

SE Main Ave/20 St/21 St RR Grade Separation Project May 29, 2018 Public Hearing



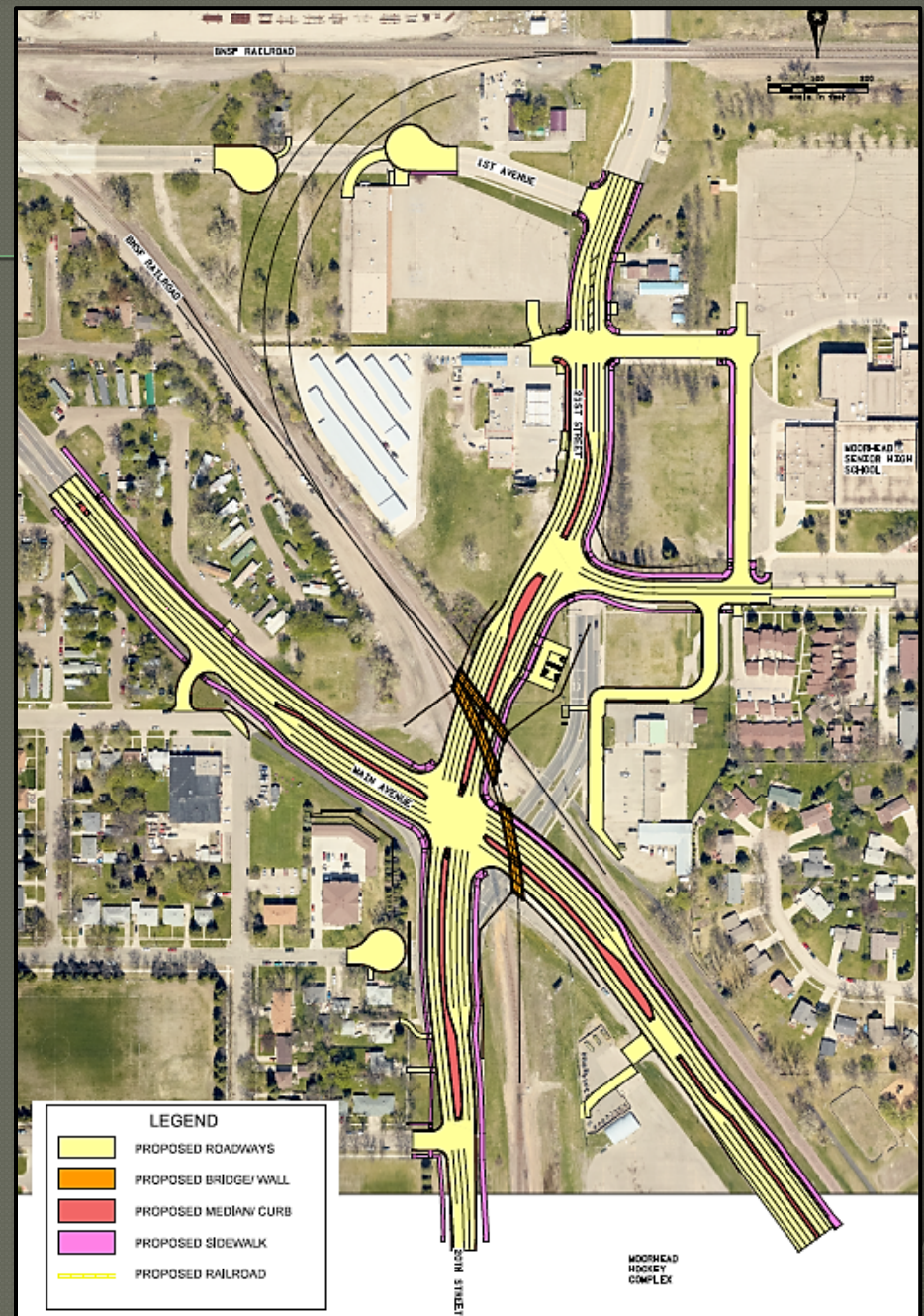
Topics

- Brief project description
- Brief history
- Funding
- Important considerations
- Previous “regional” projects
- Benefits
- As-bid costs
- Special assessments
- Construction
- Potential modifications



The Project

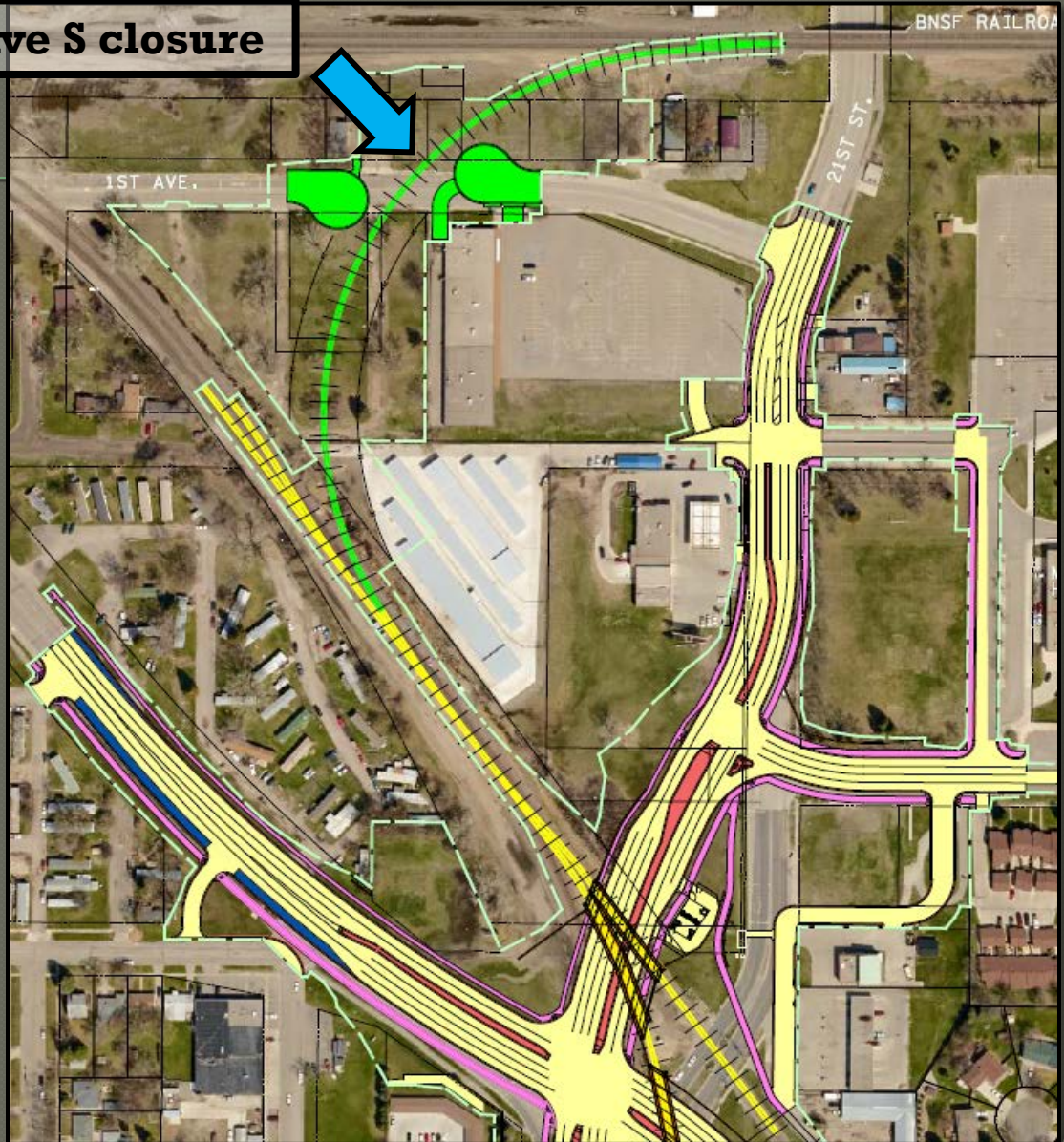
- Reconstruct & realign the intersection of SE Main Ave & 20 St/21 St
- Streets will pass under new bridges carrying BNSF & OTVR tracks
- Addition of “wye” track



The Wye

- Allows NB to EB & WB to SB train movements
- Eliminates delays at Downtown crossings due to trains backing up
- Provides RR operational benefits

1 Ave S closure



Project Animations

www.cityofmoorhead.com & search for
“se main ave”

The screenshot displays the City of Moorhead website. At the top, there is a navigation bar with links: News | Calendar | City Code | Maps | e-Notification | Contact Us | Translate. A search bar is located on the right. Below this is the header with "CITY OF MOORHEAD" and the tagline "Your Hometown minnesota". A main navigation menu includes: HOME, ABOUT THE CITY, HOW DO I..., RESIDENTS, BUSINESS, DEPARTMENTS (highlighted), and GOVERNMENT. On the left, a sidebar menu lists various services under "Engineering", including Current Projects, Street & Traffic Control Signs, Forms & Resources, Permits, Reports & Studies, Petitions for Public Improvements, Contact Engineering, Special Assessments, Floodplain Information, Geographic Information Systems, Stormwater Management, and Wastewater. The main content area shows the breadcrumb trail: Departments > Engineering > Forms & Resources > Reports & Studies. The title of the page is "ANIMATED DEPICTION OF 20TH & 21ST ST/SE MAIN AVENUE GRADE SEPARATION PROJECT". Below the title are links for Font Size, Share & Bookmark, Feedback, and Print. The sub-header reads "Aerial View North Bound on 20th St." followed by a large black rectangular placeholder for the animation.

Benefits

- High priority grade separation
- Improve safety & congestion for vehicles, bicycles, pedestrians & emergency services
 - In the vicinity of SE Main Ave & 20 St/21 St
 - At Downtown crossings
- Improve freight operations & efficiency



Report on the
**Improvements to Highway-Rail
Grade Crossings and Rail Safety**

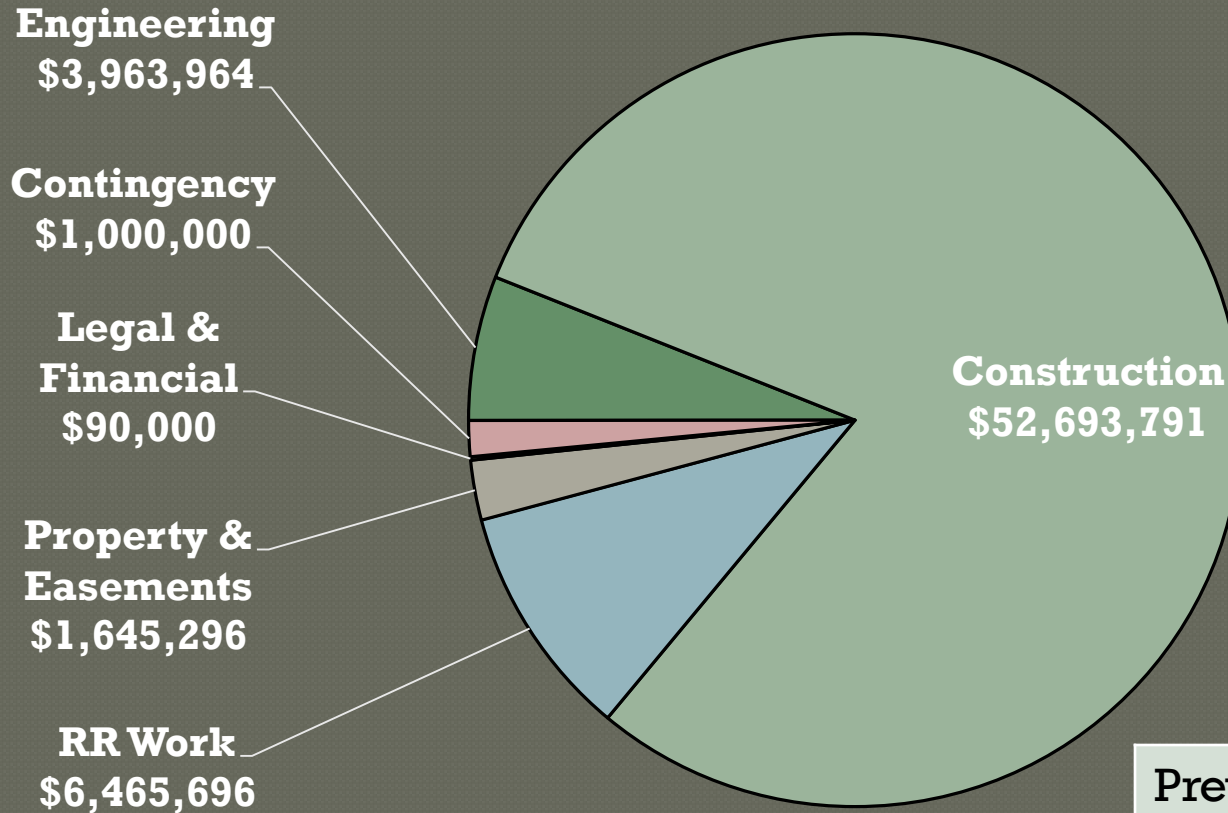
December 2014



Brief History

- ◉ 2000: *Study of 34th Street/I-94 Interchange and Railroad Relocation Alternatives*
- ◉ 2002: Preliminary engineering & environmental assessment (EA) begins
- ◉ 2006: Right-of-way acquisition & final design begins
- ◉ 2007: Final EA & Finding of No Significant Impact
- ◉ 2009: 95% Plans Complete
- ◉ 2010: Right-of-way acquisition complete
- ◉ 2011: Building demo & site preparation
- ◉ 2017: \$42.262M State grant awarded

As-bid Cost: \$65,858,747



Previous	\$6.6M
Current	\$65.9M
Total	\$72.5M

What is driving the cost?

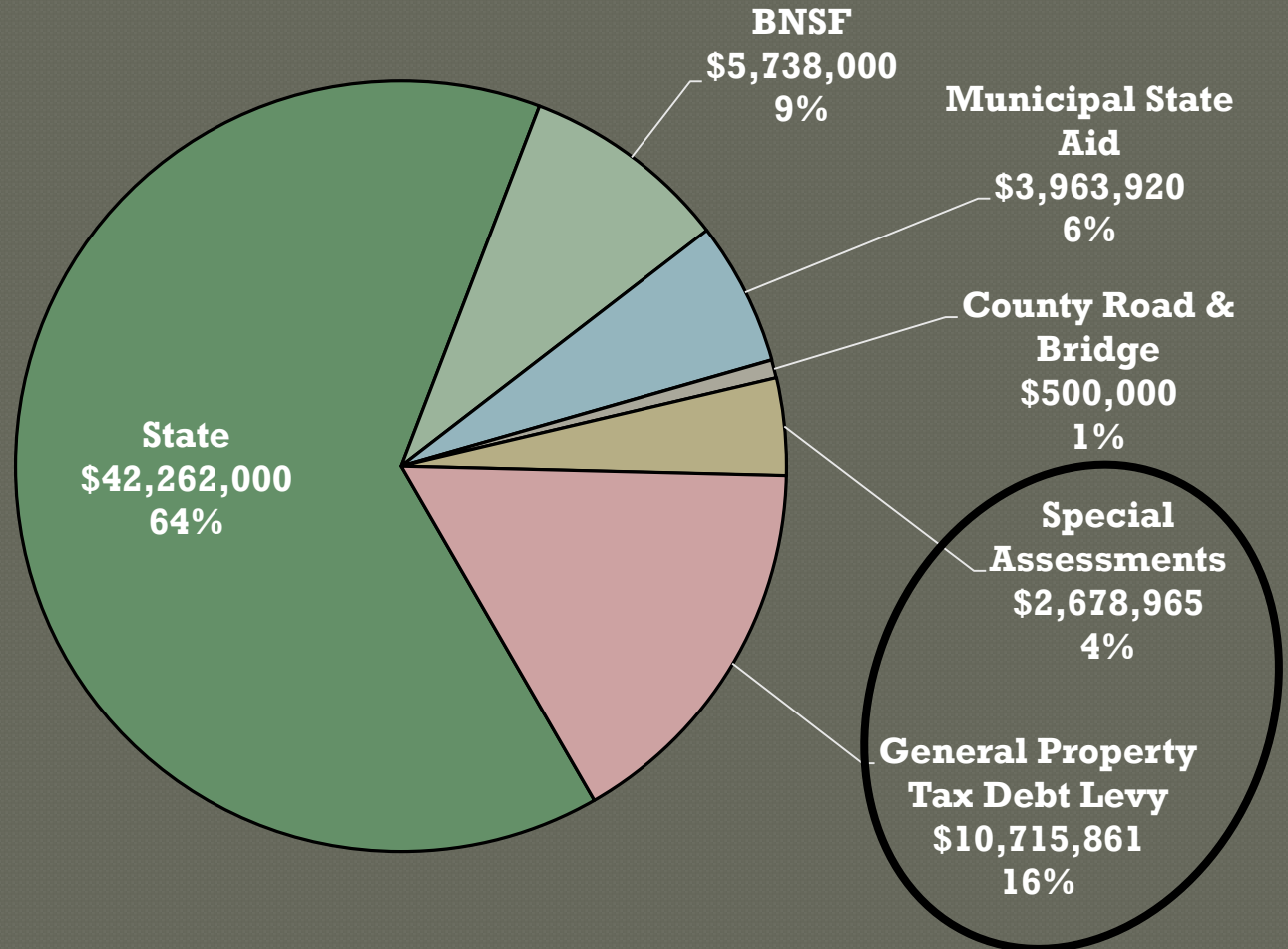
- Railroad modifications (track, signals, etc)
- Railroad coordination
- Maintaining railroad operations
- Project complexity
- Small work zone
- Quantity of excavation
- Stormwater improvements
- Managing stormwater on the construction site

More than \$12M

Potential Sources of Local Funding

- ✓ Municipal State Aid – about \$2M per year
- ✓ County Road & Bridge – about \$150,000 per year
- ✓ Bond
 - Requires 20% of the bond amount be collected through special assessments
 - Remaining 80% can be collected through general property tax debt levy or other city-wide sources (all properties contribute)
- Utility funds – water, power, sewer relocations
- Other??

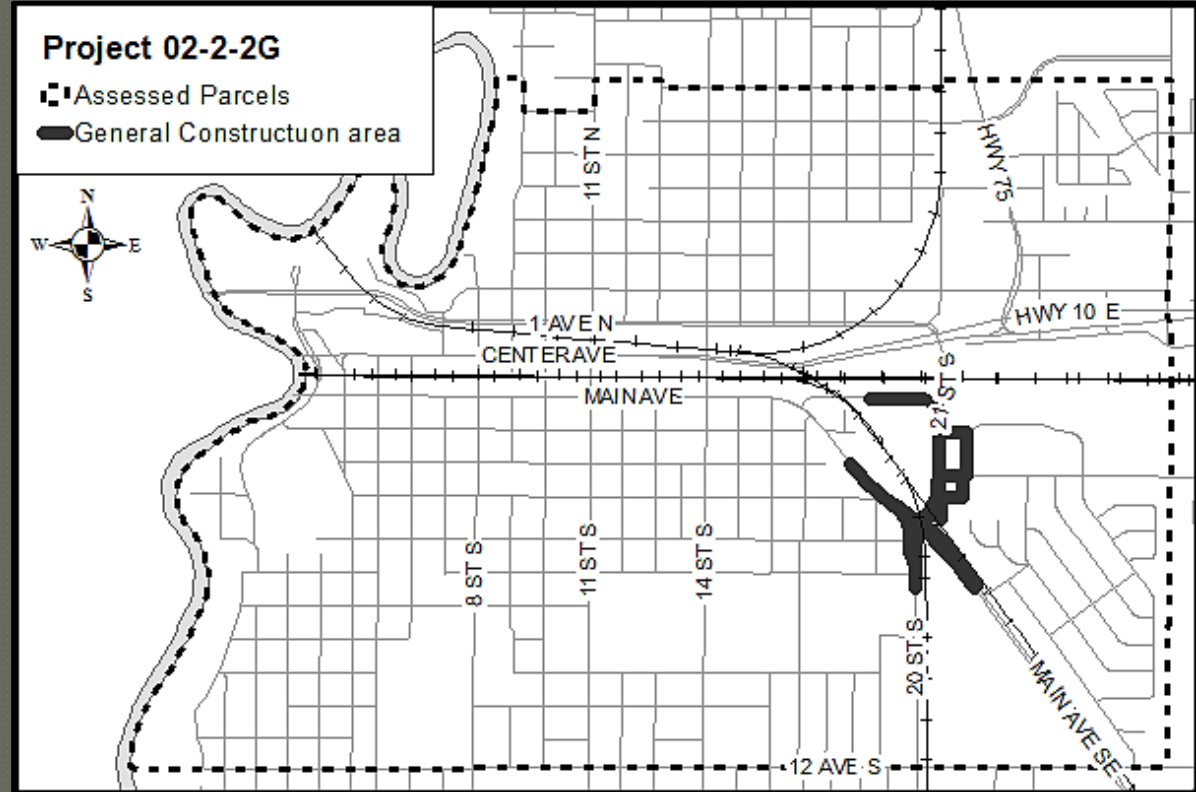
Proposed Funding: \$65,858,747



Bond: \$13.395M

Special Assessment District

- Regional benefits
- Downtown benefits
- Consider similar function of 34 St Overpass
- Consider previous & future regional projects (e.g. 34 St/I-94 interchange, 15 Ave N bridge)

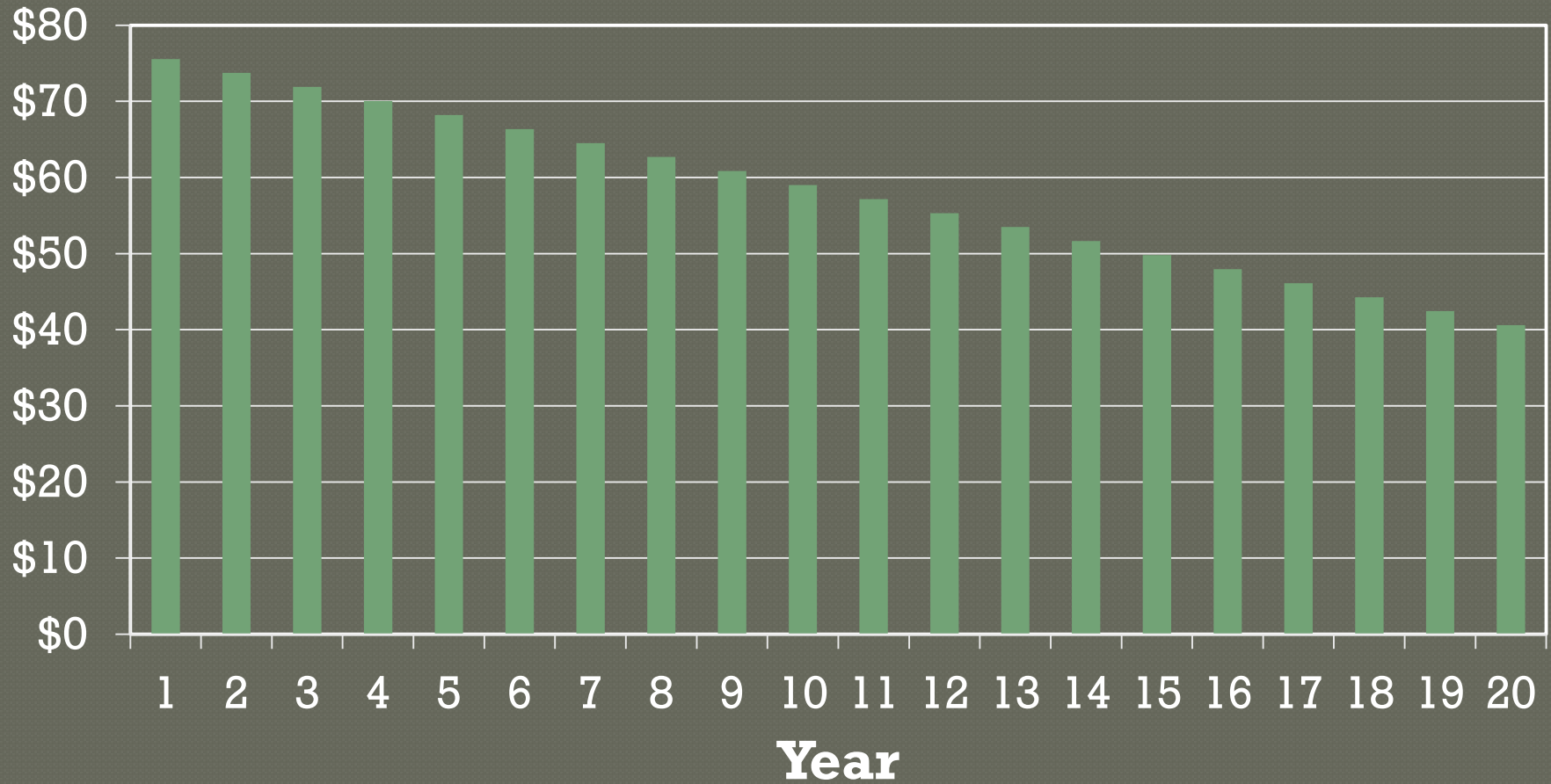


Special Assessment Examples

Parcel Size	Example 1	Example 2	Example 3
1 acre or less	\$775.00	\$750.00	\$685.00
1.01 to 5 acres	\$1,162.50	\$1,500.00	\$2,740.00
More than 5 acres	\$1,550.00	\$3,000.00	\$5,480.00

- Paid over 20 years
- Estimated interest rate of 4.75%
- At \$775.00, first year payment is approximately \$76
- Collected with property taxes
- Subject City Council direction & action

Annual Payments for Example 1: \$775, 20 years, 4.75% interest



Special Assessment Schedule

- Public Hearing to Consider Use of Special Assessments:

May 29, 2018

- Consider Resolutions to Order Improvements, Approve Agreements, Award Bid:

June 4, 2018

- Public Hearing to Adopt Special Assessments:

No earlier than Fall, 2019

- Special Assessment Collections Begin:

No earlier than 2020

Important Considerations

- Public hearing
 - Legal requirement to allow the City Council to consider the use of special assessments to cover some of the local cost for the project
 - Necessary step to preserve this funding option even if it is ultimately not used
- Final amount to be assessed to individual parcels need not be determined at the hearing
- Final amount subject to:
 - Council direction on allocation to properties in the special assessment district
 - Final project costs
 - Adoption at a future public hearing

Construction



- Initiate construction Summer, 2018
- Total duration is approximately 3 years
 - During the first 2 years, SE Main Ave/20 St/21 St intersection closed to most or all movements
 - During the third year, primary impacts are on 1 Ave S

Special Assessment District Examples for Regional Projects

- 34 St & I-94 Interchange
- SE Main Ave & I-94 Ramps
- Flood Mitigation

34 St & I-94 Interchange

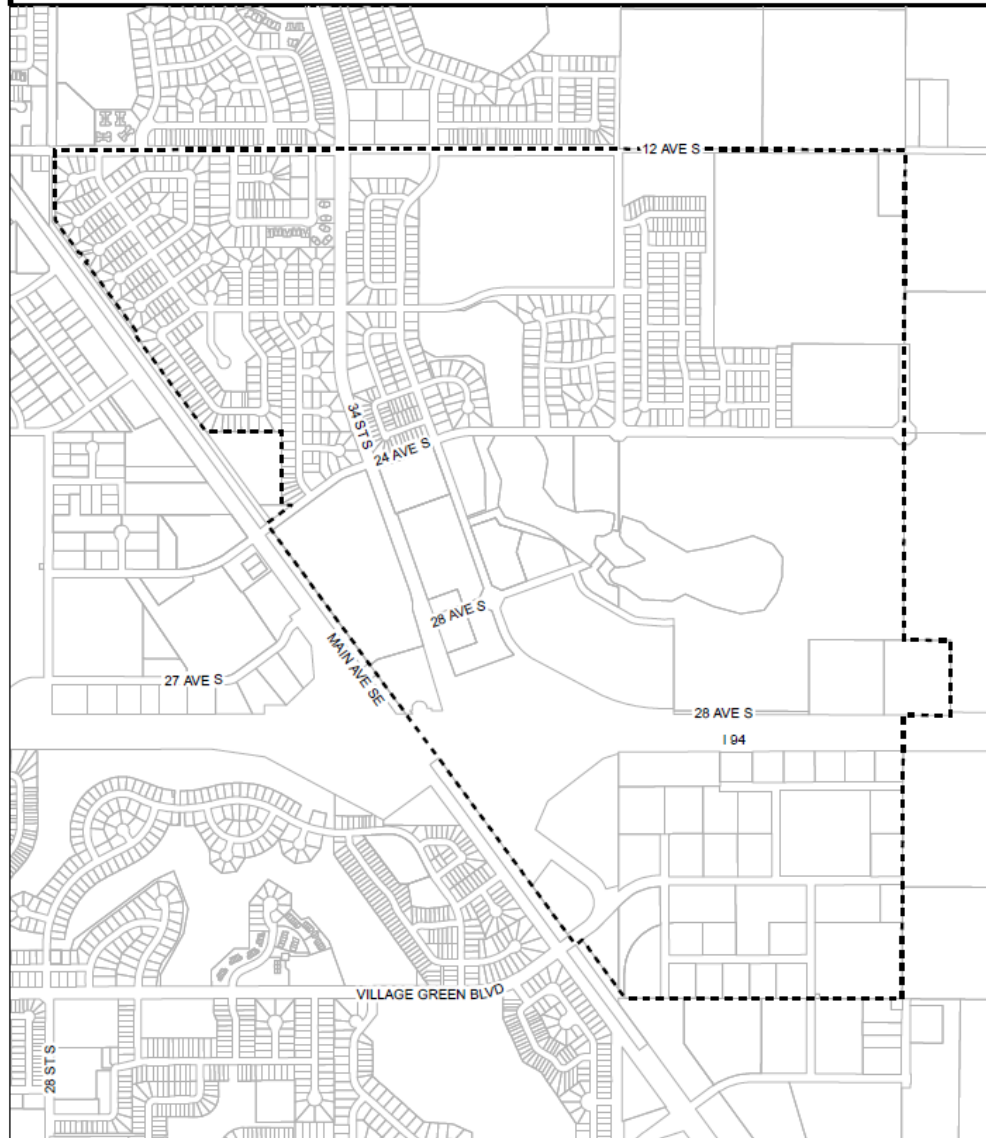
- ≈ \$3.5M assessed
- 693 parcels
- Range:
 - \$658 - \$564,167
- Most common:
 - \$1,300-\$1,575

Project 04-2-1 - 34th St S and I-94 Interchange

Assessment Area



Map Created on
5/21/2018

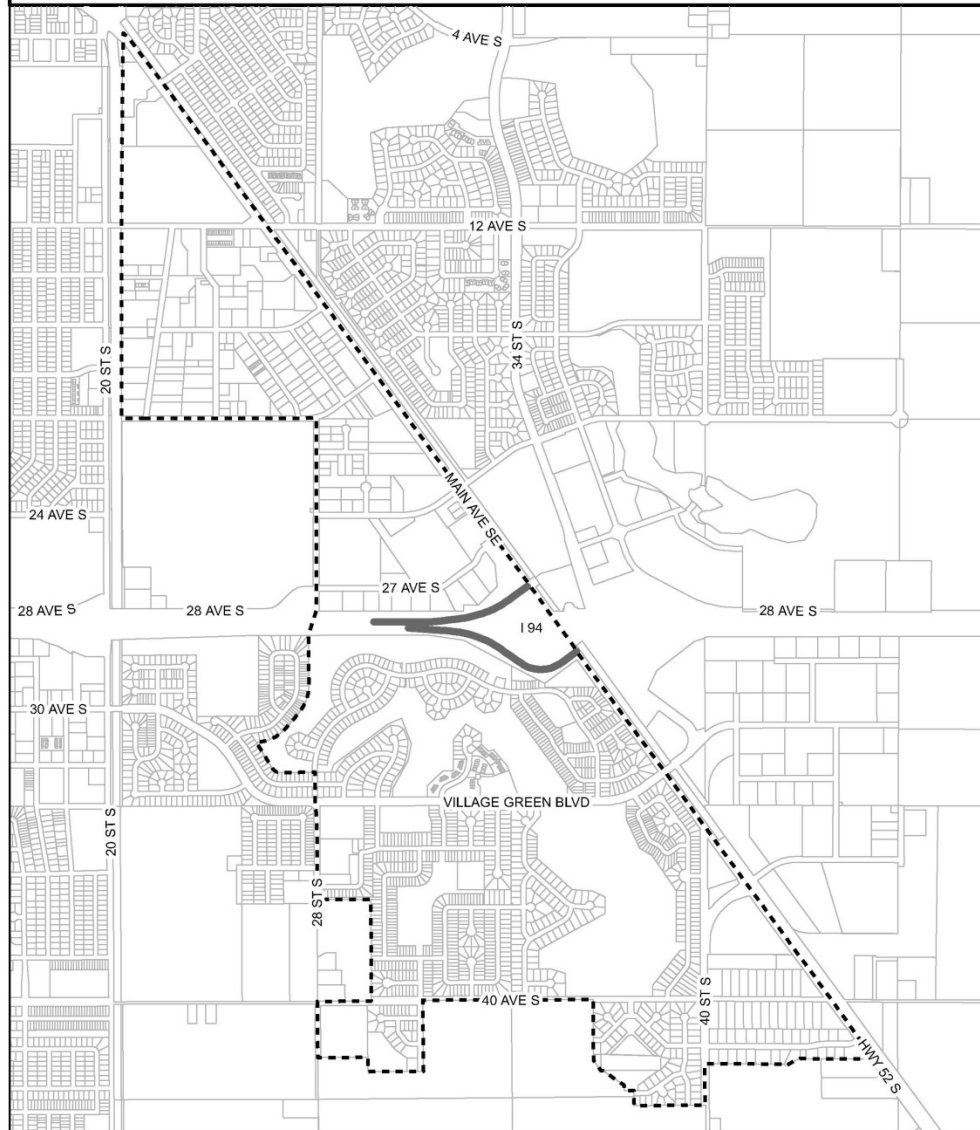


SE Main Ave & I-94 Ramps

- ≈ \$0.52M assessed
- 1,484 parcels
- Range:
 - \$148 - \$51,066
- Most common:
 - \$148

City Project 11-A2-4 - SE Main and I-94 Ramps

- Assessment Area
- Interstate Ramp Reconstruction



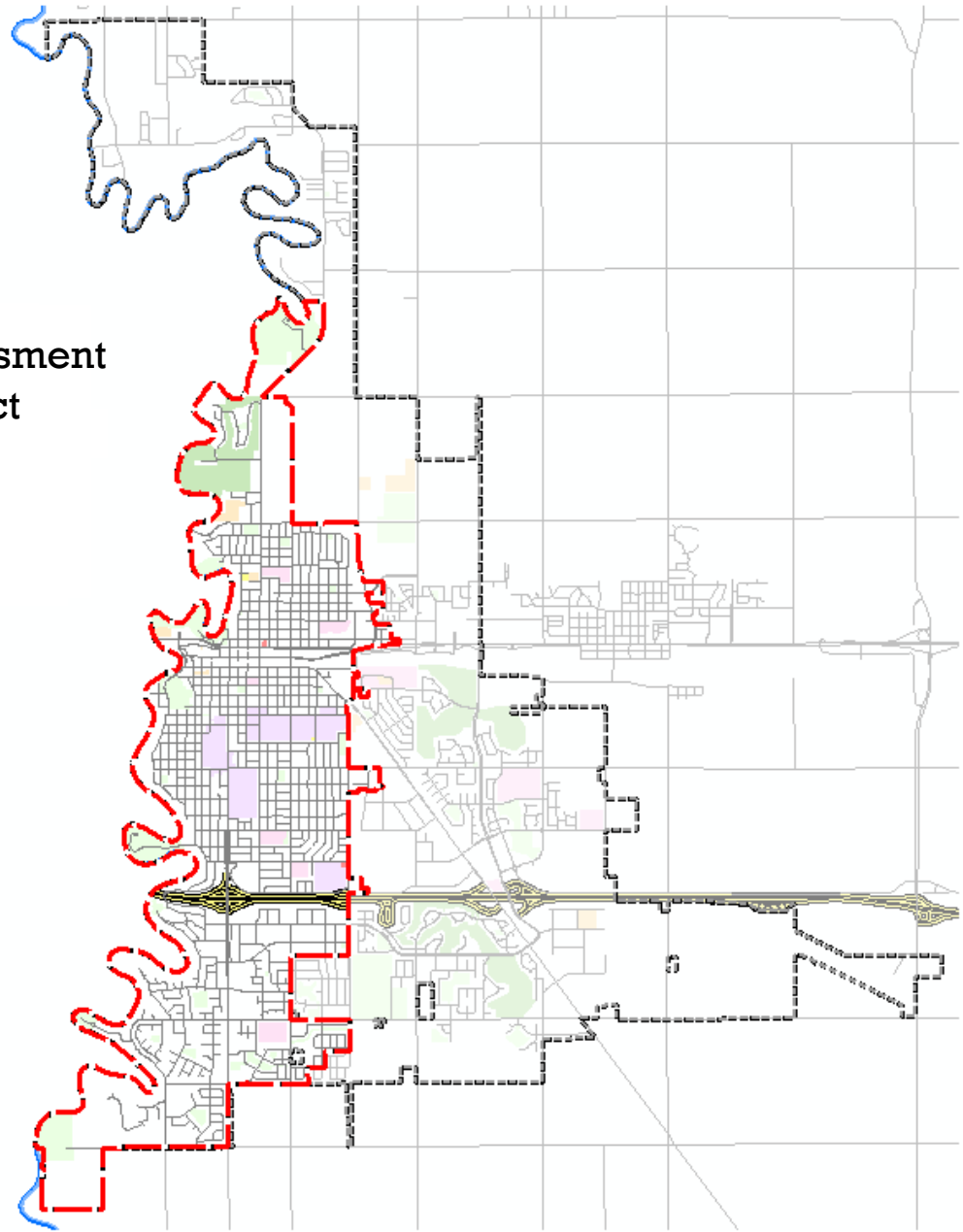
Flood Mitigation

- ≈ \$5.9M assessed
- ≈ 8,400 parcels
- Range:
 - \$473 - \$10,565
- Most common:
 - \$547

Legend



Assessment
District



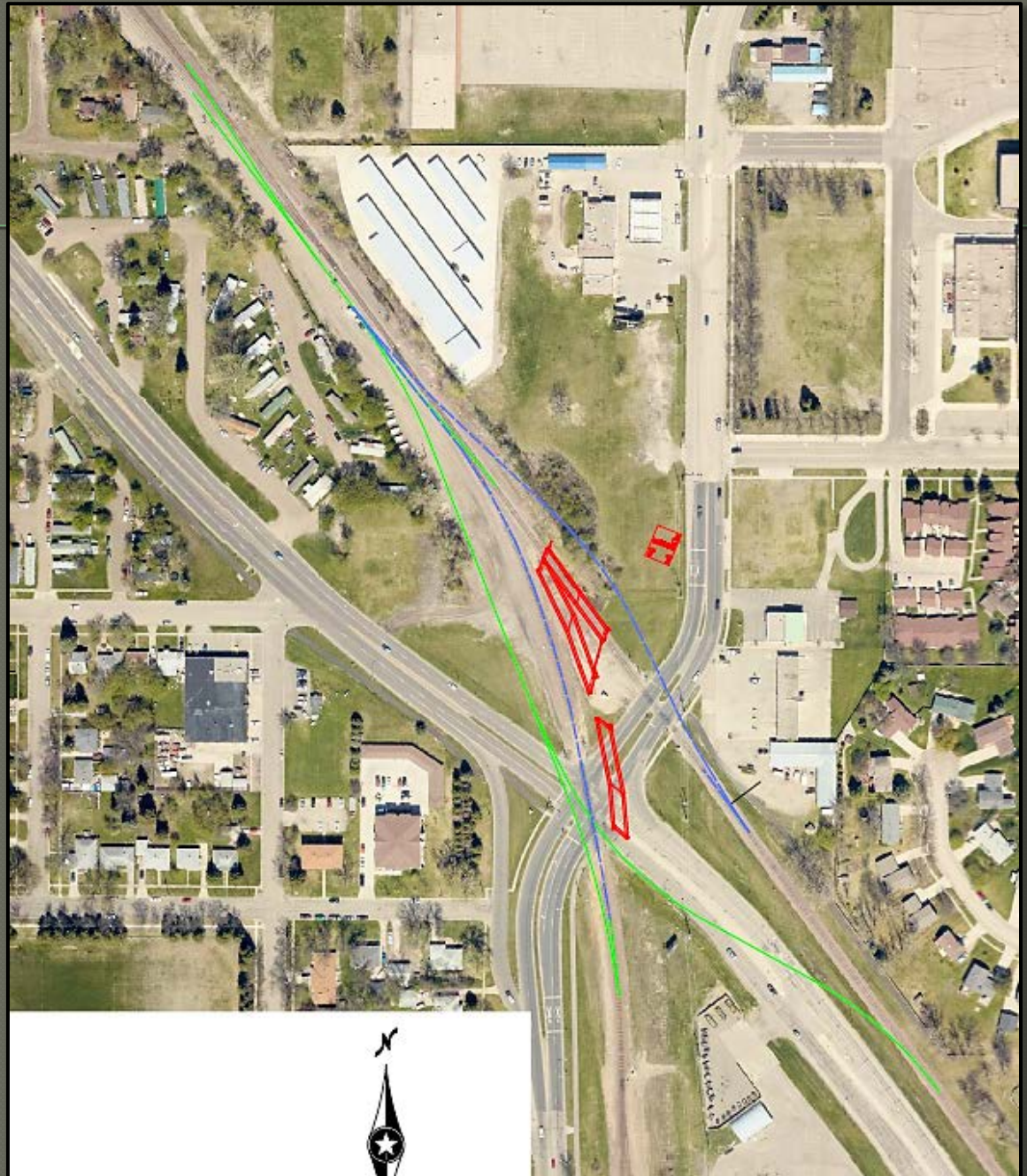
On-going efforts....

- *To secure additional funding & reduce costs:*
 - Request for additional State assistance
 - \$6M in recently passed bonding bill
 - Awaiting Governor signature
 - Coordination with low bid contractor to explore project modifications to reduce cost

Potential Project Modifications

Potential Revision	Savings	
Full closure of SE Main Ave/20 St/21 St intersection	\$125,000	Y
Revised shoofly	\$1,250,000- \$1,600,000	Y
Pavement typical section modifications		
Eliminate/reduce select granular borrow - various	\$281,000	Y
Substitute bituminous pavement for concrete	\$750,000	N
Substitute regular concrete for stamped colored concrete	\$77,363	N
Pump modifications	TBD	TBD
Delete knife gate from pumping station	\$90,000	Y
Shorter height of retaining walls	\$160,000- \$198,000	Y

Revised Shoofly



Potential Project Modifications

Potential Revision	Savings	
Substitute vinyl chain link fence for decorative railing	\$100,000- \$125,000	Y
Shorten turn lanes	\$66,000- \$132,000	Y
Eliminate 10' sidewalk on N side of Main Ave, W of 20 St	\$65,000	N
Estimated potential savings	\$2,964,363- \$3,443,363	
Estimated recommended savings	\$2,072,000- \$2,551,000	
Less BNSF additional temporary shoofly costs	???	

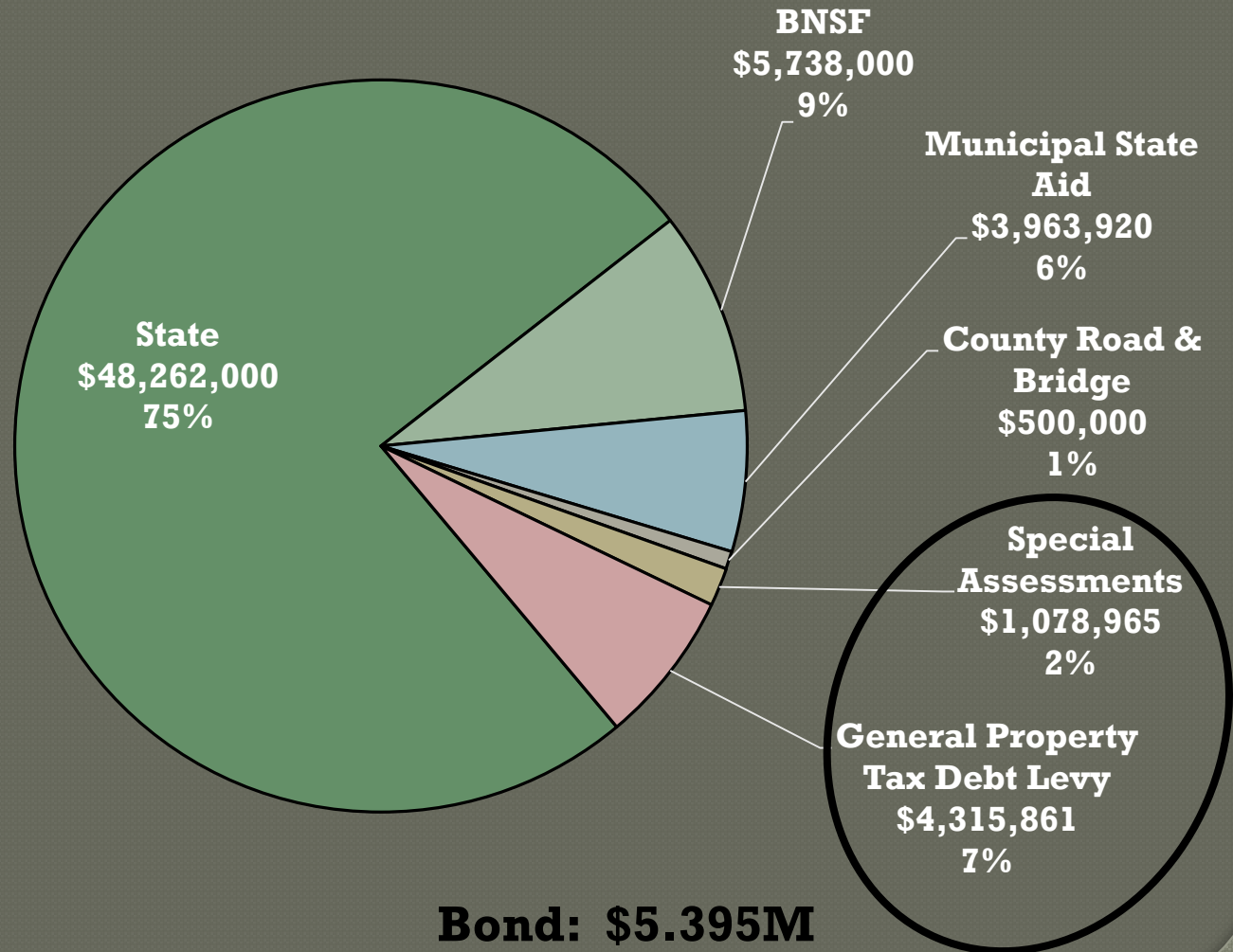
All savings subject to development of detailed change orders

Illustration of potential modifications

● Assumptions:

- \$6M in additional State assistance
- \$2M in *net savings* from project revisions:
 - Dependent on development of detailed change order(s)
 - Dependent on increased BNSF shoofly costs - TBD
- No other changes in funding sources or costs

Modified Funding: \$63,858,747



Special Assessment Examples

Parcel Size	Example 1	Example 2	Example 3
1 acre or less	\$355.00	\$345.00	\$315.00
1.01 to 5 acres	\$532.50	\$690.00	\$1,260.00
More than 5 acres	\$710.00	\$1,380.00	\$2,520.00

- Paid over 20 years
- Estimated interest rate of 4.75%
- At \$355.00, first year payment is approximately \$35
- Collected with property taxes
- Subject City Council direction & action