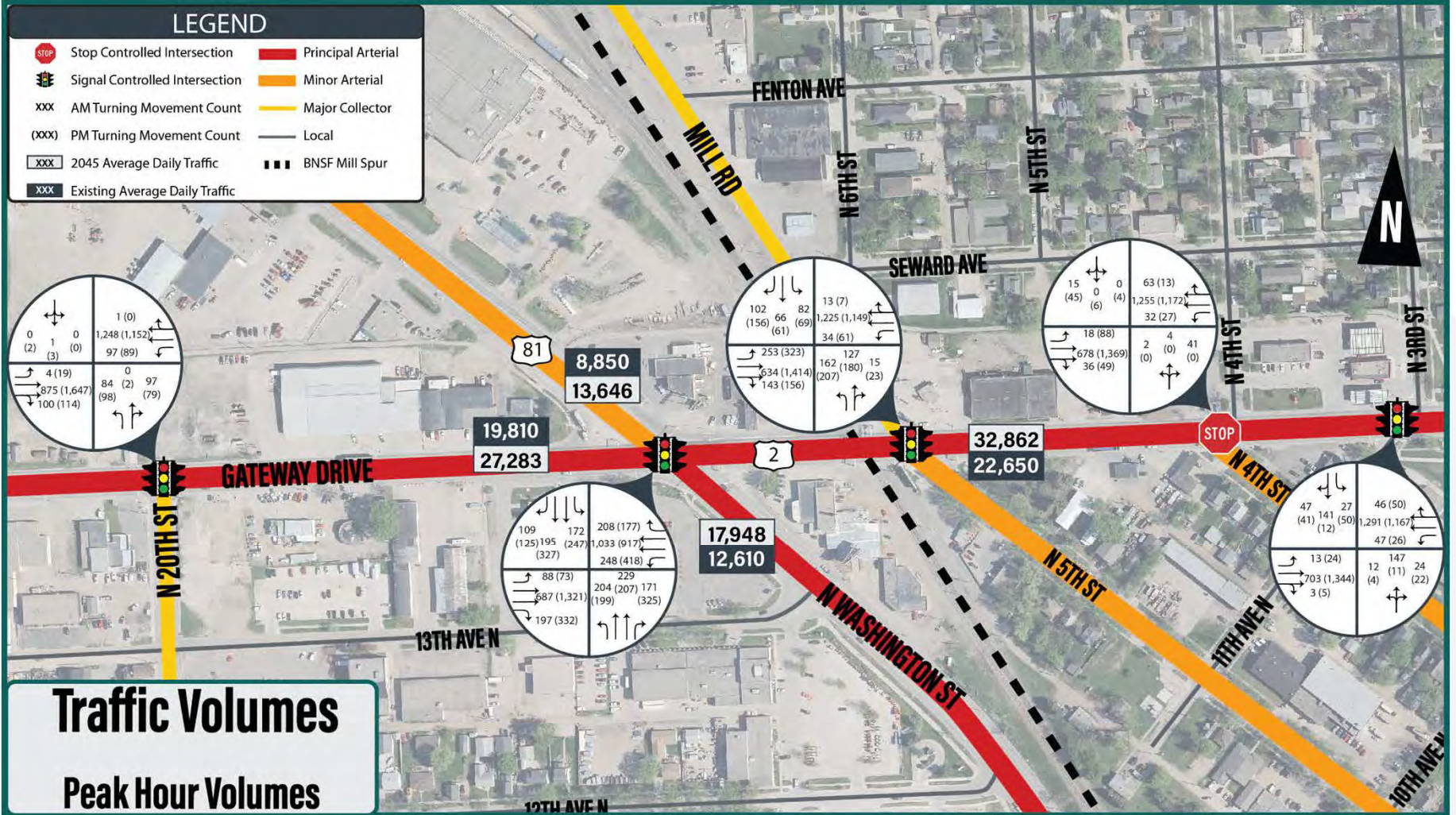
N 20TH ST

N WASHINGTON ST

2

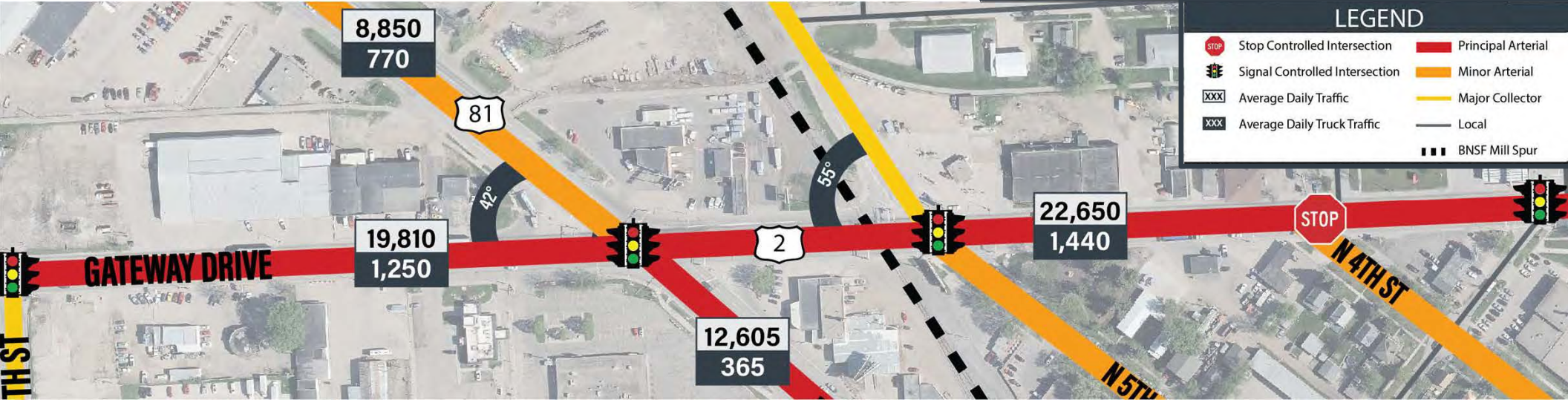


# Existing and Future Traffic Volumes




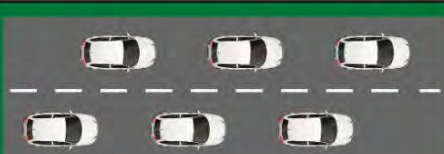




# Truck Traffic

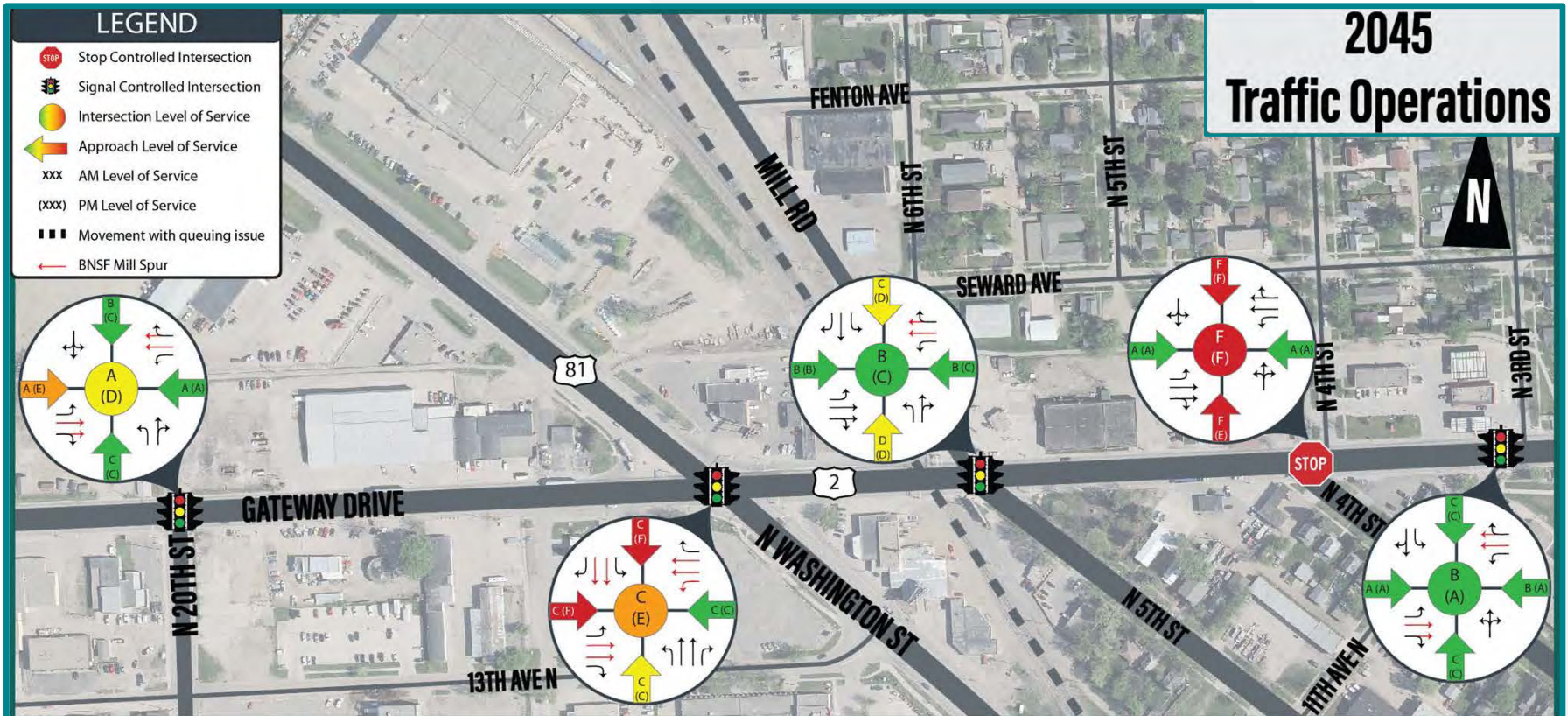
- > Level One Freight System with international connections
- > 1,200-1,500 trucks per day
- > Trucks per day > 1,500 during sugar beet harvest season
- > In 2016, NDSM increased capacity 33%, looking to expand another 22% in 5 years



# Traffic Operations

CAPACITY	TRAFFIC FLOW	DESCRIPTION
Under	 <p>Diagram showing two cars on a two-lane road with a dashed center line, moving in the same direction. There is a large gap between them, indicating free flow.</p>	<b>LOS A - FREE FLOW</b> Low volumes and no delays.
	 <p>Diagram showing three cars on a two-lane road with a dashed center line, moving in the same direction. The cars are more closely spaced than in LOS A, but still have some gaps.</p>	<b>LOS B - STABLE FLOW</b> Low volumes and speeds dictated by travel conditions.
	 <p>Diagram showing four cars on a two-lane road with a dashed center line, moving in the same direction. The cars are more closely spaced than in LOS B, with smaller gaps.</p>	<b>LOS C - STABLE FLOW</b> Speeds and maneuverability closely controlled due to higher volumes.
Approaching	 <p>Diagram showing six cars on a two-lane road with a dashed center line, moving in the same direction. The cars are very closely spaced, with minimal gaps.</p>	<b>LOS D - RESTRICTED FLOW</b> Higher density traffic restricts maneuverability and volumes approaching capacity.
At	 <p>Diagram showing eight cars on a two-lane road with a dashed center line, moving in the same direction. The cars are very closely spaced, with minimal gaps.</p>	<b>LOS E - UNSTABLE FLOW</b> Low speeds, considerable delays, and volumes at or slightly over capacity.
Over	 <p>Diagram showing ten cars on a two-lane road with a dashed center line, moving in the same direction. The cars are very closely spaced, with minimal gaps.</p>	<b>LOS F - FORCED FLOW</b> Very low speeds, volumes exceed capacity, and long delays with stop-and-go traffic.

# Intersection Traffic Operations



- ◇ LOS acceptable at all intersections today, except N 4<sup>th</sup> Street.
- ◇ Congestion Builds at Washington Street, causing unacceptable LOS in the future
- ◇ Queuing an Issues in All Scenarios
- ◇ Travel Time a Concern with Trains and Multiple Signals

# 2045 Queuing Issues

## PM Peak



## Train Event (non-unit train)





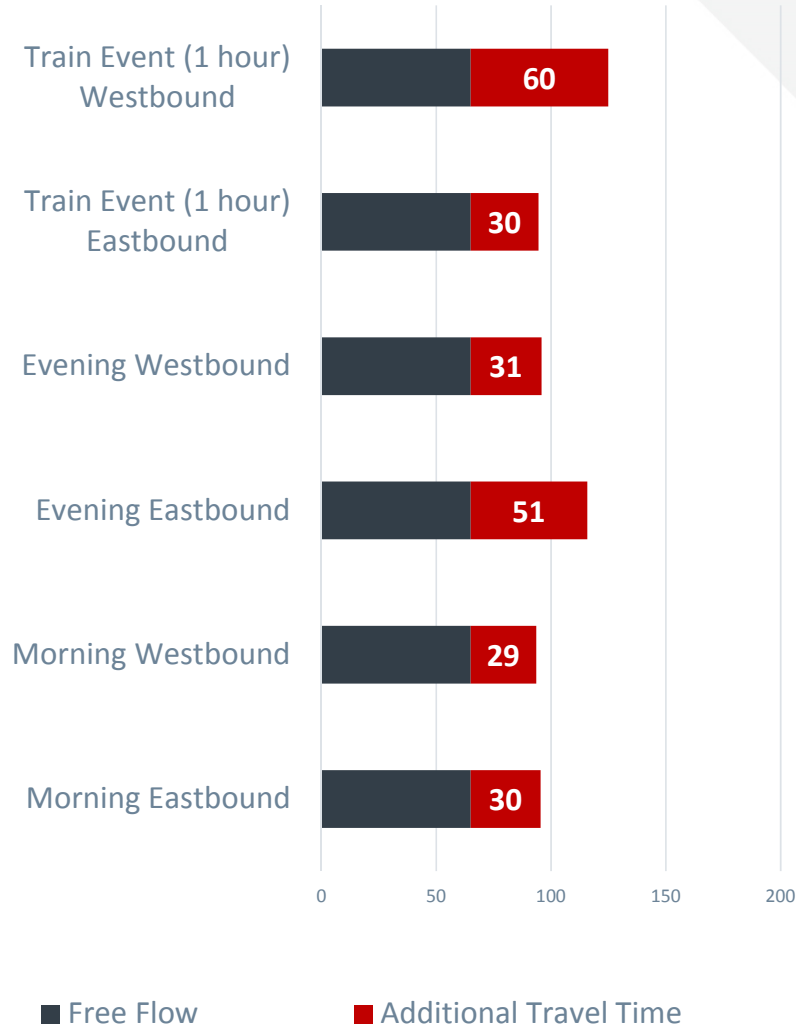
## 2045 Train Event Operations



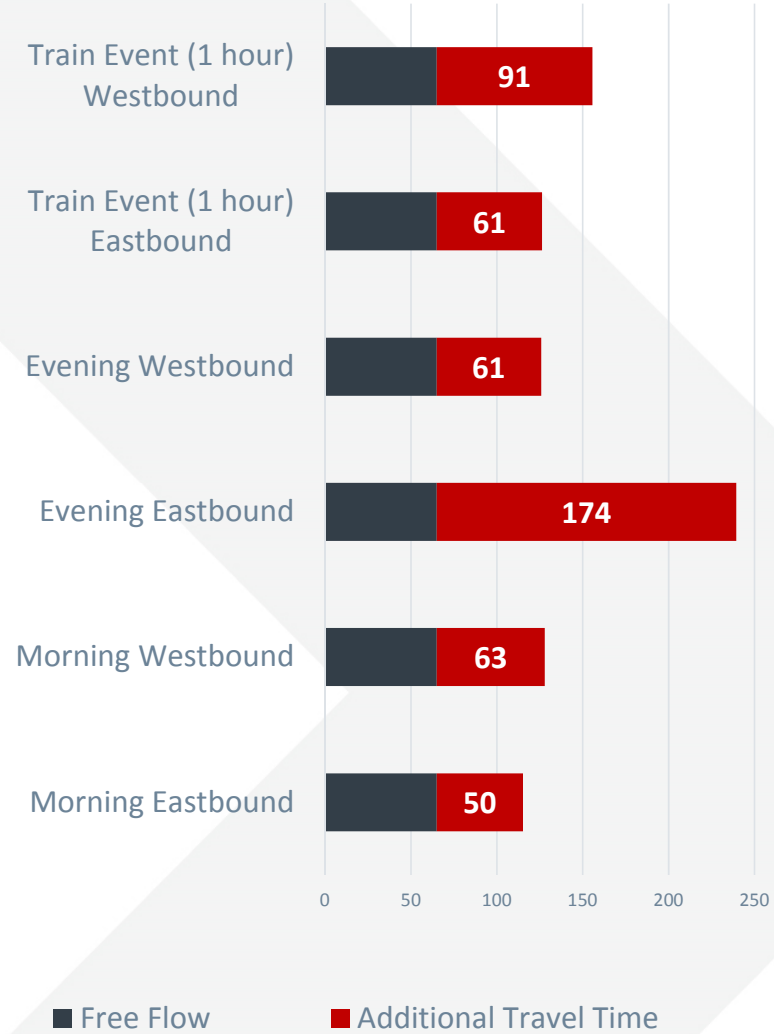
- > One train event:
  - > 4 hours of vehicle delay today
  - > 7 hours by 2045
- > Future unit trains

Travel Time

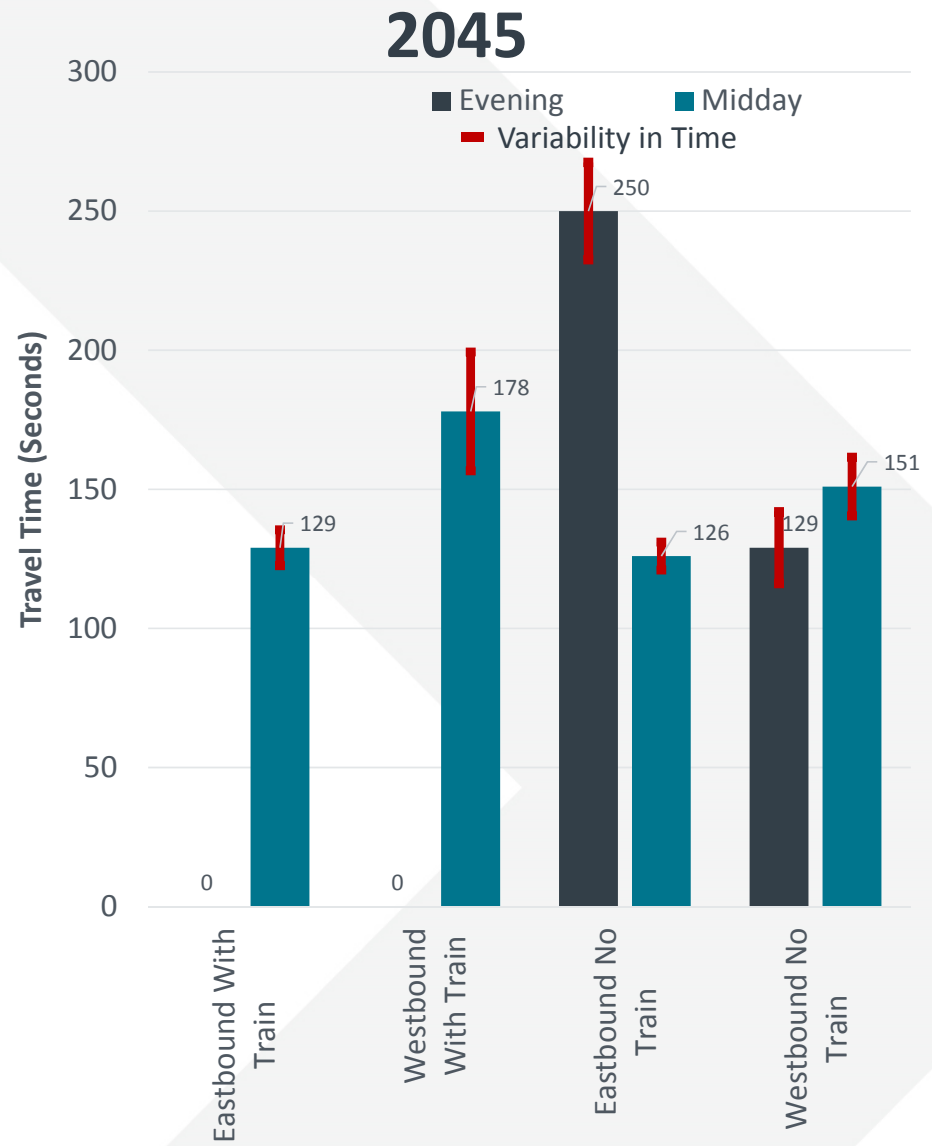
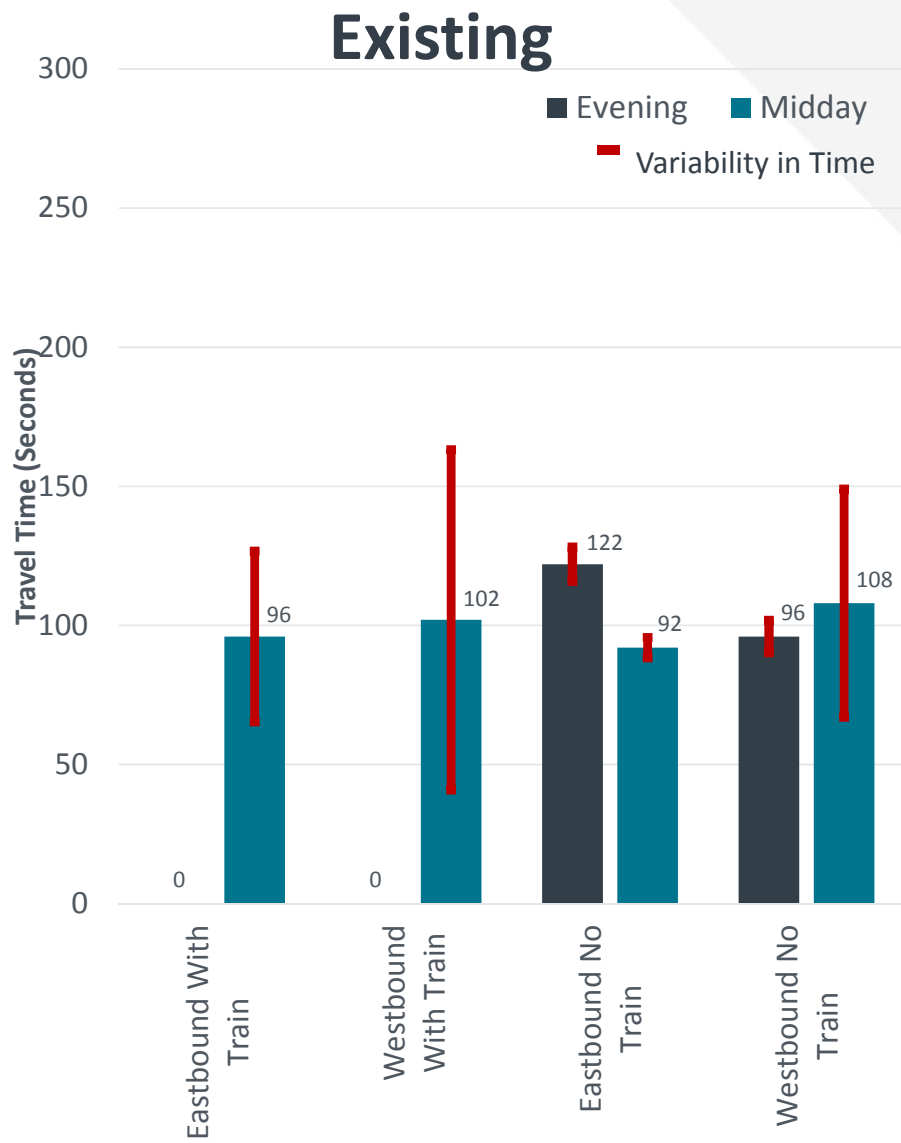
### Existing



### 2045

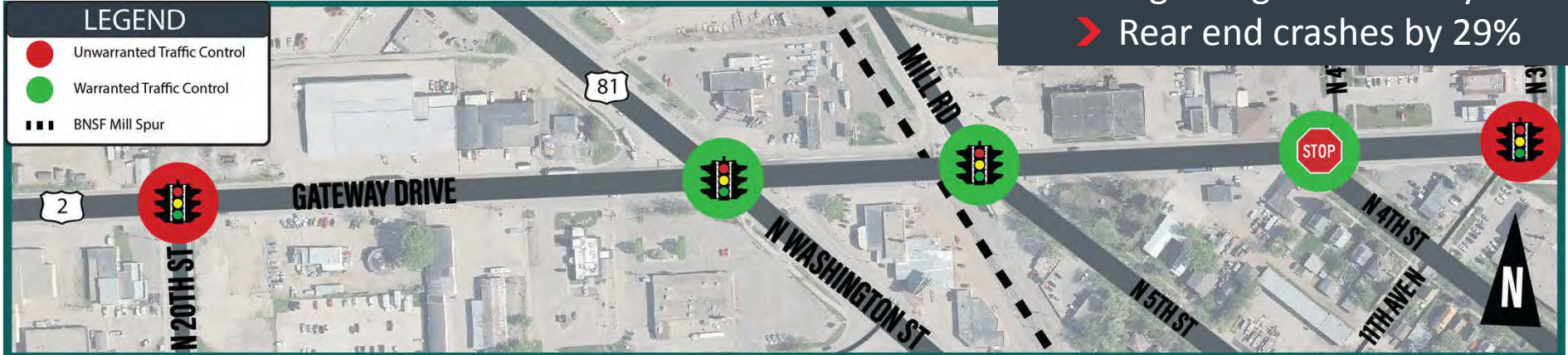


# Reliability



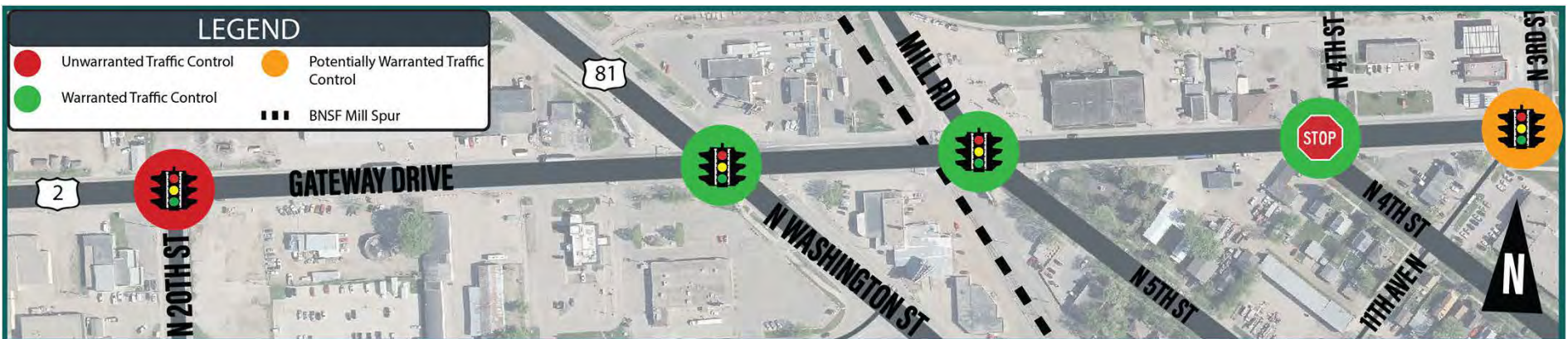
# Existing Traffic Control Analysis

## Existing



- Removal of unwarranted signals reduces
  - All crashes by 24%
  - Injury crashes by 54%
  - Right angle crashes by 24%
  - Rear end crashes by 29%

## 2030 and 2045





# Safety

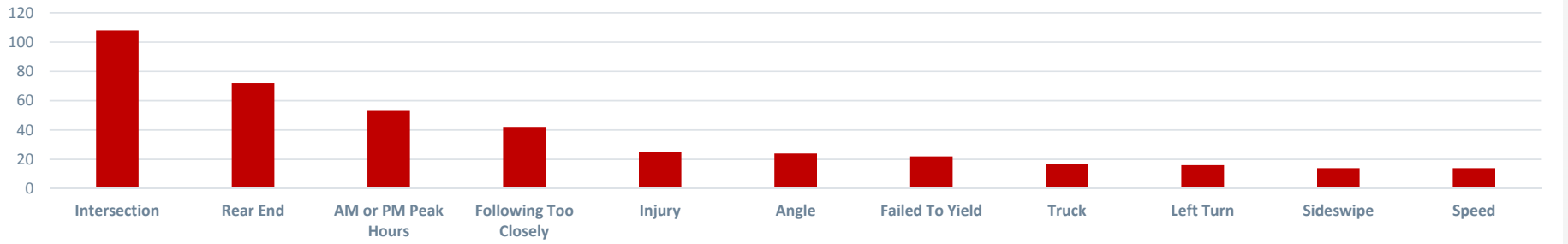
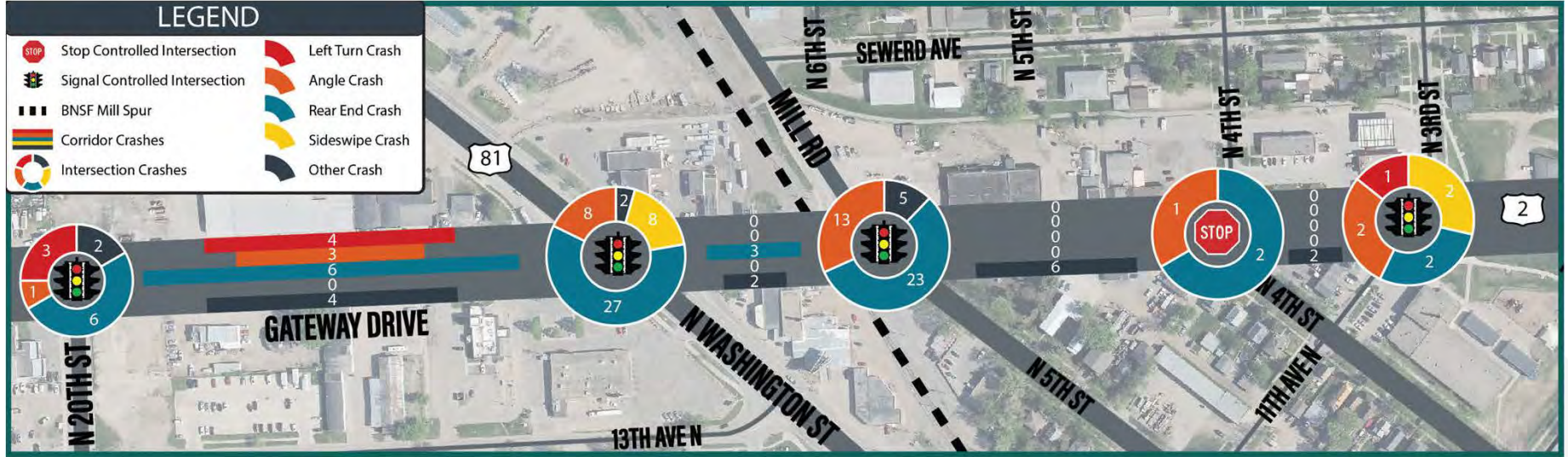
N WASHINGTON ST

N 20TH ST

2



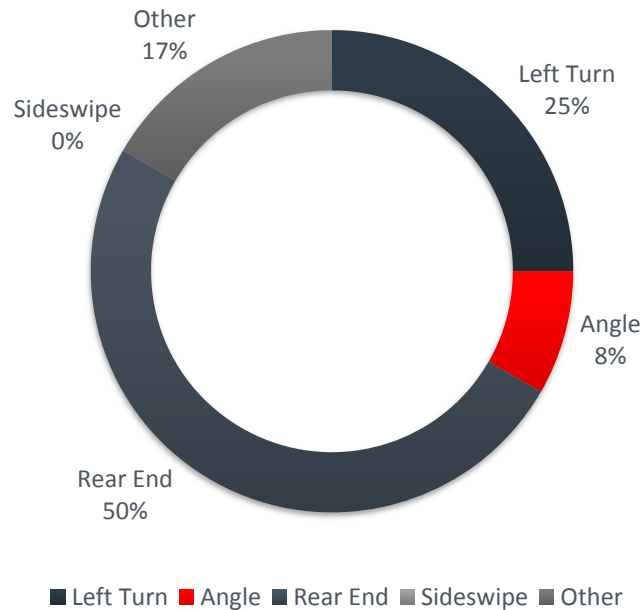
Crash History



➤ 28 Crashes/Year  
 ➤ 78% Intersection Crashes

➤ 52% Rear-End Crashes  
 ➤ 38% Peak Hour Crashes

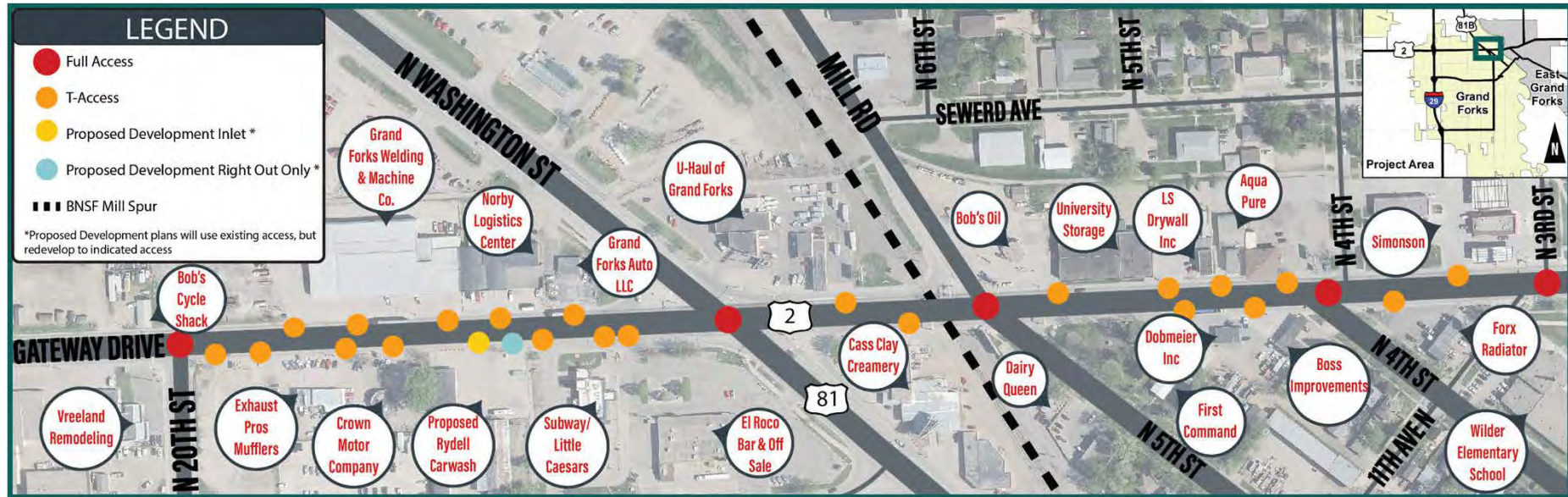
# 20<sup>th</sup> Street Intersection



- 12 crashes in last five years
- 33% rear end crashes on east approach
- 25% westbound left-turn crashes (Protected/Permitted)

- Unwarranted signal control increases
  - All crashes by 24%
  - Injury crashes by 53%
  - Right angle crashes by 24%
  - Rear end crashes by 29%

# Access Management

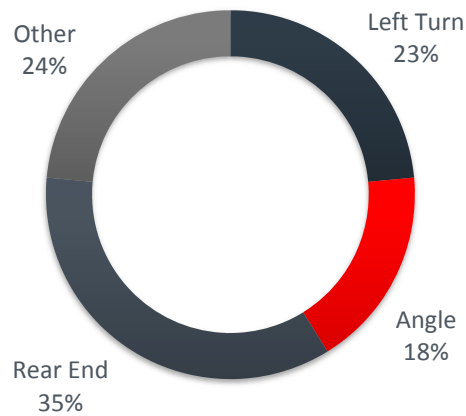


- Unsignalized driveways
  - Increase crash rate by 2%
  - Reduces corridor travel speed by 0.25 MPH

- Desired Access Spacing
  - 660 feet
  - 8 access/mile
- Existing Access Spacing
  - 33 accesses
  - 66 access/mile (8x Standard)



# 20<sup>th</sup> Street to Washington Street

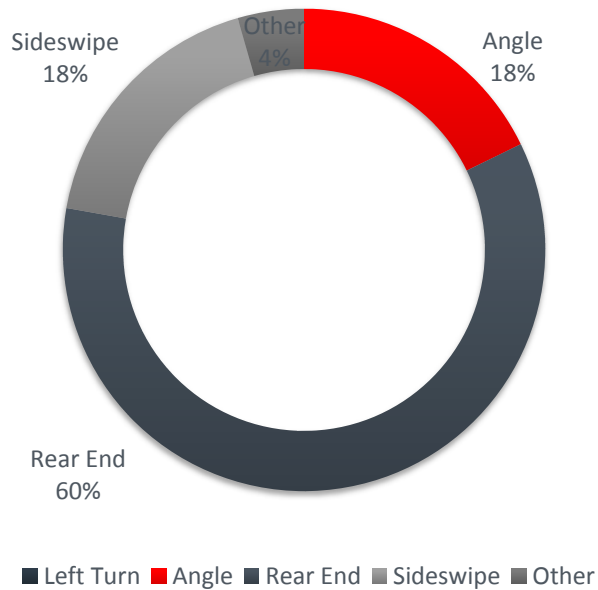


■ Left Turn ■ Angle ■ Rear End  
■ Sideswipe ■ Other

- 17 crashes in last five years
- Above critical crash rate
- 41% during AM/PM peak hours
- Long queues and dense access spacings
- Queues block sight lines

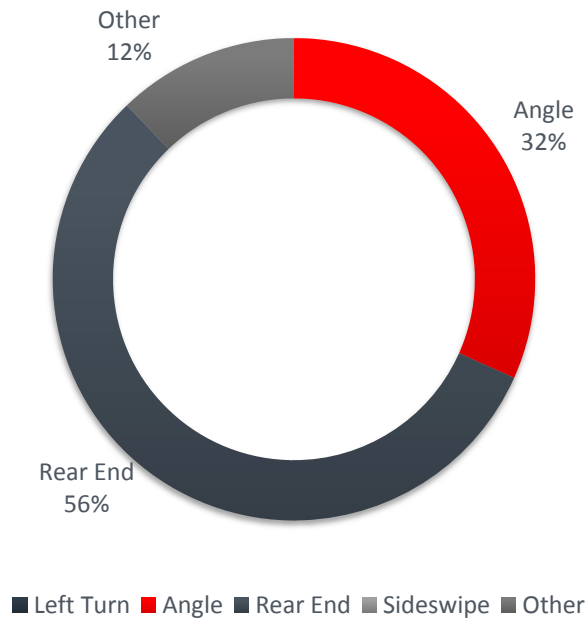


# US 81/Washington Street Intersection



- > 45 crashes in last five years
- > 60% rear end crashes
  - > 30% during AM or PM peak hour
  - > 30% between 11 AM to 1 PM
- > 8 crashes involving trucks
- > 0 Crashes involving Pedestrians or Bikes
- > Long queues and dense access spacings
- > 30% rear end crashes during peak hours

# Mill Road/5<sup>th</sup> Street Intersection



- > 41 crashes in last five years
- > Above critical crash rate

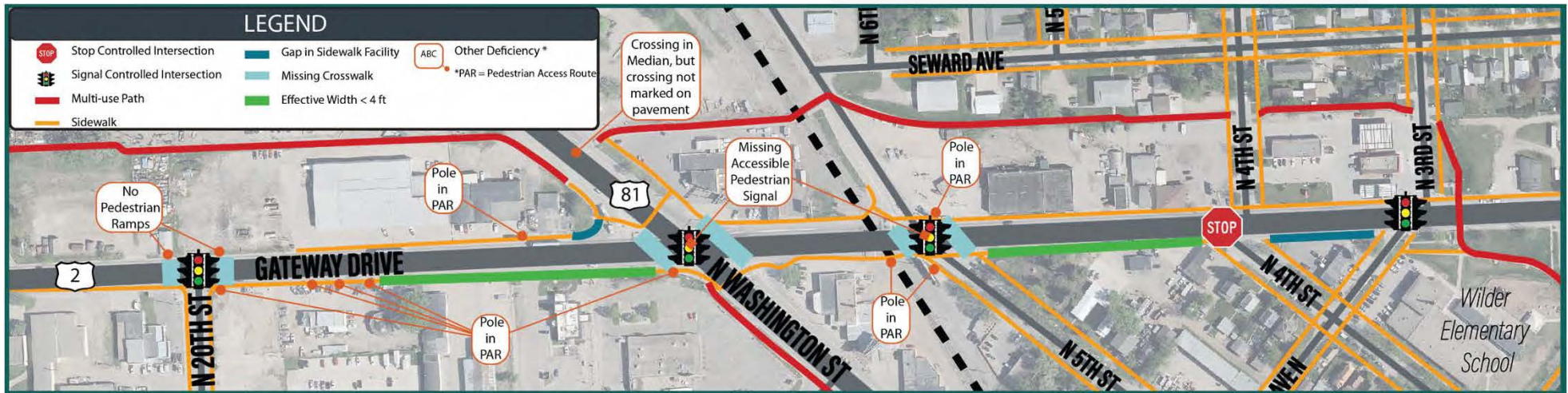
- > 50% rear end crashes
  - > 65% During AM or PM peak hours
  - > 52% occurred on east approach

An aerial photograph of an industrial or commercial district. A semi-transparent dark grey rectangle is overlaid on the center of the image, containing the title text. The background shows various buildings, parking lots with cars and trucks, and streets. A road labeled 'N WASHINGTON ST' runs diagonally from the top right towards the center. Another road labeled 'N 20TH ST' runs vertically on the left side. A shield-shaped road sign with the number '2' is visible in the lower-left quadrant. A north arrow icon is located in the top right corner of the image.

# Pedestrian, Bicycle and Transit

# Pedestrian Network

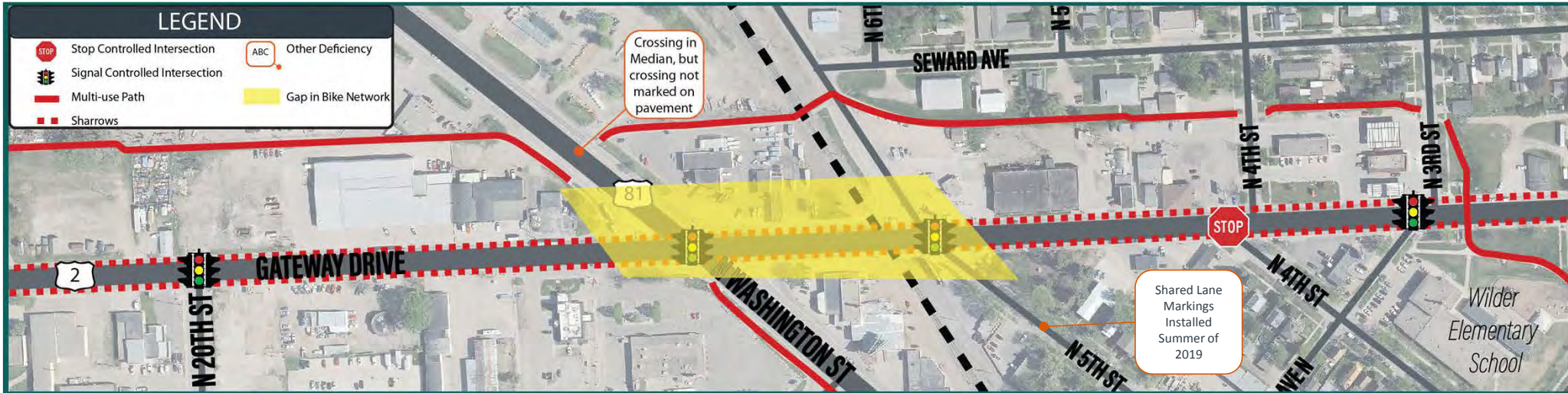
Pg. 9,10



- Only controlled crossing at 3<sup>rd</sup> Street underpass
- ADA conflicts at crosswalks, utilities and driveways
- Minimal to no buffer



# Bicycle Network

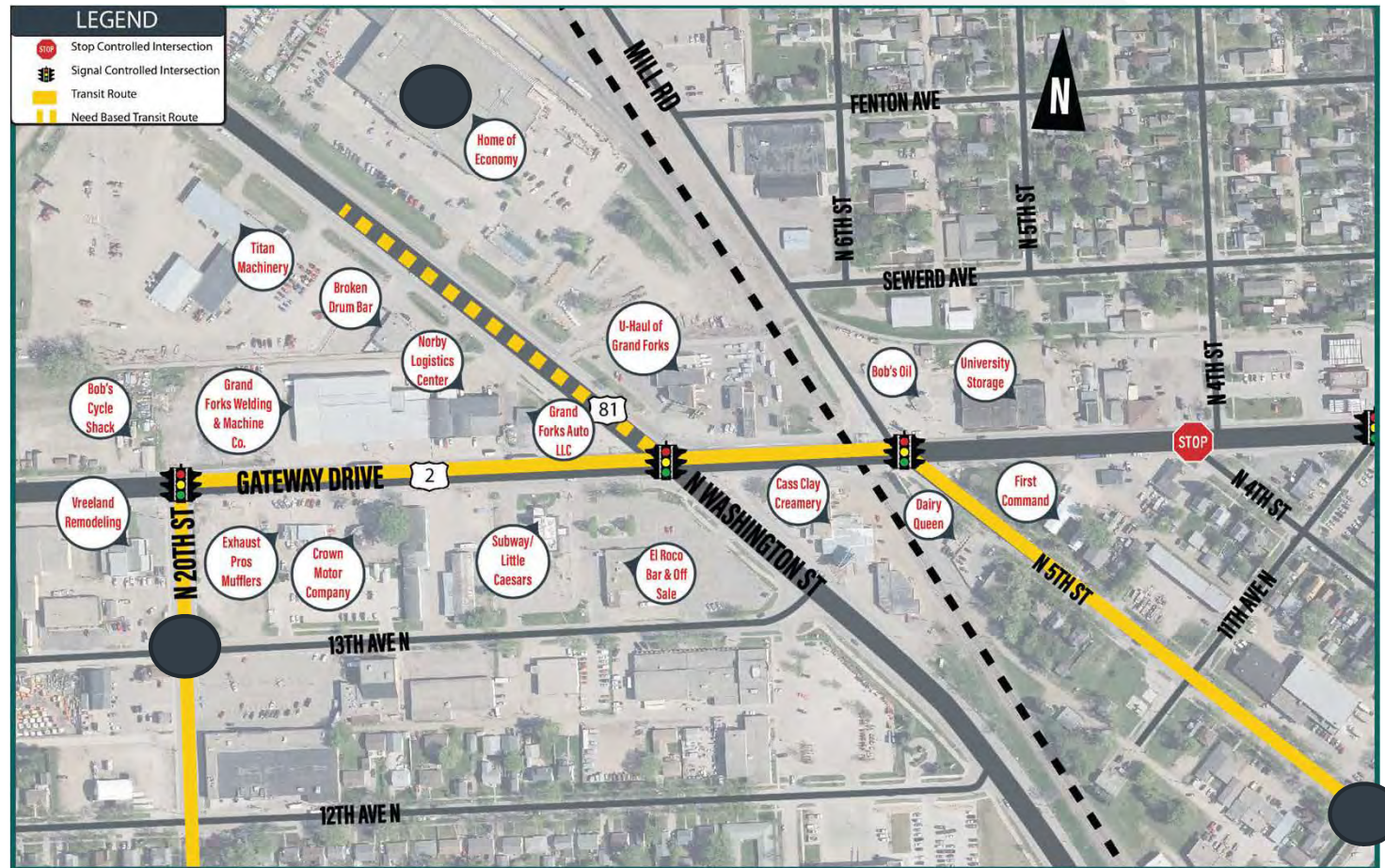


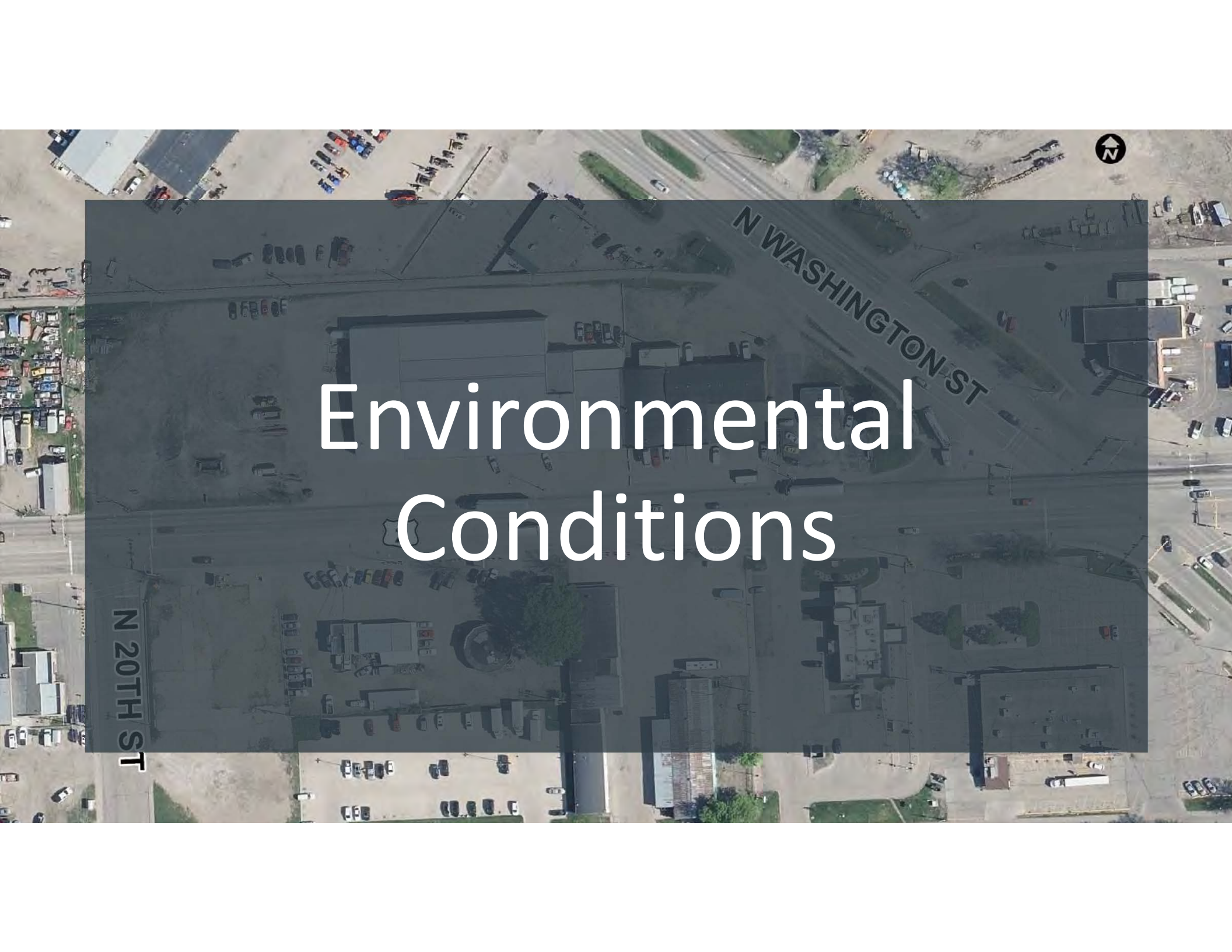
- Connections
  - 3<sup>rd</sup> Street and Red River Greenway to the east
  - Columbia Road to the west
- No traffic control to cross US 2/Washington Street
- Underpass at 3<sup>rd</sup> Street
- Bikes allowed on all streets



# Transit Network

- CAT Route 2
  - Hourly service
- CAT Route 13
  - Night Route
- Stops
  - 5<sup>th</sup> Street/10<sup>th</sup> Ave
  - Hugo's on 20<sup>th</sup> St
  - Home of Economy when scheduled in advance





# Environmental Conditions

N WASHINGTON ST

N 20TH ST



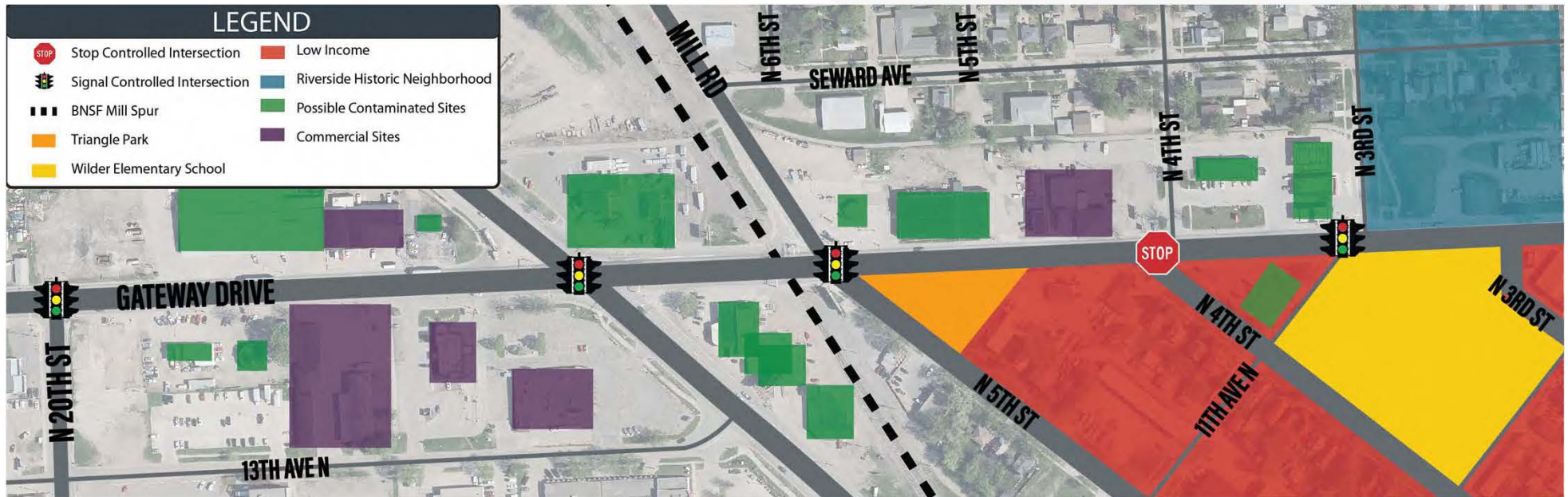


## Right-Of-Way



- US2/Gateway Drive : 70 feet
- US 81/Washington Street : 20 feet on east side, 60 feet of west side

# Affected Environment



## > Potential Impacts

- > Hazardous Waste Sites
- > Social and Economic Impacts
- > Noise

- > Pedestrians and Bicyclists
- > Environmental Justice
- > Historic and Archaeological Preservation

- > Section 4f



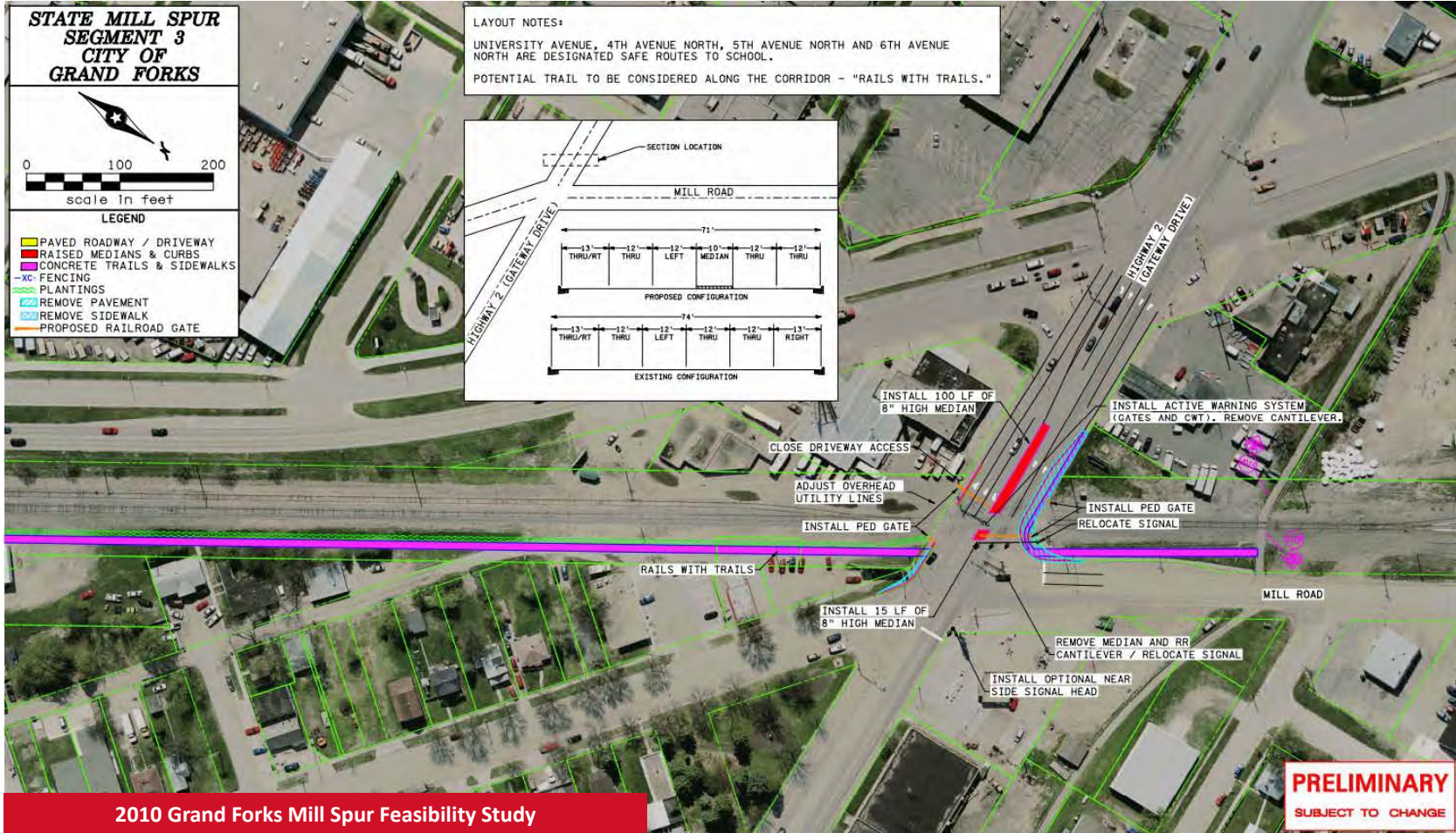
# Alternative Brainstorming

N 20TH ST

N WASHINGTON ST



# At-Grade Improvements



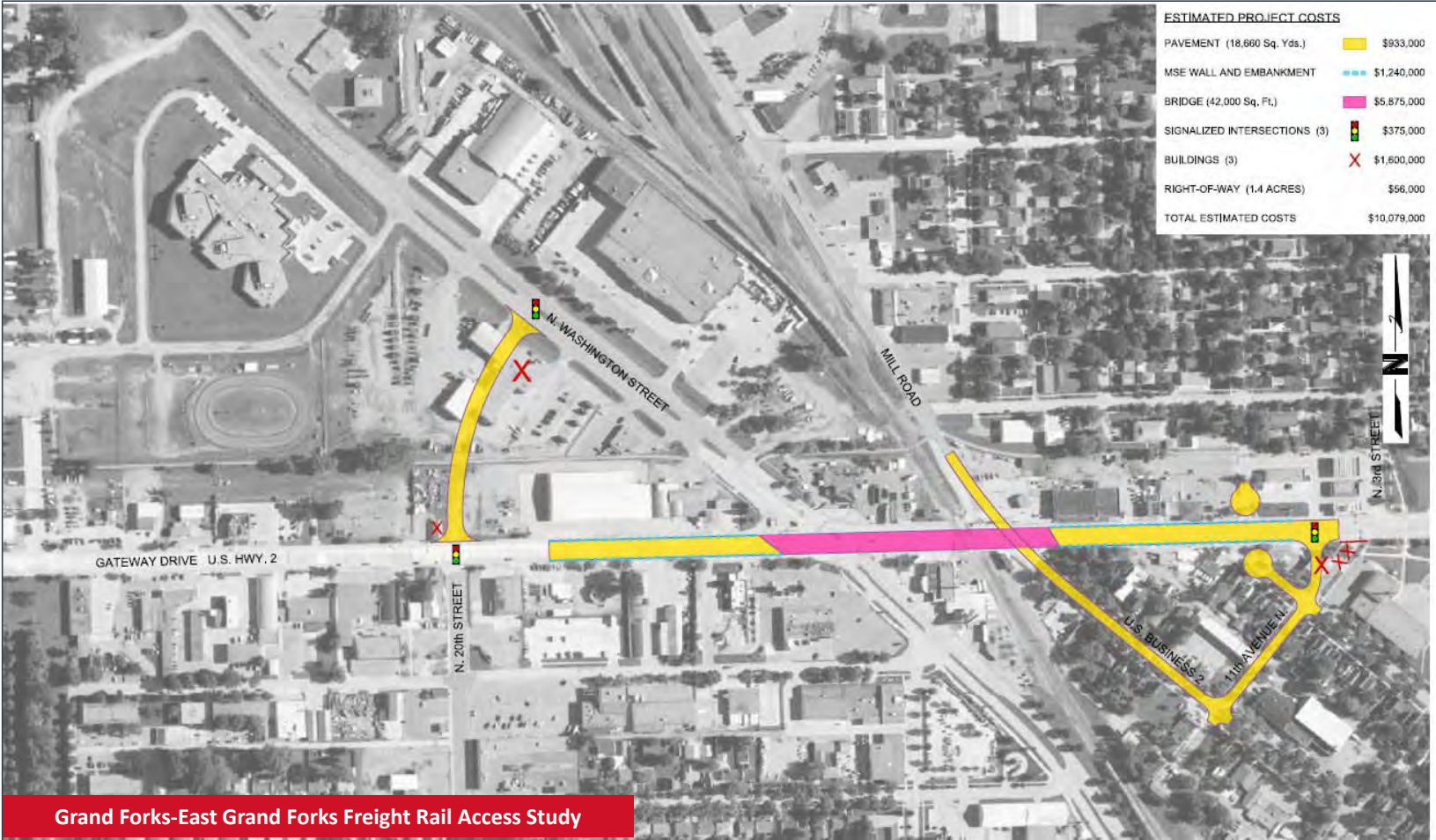
# Rerouting Skewed Movements



# Reroute the Mill Spur

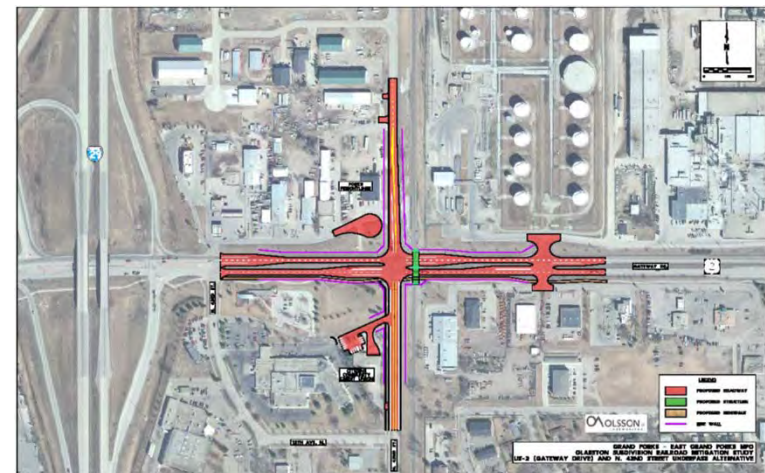


# Grade Separated Crossing

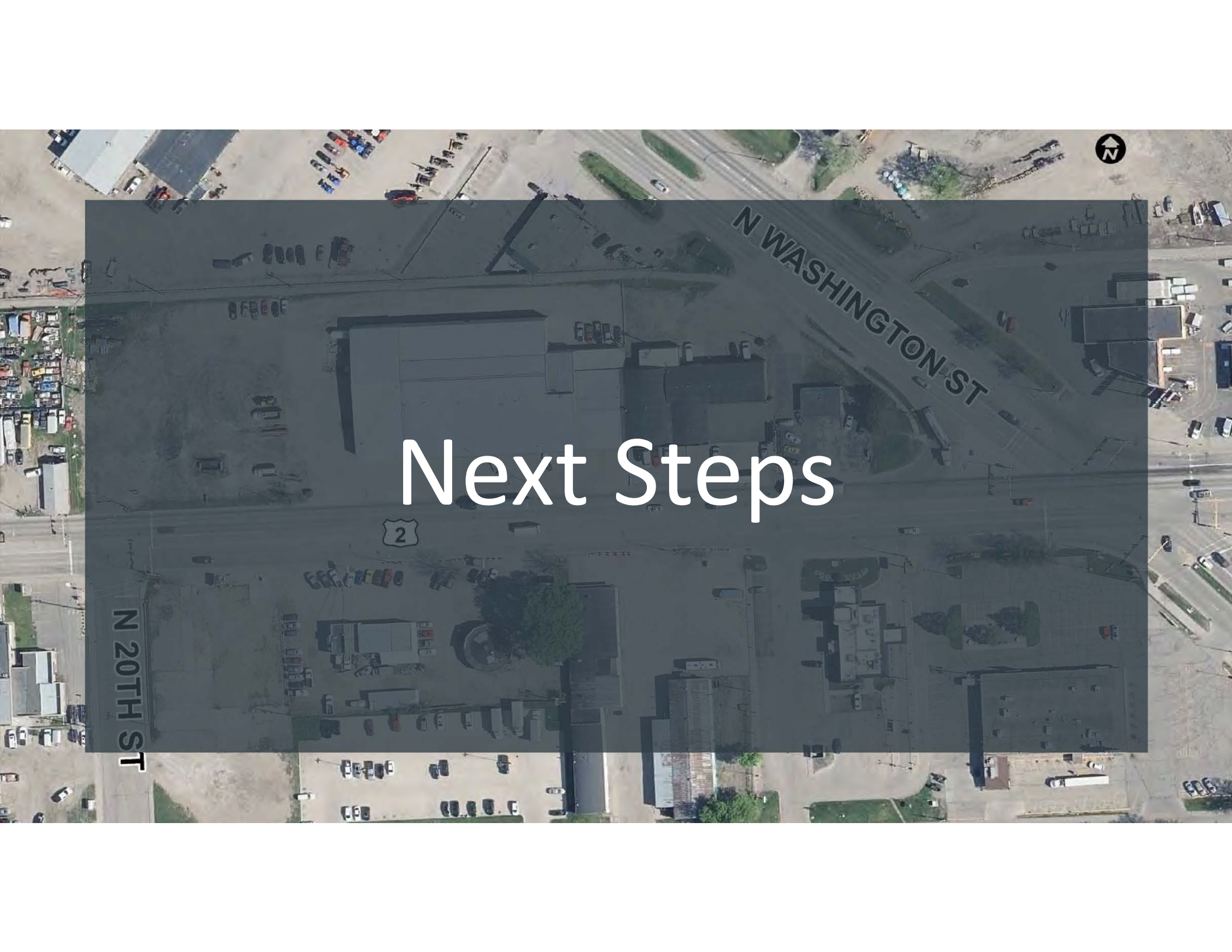


# Funding Availability

- >\$150,000,000 in Unfunded Grand Forks Projects
- 42<sup>nd</sup> Street and DeMers Avenue (~\$25-30M)
- Gateway Drive/US 2 and Glasston (~\$28M)
- Part of the NHS and Freight System







# Next Steps

N WASHINGTON ST

N 20TH ST

2



# Next Steps

Review Public  
Comments and  
Ideas



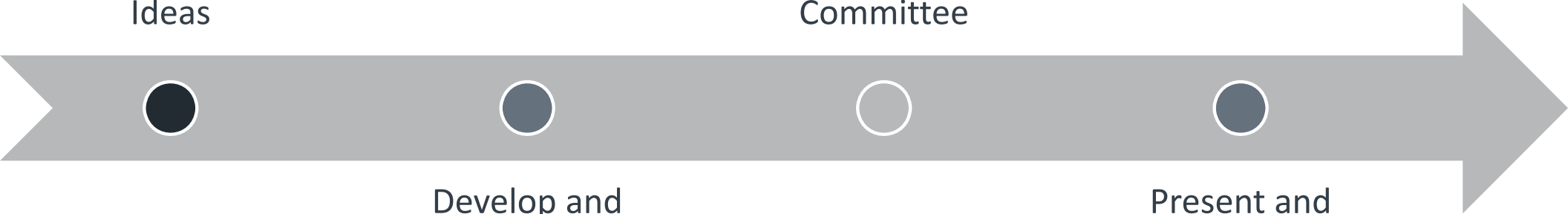
Develop and  
Analyze  
Alternatives



Review  
Alternatives with  
Steering  
Committee



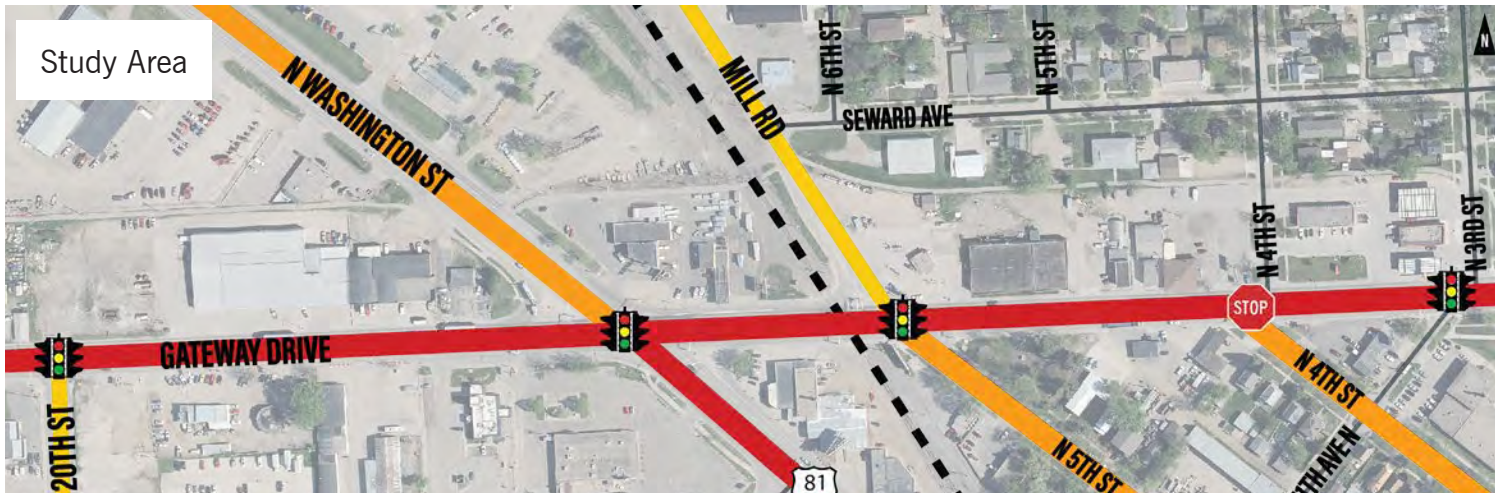
Present and  
Review  
Alternatives to the  
Public



## How to Get Involved

- Share Your Ideas at the Meeting!
- Fill Out Brainstorming Worksheet
- E-mail: [mike.bittner@kljeng.com](mailto:mike.bittner@kljeng.com)
- Fill Out Comment Card
- Visit website: <https://theforksmpo.com/the-forks-mpo/>

# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING



More info on the website: <https://theforksmpo.com/the-forks-mpo/u-s-2-u-s-81-skewed-intersection-study/>

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

This meeting will present the existing and future conditions and obtain public input on these issues. The community will also be asked to help brainstorm possible alternatives and develop a list of priorities.

## MEETING DETAILS: APRIL 11, 2019

**OPEN FORUM:** 5 to 7 PM

**PRESENTATION:** 5:30 PM

**LOCATION:** Grand Forks City Hall Council Chambers  
255 N. 4th Street

### Can't Make It?

Send written comments by April 26, 2019 to:

**Mike Bittner, Project Manager**

728 East Beaton Drive

West Fargo, ND 58078

Or via email

[mike.bittner@kljeng.com](mailto:mike.bittner@kljeng.com) with "US 2/US 81 Intersection" in the subject line.



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmpo.org](mailto:earl.haugen@theforksmpo.org).

# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

This meeting will present the existing and future conditions and obtain public input on these issues. The community will also be asked to help brainstorm possible alternatives and develop a list of priorities.



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmpo.org](mailto:earl.haugen@theforksmpo.org)

# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

This meeting will present the existing and future conditions and obtain public input on these issues. The community will also be asked to help brainstorm possible alternatives and develop a list of priorities.



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmpo.org](mailto:earl.haugen@theforksmpo.org)

# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

This meeting will present the existing and future conditions and obtain public input on these issues. The community will also be asked to help brainstorm possible alternatives and develop a list of priorities.



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmpo.org](mailto:earl.haugen@theforksmpo.org)

# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

This meeting will present the existing and future conditions and obtain public input on these issues. The community will also be asked to help brainstorm possible alternatives and develop a list of priorities.



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmpo.org](mailto:earl.haugen@theforksmpo.org)

**MEETING DETAILS:**

April 11, 2019  
Open Forum: 5 to 7 PM  
Presentation: 5:30 PM  
Grand Forks City Hall  
Council Chambers  
255 N. 4th Street  
Grand Forks

**CAN'T MAKE IT?**

*Send written comments by April 26, 2019 to:*  
**Mike Bittner, Project Manager**  
728 East Beaton Drive  
West Fargo, ND 58078  
*or via email*  
**mike.bittner@kljeng.com** with **"US 2/US 81 Intersection"** in the subject line.  
*Check out [theforksmmpo.com](http://theforksmmpo.com) for more info.*

**MEETING DETAILS:**

April 11, 2019  
Open Forum: 5 to 7 PM  
Presentation: 5:30 PM  
Grand Forks City Hall  
Council Chambers  
255 N. 4th Street  
Grand Forks

**CAN'T MAKE IT?**

*Send written comments by April 26, 2019 to:*  
**Mike Bittner, Project Manager**  
728 East Beaton Drive  
West Fargo, ND 58078  
*or via email*  
**mike.bittner@kljeng.com** with **"US 2/US 81 Intersection"** in the subject line.  
*Check out [theforksmmpo.com](http://theforksmmpo.com) for more info.*

**MEETING DETAILS:**

April 11, 2019  
Open Forum: 5 to 7 PM  
Presentation: 5:30 PM  
Grand Forks City Hall  
Council Chambers  
255 N. 4th Street  
Grand Forks

**CAN'T MAKE IT?**

*Send written comments by April 26, 2019 to:*  
**Mike Bittner, Project Manager**  
728 East Beaton Drive  
West Fargo, ND 58078  
*or via email*  
**mike.bittner@kljeng.com** with **"US 2/US 81 Intersection"** in the subject line.  
*Check out [theforksmmpo.com](http://theforksmmpo.com) for more info.*

**MEETING DETAILS:**

April 11, 2019  
Open Forum: 5 to 7 PM  
Presentation: 5:30 PM  
Grand Forks City Hall  
Council Chambers  
255 N. 4th Street  
Grand Forks

**CAN'T MAKE IT?**

*Send written comments by April 26, 2019 to:*  
**Mike Bittner, Project Manager**  
728 East Beaton Drive  
West Fargo, ND 58078  
*or via email*  
**mike.bittner@kljeng.com** with **"US 2/US 81 Intersection"** in the subject line.  
*Check out [theforksmmpo.com](http://theforksmmpo.com) for more info.*



# US 2/US 81 SKEWED INTERSECTION STUDY

Public Input Meeting #2

**Overcoming Barriers**    **Strengthening Connections**

M.P.O.  
M.P.O.  
M.P.O.

Grand Forks - East Grand Forks  
Metropolitan Planning Organization

**Ensuring Opportunities**    **Planning One Community**



ENGINEERING, REIMAGINED

# Project Process



```
graph LR; A[Identify Key Issues and Opportunities] --> B[Develop and Assess Alternatives]; B --> C[Formulate Implementation Strategy];
```

Identify Key  
Issues and  
Opportunities

Develop and  
Assess  
Alternatives

Formulate  
Implementation  
Strategy





# Key Issues Refresher

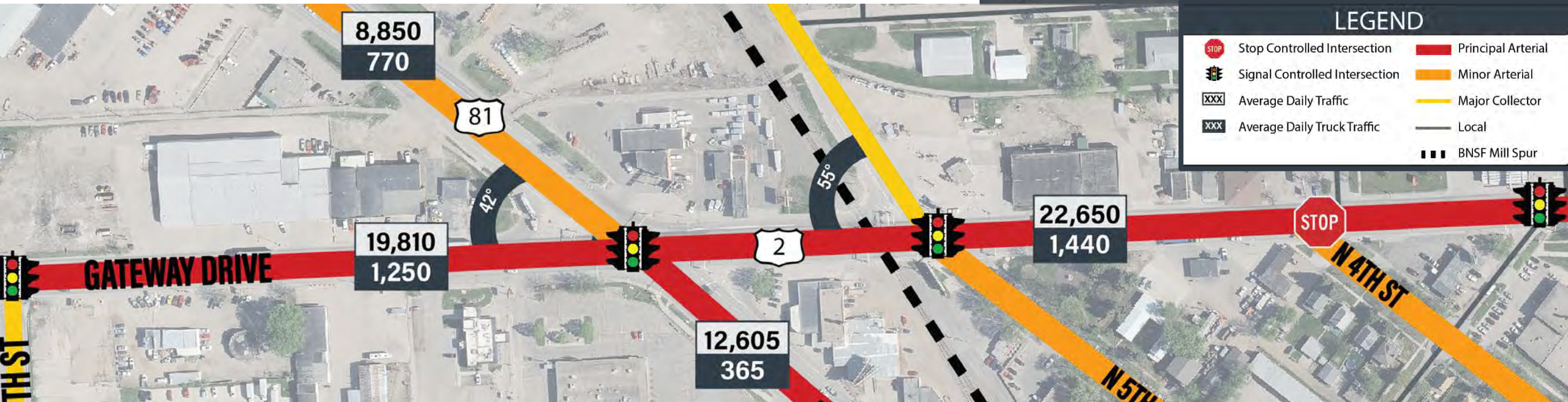
N 20TH ST

N WASHINGTON ST

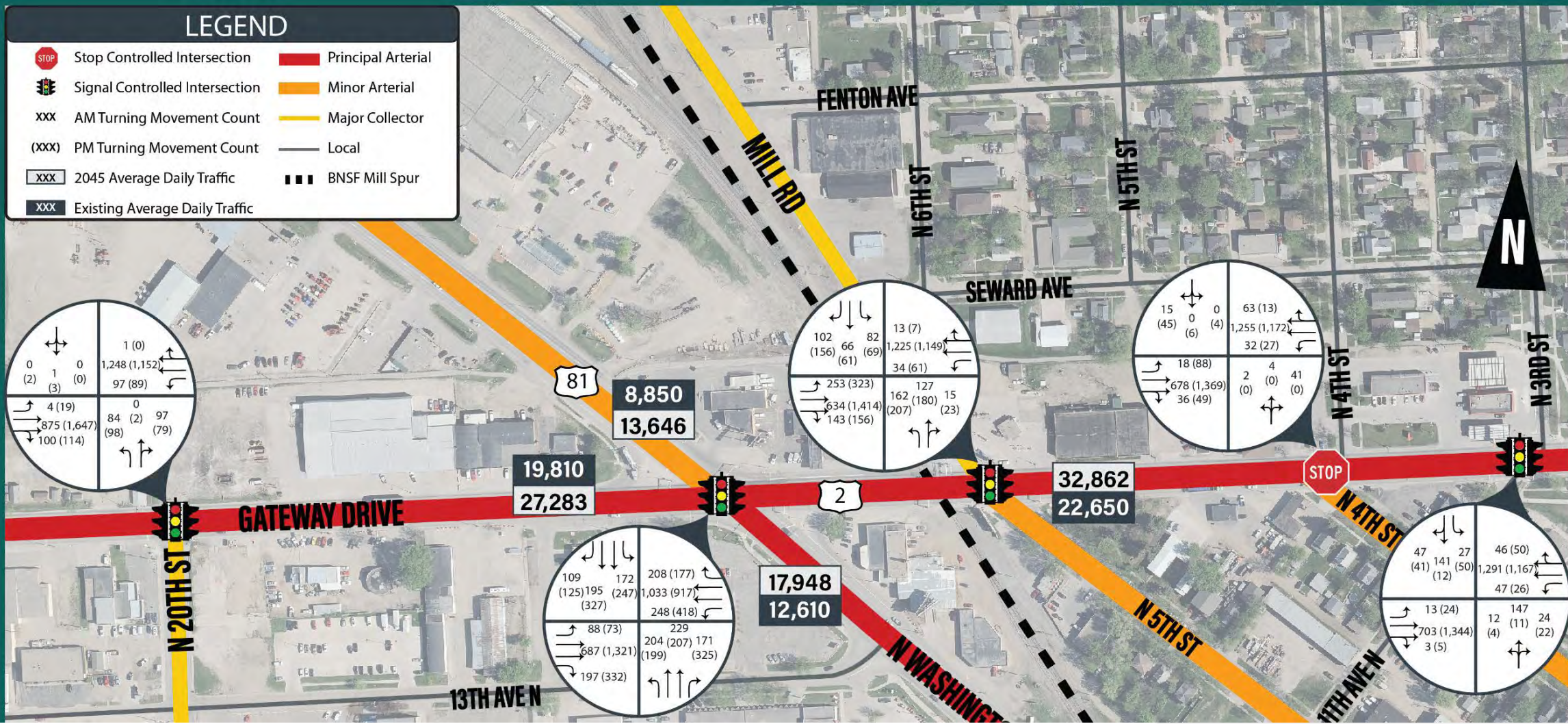


# Traffic

- 19,800 – 22,600 Vehicles Per Day
- 1,200-1,500 trucks per day
  - In 2016, NDSM increased capacity 33%, looking to expand another 22% in 5 years
- Skewed Turning Movements









# Existing and Future Traffic Volumes

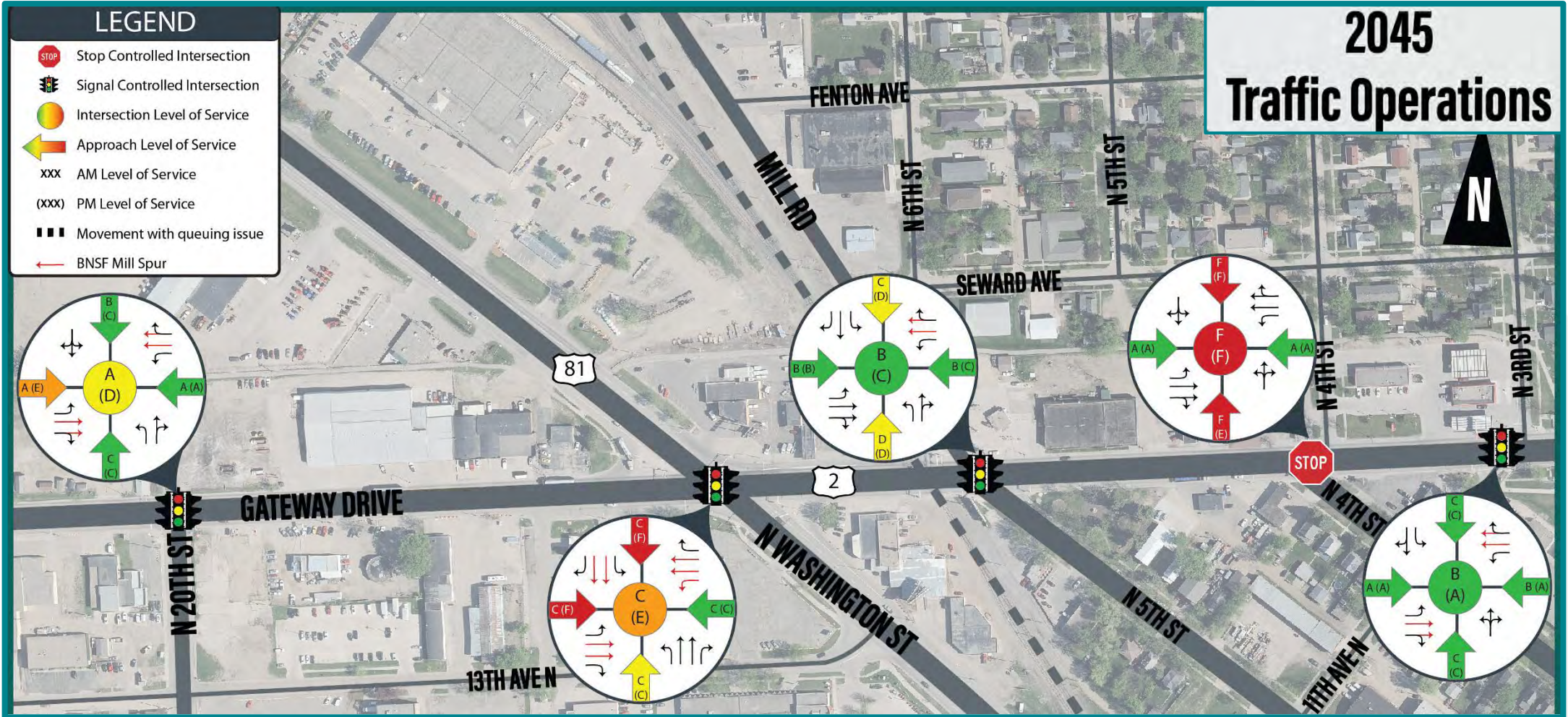


- Projections Show 7,500 – 10,000 More ADT by 2045 on Gateway/US 2
- By Comparison; Historic Traffic Volumes Show Reduced Traffic Volumes over the Past 10 Year

# Traffic Operations

CAPACITY	TRAFFIC FLOW	DESCRIPTION
Under	 <p>Diagram showing two cars on a two-lane road with a dashed center line, moving in the same direction. There is a large gap between them, indicating free flow.</p>	<b>LOS A - FREE FLOW</b> Low volumes and no delays.
	 <p>Diagram showing three cars on a two-lane road with a dashed center line, moving in the same direction. The cars are spaced out, indicating stable flow.</p>	<b>LOS B - STABLE FLOW</b> Low volumes and speeds dictated by travel conditions.
	 <p>Diagram showing four cars on a two-lane road with a dashed center line, moving in the same direction. The cars are closer together, indicating stable flow with higher volumes.</p>	<b>LOS C - STABLE FLOW</b> Speeds and maneuverability closely controlled due to higher volumes.
Approaching	 <p>Diagram showing six cars on a two-lane road with a dashed center line, moving in the same direction. The cars are very close together, indicating restricted flow.</p>	<b>LOS D - RESTRICTED FLOW</b> Higher density traffic restricts maneuverability and volumes approaching capacity.
At	 <p>Diagram showing eight cars on a two-lane road with a dashed center line, moving in the same direction. The cars are packed closely together, indicating unstable flow.</p>	<b>LOS E - UNSTABLE FLOW</b> Low speeds, considerable delays, and volumes at or slightly over capacity.
Over	 <p>Diagram showing ten cars on a two-lane road with a dashed center line, moving in the same direction. The cars are packed very closely together, indicating forced flow.</p>	<b>LOS F - FORCED FLOW</b> Very low speeds, volumes exceed capacity, and long delays with stop-and-go traffic.

# Intersection Traffic Operations



- ◇ LOS acceptable at all intersections today, except N 4<sup>th</sup> Street.
- ◇ Congestion Builds at Washington Street, causing unacceptable LOS in the future
- ◇ Queuing an Issue in All Scenarios
- ◇ Travel Time a Concern with Trains and Multiple Signals

# 2045 PM Queuing Issues

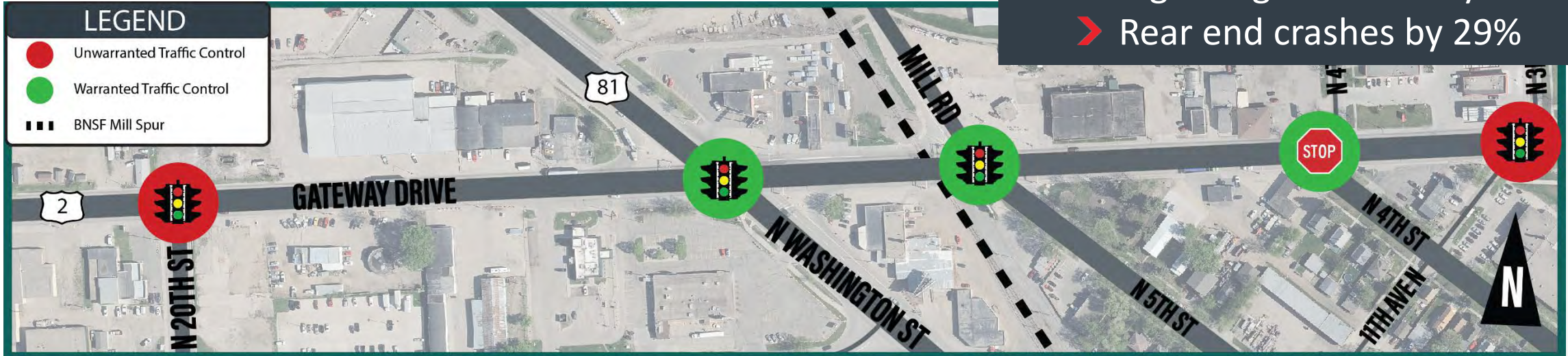
© 2017 Microsoft Corporation

## 2045 PM Peak



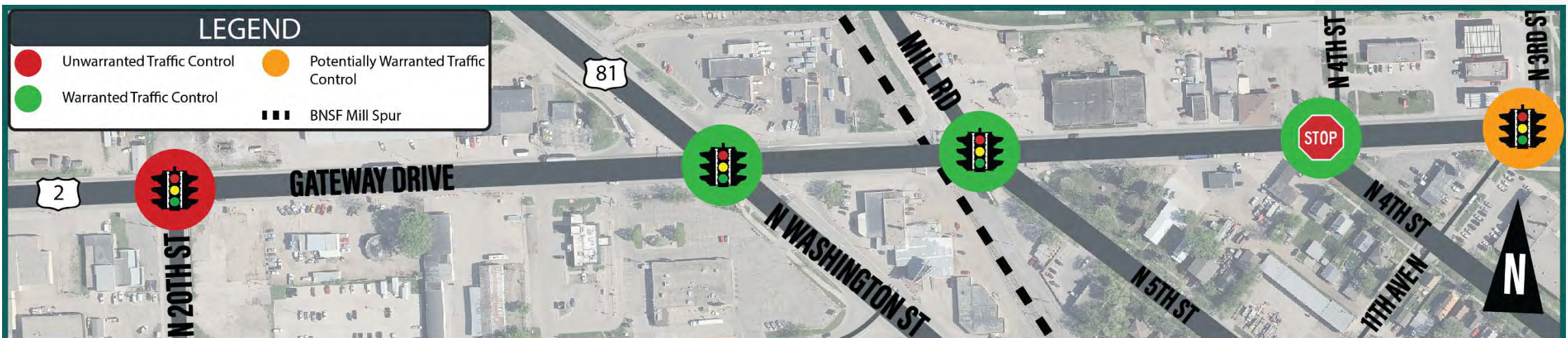
# Existing Traffic Control Analysis

## Existing



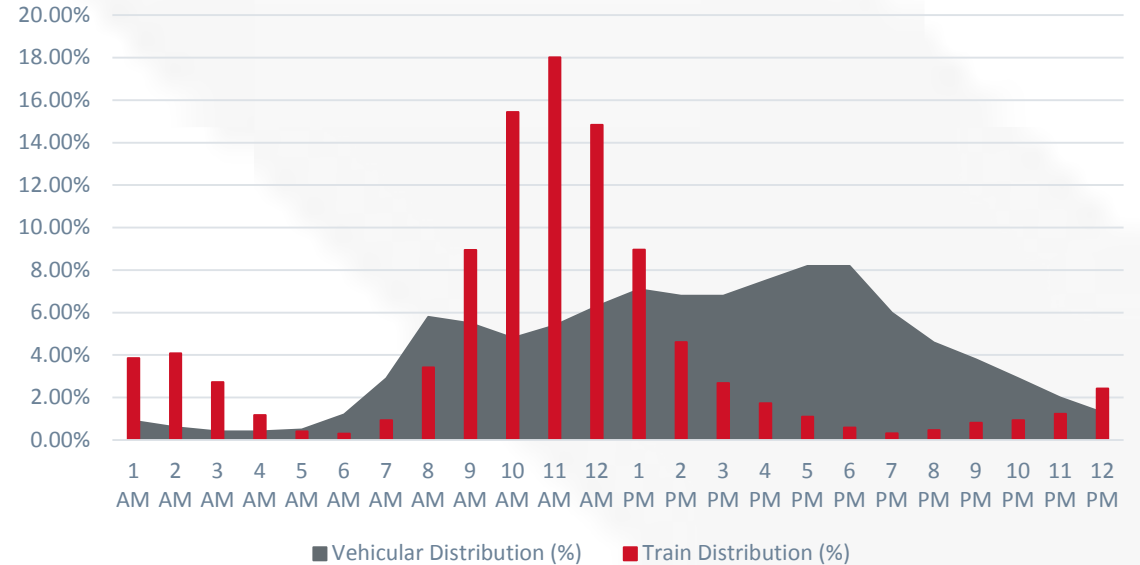
- Removal of unwarranted signals reduces
  - All crashes by 24%
  - Injury crashes by 54%
  - Right angle crashes by 24%
  - Rear end crashes by 29%

## 2030 and 2045

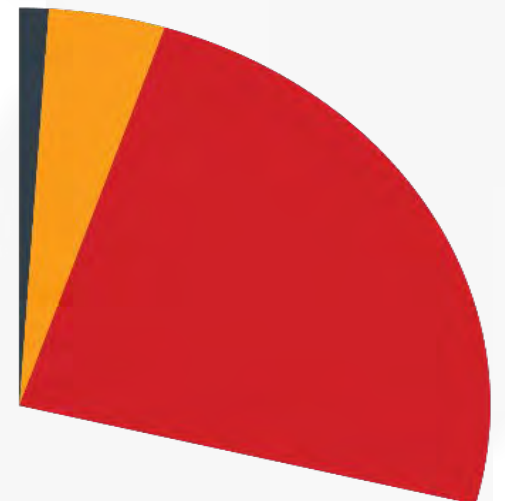


# Train Blockages

- 4 to 5 blockages per day
  - 10 MPH or Less
- Safety
  - No Crashes Since 1994
  - 7<sup>th</sup> Highest Predicted Rail Crash Rate in the County



- *Minimum Delay*  
- 0:21 minutes
- *Average Delay*  
- 2:31 minutes
- *Maximum Delay*  
- 14:14 minutes





# Train Delays



- Delay from One Blockage
  - 4 hours in 2019
  - 7 hours by 2045
- Travel Reliability
  - 2-5x Longer Delays with Train

# Unit Trains

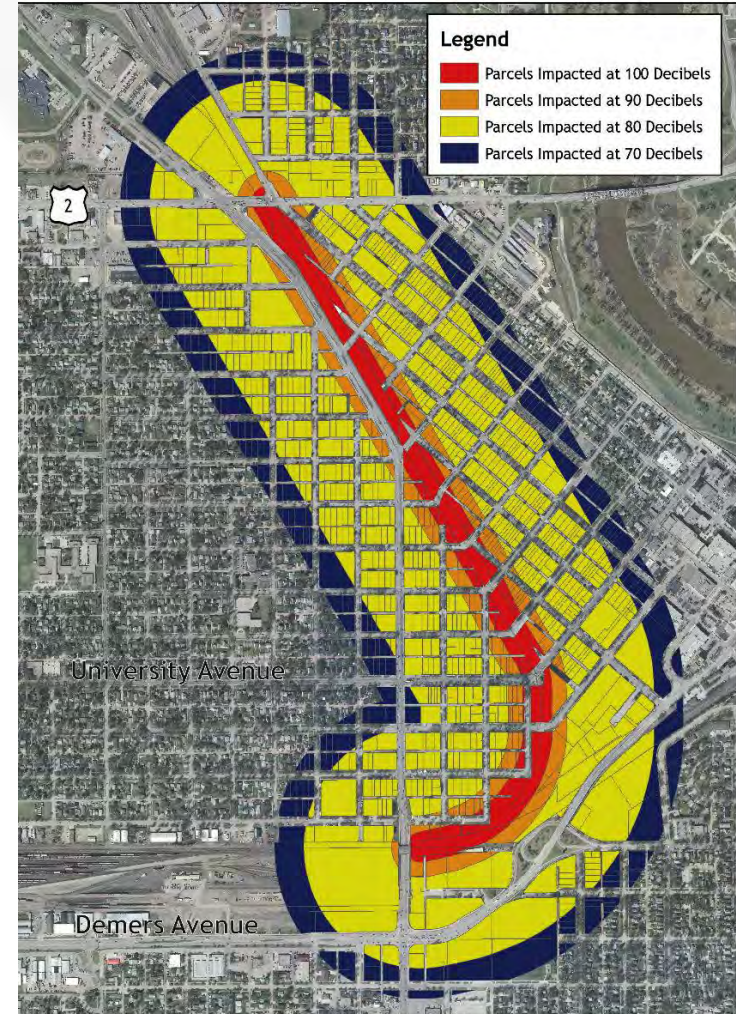
- ND Mill Working to Accommodate Unit Trains
- All crossings will be blocked at the same time.

**4x** Longer than Current Trains

**10-17** Minutes of Delay at Each Mill Spur Crossings

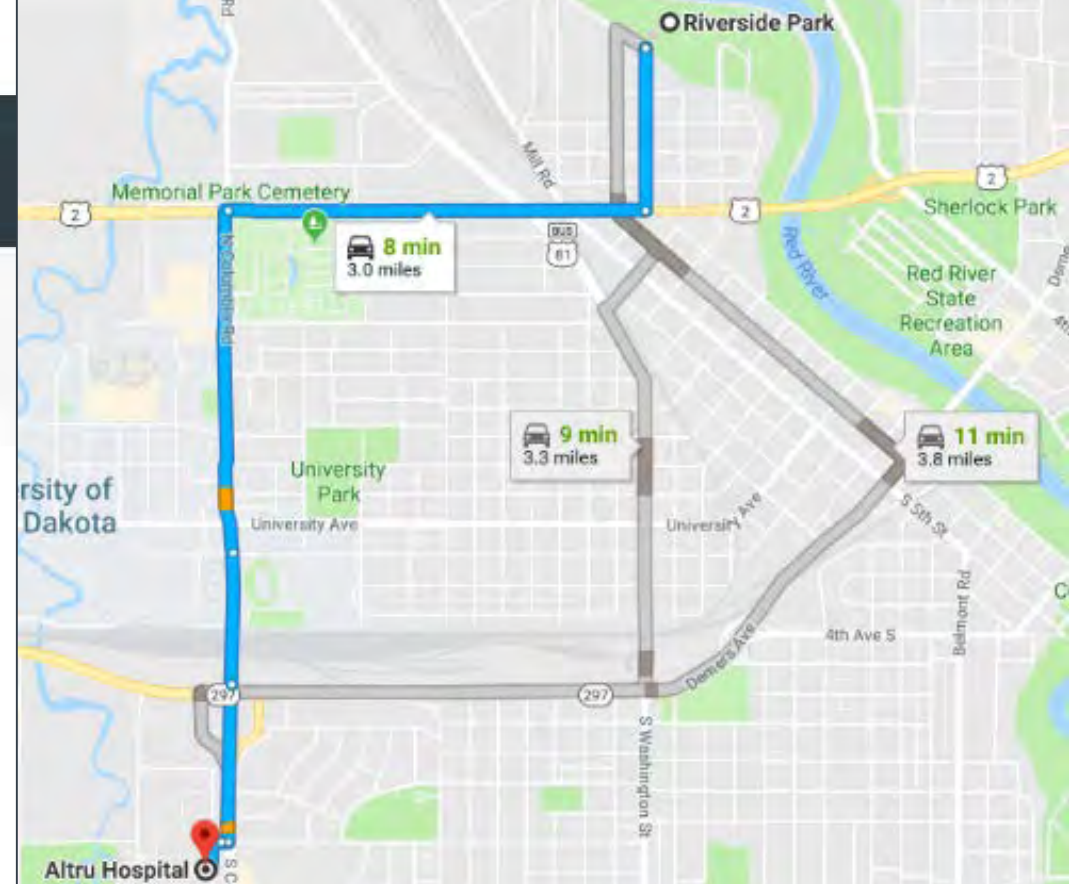
**0-4** Blockages per Month

## Potential to Occur at Night

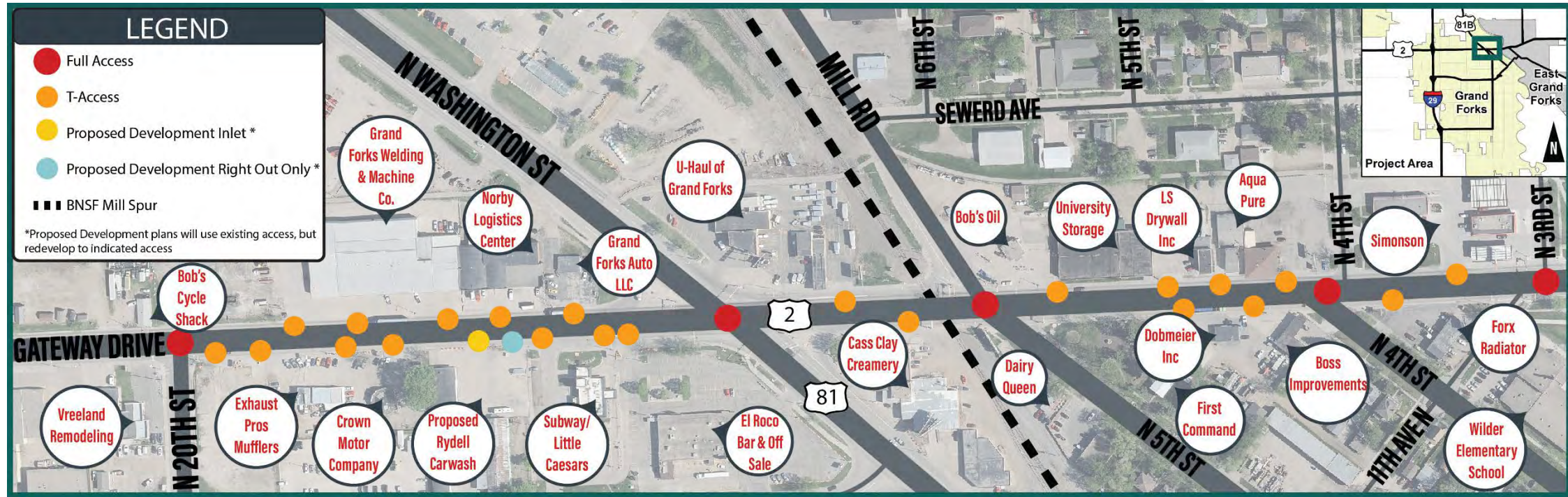


# Emergency Responders

- Fire Response Goal to reach every address within four minutes
  - Brain damage in four to six minutes when heart stops
  - Fires can double every 60 seconds
- ND Mill will Work with the City and EMS when a Unit Train Occurs



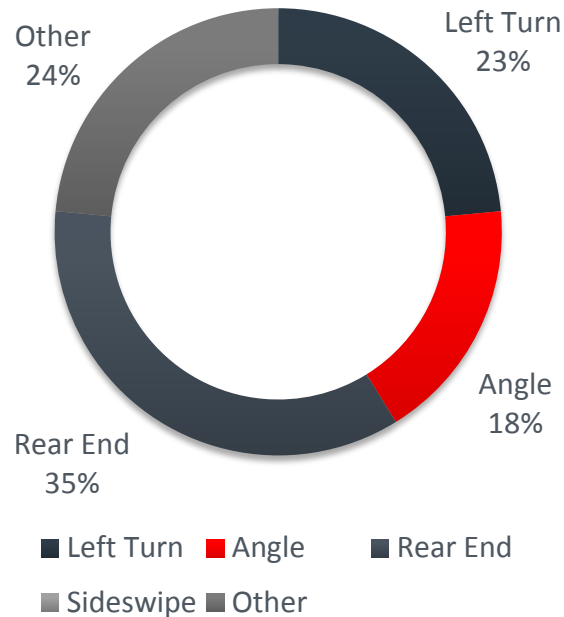
# Access Management



- Unsignalized driveways
  - Increase crash rate by 2%
  - Reduces corridor travel speed by 0.25 MPH

- Desired Access Spacing
  - 660 feet
  - 8 access/mile
- Existing Access Spacing
  - 33 accesses
  - 66 access/mile (8x Standard)

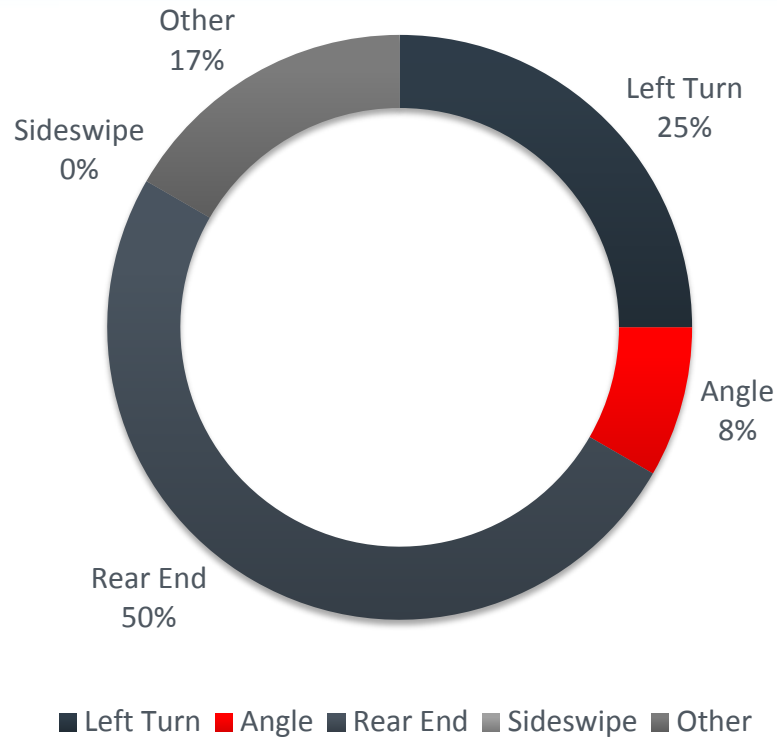
# 20<sup>th</sup> Street to Washington Street



- 17 crashes in last five years
- Above critical crash rate
- 41% during AM/PM peak hours
- Long queues and dense access spacings
- Queues block sight lines



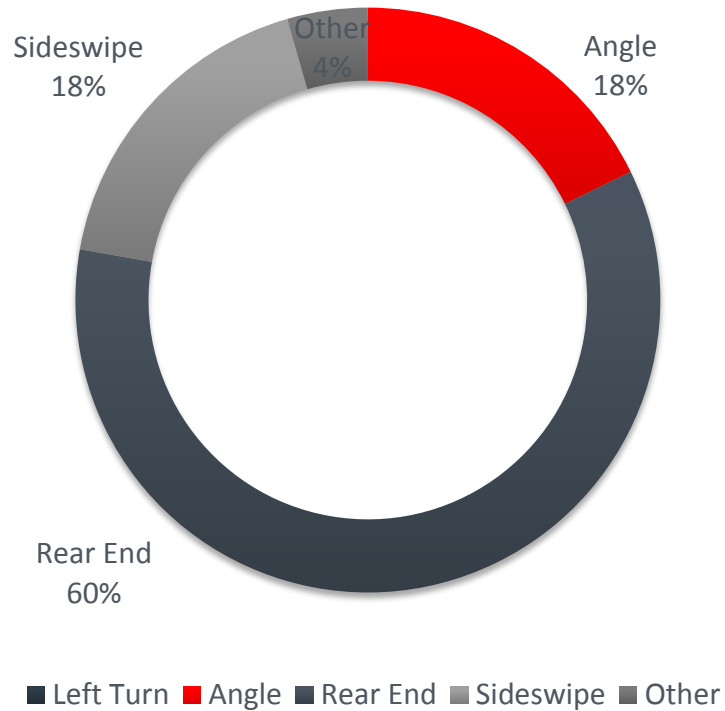
# 20<sup>th</sup> Street Intersection



- 12 crashes in last five years
- 33% rear end crashes on east approach
- 25% westbound left-turn crashes (Protected/Permitted)

- Unwarranted signal control increases
  - All crashes by 24%
  - Injury crashes by 53%
  - Right angle crashes by 24%
  - Rear end crashes by 29%

# US 81/Washington Street Intersection



➤ 45 crashes in last five years

➤ 60% rear end crashes

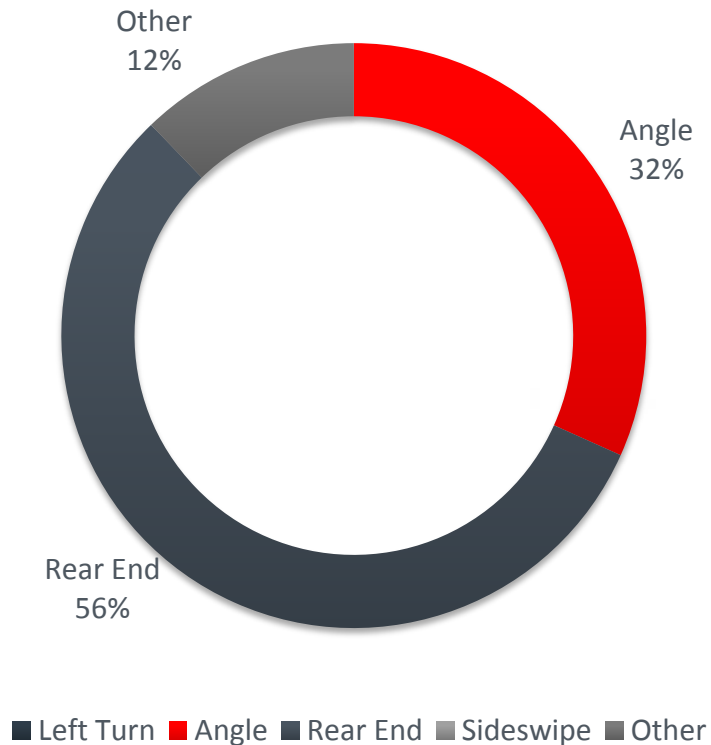
➤ 30% during AM or PM peak hour

➤ 30% between 11 AM to 1 PM

➤ 8 crashes involving trucks

➤ 0 Crashes involving Pedestrians or Bikes

# Mill Road/5<sup>th</sup> Street Intersection

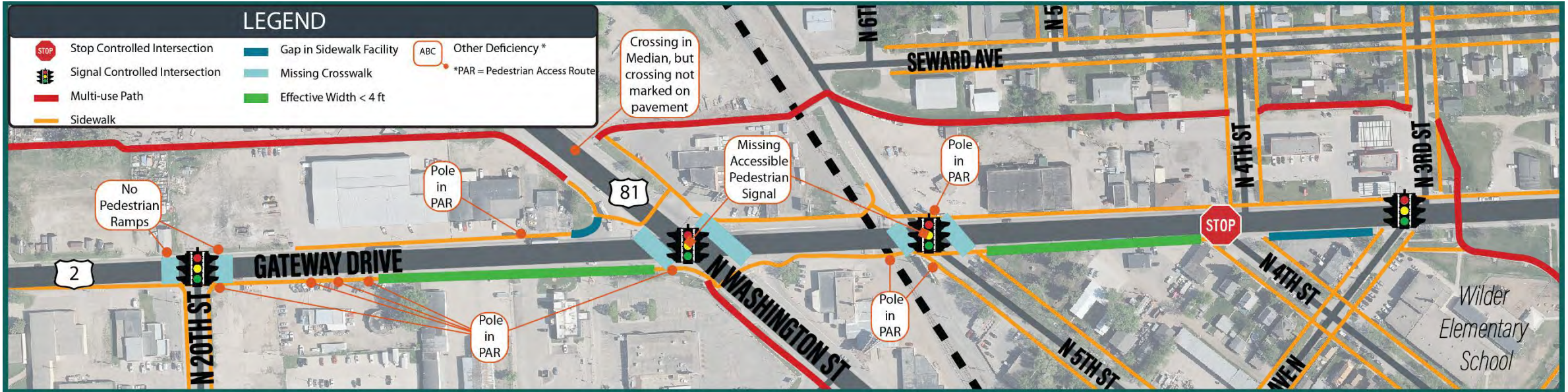


- 41 crashes in last five years
- Above critical crash rate

- 50% rear end crashes
  - 65% During AM or PM peak hours
  - 52% occurred on east approach



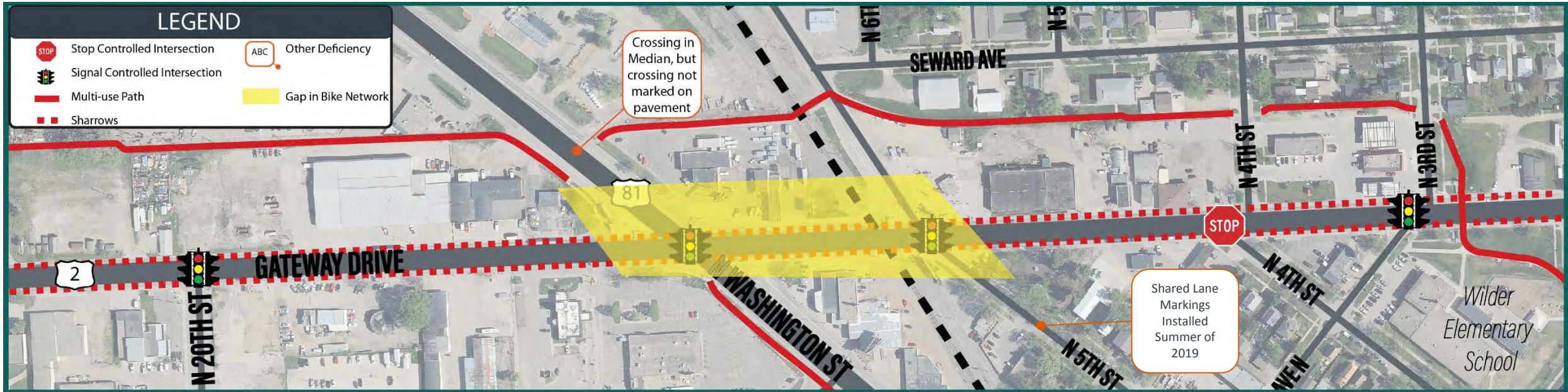
# Pedestrian Network



- Only controlled crossing at 3<sup>rd</sup> Street underpass
- ADA conflicts at crosswalks, utilities and driveways
- Minimal to no buffer



# Bicycle Network

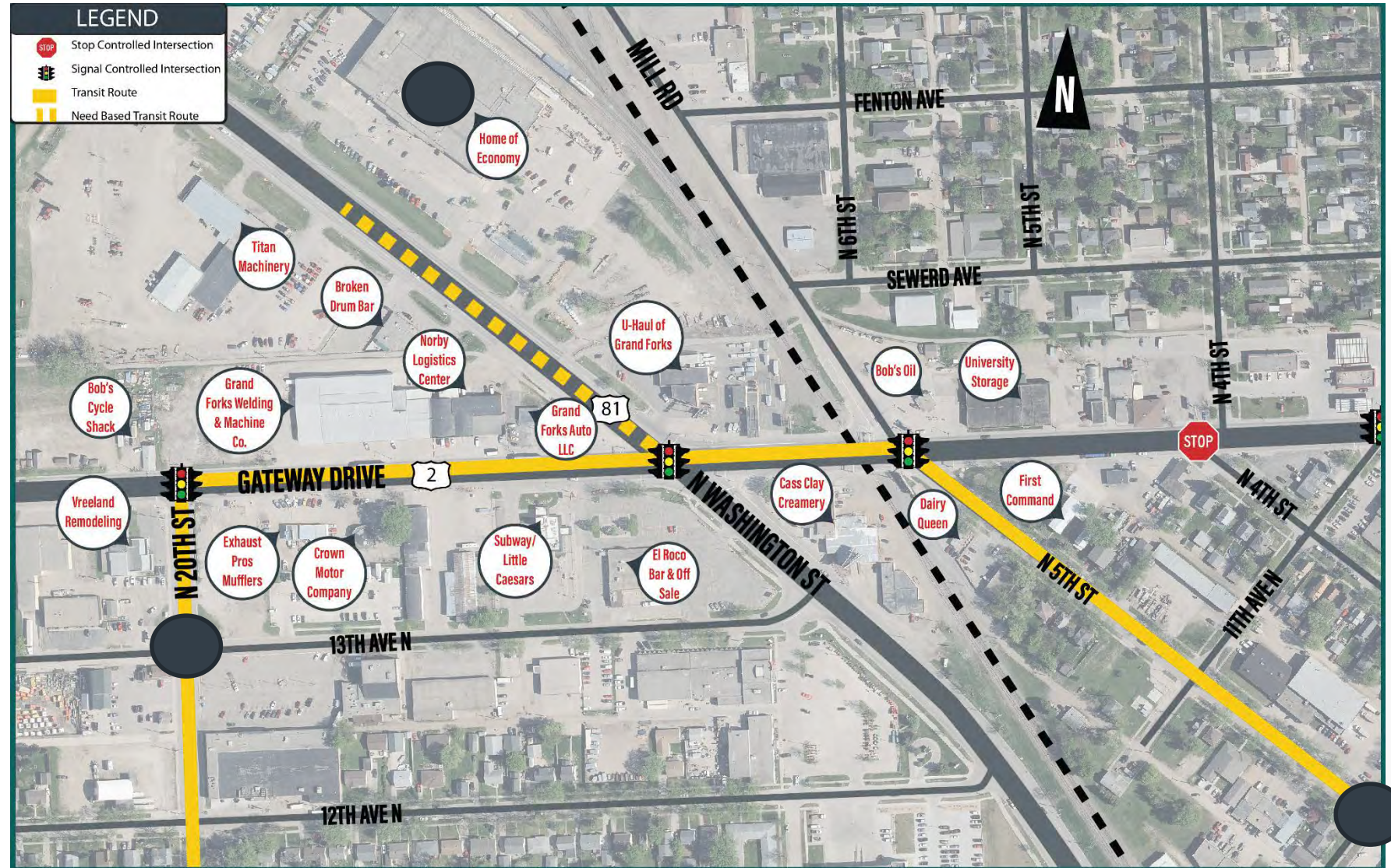


- > Connections
  - > 3<sup>rd</sup> Street and Red River Greenway to the east
  - > Columbia Road to the west
- > No traffic control to cross US 2/Washington Street
- > Underpass at 3<sup>rd</sup> Street
- > Bikes allowed on all streets



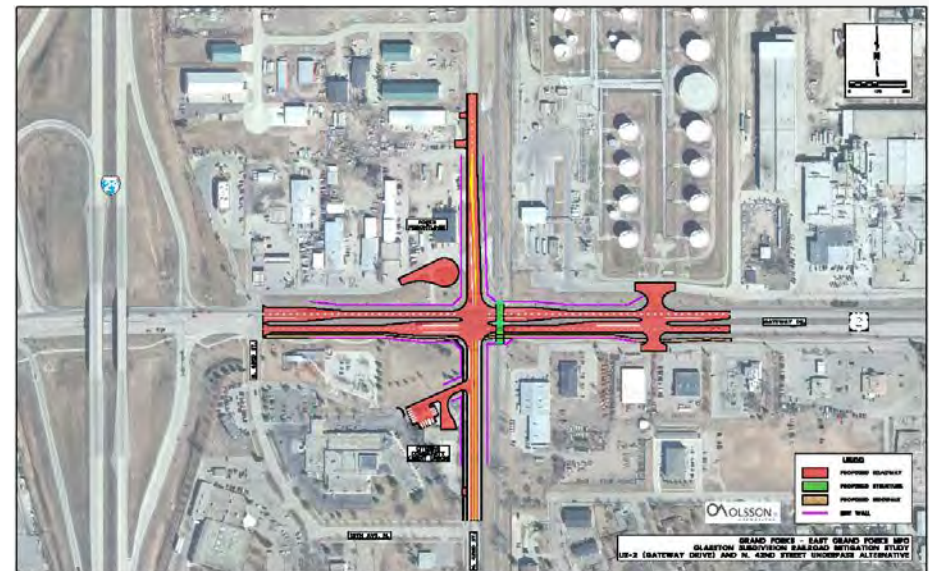
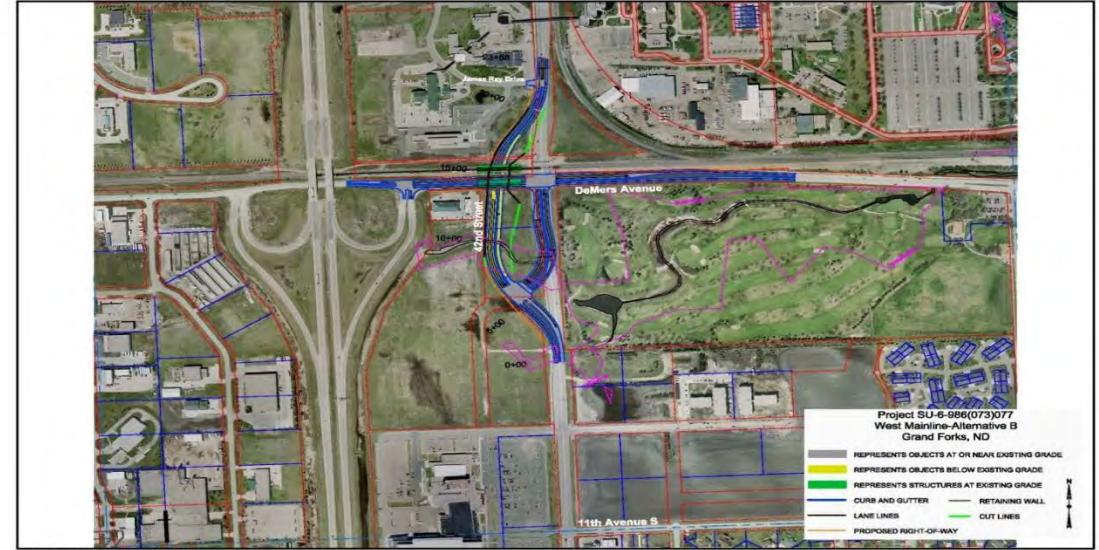
# Transit Network

- CAT Route 2
  - Hourly service
- CAT Route 13
  - Night Route
- Stops
  - 5<sup>th</sup> Street/10<sup>th</sup> Ave
  - Hugo's on 20<sup>th</sup> St
  - Home of Economy when scheduled in advance



# Funding Availability

- >\$150,000,000 in Unfunded Grand Forks Projects
- 42<sup>nd</sup> Street and DeMers Avenue (~\$25-30M)
- Gateway Drive/US 2 and Glasston (~\$28M)
- Part of the NHS and Freight System





# Alternative Development Approach

N 20TH ST

N WASHINGTON ST

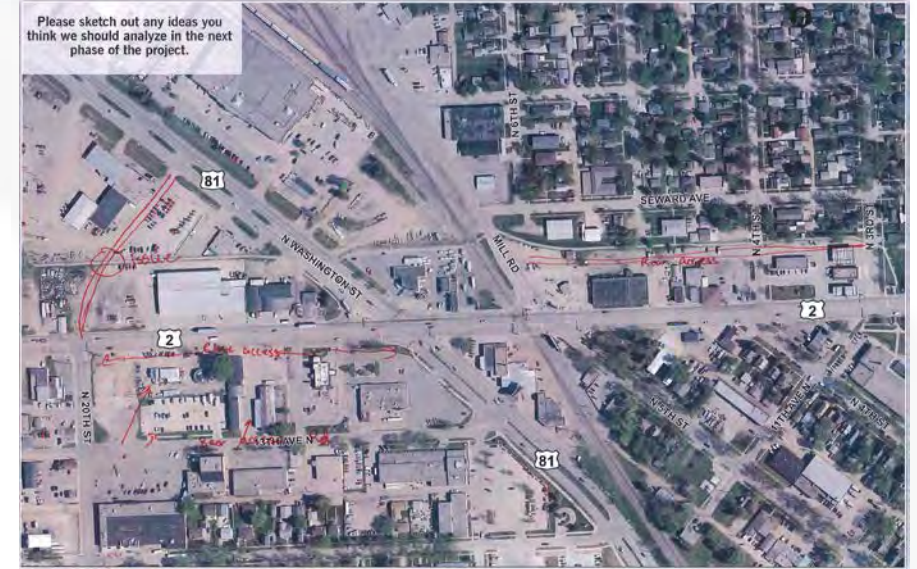
# Public Input Meeting #1

- Held April 11th, 2019
- 12 Attendees
- Only 1 Full Brainstorming Worksheet Filled Out
- Primary Concerns Raised at Meeting;
  - Rail Whistles, Especially with Unit Trains
  - Rail Delays, Especially with Unit Trains
  - Challenging Truck Turning Movements
  - Lack of Good Pedestrian and Bicycle Facilities



# Alternative Brainstorming

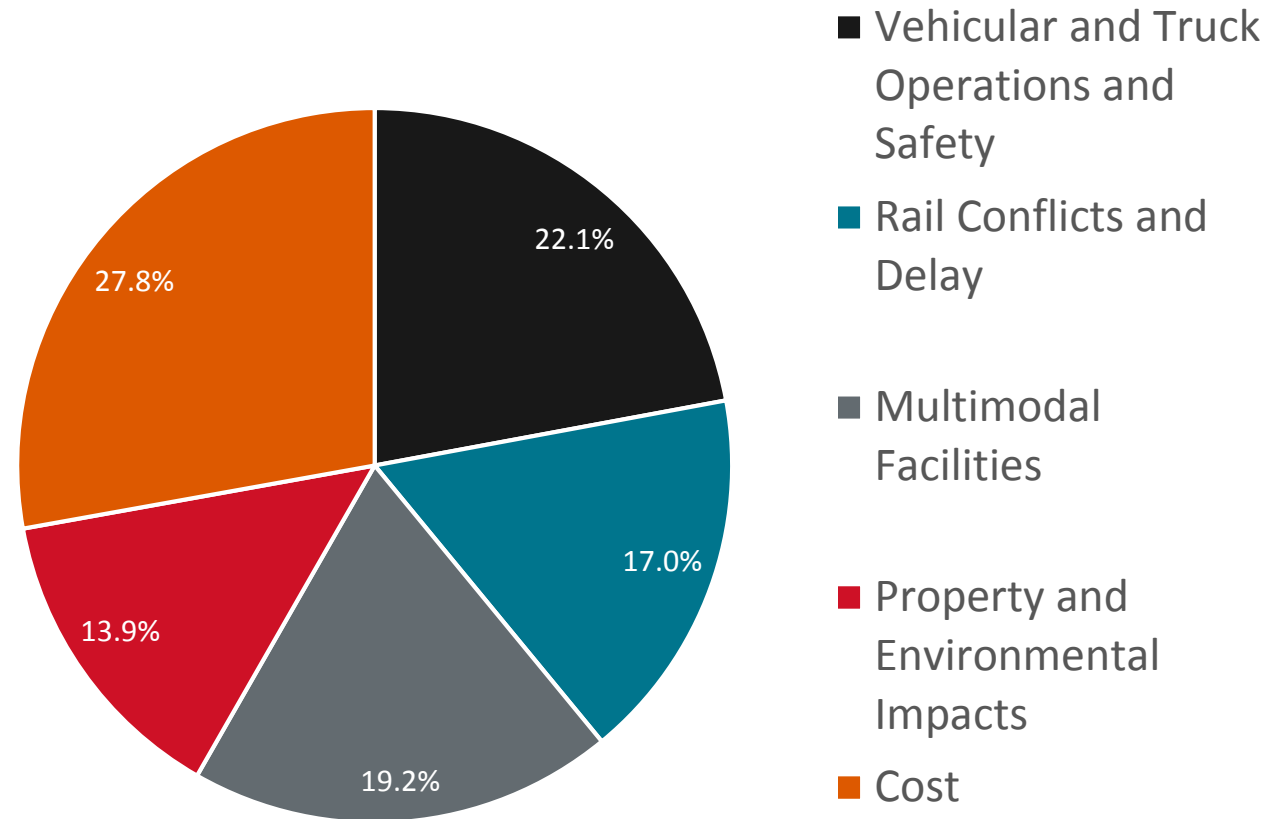
- Steering Committee Brainstorming Guided Alternative Development
- Represented Agencies on Steering Committee Meeting
  - Forks MPO
  - NDDOT Grand Forks District
  - Grand Forks Engineering
  - Grand Forks Planning
  - Wilder Elementary School
  - ND State Mill
  - Local Businesses



# Alternative Scoring

- Scores ARE Comparative Summaries
- Scores ARE NOT Recommendations

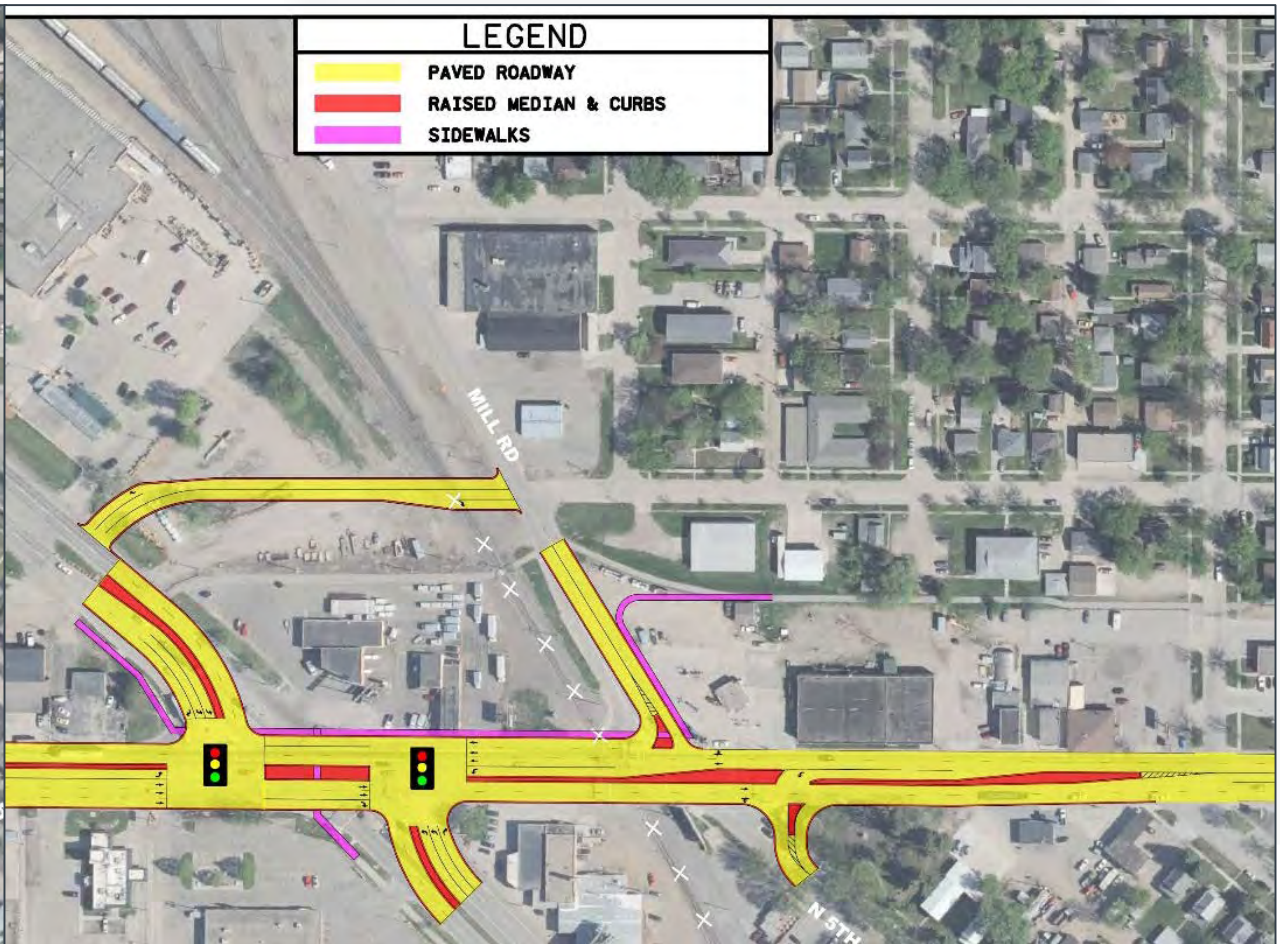
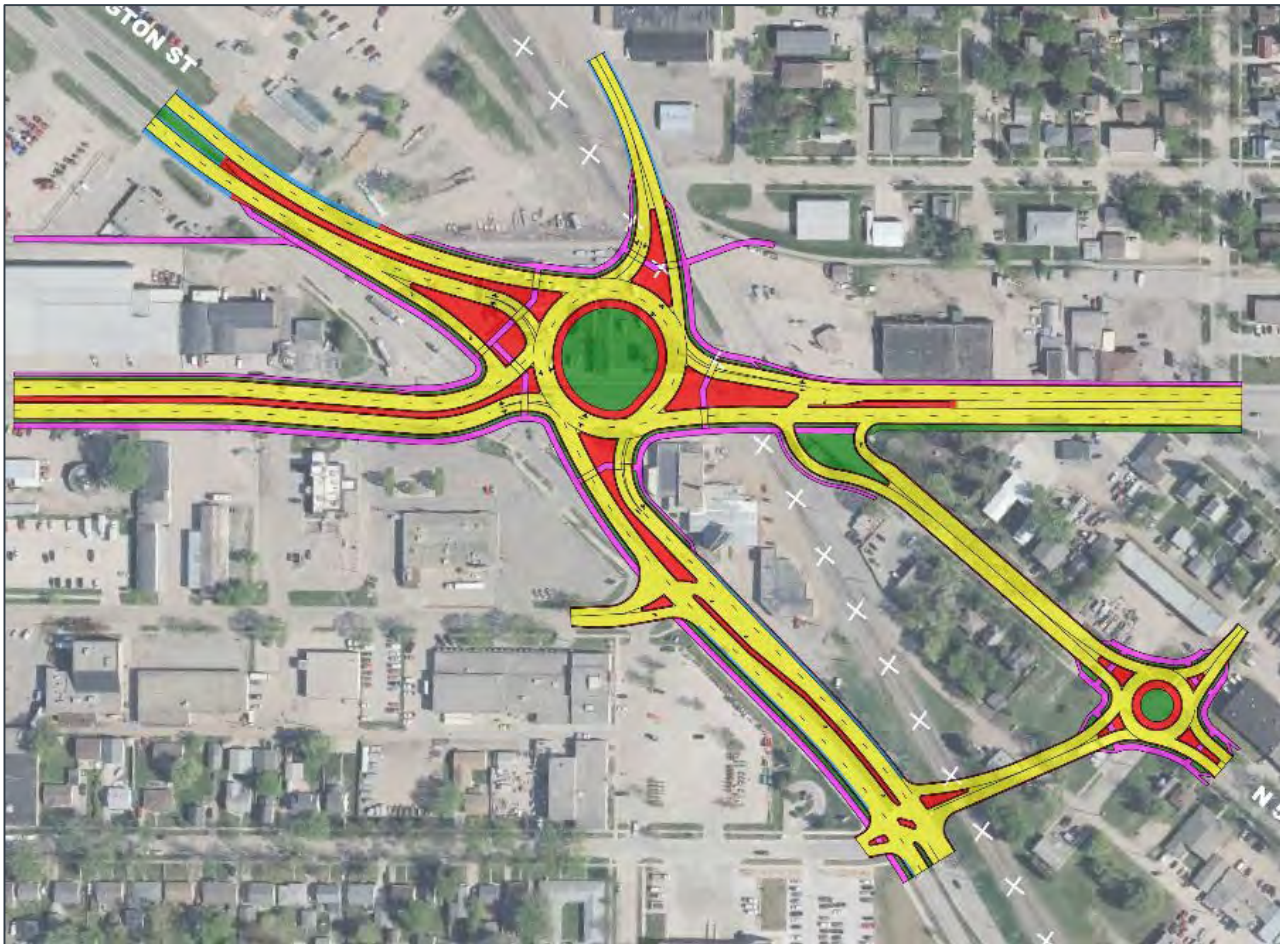
*Ranked Evaluation Metrics*





# Discarded Alternatives

- Preliminary Analysis and Coordination with Steering Committee Led to Eliminate of Alternatives that Made Conditions Worse



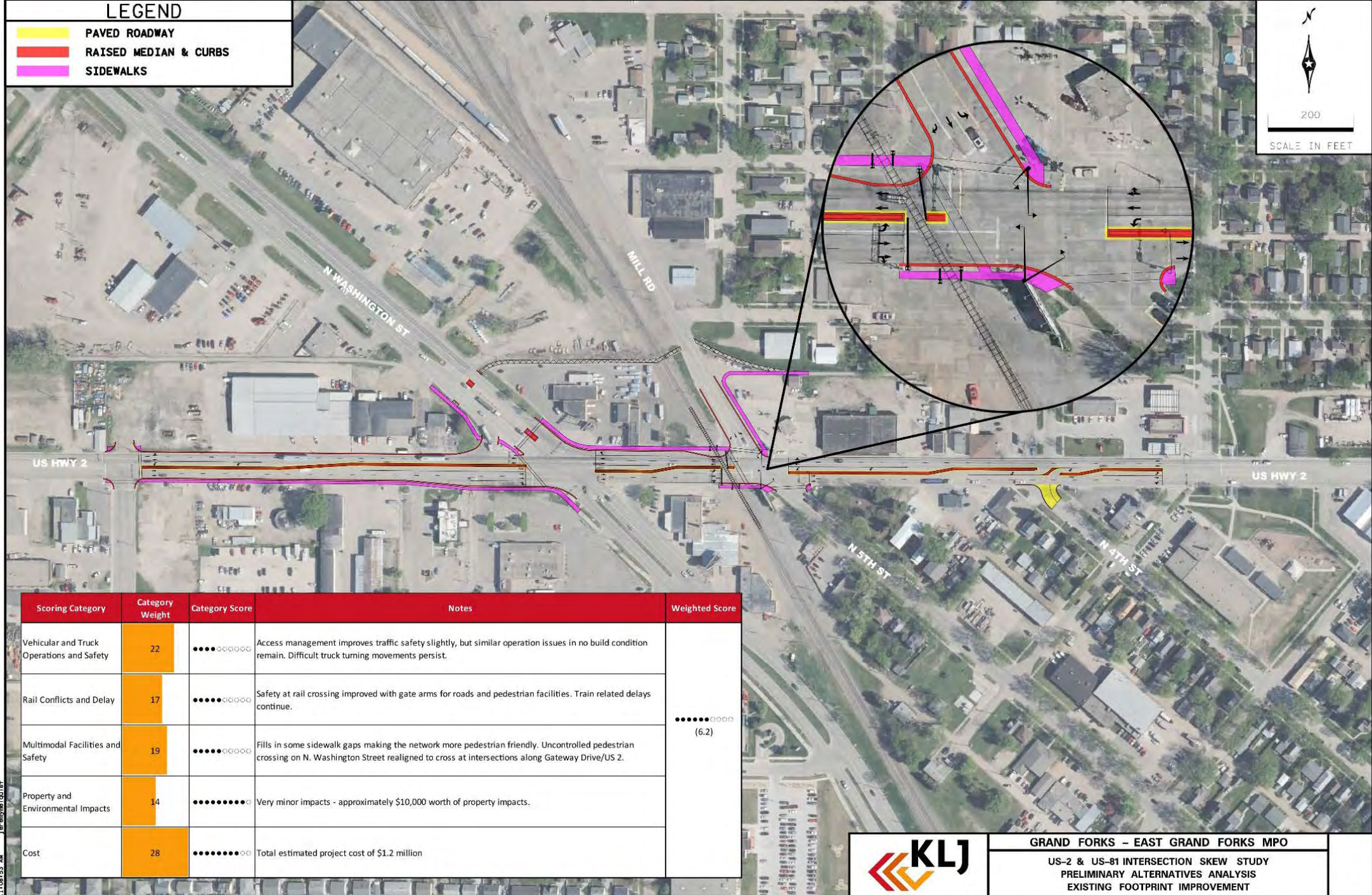


# Alternatives with No Changes to the Mill Spur

N 20TH ST

N WASHINGTON ST

# Alt EF: Existing Footprint Plan



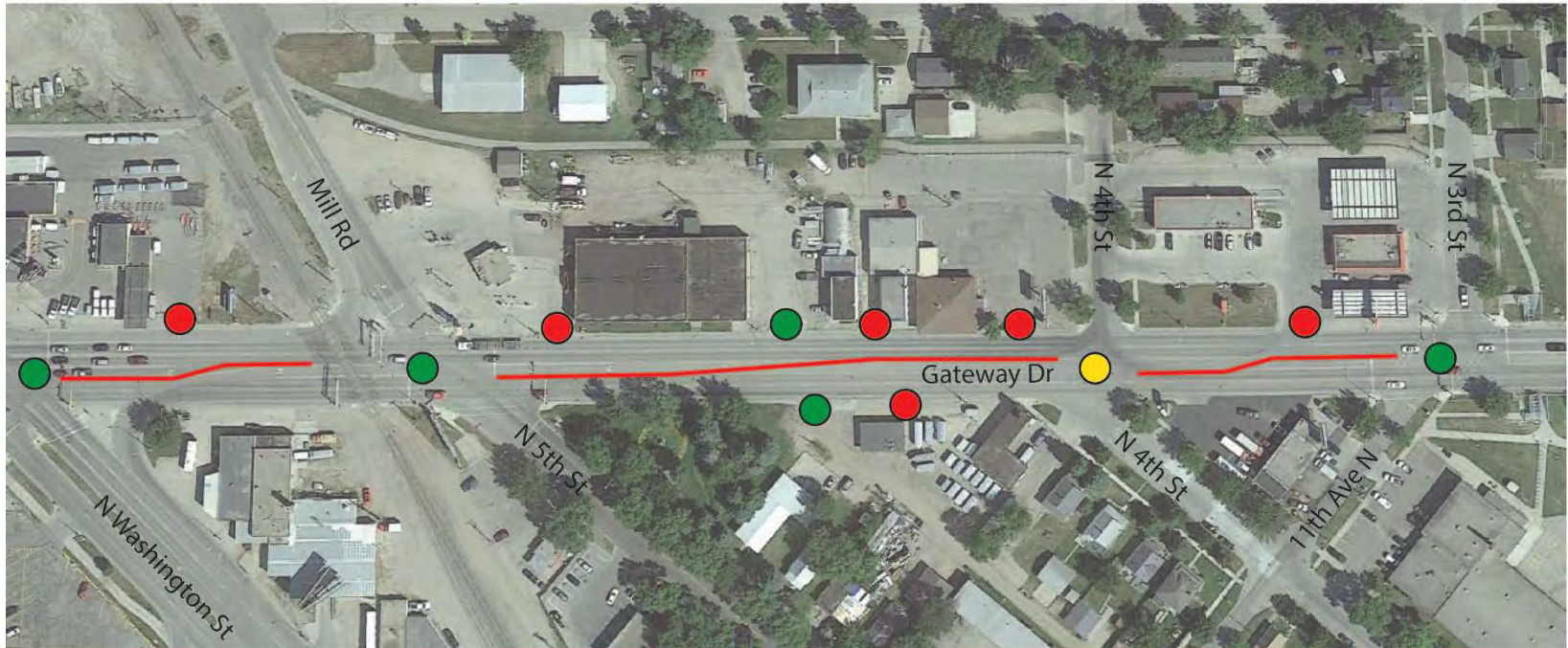
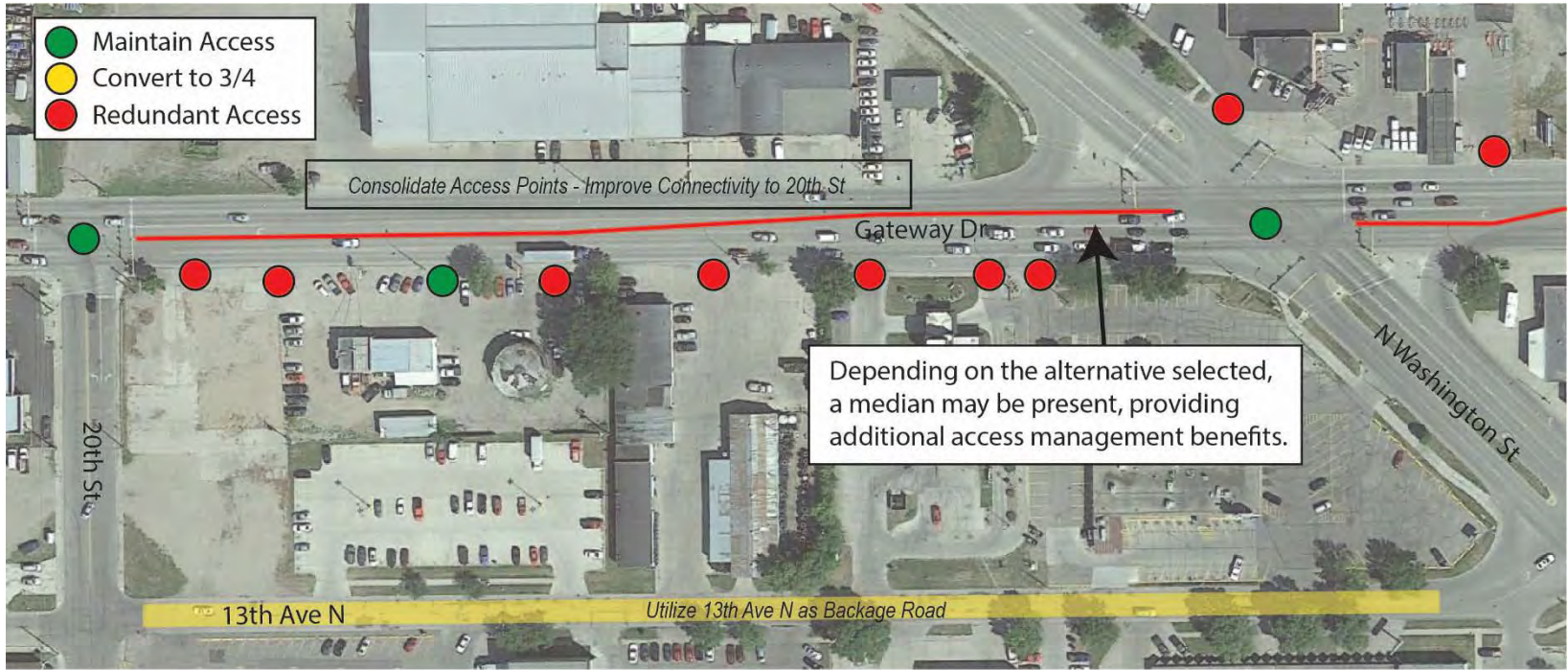
Scoring Category	Category Weight	Category Score	Notes	Weighted Score
Vehicular and Truck Operations and Safety	22	●●●●○	Access management improves traffic safety slightly, but similar operation issues in no build condition remain. Difficult truck turning movements persist.	●●●●●○ (6.2)
Rail Conflicts and Delay	17	●●●●○	Safety at rail crossing improved with gate arms for roads and pedestrian facilities. Train related delays continue.	
Multimodal Facilities and Safety	19	●●●●○	Fills in some sidewalk gaps making the network more pedestrian friendly. Uncontrolled pedestrian crossing on N. Washington Street realigned to cross at intersections along Gateway Drive/US 2.	
Property and Environmental Impacts	14	●●●●●○	Very minor impacts - approximately \$10,000 worth of property impacts.	
Cost	28	●●●●●○	Total estimated project cost of \$1.2 million	

6/6/2019 11:08:53 AM



GRAND FORKS - EAST GRAND FORKS MPO  
 US-2 & US-81 INTERSECTION SKEW STUDY  
 PRELIMINARY ALTERNATIVES ANALYSIS  
 EXISTING FOOTPRINT IMPROVEMENT

# Optional Access Management

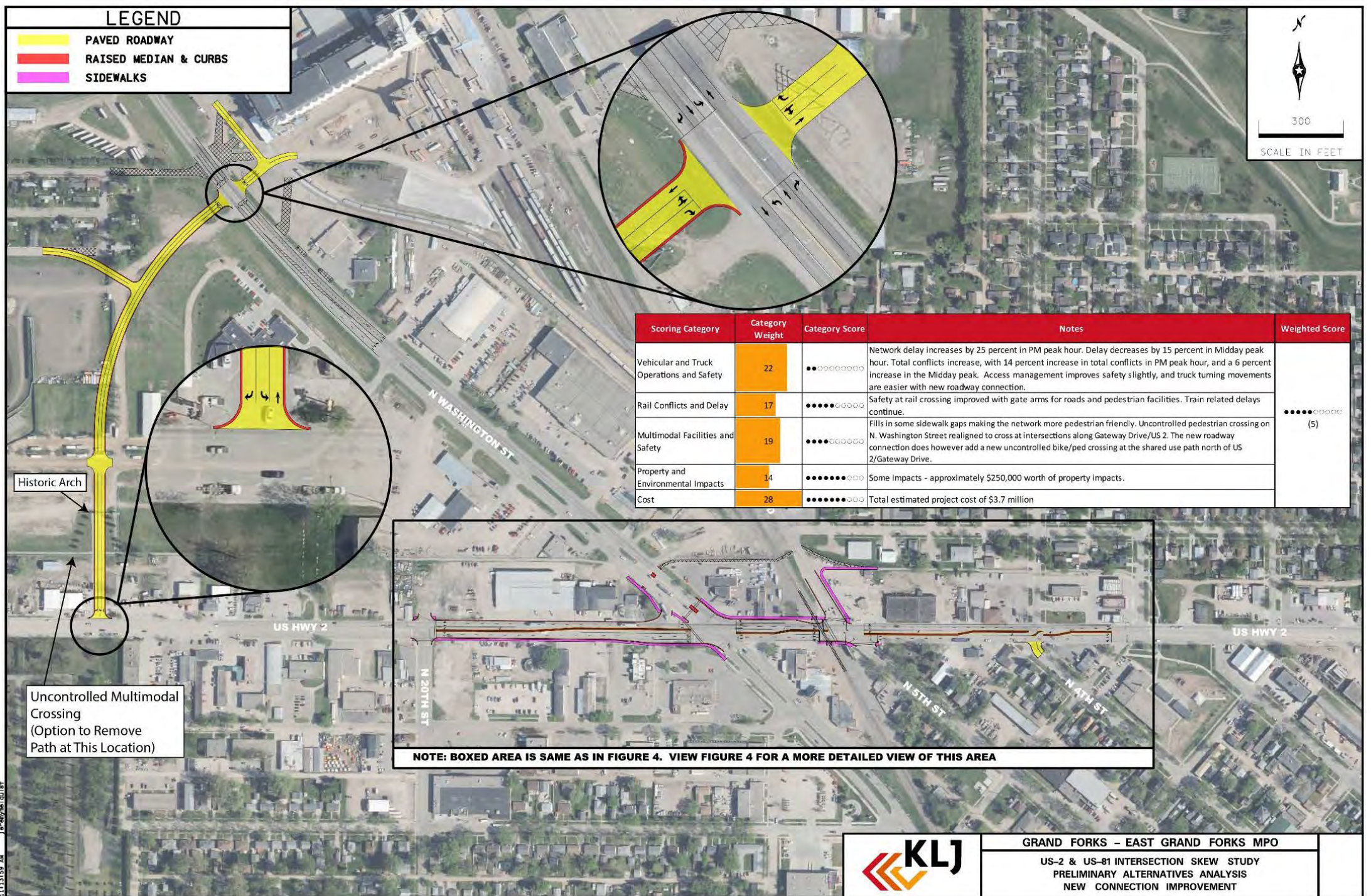


# Alt EF: Existing Footprint Improvement Plan

## > Rankings

Alternative	Category	Category Rank	Overall Rank
EF: Existing Footprint Improvement Plan	Vehicular and Truck Operations and Safety	3	2
	Rail Conflicts and Delay	5	
	Multimodal Facilities and Safety	3	
	Property and Environmental Impacts	1	
	Cost	1	

# Alt NRC: New Roadway Connection Improvement Plan



LEGEND	
<span style="color: yellow;">█</span>	PAVED ROADWAY
<span style="color: red;">█</span>	RAISED MEDIAN & CURBS
<span style="color: magenta;">█</span>	SIDEWALKS

N

300

SCALE IN FEET

Scoring Category	Category Weight	Category Score	Notes	Weighted Score
Vehicular and Truck Operations and Safety	22	●●○○○○○○	Network delay increases by 25 percent in PM peak hour. Delay decreases by 15 percent in Midday peak hour. Total conflicts increase, with 14 percent increase in total conflicts in PM peak hour, and a 6 percent increase in the Midday peak. Access management improves safety slightly, and truck turning movements are easier with new roadway connection.	●●●●○○○○ (5)
Rail Conflicts and Delay	17	●●●●○○○○	Safety at rail crossing improved with gate arms for roads and pedestrian facilities. Train related delays continue.	
Multimodal Facilities and Safety	19	●●●●○○○○	Fills in some sidewalk gaps making the network more pedestrian friendly. Uncontrolled pedestrian crossing on N. Washington Street realigned to cross at intersections along Gateway Drive/US 2. The new roadway connection does however add a new uncontrolled bike/ped crossing at the shared use path north of US 2/Gateway Drive.	
Property and Environmental Impacts	14	●●●●○○○○	Some impacts - approximately \$250,000 worth of property impacts.	
Cost	28	●●●●○○○○	Total estimated project cost of \$3.7 million	

**NOTE: BOXED AREA IS SAME AS IN FIGURE 4. VIEW FIGURE 4 FOR A MORE DETAILED VIEW OF THIS AREA**

6/6/2019 11:13:55 AM

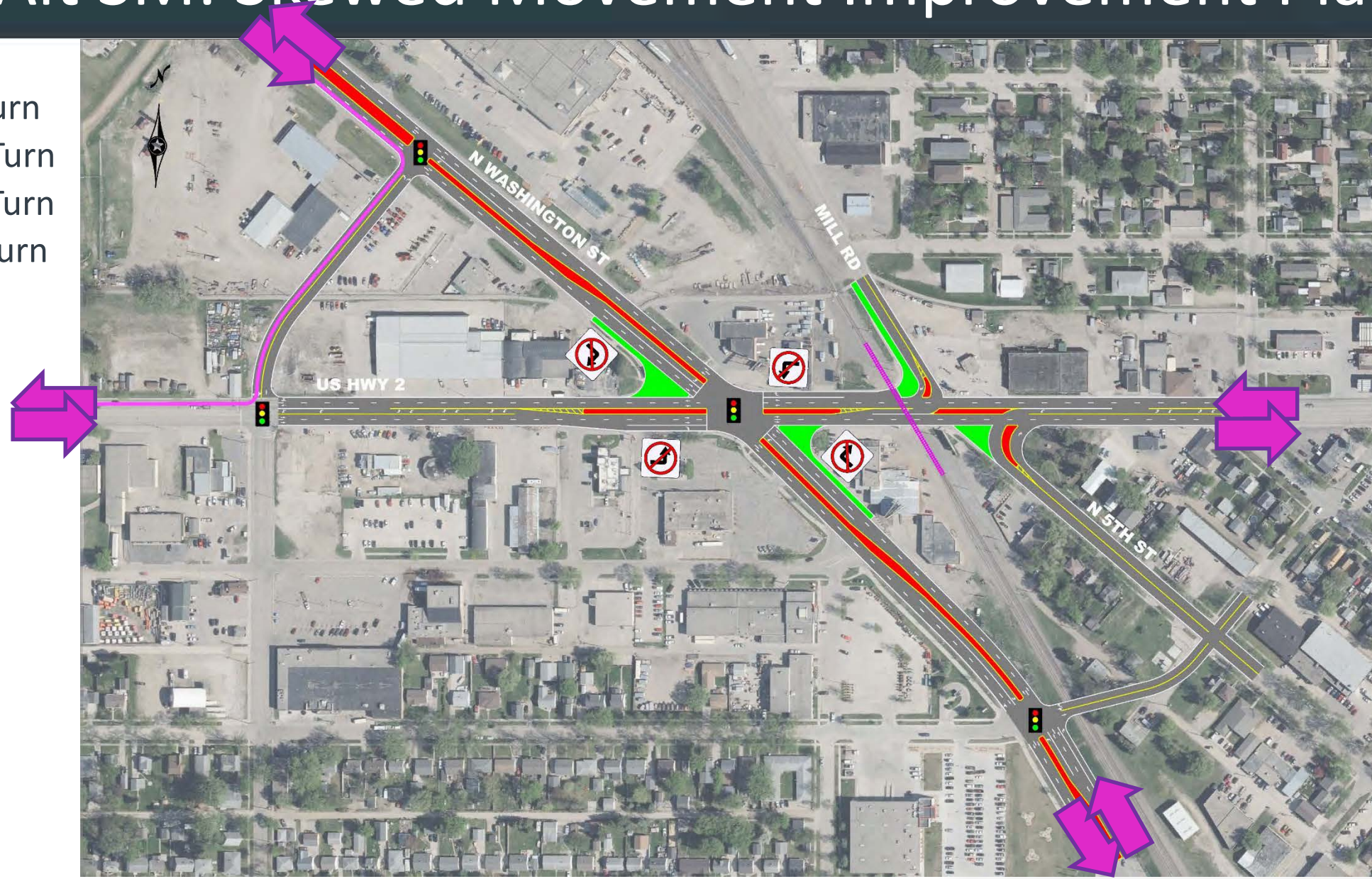
# Alt NRC: New Roadway Connection Improvement Plan

## > Rankings

Alternative	Category	Category Rank	Overall Rank
NRC: New Roadway Connection Improvement Plan	Vehicular and Truck Operations and Safety	7	6
	Rail Conflicts and Delay	5	
	Multimodal Facilities and Safety	5	
	Property and Environmental Impacts	3	
	Cost	2	

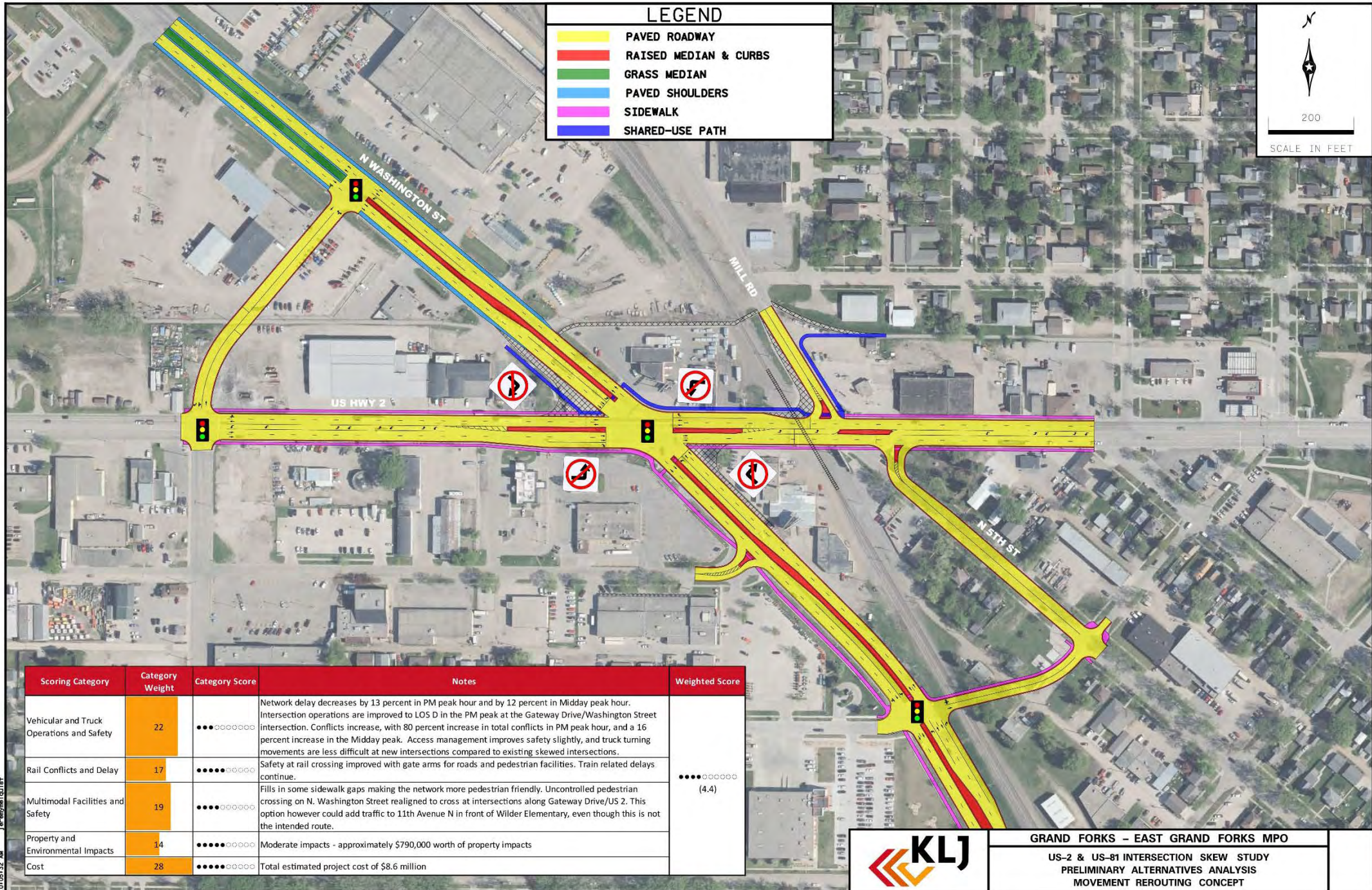
# Alt SM: Skewed Movement Improvement Plan

- EB Left Turn
- WB Left Turn
- NB Right Turn
- SB Right Turn





# Alt SM: Skewed Movement Improvement Plan



Scoring Category	Category Weight	Category Score	Notes	Weighted Score
Vehicular and Truck Operations and Safety	22	●●●○○○○○	Network delay decreases by 13 percent in PM peak hour and by 12 percent in Midday peak hour. Intersection operations are improved to LOS D in the PM peak at the Gateway Drive/Washington Street intersection. Conflicts increase, with 80 percent increase in total conflicts in PM peak hour, and a 16 percent increase in the Midday peak. Access management improves safety slightly, and truck turning movements are less difficult at new intersections compared to existing skewed intersections.	●●●○○○○○ (4.4)
Rail Conflicts and Delay	17	●●●●○○○○	Safety at rail crossing improved with gate arms for roads and pedestrian facilities. Train related delays continue.	
Multimodal Facilities and Safety	19	●●●●○○○○	Fills in some sidewalk gaps making the network more pedestrian friendly. Uncontrolled pedestrian crossing on N. Washington Street realigned to cross at intersections along Gateway Drive/US 2. This option however could add traffic to 11th Avenue N in front of Wilder Elementary, even though this is not the intended route.	
Property and Environmental Impacts	14	●●●●○○○○	Moderate impacts - approximately \$790,000 worth of property impacts	
Cost	28	●●●●○○○○	Total estimated project cost of \$8.6 million	

8/7/2018 10:05:32 AM Jeremy Gullet



**GRAND FORKS – EAST GRAND FORKS MPO**  
 US-2 & US-81 INTERSECTION SKEW STUDY  
 PRELIMINARY ALTERNATIVES ANALYSIS  
 MOVEMENT REROUTING CONCEPT

# Alt SM: Skewed Movement Improvement Plan

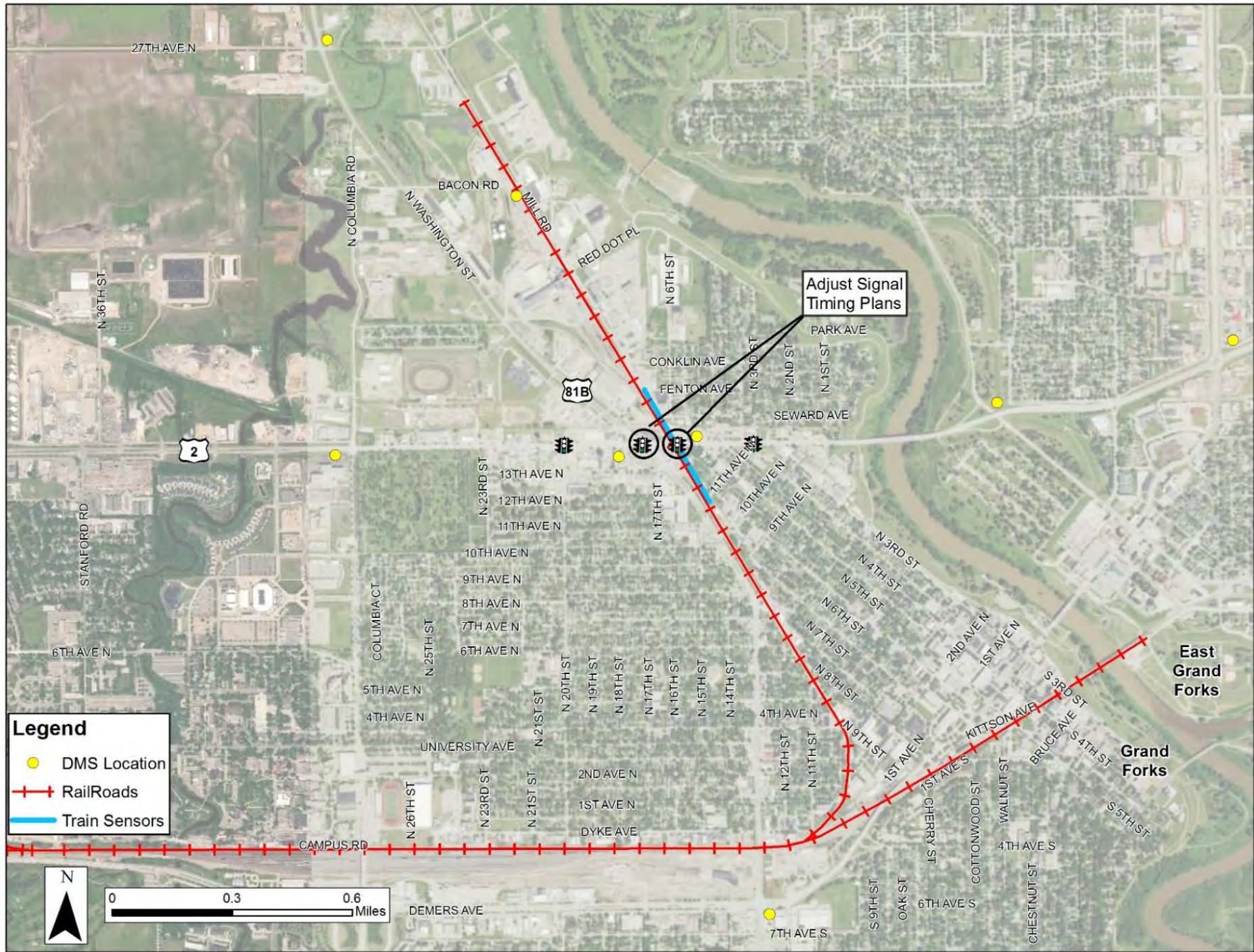
## ➤ Rankings

Alternative	Category	Category Rank	Overall Rank
SM: Skewed Movement Rerouting Improvement Plan	Vehicular and Truck Operations and Safety	5	7
	Rail Conflicts and Delay	5	
	Multimodal Facilities and Safety	5	
	Property and Environmental Impacts	4	
	Cost	4	

# Sub-Option: ITS Routing Solution



# Sub-Options: ITS Routing Solution





# Base Alternatives with Railroad Realignment

N 20TH ST

N WASHINGTON ST

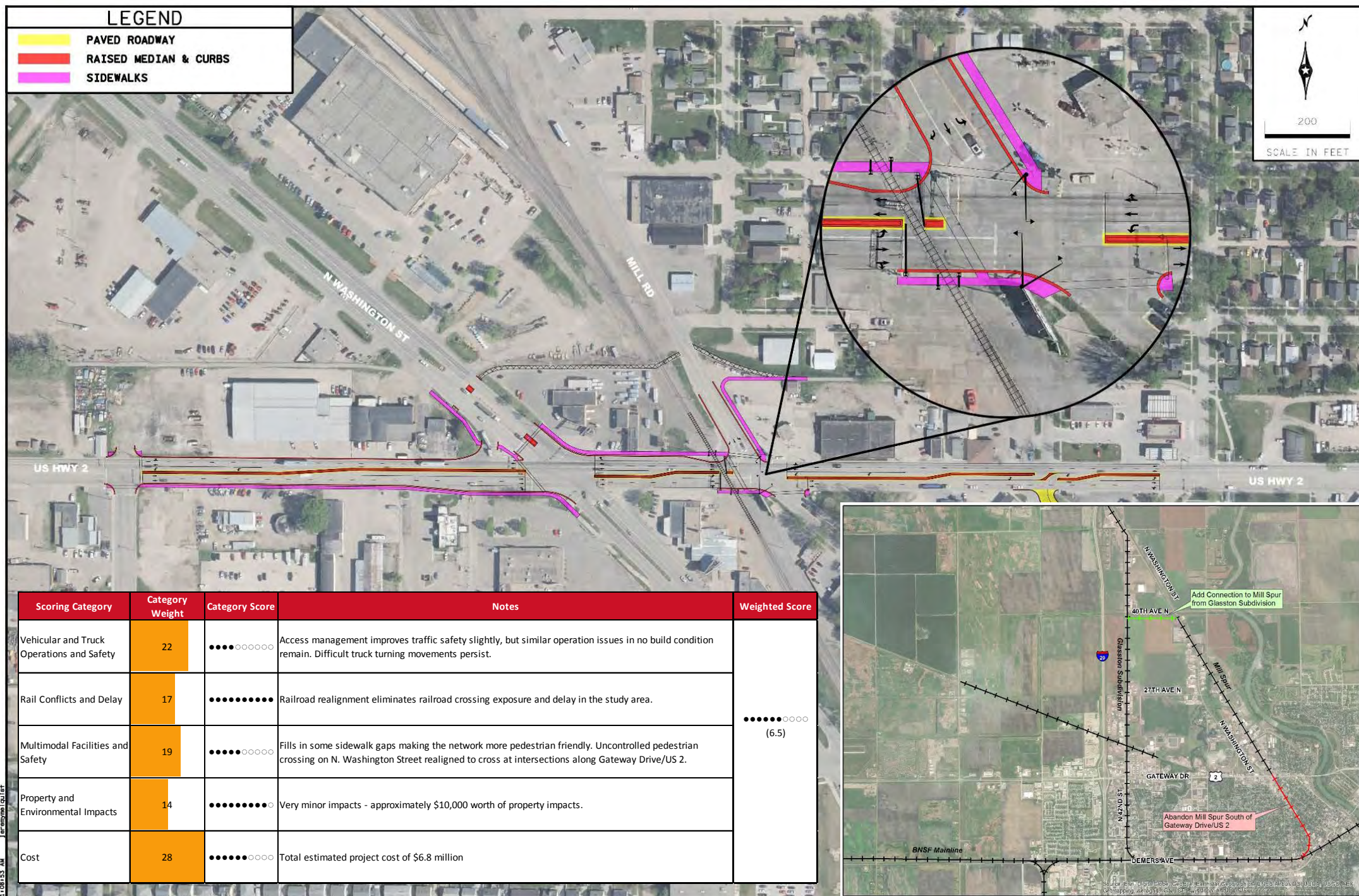


# Railroad Realignment



- Connect to Glasston Line
- Estimated to be \$5.6M
- Past Studies Found Grade Separation Necessary at Gateway/42<sup>nd</sup> Street/Glasston Line
- Benefits to 8 Other Mill Spur Crossings to Safety and Noise

# Alt EF+R: Existing Footprint With Realignment



Scoring Category	Category Weight	Category Score	Notes	Weighted Score
Vehicular and Truck Operations and Safety	22	●●●○○○○○	Access management improves traffic safety slightly, but similar operation issues in no build condition remain. Difficult truck turning movements persist.	●●●●○○○○ (6.5)
Rail Conflicts and Delay	17	●●●●●●●●	Railroad realignment eliminates railroad crossing exposure and delay in the study area.	
Multimodal Facilities and Safety	19	●●●●○○○○○	Fills in some sidewalk gaps making the network more pedestrian friendly. Uncontrolled pedestrian crossing on N. Washington Street realigned to cross at intersections along Gateway Drive/US 2.	
Property and Environmental Impacts	14	●●●●●●●○	Very minor impacts - approximately \$10,000 worth of property impacts.	
Cost	28	●●●●○○○○○	Total estimated project cost of \$6.8 million	

6/6/2019 11:08:53 AM | ArcMap | 10/1/2019

Source: Esri, DigitalGlobe, GeoEye, Earthstar OpenSource, CNES/Airbus DS, USDA, AeroGRID, IGN, SIA, Airphoto, USDA, etc. © 2019 Esri. All rights reserved. ArcGIS is a registered trademark of Esri. All other trademarks are the property of their respective owners.

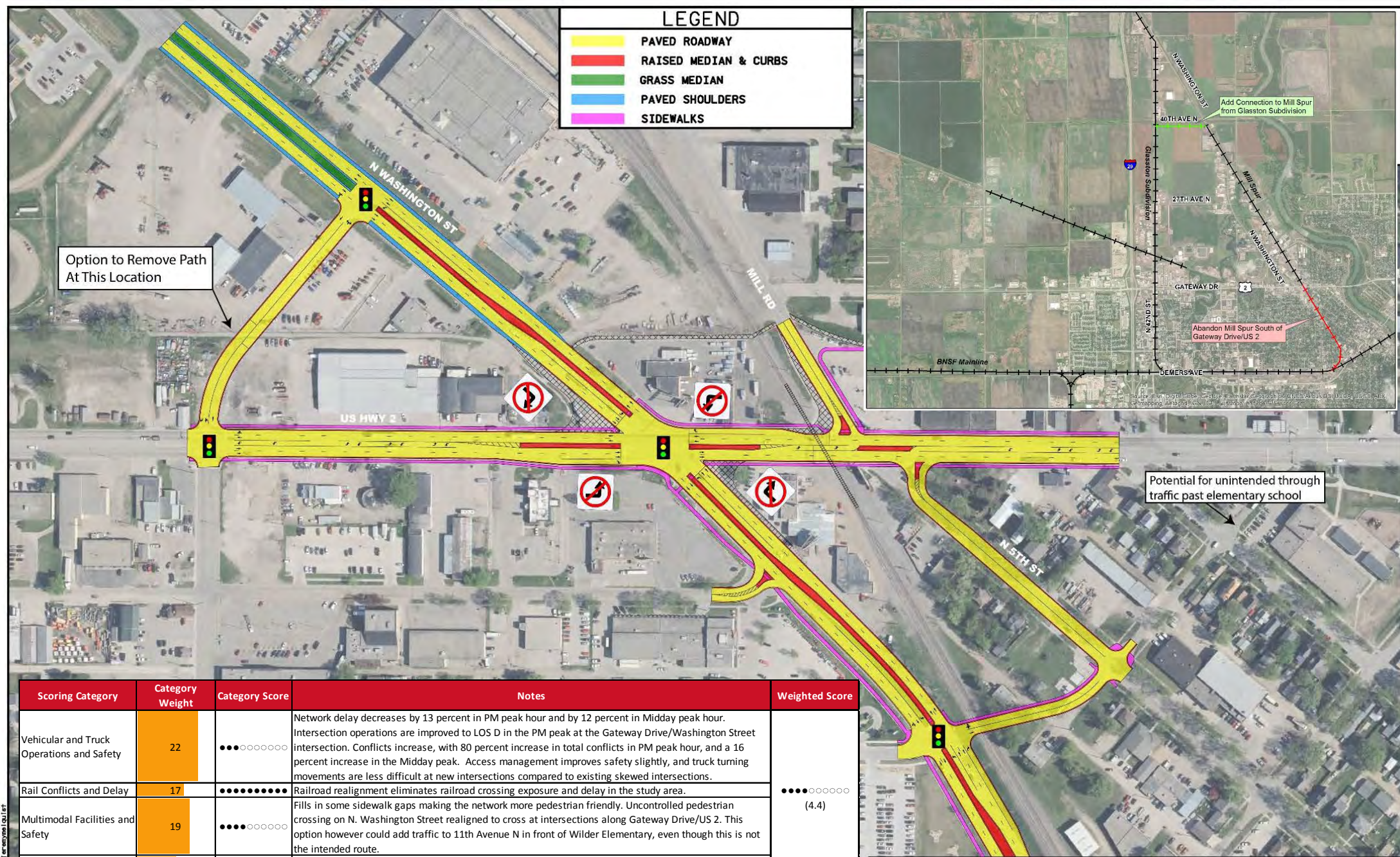
# Alt EF+R: Existing Footprint with Realignment

## ➤ Rankings

Alternative	Category	Category Rank	Overall Rank
EF+R: Railroad Realignment with Existing Footprint Improvement Plan	Vehicular and Truck Operations and Safety	3	1
	Rail Conflicts and Delay	1	
	Multimodal Facilities and Safety	3	
	Property and Environmental Impacts	1	
	Cost	3	



# Alt SM+R: Skewed Movement With Roadway Realignment



**LEGEND**

- PAVED ROADWAY
- RAISED MEDIAN & CURBS
- GRASS MEDIAN
- PAVED SHOULDERS
- SIDEWALKS

Scoring Category	Category Weight	Category Score	Notes	Weighted Score
Vehicular and Truck Operations and Safety	22	●●●○○○○○	Network delay decreases by 13 percent in PM peak hour and by 12 percent in Midday peak hour. Intersection operations are improved to LOS D in the PM peak at the Gateway Drive/Washington Street intersection. Conflicts increase, with 80 percent increase in total conflicts in PM peak hour, and a 16 percent increase in the Midday peak. Access management improves safety slightly, and truck turning movements are less difficult at new intersections compared to existing skewed intersections.	●●●○○○○○ (4.4)
Rail Conflicts and Delay	17	●●●●●●●●	Railroad realignment eliminates railroad crossing exposure and delay in the study area.	
Multimodal Facilities and Safety	19	●●●○○○○○	Fills in some sidewalk gaps making the network more pedestrian friendly. Uncontrolled pedestrian crossing on N. Washington Street realigned to cross at intersections along Gateway Drive/US 2. This option however could add traffic to 11th Avenue N in front of Wilder Elementary, even though this is not the intended route.	
Property and Environmental Impacts	14	●●●●○○○○	Moderate impacts - approximately \$790,000 worth of property impacts	
Cost	28	●●○○○○○○	Total estimated project cost of \$14.1 million	

6/16/2019 11:20:34 AM jerry@klj.com

**GRAND FORKS – EAST GRAND FORKS MPO**

US-2 & US-81 INTERSECTION SKEW STUDY  
PRELIMINARY ALTERNATIVES ANALYSIS  
MOVEMENT REROUTING CONCEPT

# Alt SM+R: Skewed Movement with Roadway Realignment

## > Rankings

Alternative	Category	Category Rank	Overall Rank
SM+R: Railroad Realignment with Skewed Movement Rerouting Improvement Plan	Vehicular and Truck Operations and Safety	5	5
	Rail Conflicts and Delay	1	
	Multimodal Facilities and Safety	5	
	Property and Environmental Impacts	4	
	Cost	5	

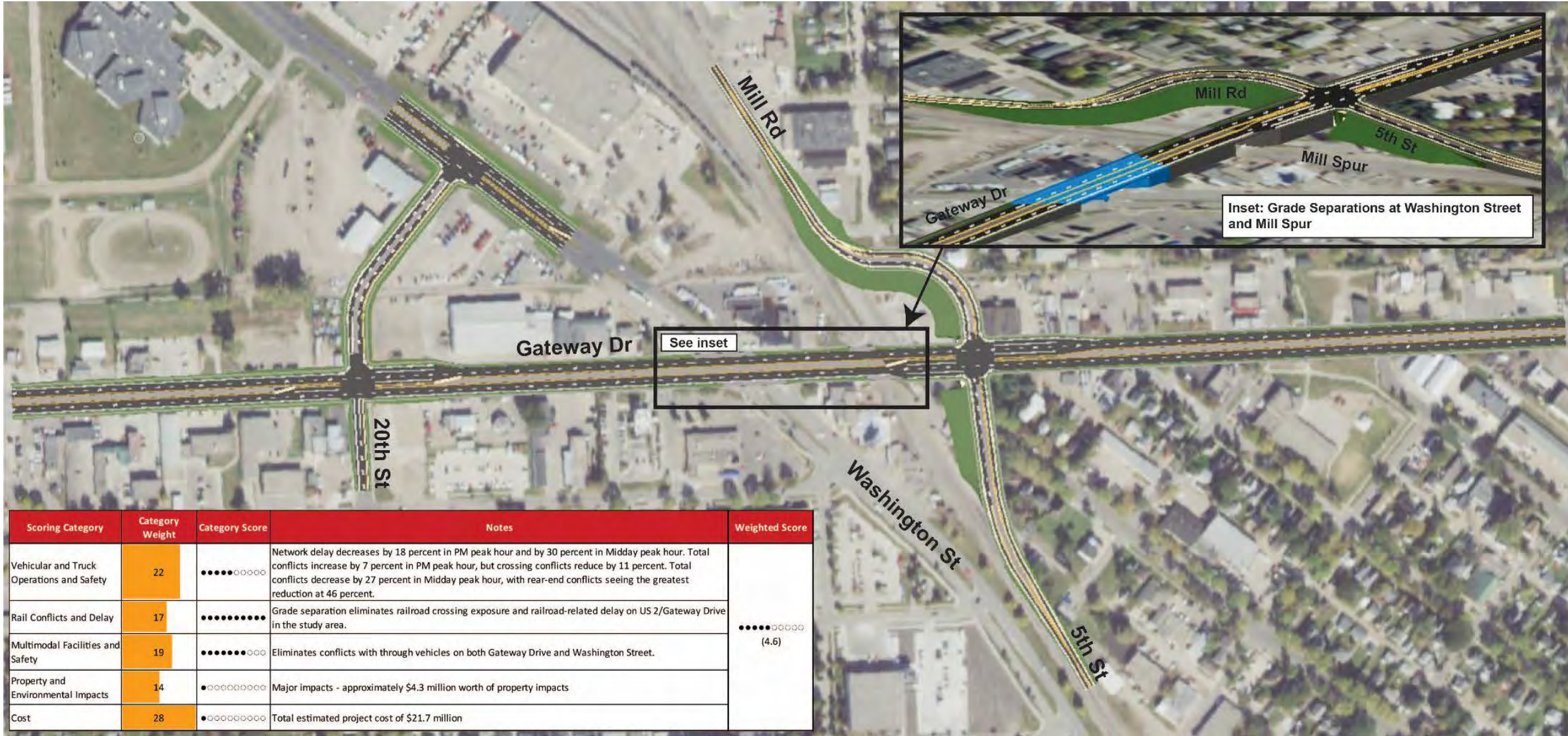


# Railroad Grade Separated Alternatives

N 20TH ST

N WASHINGTON ST

# Alt GS-1: Grade Separation of Washington St and Mill Spur

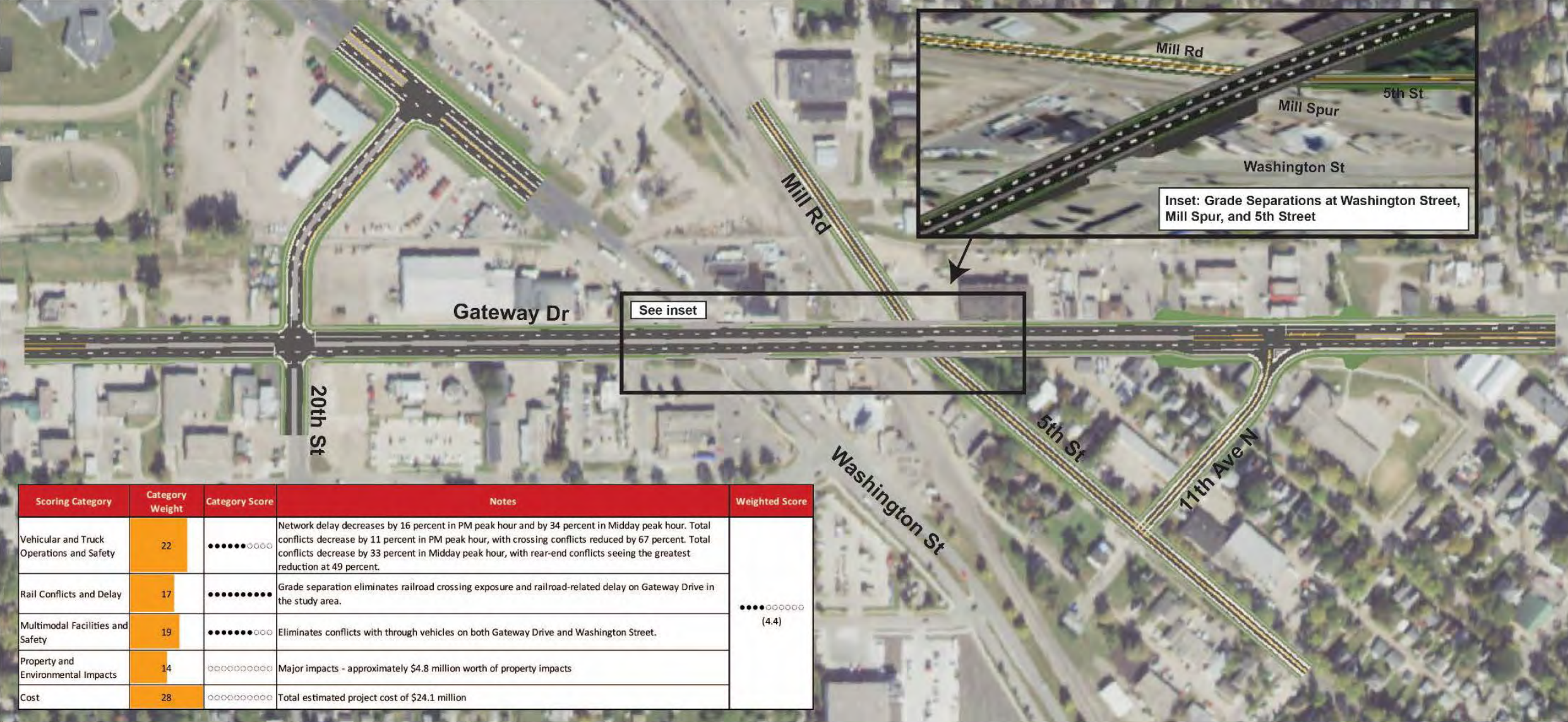


# Alt GS-1: Grade Separation of Washington St and Mill Spur

## > Rankings

Alternative	Category	Category Rank	Overall Rank
GS-1: Grade Separation of US 81/Washington Street and Mill Spur	Vehicular and Truck Operations and Safety	2	3
	Rail Conflicts and Delay	1	
	Multimodal Facilities and Safety	1	
	Property and Environmental Impacts	6	
	Cost	6	

# Alt GS-2: Grade Separation of Washington St, Mill Spur and Mill Road



Scoring Category	Category Weight	Category Score	Notes	Weighted Score
Vehicular and Truck Operations and Safety	22	●●●●●○○○○	Network delay decreases by 16 percent in PM peak hour and by 34 percent in Midday peak hour. Total conflicts decrease by 11 percent in PM peak hour, with crossing conflicts reduced by 67 percent. Total conflicts decrease by 33 percent in Midday peak hour, with rear-end conflicts seeing the greatest reduction at 49 percent.	●●●●○○○○○ (4.4)
Rail Conflicts and Delay	17	●●●●●●●●	Grade separation eliminates railroad crossing exposure and railroad-related delay on Gateway Drive in the study area.	
Multimodal Facilities and Safety	19	●●●●●○○○	Eliminates conflicts with through vehicles on both Gateway Drive and Washington Street.	
Property and Environmental Impacts	14	○○○○○○○○○○	Major impacts - approximately \$4.8 million worth of property impacts	
Cost	28	○○○○○○○○○○	Total estimated project cost of \$24.1 million	

# Alt GS-2: Grade Separation of Washington St, Mill Spur and Mill Road

## > Rankings

Alternative	Category	Category Rank	Overall Rank
GS-2: Grade Separation of US 81/Washington Street, Mill Spur, and Mill Road/5th Street	Vehicular and Truck Operations and Safety	1	4
	Rail Conflicts and Delay	1	
	Multimodal Facilities and Safety	1	
	Property and Environmental Impacts	7	
	Cost	7	



# Summary

N WASHINGTON ST

2

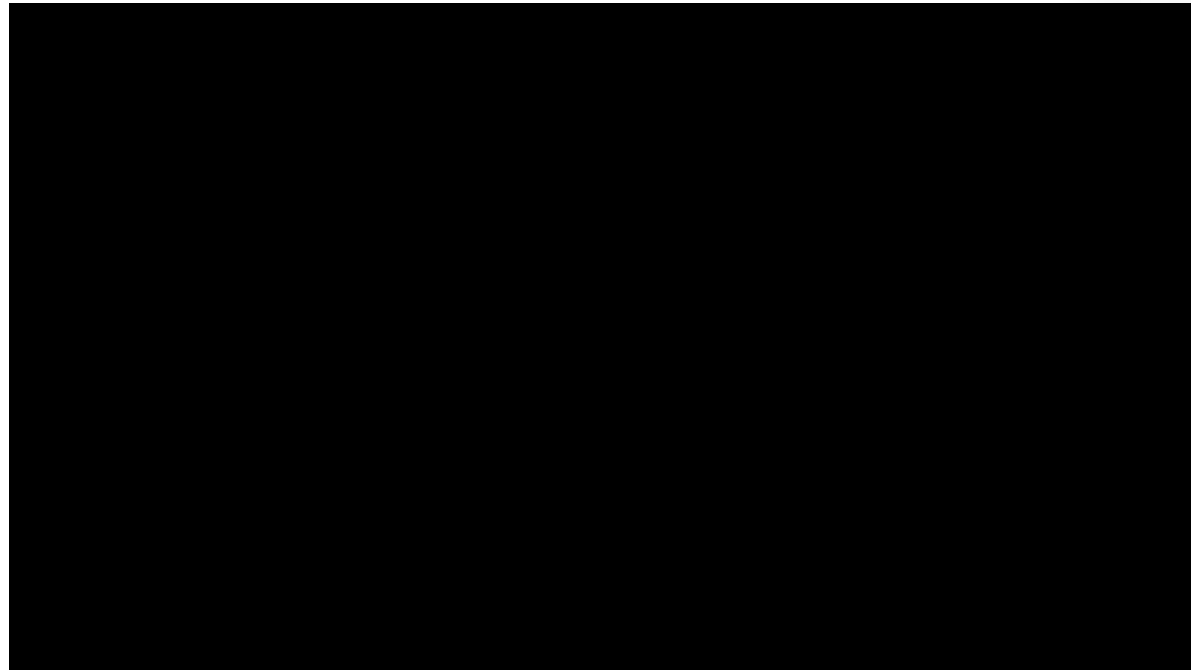
N 20TH ST





> Do Nothing  
> Lowest Benefits

> Grade Separation  
> Highest Benefits



> Railroad  
Realignment  
> 2<sup>nd</sup> Highest  
Benefits

# Alternatives Summary – Rankings

Alternative	Category	Category Rank	Overall Rank
EF: Existing Footprint Improvement Plan	Vehicular and Truck Operations and Safety	3	2
	Rail Conflicts and Delay	5	
	Multimodal Facilities and Safety	3	
	Property and Environmental Impacts	1	
	Cost	1	
NRC: New Roadway Connection Improvement Plan	Vehicular and Truck Operations and Safety	7	6
	Rail Conflicts and Delay	5	
	Multimodal Facilities and Safety	5	
	Property and Environmental Impacts	3	
	Cost	2	
SM: Skewed Movement Rerouting Improvement Plan	Vehicular and Truck Operations and Safety	5	7
	Rail Conflicts and Delay	5	
	Multimodal Facilities and Safety	5	
	Property and Environmental Impacts	4	
	Cost	4	
EF+R: Railroad Realignment with Existing Footprint Improvement Plan	Vehicular and Truck Operations and Safety	3	1
	Rail Conflicts and Delay	1	
	Multimodal Facilities and Safety	3	
	Property and Environmental Impacts	1	
	Cost	3	
SM+R: Railroad Realignment with Skewed Movement Rerouting Improvement Plan	Vehicular and Truck Operations and Safety	5	5
	Rail Conflicts and Delay	1	
	Multimodal Facilities and Safety	5	
	Property and Environmental Impacts	4	
	Cost	5	
GS-1: Grade Separation of US 81/Washington Street and Mill Spur	Vehicular and Truck Operations and Safety	2	3
	Rail Conflicts and Delay	1	
	Multimodal Facilities and Safety	1	
	Property and Environmental Impacts	6	
	Cost	6	
GS-2: Grade Separation of US 81/Washington Street, Mill Spur, and Mill Road/5th Street	Vehicular and Truck Operations and Safety	1	4
	Rail Conflicts and Delay	1	
	Multimodal Facilities and Safety	1	
	Property and Environmental Impacts	7	
	Cost	7	

## Key Takeaways

1. Eliminating Skewed Turning Movements Comes at a Heavy Cost Either Financially or to Operations
2. It's More Expensive and Impactful to Grade Separate then Realign the Railroad. This Doesn't Account for Benefits at all the Other Crossings Along Mill Spur
3. Traffic Forecasts on Gateway Drive are High and Make Solutions without Added Capacity Challenging. Forecasts should be Monitored.
4. Consolidating Washington with 5<sup>th</sup>/Mill Spur Isn't Likely Accomplished with Acceptable Operations



N WASHINGTON ST

# Next Steps



N 20TH ST

# Next Steps

Get Your Input!



Develop  
Implementation  
Plan and Draft  
Report



Review Draft  
Report with  
Steering  
Committee



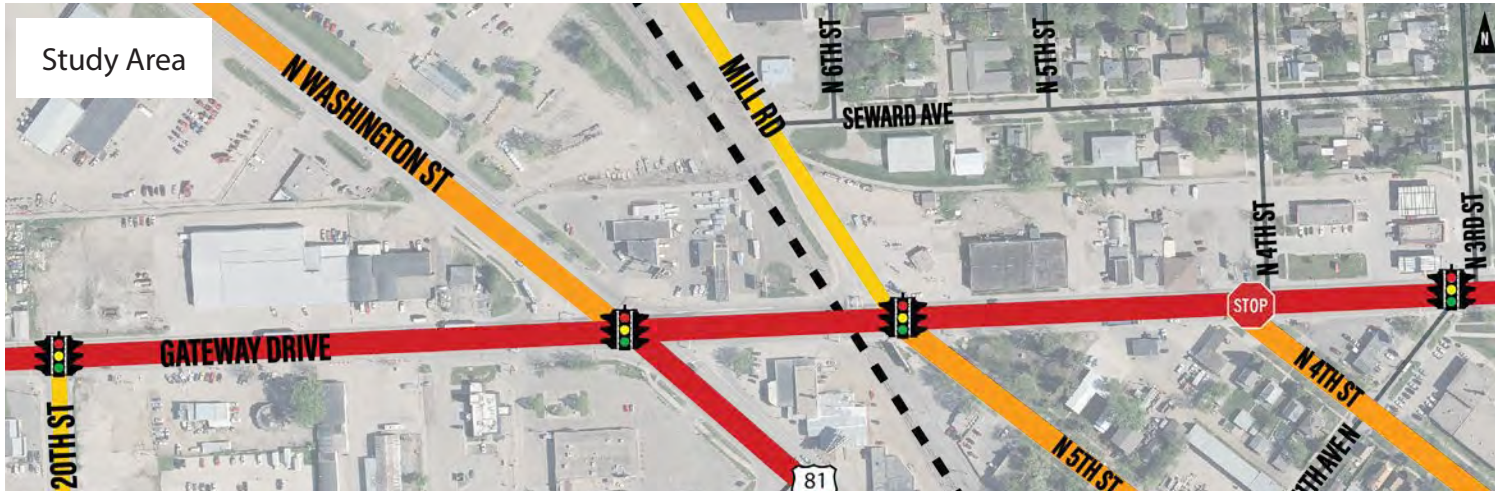
Draft Report  
Available to the  
Public



# How to Get Involved

- Share Your Ideas at the Meeting!
- Fill Out Scorecard Worksheet
- E-mail: [mike.bittner@kljeng.com](mailto:mike.bittner@kljeng.com)
- Fill Out Comment Card
- Visit website: <https://theforksmppo.com/the-forks-mpo/>

# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING



More info on the website: <https://theforksmpo.com/the-forks-mpo/u-s-2-u-s-81-skewed-intersection-study/>

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

This meeting will present the existing and future conditions and obtain public input on these issues. The community will also be asked to help brainstorm possible alternatives and develop a list of priorities.

## MEETING DETAILS: AUGUST 7TH, 2019

**OPEN FORUM:** 5 to 7 PM

**PRESENTATION:** 5:30 PM

**LOCATION:** Grand Forks City Hall Room A-101  
255 N. 4th Street

### CAN'T MAKE IT?

Send written comments by August 23rd, 2019 to:

**Mike Bittner, Project Manager**

728 East Beaton Drive  
West Fargo, ND 58078

Or via email

**mike.bittner@kljeng.com** with **"US 2/US 81 Intersection"** in the subject line.

Overcoming Barriers    Strengthening Connections  
Grand Forks - East Grand Forks  
Metropolitan Planning Organization  
Ensuring Opportunities    Planning One Community



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmpo.org](mailto:earl.haugen@theforksmpo.org).

# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

The purpose of this meeting is to present, review, refine, and evaluate potential improvement strategies.



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmplpo.org](mailto:earl.haugen@theforksmplpo.org)

# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

The purpose of this meeting is to present, review, refine, and evaluate potential improvement strategies.



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmplpo.org](mailto:earl.haugen@theforksmplpo.org)

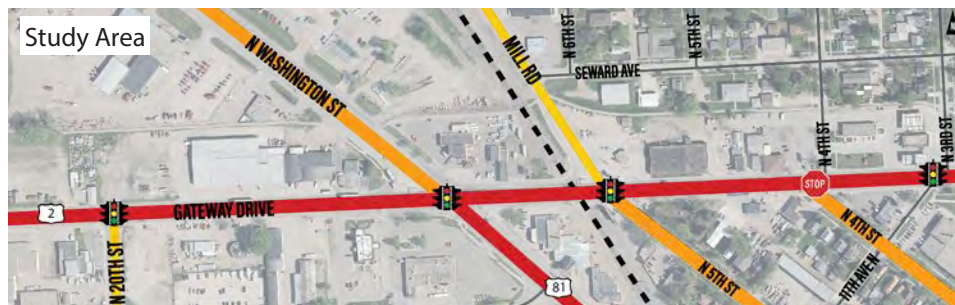
# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

The purpose of this meeting is to present, review, refine, and evaluate potential improvement strategies.



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmplpo.org](mailto:earl.haugen@theforksmplpo.org)

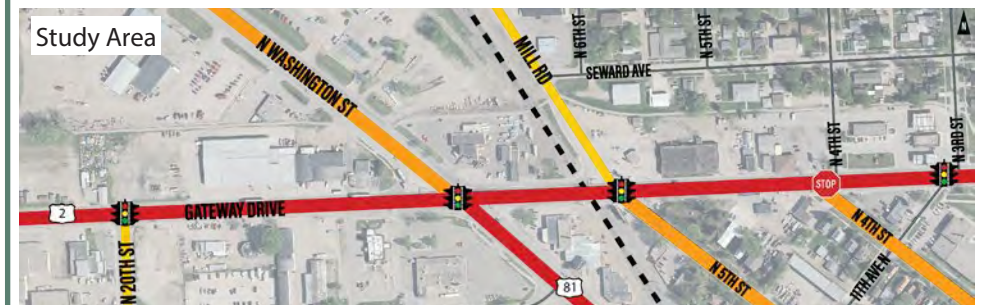
# US 2/US 81 SKEWED INTERSECTION STUDY PUBLIC INPUT MEETING

## WHY THIS STUDY?

The US 2 and US 81 skewed intersection and the Mill Spur railroad create challenging traffic operations, making turning movements for trucks difficult and blocking driveways, creating safety issues for vehicles, bicycles, and pedestrians.

## WHY THIS MEETING?

The purpose of this meeting is to present, review, refine, and evaluate potential improvement strategies.



The Grand Forks/ East Grand Forks Metropolitan Planning Organization will consider every request for reasonable accommodation. To request accommodations, contact Earl Haugen, at 701-746-2660 or [earl.haugen@theforksmplpo.org](mailto:earl.haugen@theforksmplpo.org)



**MEETING DETAILS:**

August 7th, 2019  
Open Forum: 5 to 7 PM  
Presentation: 5:30 PM  
Grand Forks City Hall  
Room A-101  
255 N. 4th Street Grand  
Forks



**CAN'T MAKE IT?**

*Send written comments by August 23rd to:*  
**Mike Bittner, Project Manager**  
728 East Beaton Drive  
West Fargo, ND 58078  
*or via email*  
**mike.bittner@kljeng.com** with **"US 2/US 81 Intersection"** in the subject line.  
*Check out [theforksmo.com](http://theforksmo.com) for more info.*

**MEETING DETAILS:**

August, 7th, 2019  
Open Forum: 5 to 7 PM  
Presentation: 5:30 PM  
Grand Forks City Hall  
Room A-101  
255 N. 4th Street Grand  
Forks



**CAN'T MAKE IT?**

*Send written comments by August 23rd to:*  
**Mike Bittner, Project Manager**  
728 East Beaton Drive  
West Fargo, ND 58078  
*or via email*  
**mike.bittner@kljeng.com** with **"US 2/US 81 Intersection"** in the subject line.  
*Check out [theforksmo.com](http://theforksmo.com) for more info.*

**MEETING DETAILS:**

August 7th, 2019  
Open Forum: 5 to 7 PM  
Presentation: 5:30 PM  
Grand Forks City Hall  
Room A-101  
255 N. 4th Street Grand  
Forks



**CAN'T MAKE IT?**

*Send written comments by August 23rd to:*  
**Mike Bittner, Project Manager**  
728 East Beaton Drive  
West Fargo, ND 58078  
*or via email*  
**mike.bittner@kljeng.com** with **"US 2/US 81 Intersection"** in the subject line.  
*Check out [theforksmo.com](http://theforksmo.com) for more info.*

**MEETING DETAILS:**

August 7th, 2019  
Open Forum: 5 to 7 PM  
Presentation: 5:30 PM  
Grand Forks City Hall  
Room A-101  
255 N. 4th Street Grand  
Forks



**CAN'T MAKE IT?**

*Send written comments by August 23rd to:*  
**Mike Bittner, Project Manager**  
728 East Beaton Drive  
West Fargo, ND 58078  
*or via email*  
**mike.bittner@kljeng.com** with **"US 2/US 81 Intersection"** in the subject line.  
*Check out [theforksmo.com](http://theforksmo.com) for more info.*

# US 2/US 81 SKEWED INTERSECTION STUDY

## YOUR INPUT IS NEEDED!

### MAJOR CHANGES ARE BEING STUDIED

Nine alternatives have been developed for this intersection vicinity. Improvement options include access management, new roadway connections, railroad relocation, grade separation, technology solutions, and others.

### HOW TO PROVIDE COMMENTS

Please fill out the Alternative Scorecard on the Forks MPO Website:  
<https://theforksmpo.com/the-forks-mpo/u-s-2-u-s-81-skewed-intersection-study/>

The scorecard will help guide what alternatives will be carried forward, refined and discarded.



# US 2/US 81 SKEWED INTERSECTION STUDY

## YOUR INPUT IS NEEDED!

### MAJOR CHANGES ARE BEING STUDIED

Nine alternatives have been developed for this intersection vicinity. Improvement options include access management, new roadway connections, railroad relocation, grade separation, technology solutions, and others.

### HOW TO PROVIDE COMMENTS

Please fill out the Alternative Scorecard on the Forks MPO Website:  
<https://theforksmpo.com/the-forks-mpo/u-s-2-u-s-81-skewed-intersection-study/>

The scorecard will help guide what alternatives will be carried forward, refined and discarded.



# US 2/US 81 SKEWED INTERSECTION STUDY

## YOUR INPUT IS NEEDED!

### MAJOR CHANGES ARE BEING STUDIED

Nine alternatives have been developed for this intersection vicinity. Improvement options include access management, new roadway connections, railroad relocation, grade separation, technology solutions, and others.

### HOW TO PROVIDE COMMENTS

Please fill out the Alternative Scorecard on the Forks MPO Website:  
<https://theforksmpo.com/the-forks-mpo/u-s-2-u-s-81-skewed-intersection-study/>

The scorecard will help guide what alternatives will be carried forward, refined and discarded.



# US 2/US 81 SKEWED INTERSECTION STUDY

## YOUR INPUT IS NEEDED!

### MAJOR CHANGES ARE BEING STUDIED

Nine alternatives have been developed for this intersection vicinity. Improvement options include access management, new roadway connections, railroad relocation, grade separation, technology solutions, and others.

### HOW TO PROVIDE COMMENTS

Please fill out the Alternative Scorecard on the Forks MPO Website:  
<https://theforksmpo.com/the-forks-mpo/u-s-2-u-s-81-skewed-intersection-study/>

The scorecard will help guide what alternatives will be carried forward, refined and discarded.



Please provide any comments you have by September 13th.



SEND RESPONSES TO:  
Mike Bittner, Project Manager  
728 East Beaton Drive  
West Fargo, ND 58078

Or via e-mail to:  
**mike.bittner@kljeng.com**  
with "US 2/US 81 Intersection" in the subject line.

Please provide any comments you have by September 13th.



SEND RESPONSES TO:  
Mike Bittner, Project Manager  
728 East Beaton Drive  
West Fargo, ND 58078

Or via e-mail to:  
**mike.bittner@kljeng.com**  
with "US 2/US 81 Intersection" in the subject line.

Please provide any comments you have by September 13th.



SEND RESPONSES TO:  
Mike Bittner, Project Manager  
728 East Beaton Drive  
West Fargo, ND 58078

Or via e-mail to:  
**mike.bittner@kljeng.com**  
with "US 2/US 81 Intersection" in the subject line.

Please provide any comments you have by September 13th.



SEND RESPONSES TO:  
Mike Bittner, Project Manager  
728 East Beaton Drive  
West Fargo, ND 58078

Or via e-mail to:  
**mike.bittner@kljeng.com**  
with "US 2/US 81 Intersection" in the subject line.

# US 2/US 81 SKEWED INTERSECTION STUDY

Name Ross Weiler

Please rank the following alternatives based on long-term desirability, assuming funding for each alternative would eventually be viable. Do NOT rank any alternatives you believe are not feasible.

- Do Nothing
- 2 Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- Alt SM: Skewed Movement
- 1 Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- 3 Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road

Please rank the following alternatives based on short-term desirability factoring in short-term funding limitations. Do NOT rank any alternatives you believe are not feasible.

- Do Nothing
- 1 Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- Alt SM: Skewed Movement
- 2 Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- 3 Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road

Are there any alternatives that are infeasible or should be discarded from further consideration?

- Do Nothing
- Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- X Alt SM: Skewed Movement
- Alt EF+R: Existing Footprint with Realignment
- X Alt SM+R: Skewed Movement with Realignment
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- Do Nothing



# US 2/US 81 SKEWED INTERSECTION STUDY



COMMENTS

Please use the space below to provide comments regarding the US 2/US 81 Skewed Intersection Study.

PLEASE  
PRINT

Name:

Ross Weiler

Address:

-THIS SPACE  
OFFICE USE  
ONLY-

Concern that raised dividers will catch snow and impede snow removal

I feel that eliminating rail between Gateway & Demers along 5th St would have most overall benefit. Noise, pollution, traffic neighborhood safety -

Please leave comments with meeting conductors or mail comments by August 23rd, 2019 to:

Mike Bittner  
728 East Beaton Drive  
West Fargo, ND 58078  
Email: [mike.bittner@kljeng.com](mailto:mike.bittner@kljeng.com)  
Note "US 2/US 81 Skewed Intersection Study" in the email subject heading



# US 2/US 81 SKEWED INTERSECTION STUDY

Name Dean Kuhns

Please rank the following alternatives based on long-term desirability, assuming funding for each alternative would eventually be viable. Do NOT rank any alternatives you believe are not feasible.

- 5 Do Nothing
- 3 Alt EF: Existing Footprint
- 4 Alt NRC: New Roadway Connection
- 6 Alt SM: Skewed Movement
- 7 Alt EF+R: Existing Footprint with Realignment
- 2 Alt SM+R: Skewed Movement with Realignment
- X Alt GS-1: Grade Separation of Washington Street and Mill Spur
- X Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road

Please rank the following alternatives based on short-term desirability factoring in short-term funding limitations. Do NOT rank any alternatives you believe are not feasible.

- 4 Do Nothing
- 3 Alt EF: Existing Footprint
- 5 Alt NRC: New Roadway Connection
- 6 Alt SM: Skewed Movement
- 1 Alt EF+R: Existing Footprint with Realignment
- 2 Alt SM+R: Skewed Movement with Realignment
- X Alt GS-1: Grade Separation of Washington Street and Mill Spur
- X Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road

Are there any alternatives that are infeasible or should be discarded from further consideration?

- Do Nothing
- Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- Alt SM: Skewed Movement
- Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- Do Nothing





# US 2/US 81 SKEWED INTERSECTION STUDY

Name \_\_\_\_\_ Jason Peterson \_\_\_\_\_

**Please rank the following alternatives based on long-term desirability, assuming funding for each alternative would eventually be viable. Do NOT rank any alternatives you believe are not feasible.**

- 2 Alt EF: Existing Footprint
- 4 Alt NRC: New Roadway Connection
- 6 Alt SM: Skewed Movement
- 3 Alt EF+R: Existing Footprint with Realignment
- 5 Alt SM+R: Skewed Movement with Realignment
- Alt R+R: Washington Street and Mill Road Roundabouts
- Alt ST+R: Separated T-Intersections at Washington Street
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- 1 Do Nothing

**Please rank the following alternatives based on short-term desirability factoring in short-term funding limitations. Do NOT rank any alternatives you believe are not feasible.**

- 2 Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- Alt SM: Skewed Movement
- 3 Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- Alt R+R: Washington Street and Mill Road Roundabouts
- Alt ST+R: Separated T-Intersections at Washington Street
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- 1 Do Nothing

**Are there any alternatives that are infeasible or should be discarded from further consideration?**

- Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- Alt SM: Skewed Movement
- Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- Alt R+R: Washington Street and Mill Road Roundabouts
- Alt ST+R: Separated T-Intersections at Washington Street
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- Do Nothing



# US 2/US 81 SKEWED INTERSECTION STUDY

Name Mike Jones

**Please rank the following alternatives based on long-term desirability, assuming funding for each alternative would eventually be viable. Do NOT rank any alternatives you believe are not feasible.**

- 4 Alt EF: Existing Footprint
- 3 Alt NRC: New Roadway Connection
- 1 Alt SM: Skewed Movement
- 2 Alt EF+R: Existing Footprint with Realignment
- 5 Alt SM+R: Skewed Movement with Realignment
- Alt R+R: Washington Street and Mill Road Roundabouts
- Alt ST+R: Separated T-Intersections at Washington Street
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- Do Nothing

**Please rank the following alternatives based on short-term desirability factoring in short-term funding limitations. Do NOT rank any alternatives you believe are not feasible.**

- 1 Alt EF: Existing Footprint
- 3 Alt NRC: New Roadway Connection
- 2 Alt SM: Skewed Movement
- 4 Alt EF+R: Existing Footprint with Realignment
- 5 Alt SM+R: Skewed Movement with Realignment
- Alt R+R: Washington Street and Mill Road Roundabouts
- Alt ST+R: Separated T-Intersections at Washington Street
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- Do Nothing

**Are there any alternatives that are infeasible or should be discarded from further consideration?**

- Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- Alt SM: Skewed Movement
- Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- Alt R+R: Washington Street and Mill Road Roundabouts
- Alt ST+R: Separated T-Intersections at Washington Street
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- Do Nothing

# US 2/US 81 SKEWED INTERSECTION STUDY

Name Paul Graveline

*Please rank the following alternatives based on long-term desirability, assuming funding for each alternative would eventually be viable. Do NOT rank any alternatives you believe are not feasible.*

- 3 Alt EF: Existing Footprint
- 1 Alt NRC: New Roadway Connection
- 10 Alt SM: Skewed Movement
- 9 Alt EF+R: Existing Footprint with Realignment
- 8 Alt SM+R: Skewed Movement with Realignment
- 7 Alt R+R: Washington Street and Mill Road Roundabouts
- 6 Alt ST+R: Separated T-Intersections at Washington Street
- 4 Alt GS-1: Grade Separation of Washington Street and Mill Spur
- 5 Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- 2 Do Nothing

*Please rank the following alternatives based on short-term desirability factoring in short-term funding limitations. Do NOT rank any alternatives you believe are not feasible.*

- Alt EF: Existing Footprint
- 2 Alt NRC: New Roadway Connection
- Alt SM: Skewed Movement
- Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- Alt R+R: Washington Street and Mill Road Roundabouts
- Alt ST+R: Separated T-Intersections at Washington Street
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- 1 Do Nothing

*Are there any alternatives that are infeasible or should be discarded from further consideration?*

- Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- 1 Alt SM: Skewed Movement
- 2 Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- 3 Alt R+R: Washington Street and Mill Road Roundabouts
- Alt ST+R: Separated T-Intersections at Washington Street
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- Do Nothing

**How do you compare the proposed Skew Study projects to others around the metro area?**

- High Priority - One of the top improvement needs in the area.  
 Medium Priority - Important but not one of the top 5 needs in the area.  
 Low Priority - Unnecessary in the next 10 to 15 years.  
 No Priority - Do Nothing is the best solution.

**Do you believe the ITS Routing Option is a good addition to any short-term solutions?**

- Yes  
 No

**Do you believe the optional access management reconfiguration is a good addition to any short- or long-term plans?**

- Yes  
 No

**Is there a hybrid solution you think should be considered?**

Any Plan to Limit Business access from US Highway 2 and N. Washington is a BAD idea. It will hurt the businesses.

Also, Squeezed movement Re Routing with Turn Restrictions is not a good idea.

Rail re-route North would be a good idea to solve some of the issues. Also, I think the ALT SM Sub Option: ITS Routing would be good.

Best Idea - Grade separation on US Hwy 2 w East/West Access on US Highway 2 from North Washington is combination with a re-route of the Railway North of the city.

Electronic Billboards Re-routing traffic during Train Crossings is definitely a good solution too.

# US 2/US 81 SKEWED INTERSECTION STUDY

Name Ross Weiler

Please rank the following alternatives based on long-term desirability, assuming funding for each alternative would eventually be viable. Do NOT rank any alternatives you believe are not feasible.

- Do Nothing
- 2 Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- Alt SM: Skewed Movement
- 1 Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- 3 Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road

Please rank the following alternatives based on short-term desirability factoring in short-term funding limitations. Do NOT rank any alternatives you believe are not feasible.

- Do Nothing
- 1 Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- Alt SM: Skewed Movement
- 2 Alt EF+R: Existing Footprint with Realignment
- Alt SM+R: Skewed Movement with Realignment
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- 3 Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road

Are there any alternatives that are infeasible or should be discarded from further consideration?

- Do Nothing
- Alt EF: Existing Footprint
- Alt NRC: New Roadway Connection
- X Alt SM: Skewed Movement
- Alt EF+R: Existing Footprint with Realignment
- X Alt SM+R: Skewed Movement with Realignment
- Alt GS-1: Grade Separation of Washington Street and Mill Spur
- Alt GS-2: Grade Separation of Washington Street, Mill Spur, and Mill Road
- Do Nothing

