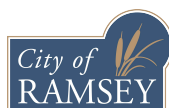
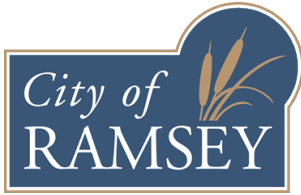


# Appendix G: Meeting Summaries



# Project Management Team (PMT)





# **Ramsey Highway 10 Corridor Improvements**

## **Project Management Team (PMT) Meeting**

**June 12, 2018  
Ramsey City Hall  
Trott Brook Room  
10:00 – 11:30 am**

### **MINUTES**

#### **Attendees:**

Tim Gladhill, Bruce Westby, Kurt Ulrich, Chloe McGuire Brigl, Mark Riverblood, Elwyn Tinklenberg, Peggy Sue Imihy, Eric Johnson, Angie Bersaw

#### **1. Introductions and PMT Roles**

- a. City of Ramsey
- b. The Tinklenberg Group
- c. Bolton & Menk
- Purpose of the PMT is to oversee project coordination and direction, discuss status and deliverables, and manage scope, schedule and budget.
- PMT will meet once a month throughout the study's duration.

#### **2. Study Goals and Influences**

- a. Study Goals and Approach
  - Eric reviewed the following study goals and approach:
    - Define problem
    - Establish unified goals and objectives
    - Develop and evaluate concepts
    - Identify one vision supported by all, so implementation plan and funding can be pursued as a next step
- b. Recent Highway Funding Developments
  - Anoka TH 10 Project is planned for 2022. If this project is combined with Rum River Bridge or other nearby projects, it could be delayed beyond 2022.
  - Elk River TH 169 freeway vision was recently awarded funding through the Corridors of Commerce program.
  - Ramsey has \$1.5M for design of railroad underpass at Ramsey Blvd. This location was chosen due to perceived ease of implementation and lower cost. The Sunfish Lake Blvd crossing will be complex due to drainage issues, right-of-way impacts, and cost.
  - City recently secured an additional \$2M for the Ramsey Blvd railroad underpass and associated improvements. The City believes an underpass is the most feasible solution but the funding is flexible for a grade separated solution, whether under or over the rail.
- c. City Priorities/Development Pressures
  - City desires full access at both Ramsey Blvd and Sunfish Lake Blvd intersections with Highway 10. Full access may not need to be an interchange. The study process is designed to identify and dig into the problems that need to be solved and to identify appropriate solutions to answer questions such as full access, free-flow, and/or interchange.
  - City requested the study accelerate needs and options at the Ramsey Blvd rail crossing

- first due to funding availability and coordination needs with Anoka County.
- Study will need to determine if railroad grade separation is needed at both Ramsey Blvd and Sunfish Lake Blvd.
- City noted a potential turnback of CSAH 5 and the need to investigate what this could do to traffic patterns on Ramsey Blvd and Sunfish Lake Blvd.
- City requested the study note the potential for a future river crossing but that it is unfunded and will not be included in the traffic forecasting work.
- d. Other Considerations
  - City requested Bolton & Menk add the following to the base map for future PMT meetings: TH 10 Access Planning Study options, RALF properties, labels for trails, parks and proposed skyway connection.
  - Streetlight Data will be used if possible to define regional nature of trips served by TH 10 (i.e., weekend vs weekday; local vs regional).

### **3. Scope of Services and Schedule**

- a. Establish Unified Goals and Objectives
- b. Develop and Evaluate Alternatives
- c. Provide Recommendations
- The PMT agreed to the overall study schedule. The following items were requested/noted:
  - TAC 4 should be scheduled early in January if possible to align with the legislative session.
  - BMI to add Highway 10 Steering Committee to schedule. Anticipate 2-3 meetings.
  - Note print dates for Ramsey Resident as reminder for project updates.

### **4. Public Involvement Plan**

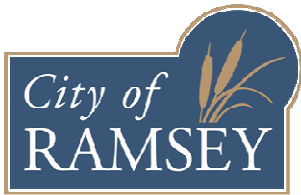
- a. Confirm Meeting Groups and Sequence
- b. Identify Committee Participants
- c. Branding/Logo Options
- d. Study Initiation Message
- BMI will add the Highway 10 Steering Committee to the public involvement plan. The PMT suggested the Steering Committee be a public group made up of approximately 6-8 business/property owners and members of the general public. The Steering Committee will meet 2-3 times throughout the course of the Phase I study.
- Tim suggested using a Facebook ad to invite the public to apply for membership to the Highway 10 Steering Committee.
- The PMT reviewed project logo options and suggested BMI provide additional options incorporating the Greater MN Gateway Coalition logo.
- City requested BMI wait on the postcard notices until more info is available publicly later this fall.
- Elwyn requested a representative from Congressman Emmer's office attend PMT #3.

### **5. Data Request**

- Eric noted BMI would send a request to the City for data needs.
- BMI will send the data request to the remainder of the TAC with the introductory email.

## **6. Next Steps**

- a. Monthly PMT Meetings
- b. TAC Meeting 1 – August
- c. Project Website
- The PMT will meet on the 3<sup>rd</sup> Thursday of each month from 10 am – 12 pm at city hall.
- BMI will draft an introductory welcome email to the TAC with a separate follow up for individual data needs.
- BMI working on developing a project website. Tim requested to embed the website into the City's website. This has worked well for the City in the past.



# Ramsey Highway 10 Corridor Improvements Project Management Team (PMT) Meeting #2

July 19, 2018  
Ramsey City Hall  
The COR Meeting Room  
2:00 – 4:00 pm

## MINUTES

**Attendees:** Tim Gladhill, Bruce Westby, Mark Riverblood, Elwyn Tinklenberg, Eric Johnson, Angie Bersaw, Ashley Hudson

### 1. Introductions and Meeting Overview

- i. The purpose of this PMT meeting was to confirm BMI's understanding of existing conditions, discuss progress, and identify next steps.

### 2. Existing Issues Identification/Confirmation

- a. *Ashley reviewed the following existing conditions:*
  - i. Existing Land Use
  - ii. Future Land Use
    - City Mixed Use definition = 70% residential and 30% commercial/other
    - Future mixed use designation (southeast quadrant of Ramsey Blvd/Hwy 10) – the City is getting requests for additional residential and some retail
    - Business park designation north of Hwy 10 – currently 2 building permits issued with a 3<sup>rd</sup> receiving permits now
    - Regional Park Development – short term improvements are planned
      - o The Master Plan identifies mostly passive uses
      - o Anoka County is working through funding allocations for long term improvements

**Action Item:** Mark to share scan of short term improvements - *Complete*

- iii. Demographics
  - Tim asked Bolton & Menk to confirm the socio-economic (SE) control totals used for the 2040 forecasts. The City has a request in to the Met Council to increase their 2040 SE totals.

**Action Item:** Angie will confirm which 2040 SE totals were used for the preliminary forecasts and share with Tim to determine next steps. - *Complete*

- iv. Environmental Resources
  - Trail construction is near completion through the Mississippi River West Regional Park
  - Mississippi River Corridor Critical Area (MRCCA) designation runs through the project area. MRCCA is a joint state, regional, and local program that provides planning and management for the 72-mile stretch of the Mississippi River through the seven-county metropolitan area.
  - The National Park Service recognizes this area as a National River and Recreation Area with regional recreation destinations and non-motorized connections.
  - Elwyn asked if the historical areas noted were of Native American or European settlement.

**Action Item:** BMI to confirm historic site locations as Native American or European settlement

- v. Bicycle/Pedestrian
  - Bunker Lake Boulevard is the closet connection to the city-wide greenway system.

b. *Angie reviewed the following existing conditions:*

- i. Freight/Rail/Transit
  - The Highway 10 Access Study recognized 75-80 trains/day
  - MnDOT's current count is at 58 trains/day
  - 104 trains/day is max capacity for this rail line
  - The existing at-grade railroad crossings are a safety issue for pedestrians and bikes in addition to vehicles
  - Northstar runs 12 commuter trains per day (6 in each direction) and more during special events. Amtrack runs 2 trains per day. This is all consistent with their website.
  - Currently Northstar runs a Friday mid-day connection between St. Cloud and Minneapolis (Target Station)
- ii. Existing Traffic Operations
  - Hwy 10 is a principal arterial serving 35,000 to 50,000 trips per day at relatively high speeds and for longer trips
  - The Anoka Hwy 10 project is planned for 2022 and at which time the Ramsey signals will become the primary bottleneck
  - This study will consider needs on not only Hwy 10 but also the connecting network that includes county highways and local roads
  - Study materials will also capture observations of unsafe movements due to the lack of gaps in traffic that are not accounted for in crash numbers
  - Since completion of the Armstrong Interchange, Bowers Drive is no longer seeing gaps once provided by traffic lights
  - Blockages from the queues on Hwy 10 result in risky movements from connecting streets

**Action Item:** BMI to develop infographics that communicate the problem occurring today and how that is anticipated to change and worsen in the future with growth and planned projects in Elk River and Anoka complete. A graphic will also capture the regional benefits of proposed corridor improvements.

c. *Eric reviewed the following existing conditions:*

- i. Access Inventory
  - The Highway 10 Access Planning Study identified 50 properties that have direct access to Highway 10 within the City of Ramsey
- ii. Safety Analysis
  - Funding applications typically call for current three-year crash numbers but it is still important to recognize fatalities within the past ten years.
  - Sunfish Boulevard/Highway 10 and Armstrong Boulevard/Alpine Drive are the intersections currently operating outside the normal range and both have critical crash rate indexes double or higher the statewide average.
  - When the Anoka Highway 10 project is complete Sunfish Boulevard will likely begin to see the high level of rear end crashes currently happening at Fair Oak Avenue.
  - The study area has seen a total of 277 crashes, 155 of which are rear-end crashes, with a critical index of 0.4.
  - Four pedestrian crashes have occurred in the past three years. In addition, three vehicle crashes have been caused by pedestrians within the crosswalk.

### 3. Draft 2045 Traffic Forecasts

- a. *Eric reviewed the 2045 traffic forecasts and discussed the methodology used to*
  - Eric noted the 2045 forecast year was chosen since it reflects a 20-year outlook which is typically required by MnDOT and for funding applications
  - Without improvements, the 2040 model for Ramsey is diverting trips from TH 10 onto local streets (specifically Riverdale Dr) due to over capacity on TH 10
  - The traffic numbers on Sunfish Boulevard were surprising to some and the question was raised as to where the draw is causing the drop off near Bunker Lake Blvd and Sunfish Lake Blvd NW on forecast map.

### 4. Summary of Key Issues

- a. *Angie discussed the list of overall key issues developed to guide next steps*
  - The four main points include transportation function and operations, safety, multimodal, and planned growth
  - The PMT requested the summary recognize the TH 10 corridor's weekend function in connection to Greater Minnesota
  - A comment from the public has been questioning why would the city allow more growth with Hwys 10 and 47 currently having so many operational and safety issues.
    - o It will be important to communicate to the public the access management and safety improvements built into improvements which will greatly improve corridor operations even with growth.
    - o It will also be important to note the issues with the absent private investment on the corridor due in part to existing congestion – currently 50% city owned parcels along the corridor.

**Action Item:** BMI infographics will capture and communicate key issues.

### 5. Railroad Grade Separation

- a. *Eric discussed further evaluation related to the pros and cons of over vs under for railroad grade separation*
  - The PMT agreed a meeting with the railroad is the next step to reach a full understanding of design criteria and options.
  - With current funding allocations Ramsey Boulevard is a priority for railroad grade separation and progress needs to be made to justify the state's investment in funding for these improvements.
  - Initial findings determined that:
    - o More vertical distance is required for an overpass than an underpass to meet clearance needs
    - o Local connections will likely be more difficult with an overpass
    - o An underpass will require a Shoofly and could result in greater impacts to property and railroad operations
    - o If the railroad grade separation is not built in conjunction with grade separation at TH 10 it would be likely that turn lanes and storage areas would be overbuilt

**Action Item:** BMI to reschedule meeting with the railroad to confirm design criteria and options. Bruce to provide a railroad contact name.

### 6. Public Engagement

- The City feels it is good to provide public access to the Safe Access is Good for Business FHWA document
- The PMT would like to meet once more before the first TAC meeting
- The first TAC meeting is tentatively planned for last week of August

**Action Item:** Ashley to develop content for Ramsey Resident Update - *Complete*

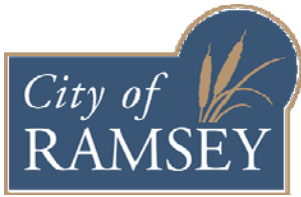
**Action Item:** Ashley to share project website draft - *Complete*

**Action Item:** Angie and Tim to discuss plan for organizing the Steering Committee - *Complete*

**Action Item:** BMI to rework logo to include the City of Ramsey logo - *Complete*

## **7. Next Steps**

- a. August PMT Meeting
  - i. No build traffic operations (2025 and 2045)
  - ii. Purpose and Need Framework
  - iii. Goals and Objectives
  - iv. Prep for TAC meeting
- b. The first TAC meeting is tentatively planned for the end of August – Angie and Tim to select potential dates to send out to the group
- c. Ramsey Resident Update material needs to be submitted by August 1st



# Ramsey Highway 10 Corridor Improvements Project Management Team (PMT) Meeting #3

**August 16, 2018  
Ramsey City Hall  
10:00 – 11:30 am**

## MINUTES

**Attendees:** Tim Gladhill, Bruce Westby, Elwyn Tinklenberg, Chloe McGuire Brigl, Eric Johnson, Angie Bersaw, Kelsey Retherford

### 1. Introductions and Meeting Overview

- i. The purpose of this PMT meeting was to update changes from the previous PMT, review 2025 and 2045 no build traffic operations, summary of needs, draft goals and objectives, and identify next steps.

### 2. Updates

- a. *Kelsey reviewed the following updates:*
  - i. Existing Traffic Operations
    - Figures were updated to show failing movements instead of failing approaches
  - ii. Existing Railroad Crossing Queuing
    - Figures were created that showed how the NB queue extends from the RR gate arms onto TH 10 when the train is present
  - iii. Safety Analysis
    - Figures were updated to show fatal crashes that occurred in the last 10 years (5 fatalities [2 vehicular and 3 pedestrians])
    - Figures were updated to show the number of crashes at the intersections of TH 10/Thurston and TH 10/Fairoak (both operate outside normal range)
  - iv. 2025 Traffic Forecasting Issues
    - When forecasting existing counts to 2025 and 2045 we noticed that our count in 2018 was higher than the forecasted 2025 ADT. This was because our counts were much higher than MnDOT's.
    - TH 10 detector data was analyzed to ensure that the day we counted was normal compared to other days in the surrounding months. We found that our count day was normal so we updated the forecasting with our counts as the base year count instead of MnDOT's.
  - v. 2025 Traffic Forecasts
    - 2025 forecasts were shown.
  - vi. 2045 Traffic Forecasts
    - Increases in ADT from what was previously shown:
      - All forecasts along Ramsey Blvd
      - All forecasts along Sunfish Lake Blvd
      - Sunwood forecasts off of Ramsey Blvd
      - All forecasts along Bunker between E of Sunfish Lake Blvd to W of Ramsey Blvd
      - TH 10 E of Sunfish Lake Blvd



### 3. 2025 and 2045 Traffic Operations

#### a. *Kelsey reviewed the 2025 and 2045 no build traffic operations*

##### 2025 No Build Operations:

- Jarvis operates overall at LOS D during the AM peak hour however NB delay is over 24 minutes per vehicle on average and SB delay is over 6 minutes per vehicle
- Jarvis PM Peak hour: NB delay is over 16 minutes per vehicle on average
- Alpine SBL fails in the PM peak, delay is less than 3 minutes per vehicle
- Armstrong/Alpine: EBL and all WB movements fail during the 2025 AM peak hour (delay <3 min)
- TH 10/Ramsey Blvd: EB and WB through queues extend beyond turn lanes. Many failing movements
- Sunfish Lake Blvd/McKinley PM Peak Hour: Intersection overall operates with failing LOS, WB approach queue extends throughout business area and all movements fail (approach delay is nearly 12 minutes per veh)
- TH 10/Sunfish Lake Blvd: Intersection overall operates with failing LOS, WBT max queue extends 3800' (Thurston ~5000 ft away), many failing movements
- Railroad crossing queueing: SB queue at the RR crossing on Sunfish extends beyond McKinley and NB peak hour queues at/onto TH 10

##### 2045 No Build Operations:

- Major issues at Jarvis and Alpine. At Jarvis no northbound or southbound vehicles are able to go during the AM peak hour (delay is over an hour). WBL only 2 of 102 vehicles make it through, since they can't go they queue onto mainline causing WB TH 10 traffic to queue over 3 miles nearly reaching TH 10 at Ramsey
- EBL at Alpine is unable to go due to the back up along WB TH 10 so EBL queues onto mainline TH 10. This limits EBT traffic so only 972 of 2300+ vehicles make it through.
- PM peak hour some veh get through but approaches still fail overall and delay is over 38 minutes per vehicle
- Alpine at Armstrong operates with failing LOS during both peak hours
- Armstrong at the TH 10 EB ramp operates with failing LOS during the PM peak hour, EB approach queue extends 9,975 ft
- Signal is likely warranted in the future with the higher volumes
- TH 10/Ramsey Blvd: Intersection operates at LOS C or D during peak hours. Buffered by Sunfish and Jarvis/Alpine/Armstrong, queues extend beyond turn lanes and many failing movements
- TH 10/Sunfish Lake Blvd: Operations worsen to LOS D and LOS F for the intersection overall, WB queue during PM peak extends 1.82 miles (just beyond Main St Interchange), many movements operate with failing LOS
- Sunfish Lake Blvd/McKinley PM Peak Hour: Intersection overall operates with failing LOS, WB approach queue extends throughout business area and all movements fail (approach delay is over 20 minutes per veh), EB approach fails (81 seconds)

**Action Item:** Kelsey to run model again cutting off turning traffic at Alpine and Jarvis to allow traffic to get to Armstrong Blvd, Ramsey Blvd and Sunfish Lake Blvd to see what the issues are.

#### b. *Kelsey reviewed the 2025 and 2045 CAP-X results*

- CAP-X is a planning level tool that was used to determine if at-grade intersection designs or grade separated interchanges would serve projected traffic at the intersections of TH 10 at Jarvis, Alpine, Ramsey and Sunfish. It is meant to be a first look to get an idea of what could work and should be further considered
- The 2045 AM and PM peak hour volumes were analyzed
- Results for TH 10 at Alpine and Jarvis were very similar. They both showed that at-

grade alternatives could work in 2045 and interchange designs would be over building (V/C ratios for interchange options were 0.06-0.12 in the AM and 0.07-0.26 in the PM)

- Results for TH 10 at Ramsey and Sunfish were also similar. Ramsey showed the partial displaced left turn and displaced left turn option are anticipated to operate with V/C ratios ranging from 0.91-0.99 during the peak hours. All other options were over 1. For TH 10 at Sunfish all at grade alternatives showed V/C ratios over 1. The interchange design ranged from 0.32-0.46 at Ramsey and 0.31-0.6 at Sunfish)

#### 4. Summary of Needs

##### a. *Angie discussed the summary of needs*

- The four main points include route importance and mobility, safety, multimodal, and economic development
- Route importance and mobility: TH 10 is a principal arterial and serves a gateway corridor to lake country, 35,500-55,000 veh/day, all approaches TH 10/Ramsey Blvd and TH 10/Sunfish Lake Blvd have failing movements today, existing NB railroad queues extend onto TH 10, and by 2045, delays at intersections and on TH 10 mainline are significant through the entire study area
- Multimodal: corridor serves vehicular, freight, transit and trains. It is a challenging corridor for pedestrians and bicyclists
- Economic Development: Strategic and responsible growth is necessary to align land use with a supporting transportation network. Population projected to grow to 39,000 by 2040. City has purchased several properties along Hwy 10 with RALF funds. With a better transportation system there would be room for economic development.

**Action Item:** BMI to add wording from comp plan “balance between rural character and urban growth”.

#### 5. Problem Statement/Infographic

##### a. *Angie discussed the problem statement/infographic*

- The PMT suggested orienting the timeline left to right and bottom to top rather than the zig-zag of the current draft, using the red color to match style (to be provided by staff), add tourism to the figure and word “connection” to emphasize how HWY 10 is a critical connection throughout MN.
- Angie suggested there could be a more simplified infographic for the public and a more detailed one for legislative staff
- PMT suggested showing deliverables needed to make the next steps possible (get funding, make a plan, purchase ROW) for 2020 and beyond.

**Action Item:** BMI to make suggested edits to the infographic.

#### 6. Goals and Objectives

##### a. *Angie discussed the draft goals and objectives*

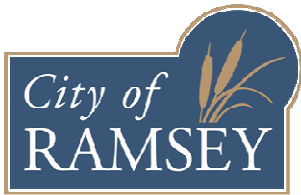
- The PMT suggested the following:
  - Order of goals/objectives should be: C, A, E, B, D. Safety should always be considered the top priority
  - Bring up the improvements in Anoka and Elk River. Show that this project is not just an improvement for the City of Ramsey but it improves the entire corridor
  - Add an “f” bullet point under B stating “promote business expansion and development

## **7. Railroad Grade Separation**

- a. *Eric gave an update*
  - The PMT agreed it would be good to confirm with railroad on design criteria and future capacity/operations of railroad
  - Eric and Bruce will meet with the railroad representations on August 17

## **8. Next Steps**

- a. August TAC Meeting
  - i. Project Overview
  - ii. Existing Conditions Review
  - iii. Summary of Issues
  - iv. Goals and Objectives
- b. Next PMT Meeting
  - i. Planned for early October
- c. Other October/November meetings
  - i. Steering Committee
  - ii. Highway 10 Subcommittee (Ramsey)
  - iii. City Council Workshop
  - iv. TAC Meeting #2
  - v. Video #1 (Purpose and Need)



## **Ramsey Highway 10 Corridor Improvements Project Management Team (PMT) Meeting #4**

**October 2, 2018  
Ramsey City Hall  
10:00 – 11:30 am**

### **MINUTES**

**Attendees:** Tim Gladhill, Bruce Westby, Elwyn Tinklenberg, Chloe McGuire Brigl, Eric Johnson, Angie Bersaw, Kelsey Retherford, Ashley Hudson

#### **1. Introductions and Meeting Overview**

- i. The purpose of this PMT meeting was to review the; existing conditions document, purpose and need framework, revised goals and objectives, high level concepts, and upcoming public involvement.

#### **2. Existing Conditions, Purpose and Need, Goals and Objectives Wrap Up**

- a. *Ashley reviewed the following updates:*
  - i. Existing Conditions Memo
    - The 2025 and 2040 no-build analysis' were added since the first draft review
- b. *Angie reviewed the following updates:*
  - ii. Purpose and Need Framework
    - The Purpose and Need are a summary of the key points pulled from the Existing Conditions Memo
    - This is the framework to define the issues the improvements will solve and the message delivered to the public
  - iii. Revised Goals and Objectives
    - The final comments were discussed
    - The Goals and Objectives will be used as the framework to guide the identification and evaluation of improvement alternatives within the study area.

#### **3. Concept Development**

- a. *Eric and Kelsey reviewed the following:*
  - i. Entire Corridor Approach
    - The Highway 10 Access Planning Study left off with recommendations throughout the corridor, but future volumes were not analyzed with the previous study. One of the goals in the previous project was to have a design that was expandable and could be built in stages when needed starting off only grade separating westbound traffic to save on costs until traffic congestion called for grade separating eastbound traffic as well.
    - Based on the volumes along TH 10 and the cross streets we have determined left turns cannot be accommodated without a signal along TH 10. RIRO (right-in/right-out) accesses will need to have acceleration and deceleration lanes.
  - ii. West End Approach and Frontage Road Discussion
    - The Highway 10 Access Planning Study identified an RCUT (restricted conflict U-turn intersection) as a future solution that would combine the traffic at the intersections of Jarvis and Alpine into one.
    - Still determining which location would be most beneficial for the RCUT.

- The RCUT would need to be signalized as there are not adequate gaps in traffic for the U-turns. Without signalizing the left and right turns at the middle intersection of the RCUT there is excessive delay because vehicles can't find gaps
- Frontage road connections were shown on both the north and south side of TH 10. All driveways/accesses directly off TH 10 need to be eliminated in the future.

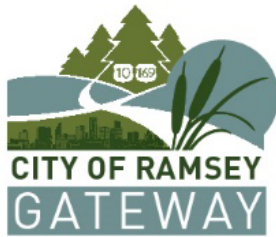
### iii. East End Approach

- Previous recommendations from the Highway 10 Access Planning Study and other alternative designs were analyzed using CAP-X to determine which designs could work, what doesn't and when they start to break down.
- CAP-X shows the volume to capacity rate which is the demand volume entering an intersection divided by the theoretical capacity of the intersection or interchange. A volume to capacity rate less than 0.85 shows adequate capacity (no significant delay/queuing). A volume to capacity rate over 1.00 would be over capacity where the movements would show higher delay and problematic queuing issues. CAP-X is only to be used as an initial planning tool. We are using it to try and determine what options could work and how long.
- Sunfish Options:
  - Full Grade Separation
    - Operates well through 2045
  - Partial Grade Separation (only grade separate WBT)
    - Starts to break down in 2025
  - Partial Grade Separation (only grade separate EBT)
    - V/C over 1 in 2025
  - High-T Partial Grade Separation (grade separate EBT and WBT)
    - Operates well through 2045
  - Right-In/Right-Out
    - Needs RIRO with acceleration/deceleration lanes
  - At grade intersection with six lanes on TH 10
    - Starts to break down in 2045
- Ramsey Options:
  - High-T Partial Grade Separation (grade separate EBT and WBT)
    - Operates well through 2045
  - Partial Grade Separation (only grade separate WBT)
    - Starts to break down in 2035
  - Partial Grade Separation (only grade separate EBT)
    - Starts to break down in 2035
  - Right-In/Right-Out
    - Needs RIRO with acceleration/deceleration lanes
  - At grade intersection with six lanes on TH 10
    - Operates well through 2045
- Railroad Shoofly Option
  - At Ramsey the shoofly track could impact the Ramsey Station platform, but still working through the design options. Should be able to get the shoofly outside of the platform. Otherwise the only impacted structures would be city buildings which could be moved.
  - At Sunfish the shoofly track would impact multiple businesses and several power poles. Based on this it would not be recommended at this location.

## 4. Next Steps

- October 23 TAC Meeting
  - Existing Conditions Review

- ii. Purpose and Need Framework
  - iii. Goals and Objectives
  - iv. Concept Development
- b. Next PMT Meeting
  - i. Planned for early November
- c. Other October/November/December meetings
  - i. Steering Committee – week of Nov 12 or Nov 19
  - ii. City Council Update – Nov 13
  - iii. Highway 10 Subcommittee (Ramsey) - week of Nov 12 or Nov 19
  - iv. Video #1 (Purpose and Need)
  - v. TAC Meeting #3 – early December



# **Ramsey Highway 10 Corridor Improvements Project Management Team (PMT) Meeting #5**

**November 15, 2018**

**Ramsey City Hall**

**10:00 am – Noon**

## **MINUTES**

**Attendees:** Tim Gladhill, Bruce Westby, Elwyn Tinklenberg, Chloe McGuire Brigl, Sean Sullivan, Angie Bersaw, Ross Tillman, Ashley Hudson

### **1. Introductions and Meeting Overview**

The purpose of this PMT meeting was to review the documentation of dismissed concepts, draft evaluation criteria, draft improvement concepts, and upcoming public and stakeholder involvement.

### **2. Concept Development and Evaluation**

Angie gave a high-level review of the universe of concepts that started from the Access Planning Study and how the following new findings impacted the list of potential concepts;

- 2025 and 2045 traffic forecasts are higher than was anticipated in the 2014 Access Planning Study
- The timeline of this study is influenced by the Anoka and Elk River projects being fully funded and complete by 2025
- It is not considered practical to phase interchange construction as part of the improvement plan
- At-grade solutions are limited and even unattainable in many areas of the corridor

#### **a. Tier 1 Screening Review:**

- i. Ashley previewed the high-level Tier 1 screening that uses the goals and objectives to identify concepts with fatal flaws recommended to be dismissed and not carried into the detailed evaluation. Concepts that were not dismissed in the Tier 1 screening will be further developed and evaluated as part of the Tier 2 evaluation.

- Angie discussed the list of concepts dismissed and a summary of the reasoning for each. The PMT agreed with the list of concepts recommended to be dismissed as part of the Tier 1 Screening.
- The City recommended the Tier 1 Screening results be presented to the City Council soon for concurrence with this decision.
- Angie then highlighted the list of concepts that will be carried forward in the more detailed Tier 2 Evaluation which include:

#### **o West End:**

- Signalized RCUT in the Adams St, Alpine Dr, and Jarvis St area
- Right-in/Right-Out at Bowers Dr

#### **o East End:**

- Ramsey Blvd
  - Railroad Overpass
  - Railroad Underpass
  - Full Access Interchange (standard, tight, or folded diamond)
  - Overpass with Right-in/Right-Out
- Sunfish Lake Blvd
  - High T (at-grade railroad)

- Overpass with Right-in/Right-Out (railroad overpass)
- b. Tier 2 Screening Criteria
    - The draft Tier 2 Screening is a more detailed evaluation that will be used to score the concepts against the project goals and objectives previously set by the PMT. It was suggested that only goals and objectives that result in differentiating scores be included in the Tier 2 Evaluation.
    - It was suggested to include performance measures that calculate the distance and number of turns required to reach convenience type businesses to help determine impacts of each concepts to their customer base.
    - Due to time constraints, the full Tier 2 evaluation criteria was not reviewed in detail. Bolton & Menk will present this to the TAC at their next meeting.
  - c. Concepts for Tier 2 Evaluation
    - i. Angie reviewed the RCUT concepts at Adams St, Alpine Dr, and Jarvis St (West End)
      - All concepts show little differentiating in the location or amount of frontage roads needed for each
      - The access to the weigh station needs to be maintained with all concepts carried forward
      - The Riverdale Dr connection will be difficult when it comes to acquiring ROW as the Pearson family is wanting to preserve the farm for the foreseeable future
    - ii. Ross walked through the Ramsey and Sunfish Lake Blvd concepts in detail (East End). The PMT members were given a handout including BMI's initial assessment of pros and cons of each concept.
      - Ramsey Blvd Concepts:
        - a. The City was concerned with moving forward with any concepts that show impacts to the Holiday Station and nearby businesses on the southeast quadrant of Ramsey Blvd and Highway 10. There was support for shifting the alignment of Ramsey Blvd to avoid impacts to Holiday and to place more impacts to the regional park on the southwest quadrant.
        - b. Holiday fuel tanks are located in the NW corner of their parcel.
        - c. The City felt the Folded EB TH 10 On and WB TH 10 Off Diamond provided better access to Holiday and the adjacent businesses.
      - Sunfish Lake Blvd Concepts
        - a. The City asked if the High T concept could become a full overpass in the future. Ross explained that this would need to be considered in the initial design and could still result in a large amount of reconstruction in the future.
        - b. There was interest from the City to reintroduce the McKinley Street connection concept through the industrial area to initiate conversations with Anoka and the benefits it will provide during and after construction of the Thurston Ave Interchange.
      - General comments for all
        - a. The question was raised if the grade separation concepts will be able to provide a future third lane expansion. The Armstrong Blvd interchange does not provide space for a third lane expansion, although the option may still be viable at Sunfish Lake and Ramsey Blvds as much of the traffic numbers drop off at Ramsey Blvd
    - iii. RALF and City Owned Property Records

### 3. Funding Strategies/Priorities/Timeline

- a. Ashley reviewed the following:
  - An inventory list of potential funding sources, state and federal, and the project elements each align with. The inventory included max award amounts available and



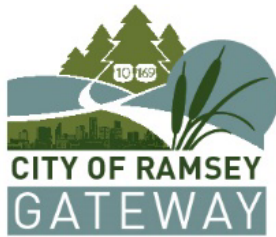
the anticipated solicitation rounds (years) the funds will be available. The emphasis was that this is an evolving inventory list that will be utilized as the funding strategy is determined with the next phase of the study.

- Ross discussed that traffic modeling will be used to help determine the sequencing of projects for full implementation of the Ramsey Highway 10 vision
- b. Group had a discussion related to the bonding award for the Ramsey Blvd RR underpass. Money would be filtered through MnDOT. Elwyn mentioned money is for RR underpass and associated improvements which means the money may be able to be spent on items not directly associated with a grade separation. The wording in the bill needs to be altered to make it more general rather than underpass only, and Tim also asked if it could be shifted to Sunfish instead as an option.

#### **4. Next Steps**

- a. MnDOT Coordination – November 19. Angie, Ross and Bruce to participate.
- b. Ramsey EDA Meeting – Nov 27
- c. TAC Meeting #3 – Nov 27
- d. PMT #6 – Dec 20

Time suggested an update to the council on December 11<sup>th</sup> to ensure buy-in on the Tier 1 screening results.



# **Ramsey Highway 10 Corridor Improvements**

## **Project Management Team (PMT) Meeting #6**

December 15, 2018  
Ramsey City Hall  
10:00 am – Noon

### **MINUTES**

**Attendees:** Tim Gladhill, Bruce Westby, Elwyn Tinklenberg, Mark Riverblood Chloe McGuire Brigl, Sean Sullivan, Angie Bersaw, Ross Tillman, Ashley Hudson

#### **1. Introductions and Meeting Overview**

The purpose of this PMT meeting was to recap on the input received at the City Council (Dec 11), FHWA (Dec 12), and MnDOT Rest Area/Weigh Station (Dec 17) meetings as well as review the draft evaluation scoring of the Ramsey and Sunfish Lake Boulevard concepts, and upcoming public and stakeholder involvement.

#### **2. Recap Recent Meetings**

- a. Angie recapped the input received at the recent agency coordination meetings with the following; City Council (Dec 11), the FHWA (Dec 12), and the MnDOT Rest Area/Weigh Station (Dec 17). This discussion included the agencies view on the current concepts and progress of the project. Angie and Ross highlighted what input gathered in these coordination meetings had impact on the recent concept development updates. In summary the following was received from each:
  - i. City Council – Need more info on the west end specific to their concern with adding a signal and the timing of when improvements are needed. They were generally okay with the east end concepts and support the momentum. The PMT determined that the next CC update will need to include traffic simulation videos and precedent examples of the signalized R-cut concept.
  - ii. FHWA – They view the project process as acceptable and on track. Stated that coordination with them is not required but helpful, so it was determined the next meeting would be before the Spring 2019 public open house.
  - iii. MnDOT Rest Area/Weigh Station – They are aware that the weigh station accel/decel lanes are substandard length and that the rest area entrances and exits are confusing. The weigh station is only open during non-peak traffic hours. The city receives recurring complaints that trucks use side roads to avoid the weigh station. The city expressed they would likely be in support of moving the weigh station as it doesn't provide much benefit to the city and they would like to use the space for park space surrounding the future regional trail head and extension to Kelley Farm in Elk River.

#### **3. Concept Development & Evaluation**

- a. East End Concept Development and Evaluation  
Ross gave a review of the updates made to all the Ramsey and Sunfish Lake Boulevard concepts. He went into detail on the Ramsey Blvd over the railroad concepts because the impacts and footprint would be the same for the Ramsey Blvd under the railroad concepts except the cost and constructability issues related to railroad coordination and impacts associated with the under the railroad concepts. He highlighted that in all concepts that the Ramsey Blvd alignment was shifted west based on previous PMT request to avoid impacts to Holiday and other existing businesses on the east side.

Comments regarding the specific concepts are summarized in the following:

Ramsey Blvd Over the Railroad

- Option 1 Standard Diamond – was eliminated in the Tier 1 screening because of the size of the footprint and vast associated impacts
- Option 2 Tight Diamond – Generally the PMT approves of this concept. In reviewing this concept, it was determined that the city does not want to show the NW frontage road in any concept moving forward as the impacts would far outweigh the benefits provided. The full take parcels will be better utilized for ponding and aesthetic enhancements.
- Option 3 Folded EB TH 10 On Tight Diamond – The PMT is not in favor of this concept because of impacts to the regional park, that already does not meet regional standards in size. The PMT does not also favor the two closely spaced intersection on the north side of TH 10 in comparison to Option 4.
- Option 4 Folded WB TH 10 Off Tight Diamond – The PMT is in favor of this concept because it only requires one intersection north of TH 10, it utilizes the full take parcels on the NW quadrant for the on ramp, and has minimal impacts to the regional park.
- Option 5 Folded EB TH 10 On and WB TH 10 Off Diamond – The PMT is not in favor of this concept because of the need for multiple/continues bridge structure over TH 10 and the RR and impacts to the regional park.
- Option 6 Folded EB TH 10 On and Semi-Folded WB TH 10 Off Diamond – The PMT is not in favor of this concept for the same reasons as Option 5.
- Option 7 RIRO/Tight Diamond – The PMT generally was in favor of this concept because of limited impacts to the regional park and existing businesses on the east side. They did note not favoring the multiple/continues bridge structure over TH 10 and the RR and that travelers eastbound have a long trip to go north on Ramsey, which is a major north/south corridor in the city.

Ramsey Blvd Under the Railroad

The PMT generally agrees that they would like to eliminate all the RR under options due to cost and constructability associated with impacts to the RR and the coordination required. It is understood that the county would like more information to support the dismissal of all the RR under concepts.

- Option 8 SPUI (TAC meeting development) – Ross noted this design can be flipped with Ramsey and the SPUI over TH 10, but the bridge structure required to do so gets large. The city favors TH 10 over because they feel it provides better visibility of the adjacent businesses. The city felt this may be an unfriendly configuration for pedestrians and questioned if it could be a roundabout.

Concept Evaluation

Ashley gave a review of the evaluation process; starting with the Tier 1 fatal flaw screening and then moving into the Tier 2 that is being used to evaluate the remaining concepts in detail. She stated that BMI is currently working through that detailed screening, but a simplified version, Draft Tier 2 Summary, with differentiating criteria will be reviewed at this meeting. Angie walked the PMT through in more detail on how each concept weighed out in the Tier 2 Summary Evaluation. Through review of the concepts and the draft evaluation, the PMT's initial outlook favored concepts 2, 4, and 7. It was understood that the Tier 2 Evaluation is still not finalized and concepts are not being dismissed now.

#### Sunfish Lake Blvd Over the Railroad

- Option 1 RIRO – The city was concerned about the convenience of this concept for truck access to the industrial areas adjacent to Ramsey Blvd. It was also suggested to realign the NE frontage road closer to the RR track to allow more land for redevelopment.
- Option 1B RIRO –
- Option 2 High-T w/ At-Grade RR Crossing – The city's concern remains here with the inability for this concept to allow north-south movement across TH 10 and acting as a major access barrier within the community.
- Option 3 Standard Diamond – The PMT concluded they are not in favor of this concept as it has significant property acquisition (loss of many businesses), high cost, and the intersections of Sunfish Lake Blvd with the N Frontage Rd and Riverdale Dr are too close to the ramps.
- Option 4 Tight Diamond – The PMT concluded they are not in favor of this concept as it has significant property acquisition (loss of many businesses) and high cost.

Ross showed the PMT an example of an echelon interchange that could be drawn up as a concept for Sunfish Lake Blvd. The PMT was generally interested in how this could work at Sunfish Lake Blvd but had concerns with the left merging ramps as they are confusing for drivers.

Angie walked the PMT through in more detail on how each concept weighed out in the Tier 2 Summary Evaluation. Through review of the concepts and the draft evaluation, the PMT's initial outlook favored concept 1A with modifications. The have concerns with the High-T (concept 2) and would prefer to see concepts 3 and 4 dismissed. The city suggested adding support of the McKinley Street connection as a measure in the evaluation. They also suggested adding a single point roundabout and echelon concept to the evaluation.

#### b. McKinley Street Connection

The PMT briefly discussed the benefits of the McKinley Street connection and how and when is the best time is to discuss this with the City of Anoka. It was determined that this discussion should come from a city staff level. Team to revise some of the benefits for the connection to focus on City of Anoka prior to a meeting being scheduled.

#### c. West End Concept Development and Evaluation

Ross provided an overview of items the team will look at related to Jarvis, Alpine, Bowers, and both the weigh station and rest area.

#### Concept Evaluation

Angie stated that the Tier 2 Evaluation of the west end concepts will be a simplified version that addresses the following:

- Traffic and operations/safety
- Ease of access to; businesses, residences, the rest area, and weigh station
- Property impacts
- Cost

#### **4. Public Involvement Plan**

The PMT agreed on the following general timeline:

- Steering Committee - February
- Property Owner Meetings – Early March
- Open House – March
- InputID – March/April

#### **5. Schedule & Next Steps**

The PMT agreed on the following general timeline:

- a. TAC Meeting #4 – Jan 17
- b. Council Work Session – Jan 29 or Feb 5
- c. Highway 10 Subcommittee – Feb 5
- d. PMT – Feb
- e. TAC #5 - Feb
- f. Steering Committee – Feb
- g. Property Owner Meetings – Early March
- h. Open House – Mid-March

# Technical Advisory Committee (TAC)



# Ramsey Highway 10 Corridor Improvements Technical Advisory Committee (TAC) Meeting #1

**August 28, 2018**  
**Ramsey City Hall**  
**The Lake Itasca Meeting Room**  
**10:00 – 11:30 am**

## MINUTES

**Attendees:** Tim Gladhill, Kurt Ulrich, Bruce Westby, Mark Riverblood, Elwyn Tinklenberg, Chloe McGuire Brigl, Joe MacPherson, Sean Sullivan, Sheila Kauppi, Melissa Barnes, Steve Peterson (Phone), Justin Femrite, Eric Johnson, Angie Bersaw, Kelsey Retherford

### 1. Introductions and Meeting Overview

- i. The purpose of the TAC meeting was to kick off the project, discuss the project overview, public involvement plan, existing conditions, future conditions, summary of issues, draft goals and objectives, and identify next steps.

### 2. Project Overview

#### a. *Eric discussed the following*

##### i. Project Overview

- Multiple studies/progress over past 20 years
- *Highway 10 Access Planning Study (2013-2014):*
  - o Was a new take on corridor (free flow vision) – 90% benefit, 50% cost of freeway
  - o Study provided a broad vision with several options at each intersection and local roadway connections
  - o BNSF grade separation was an afterthought but is important and will influence recommendations now
- Next level of study needed to identify a singular vision for the corridor
  - o Project Limits include all of Highway 10 within City limits and supporting roadways between the Mississippi River and Bunker Lake Blvd
  - o Traffic forecasting more at forefront
  - o Railroad crossing planning is a focus
  - o Property/business owners frustrated since last study because multiple options are still under consideration. The City desires to define a single corridor vision to remove the uncertainty for properties in areas that may or may not be needed for right-of-way and to encourage reinvestment in the corridor.
  - o A single vision needed for the City to continue to use the Right of Way Acquisition Loan Revolving Fund (RALF)

##### ii. Project Area and Upcoming Projects

- Eric reviewed the upcoming projects on Highway 10 in Anoka and Highway 169 in Elk River.
- TH 10 in Anoka:
  - o Project removes signals and grade separates Thurston and Fair Oak
  - o Project is mostly funded (\$80M out of \$93M)
  - o Construction planned for 2022

- TH 10 in Elk River:
  - o Project removes 5 signals
  - o Construction planned for 2023
- Ramsey secured \$3.5M for railroad grade separation at Ramsey Blvd
- iii. **Schedule**
  - Phase I – Identify the Vision
    - o Define the problem and establish unified goals and objectives (May – Sep)
    - o Develop and evaluate concepts (Sep-April)
    - o Identify one vision supported by all (April-June)
  - Future phase (Phase II) anticipated to set project Footprint / Acquire Funding
    - o Preliminary design / improved cost estimates
    - o Stormwater, noise, staging, corridor beautification
    - o Official map
    - o Implementation plan and funding

### 3. Public Involvement

- a. *Public involvement plan*
  - Angie reviewed the public involvement plan, roles of the various stakeholders, sequence of meetings and schedule.

### 4. Existing Conditions

- a. *Angie reviewed the land use, demographics, environmental resources and the pedestrian/bicycle system.*
  - i. Figures were provided in the presentation and this information will also be documented in the existing conditions memo.
  - ii. Justin Femrite reported the land use surrounding Jarvis Street is outside of the city's service area and therefore, high-density residential uses are unlikely.
  - iii. Justin said he did make a request to MnDOT District 3 to conduct an access planning study on Highway 10 in Elk River like the Anoka County/MnDOT Highway 10 Access Planning Study. He has not received a response from MnDOT yet on this request. Justin requested Angie contact MnDOT D3 to discuss the Ramsey study and potential next steps for coordination of efforts on Highway 10 in Elk River.

**Action Item:** BMI to coordinate with Justin Femrite and MnDOT D3 about study coordination efforts and potential next steps/timeframes.

- b. *Kelsey reviewed the existing traffic operations and crash history. This information will be documented in the existing conditions and traffic analysis memo.*

#### Existing Traffic Operations:

- The left and through movements at the intersection of TH 10 at Jarvis St have failing LOS
- The removal of the signal at Armstrong Blvd has improved operations at that location but reduced gaps available at nearby at-grade intersections
- Queueing issues and many failing movements at TH 10/Sunfish Lake Blvd and TH 10/Ramsey Blvd
- Existing queueing at the railroad tracks show that existing northbound queues extend onto TH 10 mainline

#### Safety Analysis:

- Crash analysis was completed at the intersections throughout the project area for the last five years (2013-2017)
- Critical index is over 1 for the intersections of Alpine at Armstrong and TH 10 at Sunfish
- Anoka County is submitting a HSIP application for the intersection of Alpine at



- Armstrong to convert the intersection to a roundabout (critical intersection is 2.17)
- TH 10 at Sunfish Lake Blvd has a critical index of 1.41
- Fatal crashes were analyzed over a ten-year period (2008-2017). There were three pedestrian fatalities and two vehicular fatalities
- Crashes were also shown at TH 10/Thurston and TH 10/Fairoak. Both are operating outside the normal range. Thurston had 115 reported crashes in a 5-year period and Fairoak had 286 with most of the crashes being rear end crashes likely caused by the long queues. Once the TH 10 project in Anoka is complete Sunfish Lake Blvd will be the first signal along westbound TH 10 so the crash issue at Sunfish Lake Blvd and Ramsey Blvd is anticipated to get worse.
- TH 10 at Ramsey Blvd is operating within the normal range however still a high number of crashes (51) with 43 being rear end crashes.

## 5. Future Conditions

- a. *Kelsey reviewed the 2025 and 2045 traffic forecasts. This information will be documented in the traffic analysis memo.*

### 2025 Traffic Forecasts:

- The 2040 Activity Based Regional Model was refined for the County Transportation Plan, updated land use, socio-economic inputs were refined, and the proposed TH 10 work in Anoka so the 2045 forecasts were completed assuming TH 10 is a freeway through Anoka.
- 2017 and 2018 traffic counts were used as existing ADT, latest counts from MnDOT's traffic data website was taken for locations not counted.
- Along TH 10 existing AADT ranges from 35,500-55,100, in 2025 forecasted AADTs range from 39,300-60,600
- Existing AADT at Armstrong, Ramsey and Sunfish just north of TH 10 ranges from 8,100-12,700, in 2025 forecasted AADTs range from 9,700-13,300

### 2045 Traffic Forecasts:

- In 2045 forecasted AADTs along TH 10 are range from 48,800-74,200
- At Armstrong, Ramsey and Sunfish just north of TH 10 the 2045 forecasted AADTs are all anticipated to be in the 14,000's where today they differ by ~1.5-5k

- b. *Kelsey reviewed the 2025 and 2045 no build traffic operations*

### 2025 No Build Operations:

- Start to see more failing movements and queuing issues at TH 10/Jarvis
- More queuing issues at TH 10/Ramsey Blvd
- Queues at TH 10/Sunfish Lake Blvd are extensive. Maximum southbound queue extends beyond McKinley St so traffic is blocked and queues extend along westbound McKinley throughout the business area. Westbound queue in the PM peak at TH 10/Sunfish extends 3800' which is close to where the Thurston ramps would be located.
- Steve Peterson asked if there are there opening day modifications that can be made to reduce this queue so that it isn't backing up to Thurston. Bolton & Menk will consider this in the concept development phase.
- Sunfish Lake Blvd/McKinley and TH 10/Sunfish Lake Blvd intersection overall operates with failing LOS during the PM peak hour
- Railroad crossing queueing: SB queue at the RR crossing on Sunfish extends beyond McKinley and NB peak hour queues at/onto TH 10

### 2045 No Build Operations:

- Major issues at Jarvis and Alpine. In addition to side street vehicles being unable to go the left turning vehicles along TH 10 are also unable to find a gap so they queue back onto the mainline and block through traffic gridlocking the network.

- Armstrong at the TH 10 EB ramp operates with failing LOS during the PM peak hour, EB approach queue extends onto TH 10 during both peak hours. Signal is likely warranted in the future with the higher volumes
- TH 10/Ramsey Blvd: more queuing issues and failing movements
- TH 10/Sunfish Lake Blvd: more queuing issues and failing movements. Maximum westbound queue extends throughout entire network modeled (to Round Lake Blvd)
- Railroad crossing queueing: SB queue at the RR crossing on Sunfish extends nearly to Bunker and NB peak hour queues at/onto TH 10

## 6. Summary of Issues

### a. *Eric discussed the summary of issues*

- The four main points include route importance, safety, multimodal, and economic development and were outlined in the presentation.
- TAC members requested additional information on the priority ranking of grade separation of both Ramsey Blvd and Sunfish Lake Blvd.
- MnDOT asked about Northstar ridership projections and how this influences traffic operations on Highway 10.
- Mark suggested that BMI to add car pulling a boat on the tourism greater MN infographic

**Action Item:** BMI to look further into ranking of the grade separated crossing in the state and determine if it was a professional opinion that they were ranked second and third statewide or published in an official report.

**Action Item:** BMI to research Northstar ridership projections and respond on potential influence to traffic projections based on the regional model.

## 7. Goals and Objectives

### a. *Angie discussed the draft goals and objectives*

- A. Safely accommodate all users
- B. Provide efficient vehicle & freight mobility & access
- C. Develop financially responsible implementation plan
- D. Support plans to build a connected & recognizable business corridor
- E. Provide infrastructure improvements compatible with environment

**Action Item:** TAC Members asked to review goals and objectives and provide comments to Angie prior to the next meeting.

## 8. Next Steps

### a. *Angie discussed the draft goals and objectives*

Next TAC Meeting – Late October

- Confirm goals/objectives and evaluation criteria
- Review and confirm range of concepts
- Review traffic analysis of build concepts
- Review Video #1

Public outreach sequence: Late Oct/Early Nov – City Council Update, Hwy 10 Steering Committee, Hwy 10 Subcommittee



# Ramsey Highway 10 Corridor Improvements Technical Advisory Committee (TAC) Meeting #2

**October 23, 2018**  
**Ramsey City Hall**  
**The Lake Itasca Meeting Room**  
**10:00 am – 12:00 pm**

## MINUTES

**Attendees:** Tim Gladhill, Kurt Ulrich, Bruce Westby, Mark Riverblood, Elwyn Tinklenberg, Chloe McGuire, Brigl, Joe MacPherson, Sean Sullivan, Melissa Barnes, Eric Johnson, Angie Bersaw, Ross Tillman

### 1. Introductions and Meeting Overview

- The purpose of the TAC meeting was to conclude the existing conditions analysis, review revised goals and objectives and begin a discussion of the approach to concept development.

### 2. Existing Conditions Conclusion

- a. *Existing Conditions Memo*
- b. *Purpose and Need Framework*
  - Angie reviewed the key findings from the Existing and No-Build Conditions memo that was sent to the TAC prior to the meeting. She noted the key findings serve as the basis for the Draft Purpose and Need framework which was also reviewed.
  - The purpose and need framework will serve as the basis for developing goals and objectives and ultimately evaluating improvement concepts.
  - Mark noted the Economic Development section of the purpose and need is also about quality of life. He shared stories of the difficulties attracting residents and businesses to Ramsey due to the traffic congestion and affects this has on quality of life and the cost of doing business.

### 3. Revised Goals and Objectives

- Angie reviewed the revised goals and objectives that reflected TAC comments and suggestions from the first meeting.
- Tim requested the Strategic Goal #2 be amended to read, "A Connected and Active Community" for consistency with the city's comprehensive plan's goals.
- The TAC supported the revisions as presented with Tim's suggested change.

### 4. Concept Development

- a. *East Side Corridor Approach (East of Armstrong Blvd)*
  - Eric provided a review of the existing and projected traffic volumes on the east side.
  - He noted BMI had completed a planning-level analysis using a tool called CAP-X. The tool uses forecasted traffic volumes to identify a range of potential improvement options. The CAP-X screening showed partial or full grade separation is needed at the intersections of Ramsey Blvd and Sunfish Lake Blvd with Highway 10.
  - Eric noted the incremental approach to improvement from the previous study is still valid; however, building partial or full grade separation at these locations in pieces is not likely due to the traffic volumes projected and changes that will occur in Ramsey, particularly at these locations, once the Anoka project is constructed in

2022-20223.

- Ross stated BMI also used CAP-X to review a potential capacity expansion of Highway 10 to 6-lanes. The results showed this improvement does not add enough capacity to warrant further analysis.
- Eric reviewed a table outlining the range of concept combinations that could be studied at Ramsey Blvd and Sunfish Lake Blvd intersections with Highway 10.
- The following questions were discussed with the TAC:
  - **Highway 10 Access** – is full access needed at both Ramsey Blvd and Sunfish Lake Blvd?
    - The City of Ramsey stated full access is preferred at both locations but understand this may not be feasible and there may be combinations of full and partial access at these locations that serve the community well. The City stated their preference is to accommodate full access at Ramsey Blvd.
    - The TAC agreed with the city's position to consider full access at Ramsey Blvd in combination with partial access options at Sunfish Lake Blvd.
  - **County Road Designation** - Is the County open to options for County Road designation change if it ends at something other than full access to Highway 10?
    - Joe stated Anoka County is open to options to consider a designation change if partial access at Sunfish Lake Blvd is considered.
  - **Railroad Grad Separation** – Is this a requirement at both Ramsey Blvd and Sunfish Lake Blvd?
    - Joe said Anoka County's long-term vision is to grade separate all County Road crossings of the BNSF railroad; however, the County realizes this may be cost prohibitive and would support one railroad grade separation now.
    - The TAC agreed it makes most sense to consider the railroad grade separation at a future interchange location but will study both locations for comparison.
- Ross reviewed each of the concepts recommended for study at Ramsey Blvd and Sunfish Lake Blvd as shown in the presentation.

b. *West Side Corridor Approach (West of Armstrong Blvd)*

- Ross reviewed the projected traffic volumes west of Armstrong Blvd. Long delays for side streets are expected and present a safety concern. He stated non-signalized intersections, whether full movement or right-in/right-out, are in the high-risk category per MnDOT's Access Management Manual. Ross said the CAP-X analysis showed very few at-grade solutions will work.
- Ross reviewed a signalized Reduced Conflict U-Turn (RCUT) intersection concept which is the only at-grade improvement shown to provide adequate 2045 operations west of Armstrong Blvd.
- Melissa said MnDOT is constructing a signalized RCUT at TH 65 and Viking Blvd and is open to studying this option on Highway 10 west of Armstrong Blvd.
- Angie will schedule a follow-up meeting with Elk River and Ramsey to discuss the location of a signalized RCUT at either Jarvis St, Adams St or Alpine Drive.
- Based on the discussion of the east side and west side range of concepts, the TAC agreed the following concepts are not consistent with the project's goals and

- objectives and, as such, should be documented and dismissed:
- East Side:
    - o Highway 10 expansion to 6-lane
    - o At-grade, full access intersections at Ramsey Blvd and Sunfish Lake Blvd
    - o Full movement grade separation at both Ramsey and Sunfish Lake Blvd
      - Sunfish Lake Blvd full access grade separation
      - Ramsey Blvd partial grade separation
    - o Railroad underpass at Sunfish Lake Blvd
  - West Side:
    - o At-grade full access intersections (non-signalized)
    - o At-grade reduced conflict intersections (non-signalized)
  - BMI will document the alternatives recommended for dismissal and present for review at the next TAC meeting.

## **5. Public Involvement Update**

- Angie reviewed the next steps for public involvement which include a release of the purpose and need video in November and elected official/stakeholder meetings in December/January.

## **6. Next Steps/Upcoming Meetings**

- Elwyn asked about ways to advance designs at Ramsey Blvd to show progress and continue to lobby for additional funds. Eric stated Bolton & Menk will begin to layout a high-level timeline to begin discussions on funding strategies and priorities.
- Tim said the City will discuss the appropriate time to get council input on the concepts dismissed and priorities discussed today with the TAC.
- The next TAC Meeting was scheduled for November 27, 2018 from 10:30 am to 12:30 pm.

# **Ramsey Highway 10 Corridor Improvements**

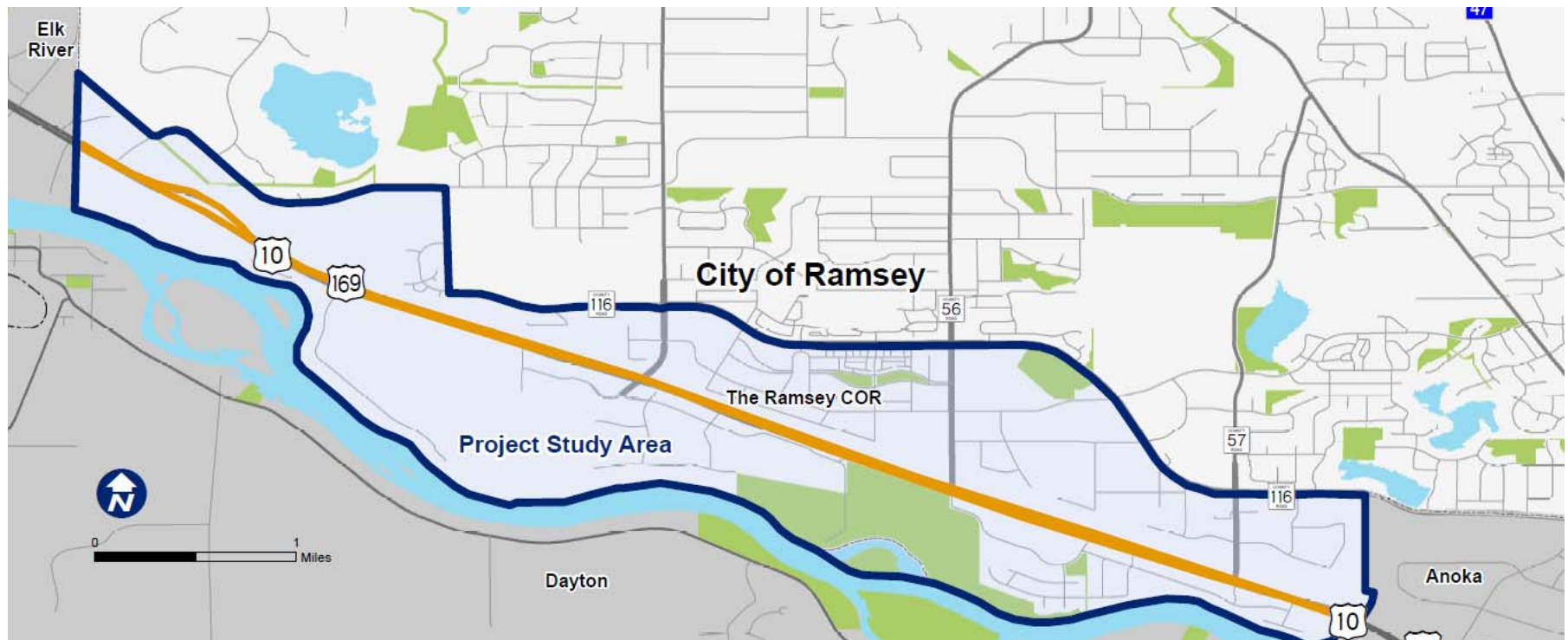
## **TAC Meeting #3**

November 27, 2018



# Meeting Overview

- ✓ Concept Evaluation
- ✓ Concept Development
- ✓ Public Involvement Update
- ✓ Next Steps





# Concept Development



## 10/23 TAC Meeting Recap

- Agreed on Purpose and Need Framework
- Provided Input on Key Discussion Items
  - Railroad Grade Separation
  - Full Access Locations
  - Signalized RCUT as option on West End
- Agreed on Concepts to Dismiss

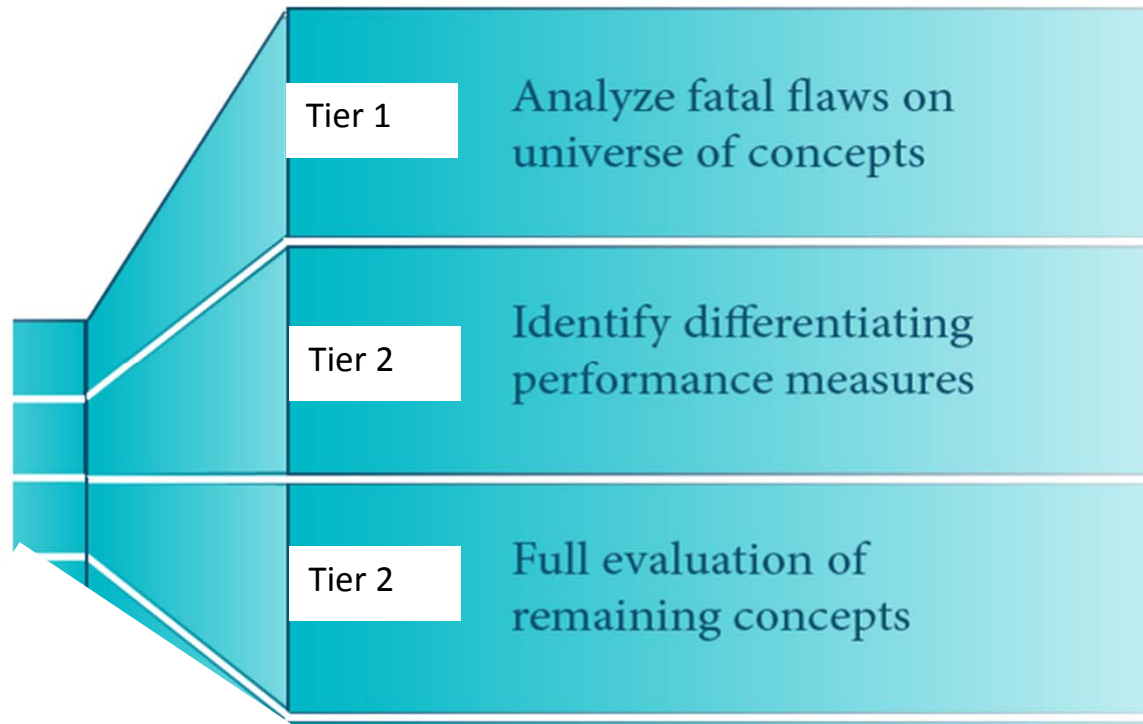




# Two Tier Evaluation Process



Universe  
of  
Concepts



# Goals and Objectives



City of Ramsey Strategic Goal	Ramsey Gateway Highway 10 Project	
	Goal	Objective
<i>Smart, Citizen-Focused Government</i>	<b>Safely accommodate all users (motor vehicles, freight, rail, transit, pedestrians, bicyclists)</b>	Eliminate fatal and serious injury crashes
		Reduce all crashes in both frequency and severity
		Provide safe pedestrian and bicycle facilities along roadways and at crossings of roads and rail
		Minimize vehicle delay from railroad operations that results in backups across adjacent intersections and onto Highway 10
<i>A Connected and Active Community</i>	<b>Provide efficient mobility and access for all modes of travel</b>	Provide acceptable mobility and system reliability on Highway 10 for access to Ramsey and beyond including regional and statewide tourism destinations
		Ensure acceptable vehicle delay and travel times for arterial highways (e.g., Highway 10, Sunfish Lake Blvd, Ramsey Blvd, and Armstrong Blvd)
		Serve the projected regional and local growth demands
		Provide reasonable and responsible access to optimize mobility and reduce the need for vehicles to enter onto Highway 10 for short trips
		Provide convenient access for pedestrians and bicyclists to serve demand
<i>Financial Stability</i>	<b>Develop a financially responsible infrastructure implementation plan</b>	Develop projects and phasing that meet schedule and funding constraints
		Minimize right-of-way costs
		Minimize lifecycle costs
		Maximize benefit-cost of improvements
		Maximize potential to secure multiple funding scenarios
<i>A Balance of Rural Character and Urban Growth</i>	<b>Support plans to build a connected and recognizable Highway 10 corridor</b>	Attract visitors and residents to the Highway 10 corridor by car, train/transit, bike or foot
		Create a cohesive and inviting aesthetic including appropriate signage, lighting and landscape
		Define right-of-way needs for clarity to affected businesses and property owners
		Accommodate existing and future land uses
		Promote business expansion
		Support connections to Ramsey assets and destinations (parks, trails, The COR, etc.) from either side of Highway 10
		Seek consistency with state, regional and local plans
	<b>Provide infrastructure improvements compatible with the natural and built environment</b>	Avoid impacts to environmental resources
		Minimize impacts to the built environment

# Universe of Concepts (Started from Access Planning Study)



## East End

- Grade separate Sunfish Lake Blvd (Highway 10 Flyover with access or overpass)
- Grade separate Ramsey Blvd (Highway 10 Flyover with access or overpass)
- Railroad grade separation at Sunfish Lake Blvd
- Railroad grade separation at Ramsey Blvd
- Supporting frontage road connections

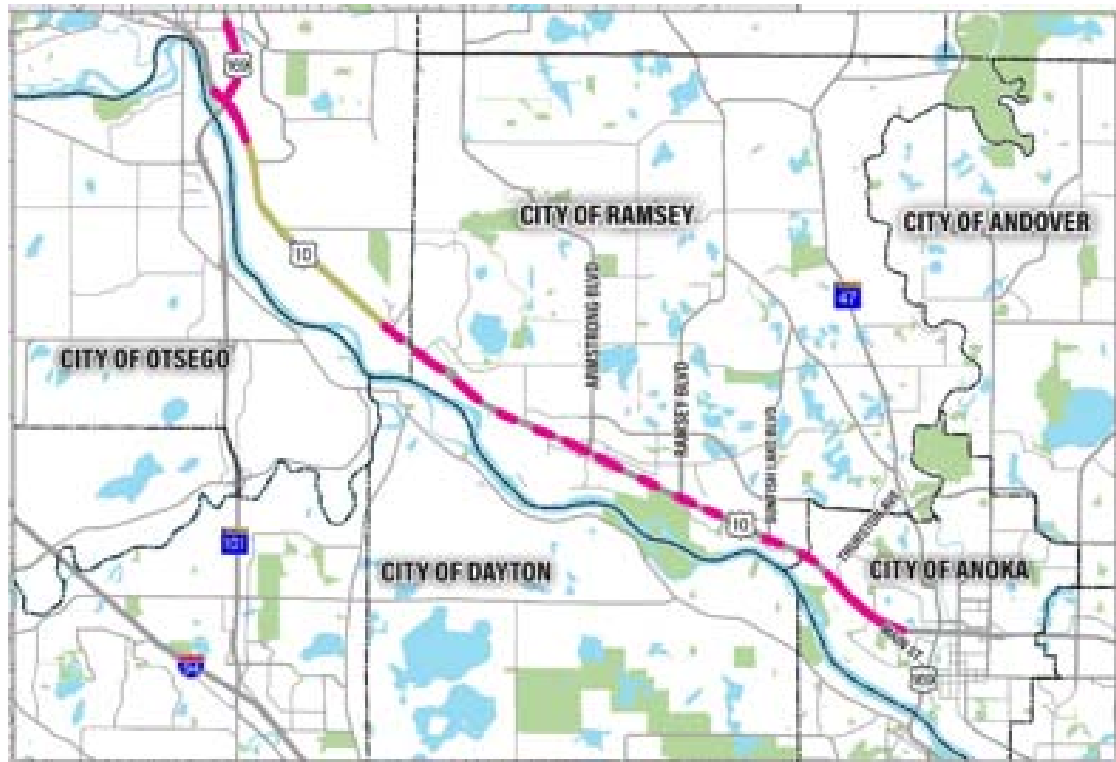
## West End

- RCUT intersection at Alpine Drive
- RCUT intersection at Bowers Drive
- Supporting frontage road connections

# Concept Development

## New Findings

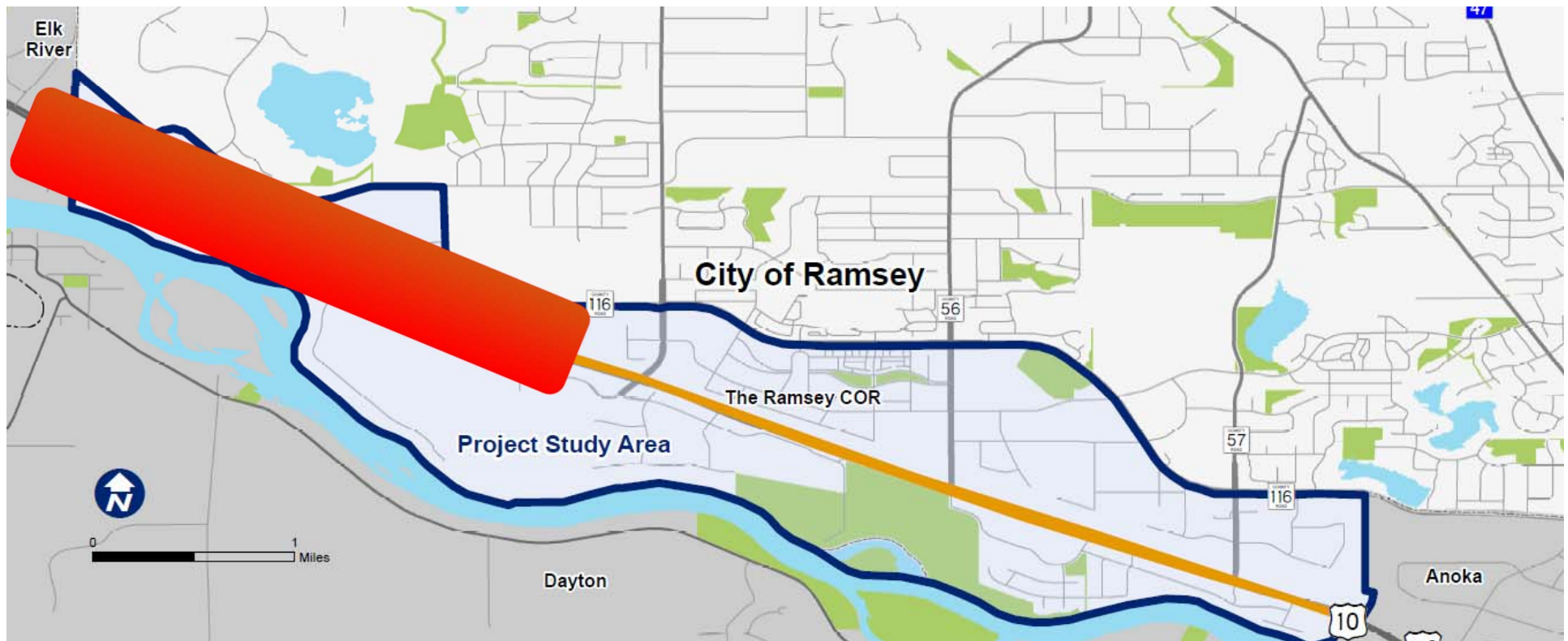
- 2025 and 2045 traffic forecasts
- Influence of Anoka and Elk River projects complete by 2025
- Not practical to phase interchange construction
  - Allows for study of additional interchange types
- At-grade solutions limited



# West End Universe of Concepts



- Jarvis/Alpine and Bowers Drive
  - At-Grade Full Access
  - At-Grade Reduced Conflict (non-signalized)
  - At-Grade Reduced Conflict (signalized)



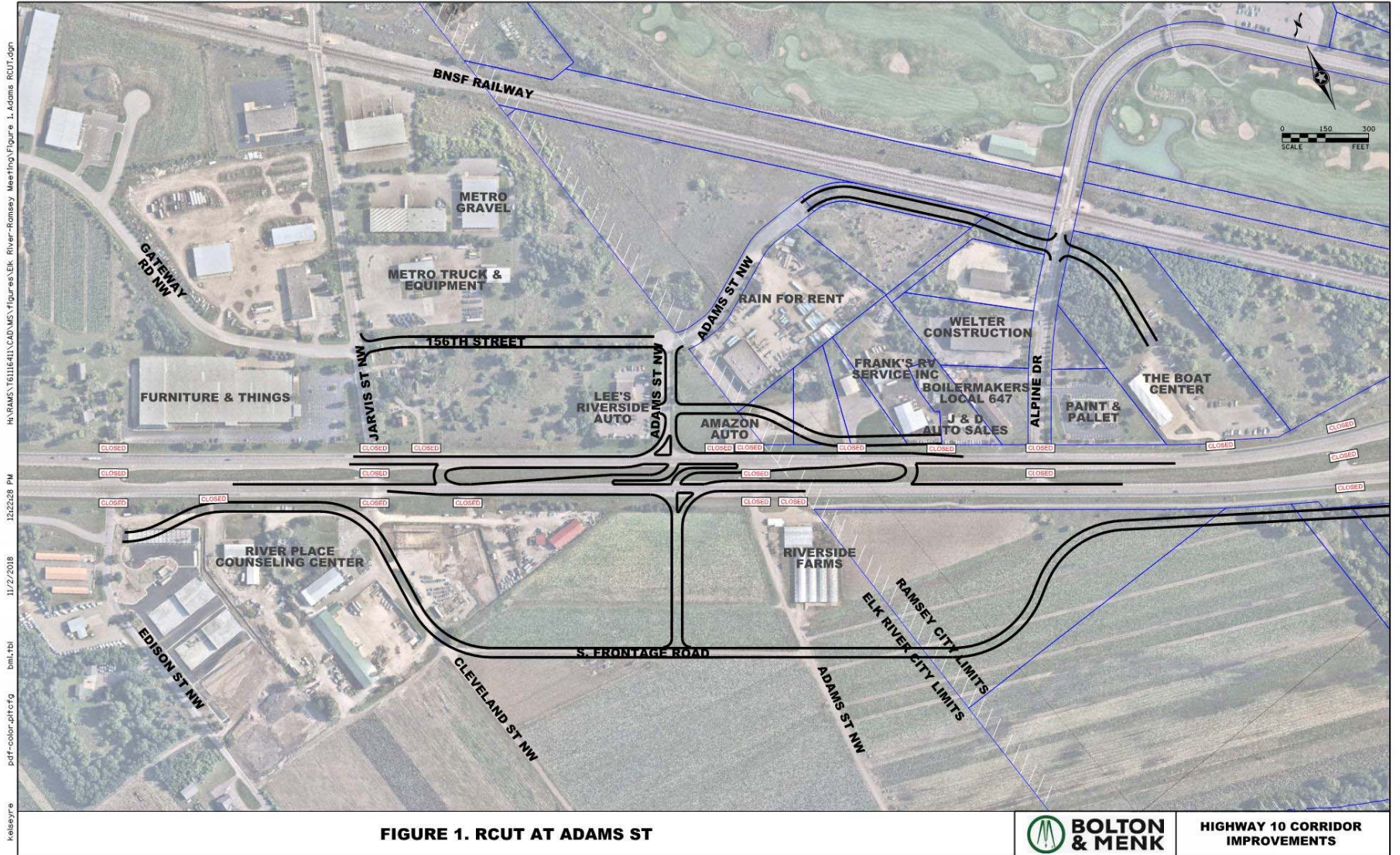


# Tier 1 Screening (see Handout)

## West End

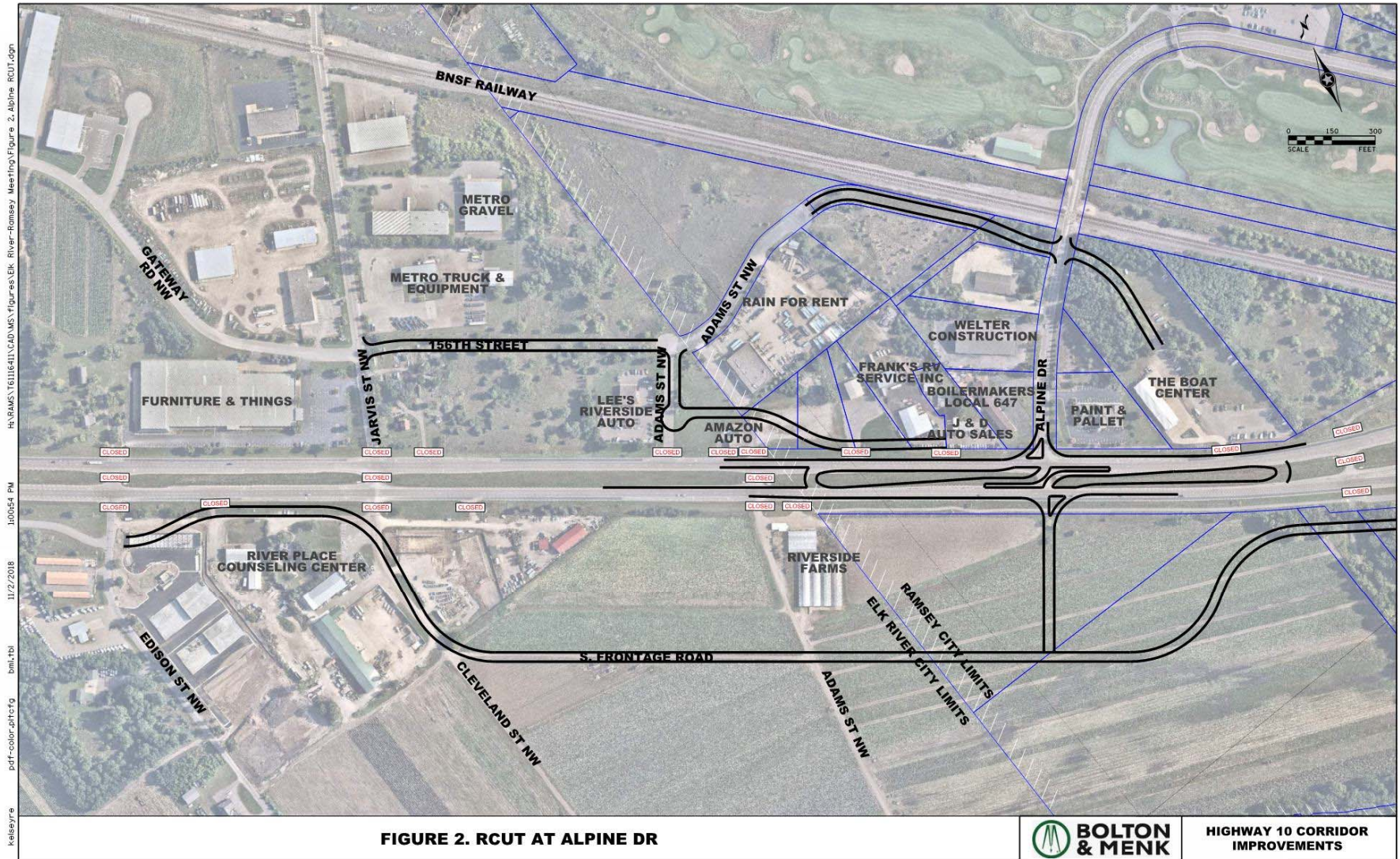
- Concepts Dismissed
  - At-Grade Full Access (non-signalized)
  - At-Grade Reduced Conflict (non-signalized)
- Conflicting Goals
  - Goal 1: Safety
  - Goal 2: Operations





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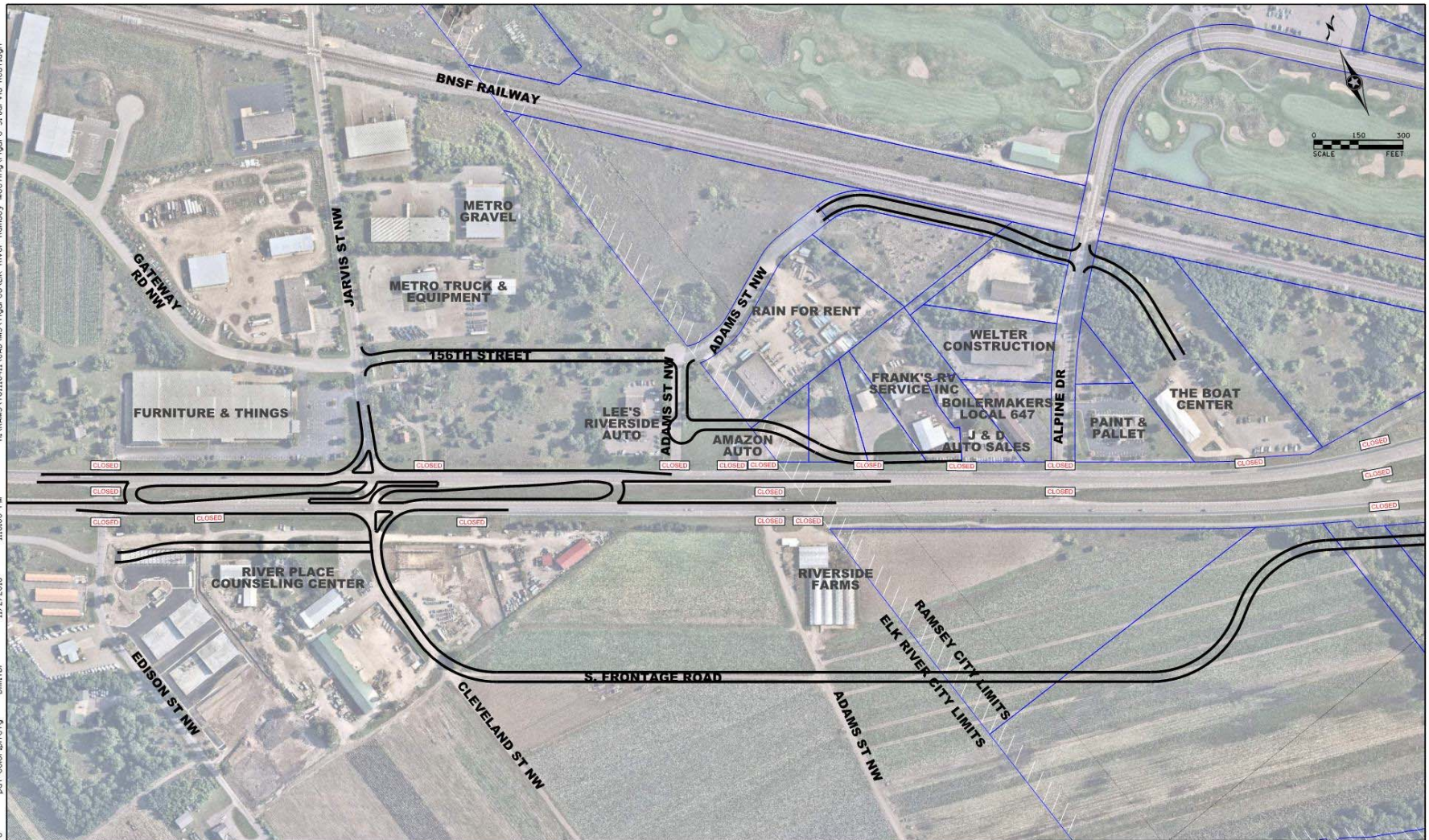
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**FIGURE 3. RCUT AT JARVIS ST**

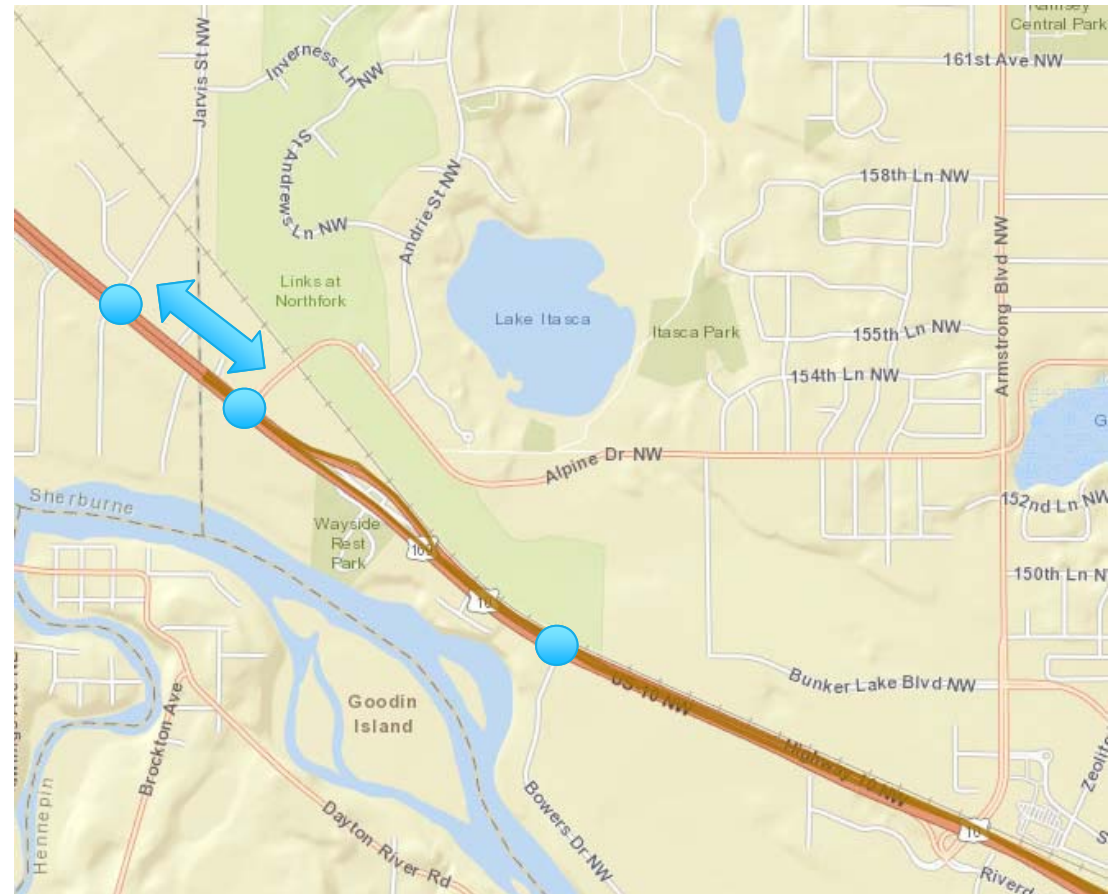


**HIGHWAY 10 CORRIDOR IMPROVEMENTS**



# Concepts to Carry Forward

- West End:
  - Signalized RCUT at Jarvis St OR Alpine Drive
  - RI/RO at Bowers Drive



# East End Universe of Concepts



- 6-lane Highway 10
- At-grade Ramsey Blvd
- At-grade Sunfish Lake Blvd

Intersection	Treatment	Concept								
		A1	A2	A3	B1	B2	B3	C1	C2	C3
Sunfish Lake	Partial Grade Separation							X		
	Full Grade Separation	X			X					
	RR at Grade		X			X			X	
	RR Grade Separated	X		X	X		X	X		X
Ramsey	Partial Grade Separation				X					
	Full Grade Separation	X						X		
	RR at Grade			X			X			X
	RR Grade Separated	X	X		X	X		X	X	

<http://bmi.maps.arcgis.com/apps/webappviewer/index.html?id=4a9958e6b4554aeca5f2d5d2241f7de7>



# Tier 1 Screening (see Handout)

## East End

- Concepts Dismissed

- 6-lane Highway 10
- At-Grade Full Access at BOTH Ramsey & Sunfish Lake
- Full Access Grade-Separation at BOTH Ramsey & Sunfish Lake
  - Full access grade-separation at Sunfish Lake Blvd\*
  - Partial grade-separation at Ramsey Blvd
- Railroad underpass at Sunfish Lake Blvd

- Conflicting Goals

- Goal 1: Safety
- Goal 2: Operations
- Goal 3: Cost
- Goal 4: Support plans/business
- Goal 5: Compatible with environment

*\*Does not dismiss the overpass with RI/RO and rail grade separation*

# Concepts to Carry Forward



- Ramsey Blvd:
  - Railroad Overpass
  - Railroad Underpass
  - Full Access Interchange
    - Standard Diamond
    - Tight Diamond
    - Folded Diamond
  - Overpass with Right-in/Right-out
- Sunfish Lake Blvd:
  - High T (at-grade Railroad)
  - Overpass with Right-in/Right-out (Railroad overpass)

Intersection	Treatment	Concept								
		A1	A2	A3	B1	B2	B3	C1	C2	C3
Sunfish Lake	Partial Grade Separation							X		
	Full Grade Separation		X			X				
	RR at Grade		X			X			X	
	RR Grade Separated	X		X	X		X	X		X
Ramsey	Partial Grade Separation					X				
	Full Grade Separation		X					X		
	RR at Grade			X			X			X
	RR Grade Separated	X	X		X	X		X	X	

Highway 10/169 Concept **DRAFT** Evaluation[illegible]

# Concept Sketches



- Ramsey Blvd Options
- Sunfish Lake Blvd Options

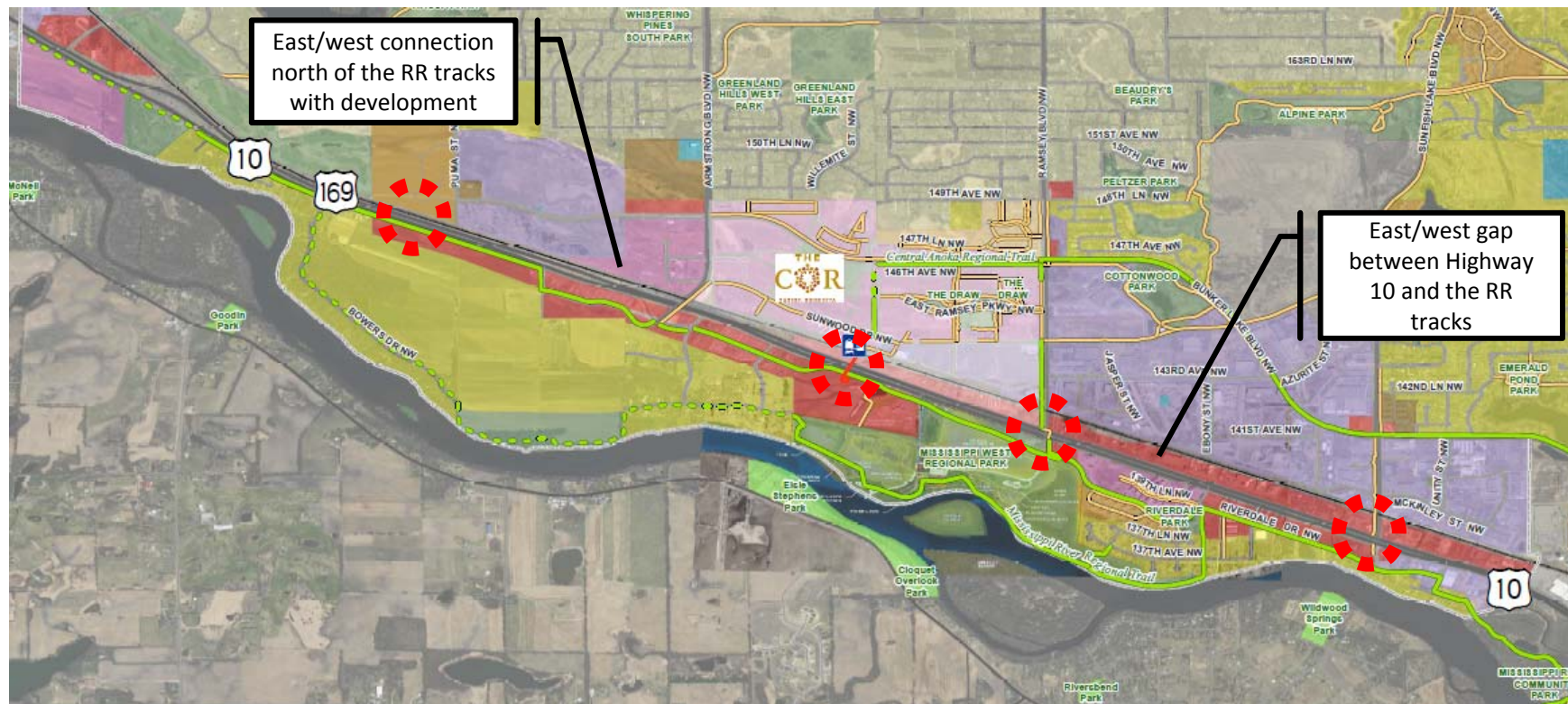




# Ped/Bike Crossing Demand



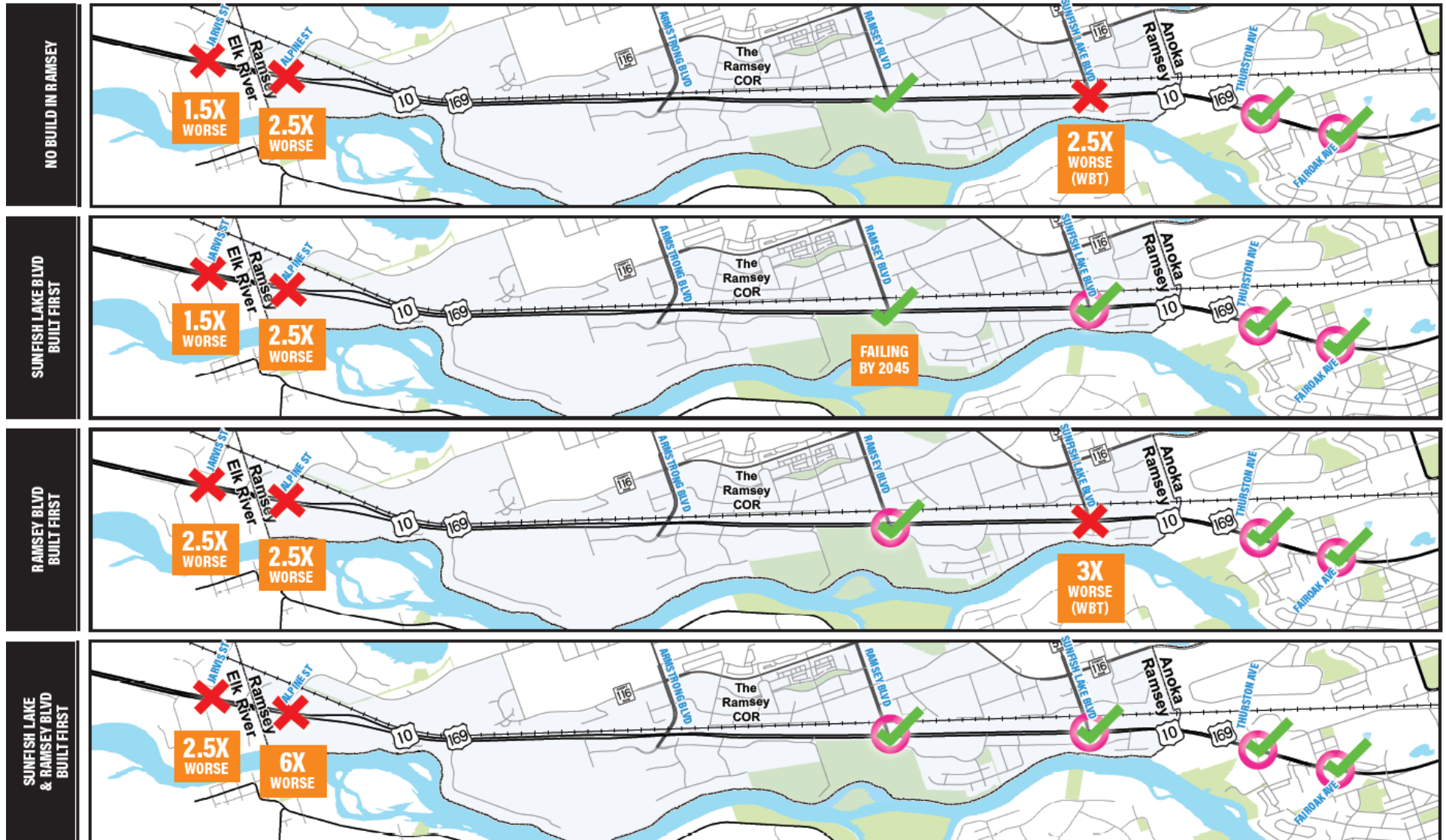
Existing and Future Crossing Demand





# RAMSEY GATEWAY - WHERE TO INVEST FIRST?

To begin to analyze where investment should start, traffic modeling was used to understand operational impacts of each first build scenario shown below.



# Public Involvement & Next Steps

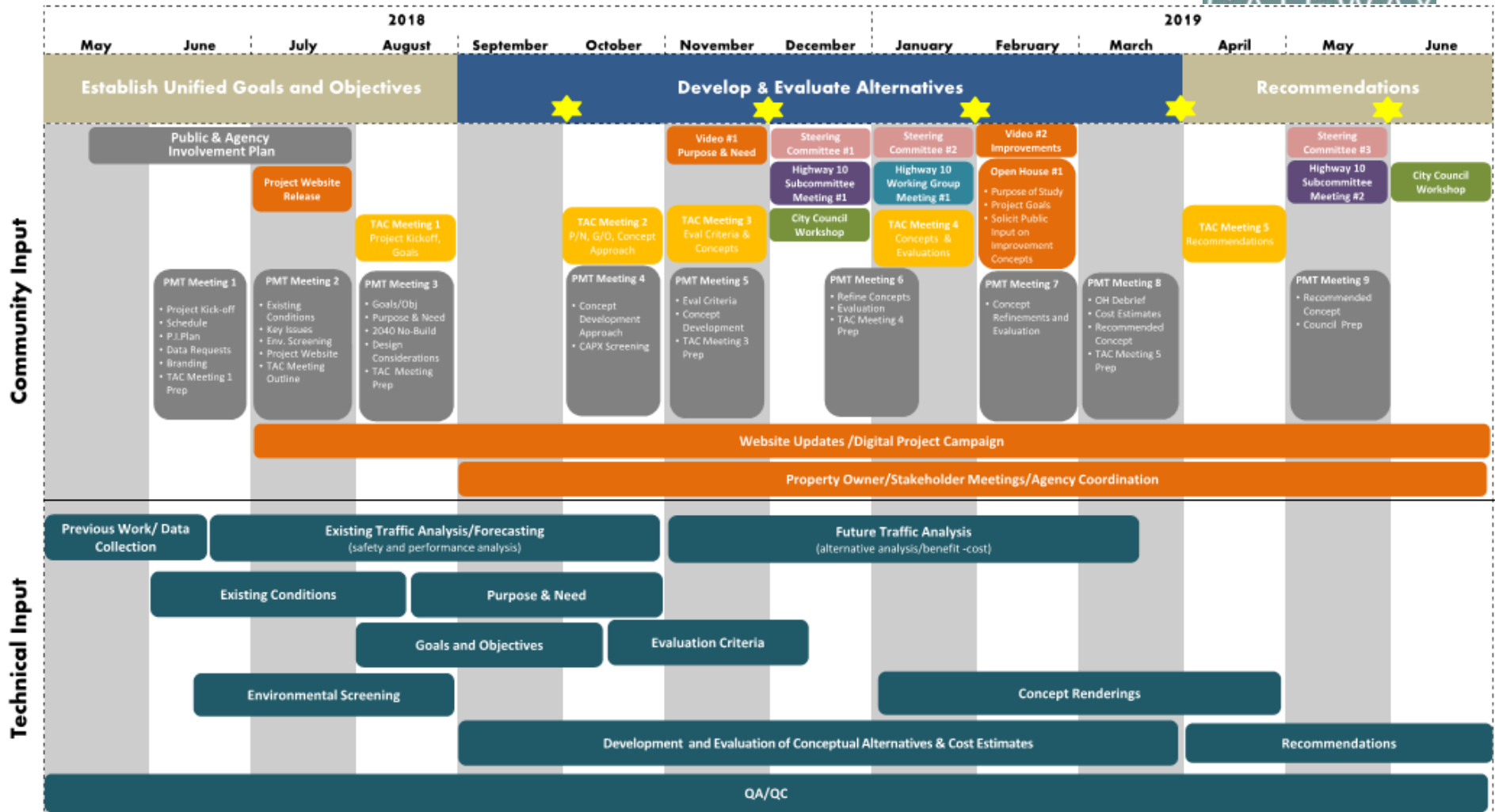
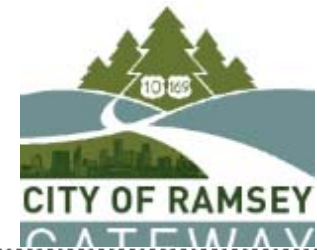


- City Council Update – December 11
- FHWA Update – December TBD
- TAC Meeting #4 - January (set date)
- Steering Committee – January
- Highway 10 Subcommittee – January
- Public Open House – February

<https://youtu.be/Zc3qhNxF82o>



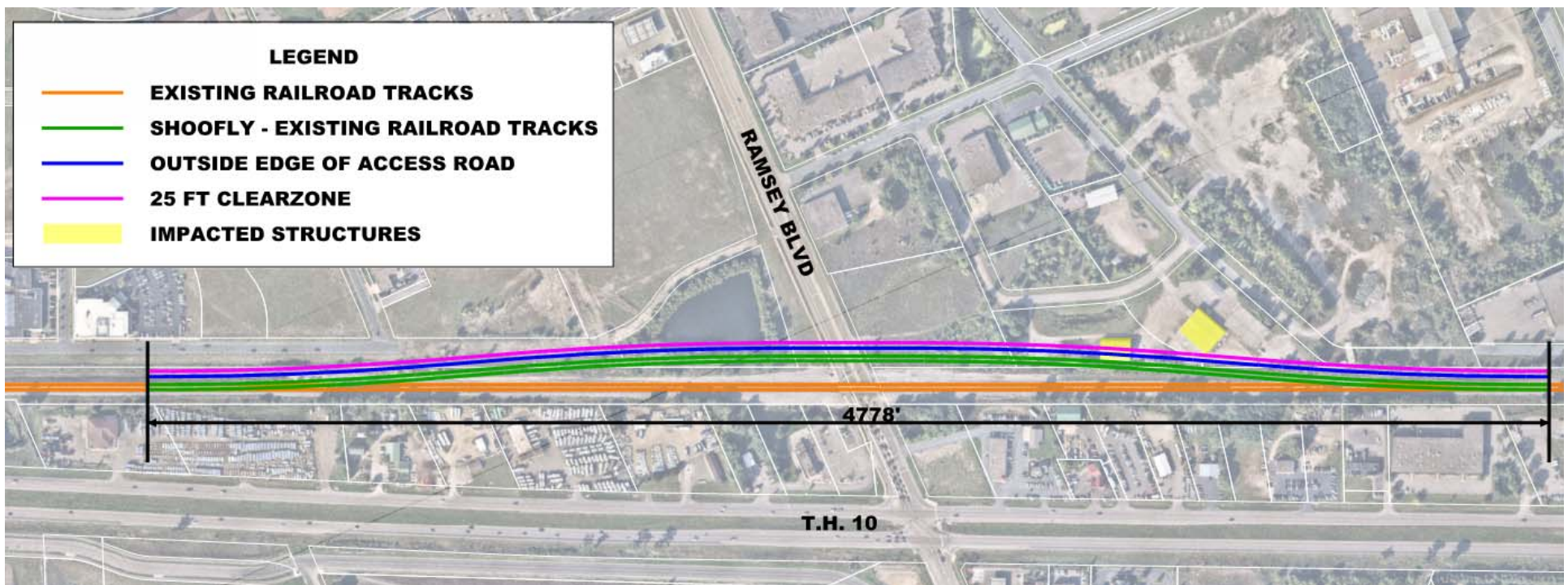
# Project Schedule



★ Ramsey Resident Newsletter Update

# Railroad Grade Separation Concepts

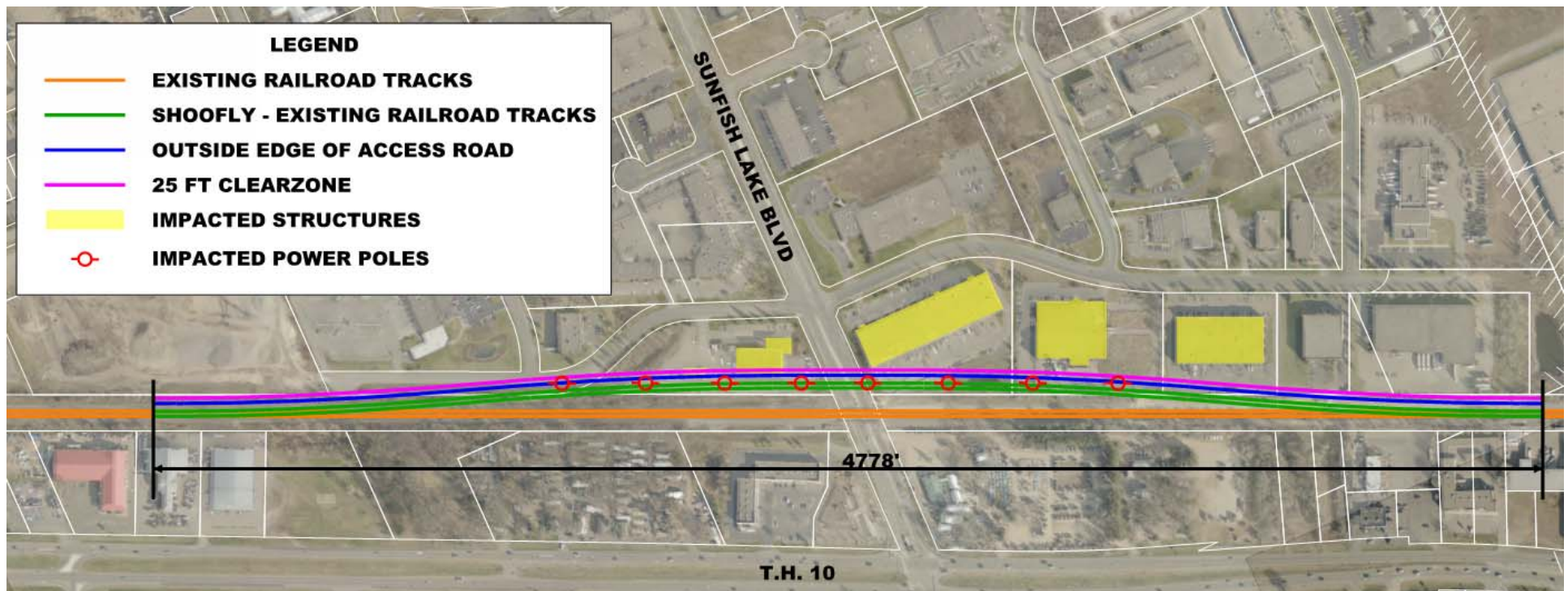
## Ramsey Blvd – Shoofly Option





# Railroad Grade Separation Concepts

## Sunfish Lake Blvd – Shoofly Option





# **Ramsey Highway 10 Corridor Improvements Technical Advisory Committee (TAC) Meeting #4**

**January 17, 2019  
Ramsey City Hall  
The Lake Itasca Meeting Room  
10:00 am – 12:00 pm**

## **MINUTES**

**Attendees:** Tim Gladhill, Kurt Ulrich, Bruce Westby, Mark Riverblood, Elwyn Tinklenberg, Chloe McGuire Brigl, Jack Forslund, Sean Sullivan, Melissa Barnes, Justin Femrite, Steve Peterson, Derek Lehrke, Angie Bersaw, Ross Tillman, Ashley Hudson

### **1. Introductions and Meeting Overview**

- The purpose of the TAC meeting was to recap on recent agency meetings, review updates to the concepts, and discuss input on the draft Tier 2 evaluation summary.

### **2. Recap Recent Meetings**

- Angie recapped the input received at the recent agency coordination meetings with the following; City Council (Dec 11), the FHWA (Dec 12), and the MnDOT Rest Area/Weigh Station (Dec 17). This discussion included the agencies view on the current concepts and progress of the project. Angie and Ross highlighted what input gathered in these coordination meetings had impact on the recent concept development updates. In summary the following was received from each:
  - i. City Council – Need more info on the west end specific to their concern with adding a signal and the timing of when improvements are needed. They were generally okay with the east end concepts and support the momentum.
  - ii. FHWA – They view the project process as acceptable and on track. Stated that coordination with them is not required but helpful, so it was determined the next meeting would be before the Spring 2019 public open house.
  - iii. MnDOT Rest Area/Weigh Station – They are aware that the weigh station accel/decel lanes are substandard length and that the rest area entrances and exits are confusing. The weigh station is only open during non-peak traffic hours. They are okay with concepts that change the layout and location of the rest area facilities. Tim Gladhill noted that the open property to the northwest of the weigh station is under purchase agreement with a new business.

### **3. Concept Development and Evaluation**

- *Ramsey Blvd Concept Sketches*
  - Ross reviewed updates to the concept sketches at Ramsey Blvd.
  - Ross noted the concepts are very preliminary at this point and don't depict the exact specifics on details such as the number of turn lanes needed.
  - Ross also reviewed the Ramsey profile in regard to how the close proximity of Highway 10 and the RR require concepts to keep similar grade separation of the highway and the RR.
  - Elwyn updated the group that the funding language for the Ramsey Blvd grade separation will be updated to be more generalized in such a way that it allows for an overpass and relative changes to support the grade separation.

- Ashley and Angie recapped on the entire evaluation process to date and gave a high-level review of how we reached the draft evaluation summary that will be discussed in detail at this meeting. It was mentioned that Bolton & Menk is still working through the full detailed evaluation as concepts are developed further but that finalizing the detailed evaluation will be most effective after we eliminate more concepts that are already showing fatal flaws with the draft summary evaluation.
- The following discussion was held while reviewing the Draft Ramsey Blvd Evaluation:
  - o The county views large park impacts as a fatal flaw. Moving forward they would like to see approximate acreage impact with each concept.
  - o Requested to re-evaluate level of measure on travel time. There should be a difference between number of turns and turns that require traveling past Ramsey or Sunfish and turning back to reach a destination. From the cities perspective westbound access is most important.
  - o Measures should be prioritized prior to sharing with the public. Color scoring should be compared throughout the entire evaluation and not just within a measure. Re-evaluate what should be colored red.
  - o It was suggested to add a percentage to understand the difference in cost between the colors.
  - o MnDOT would likely not support a SPUI or Grade Separated Roundabout when other options would work.
  - o It was agreed upon that the TAC is ready to dismiss the Ramsey Under RR options based on cost, long-term maintenance, and difficulty of gaining RR support.
  - o Team asked about feasibility of staging an overpass grade separation of the railroad separate from an interchange at Hwy 10 and vice versa (also at Sunfish Lake). BMI to investigate feasibility of doing this.
  - o After a full review of the Sunfish Lake Blvd draft evaluation summary the TAC agreed that the concepts to move forward are 2 – Tight Diamond, 4 – Folded WB Off Tight Diamond, 7 – Overpass with Right-In/Right-Out
- *Sunfish Blvd Concept Sketches*
  - Ross reviewed updates to the concept sketches at Sunfish Lake Blvd.
  - Ross noted the concepts are very preliminary at this point and don't depict the exact specifics on details such as the number of turn lanes needed.
  - The following discussion was held while reviewing the Draft Sunfish Lake Blvd Evaluation:
    - o Much of the previous comments on the Ramsey Blvd evaluation summary carry over here.
    - o It was suggested to add in impacts/coordination with RR on the Sunfish evaluation summary too.
    - o It was suggested to add compatibility with previous study to both evaluation summaries
    - o After a full review of the Sunfish Lake Blvd draft evaluation summary the TAC agreed that the concepts to move forward are 1 A and B - Overpass with Right-in/Right-out, 5 - SPUI, 6 – Grade Separated Roundabout, 7 – Center Turn Overpass
- *West End Concept Sketches*
  - Ross walked the PMT through the details of all the west end concepts.
  - Ross highlighted the pros and cons of each concept in regard to impacts to the weigh station, rest area, surrounding properties, and growth calculations.
  - Ross noted that the model does not include assumptions for growth in Elk River, so

- projections on the north side of Jarvis may be low.
- The forecasts include major development on the south side of Jarvis, which already significantly impacts traffic in 2025 forecasts. The city indicated that this is 10+ years out in the future before this would likely occur, so no need to plan for this in the short term.
  - The following discussion was held while reviewing the West End Concepts:
    - o The city would like to avoid showing a concept in which the frontage road goes through the Collins Drive neighborhood. Rather look into placing the frontage road connection along the north side of those properties, tighter to Hwy 10.
    - o There is a recently constructed building in the SE corner at Jarvis to take in consideration when designing the exact location of the right-in/right-outs.
    - o Group discussed at a high level the corridor continuing to the west until 101, however D3 planning representatives were not on the phone to provide further insight.
    - o There is a purchase agreement with a business for the parcel in which a potential WB rest area was considered.

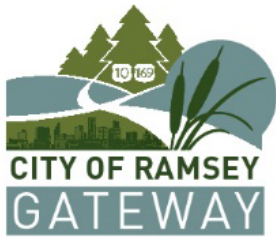
#### **4. Public Involvement**

- Angie will provide noted that we have shifted engagement with the public to late February/March to allow for time to dismiss concepts and be in conference on what is moving forward for public consumption. She noted that this does not extend the study and we are still on track with our overall predetermined schedule.

#### **5. Next Steps/Upcoming Meetings**

- Angie said she will send out a poll to set up the next TAC meeting to likely occur in mid February.





# **Ramsey Highway 10 Corridor Improvements Technical Advisory Committee (TAC) Meeting #5**

**February 21, 2019  
Ramsey City Hall  
The Lake Itasca Meeting Room  
10:00 am – 12:00 pm**

## **MINUTES**

**Attendees:** Tim Gladhill, Kurt Ulrich, Bruce Westby, Mark Riverblood, Elwyn Tinklenberg, Jack Forslund, Sean Sullivan, Melissa Barnes, Derek Lehrke, Jon Mason, Steve Peterson, Joe MacPherson, Angie Bersaw, Ross Tillman, Kelsey Retherford

### **1. Introductions and Meeting Overview**

- The purpose of the TAC meeting was to recap on recent agency meetings, review updates to the concepts in Concept Station, review cost estimates, and discuss input on the draft Tier 2 evaluation summary.

### **2. Recap Recent Meetings**

- Angie recapped the input received at the Council Workshop (Jan 29).
  - i. For the Ramsey Blvd concepts, the council concurred with the TAC recommendations. Council liked the Tight Diamond alternatives (Options 2 and 4). They had little support for the Overpass with RI/RO (Option 7).
  - ii. At Sunfish Lake Blvd concepts, the council again concurred with TAC recommendations. Council liked the Center Turn Overpass (Option 7), little support for the Overpass with RI/RO (Option 1), and were concerned for pedestrian safety with Grade Separated Roundabout (Option 6).
  - iii. For West End they liked the phased approach plan if possible and realized it is hard to plan for this now with the unknowns of the future plan for TH 10 in Elk River.

### **3. Concept Development and Evaluation**

- *Ramsey Blvd Concepts*
  - Ross and Kelsey reviewed the concepts at Ramsey Blvd in Concept Station.
  - City expressed a desire to eliminate/limit impacts to City owned parcel northeast of the railroad tracks.
  - The Overpass with RI/RO (Option 7) was updated so that traffic would exit prior to passing Ramsey Blvd similar to a typical exit ramp so that drivers would not feel as though they were passing their destination and looping back to get to the destination.
  - 2041 operations were analyzed with each of the options left. The northern intersection (where the frontage road and WB TH 10 Ramps met) of Option 4 was the only intersection that required a signal for acceptable operations. The signal is needed to accommodate the heavy EBL (WB TH 10 to NB Ramsey traffic. For the other two options this movement is a WBR turn.)
  - Operational analysis also showed that a two-lane bridge section would work along Ramsey Blvd for the Overpass with RI/RO (Option 7) which results in a lower cost.

- Cost estimates for the three remaining Ramsey concepts were compared. All were found to be within the \$50-\$60 M range (2025 dollars).
  - o The construction cost for Overpass with RI/RO (Option 7) was found to be lower than the other options, however, the ROW cost was more as the WB TH 10 RI/RO requires the full acquisition of two additional properties. The construction cost for the interchange at Armstrong inflated to 2025 dollars was found to be \$41 M where the Ramsey options ranged from \$23-\$36 M.
- A draft scoring of the options was devised for the evaluation matrix. Each of the measures analyzed in the matrix were weighted equally. If the measure was considered “good” it received 3 points, fair = 2 points and poor = 1 point. This score was compared to the cost to determine a cost per point. The most expensive Ramsey option per point was found to be the Tight Diamond (Option 2).
- Overall all staff are satisfied with the range of alternatives analyzed at Ramsey.
- Anoka County questioned why the SPUI was dismissed. Angie and MnDOT responded that MnDOT will likely only support a SPUI where no other option functions due to the high cost of a SPUI.
- MnDOT questioned if a DDI (Diverging Diamond Interchange) was considered. Ross responded that footprint/cost would be very similar to the Tight Diamond and the recommended traffic control is still being analyzed.
- *Sunfish Blvd Concepts*
  - Ross and Kelsey reviewed the concept at Sunfish Lake Blvd in Concept Station.
  - If Sunfish Lake Blvd is grade separated from TH 10 and the railroad, it is not possible to tie into the existing ground at Riverdale, therefore, some of the residential driveways would need partially reconstructed to tie into Riverdale.
  - Additionally, if Sunfish Lake Blvd goes over the railroad it is not possible to tie into the existing ground by McKinley so a portion of McKinley Street would need to be reconstructed.
  - The concepts were updated to show the driveways that would need to be reconstructed to tie into both roadways.
  - Also, with grade separation of Sunfish with the railroad and the current cross section of Sunfish Lake Blvd, retaining walls are needed so that businesses north of the railroad aren’t impacted.
  - A frontage road to accommodate the businesses to the southeast was added to all concepts. The previous study showed the frontage road tying into EB TH 10 as a RI/RO. It’s uncertain how a RI/RO would function, if it would be acceptable from an intersection spacing perspective, and how it would fit with the EB TH 10 Exit Ramp at Thurston Ave.
  - MnDOT voiced concern of vehicles turning into the wrong lane with the center turn lane options.
  - Concerns of pedestrians crossing with the Grade Separated Roundabout and SPUI were also discussed.
  - All options are anticipated to operate acceptably in 2041.
  - Cost estimates for the remaining Sunfish concepts were compared. The SPUI (Option 5A) with grade separation of the railroad was found to be the most expensive, followed by the Grade Separated Roundabout (Option 6A), and Center Turn (Option 7A). The cost of the Overpass with RI/RO (Options 1A and 1B) were found to be comparable to the at grade SPUI (Option 5B), Grade Separated Roundabout (Option 6B) and Center Turn (Option 7B).
  - Based on the costs City staff recommended dismissing Options 5A, 6A and 7A.
  - Elwin recommended adding a flyover option for Sunfish which would eliminate

- access, but save costs and reduce property impacts.
- The TAC recommended bringing the High-T option back into the mix of options.
- The TAC overall determined that the ideal alternative for Sunfish has not yet been identified and it would be best to have a workshop with staff from all agencies interested to brainstorm other alternative designs.
- Railroad grade separation phasing was analyzed at Sunfish Lake Blvd to determine if it would be possible to grade separate TH 10 first and the railroad in the future. Three different scenarios were considered.
  - o 1. Leaving TH 10 at grade and raising Sunfish over TH 10
  - o 2. Lowering TH 10 and raising Sunfish over TH 10
  - o 3. Lowering TH 10 the full clearance so Sunfish Lake Blvd is at existing grade
  - o None of the options resulted in acceptable grades (<5%) due to the close spacing of the railroad to TH 10.
- *West End Concepts*
  - Each of the west end options were analyzed separately to determine the cost of each individual improvement. Costs were developed for the following improvements
    - o Signalized RCUT at Jarvis St
    - o Overpass with RI/RO at Jarvis St
    - o Realignment of Alpine Dr
    - o RI/RO at Alpine Dr
    - o Acceleration/deceleration lanes at weigh station
    - o Acceleration/deceleration lanes at rest area
    - o Partial RCUT at Bowers Dr
    - o South Frontage Rd from Jarvis St to Armstrong Blvd
  - Kelsey walked through the operations at Jarvis St. The operational analysis showed that the 2025 no build and an unsignalized RCUT would operate with significant delay. A signalized RCUT would operate well in 2025 and through 2035, but by 2045 delay could start to become excessive and dual turn lanes would be recommended to reduce delay.
  - The following discussion was held while reviewing the West End Concepts:
    - o Angie explained how due to the uncertainties of TH 10 in Elk River it would be difficult to come to one recommended solution. She proposed to document the analysis we have done and come up with a few recommendations to be further evaluated with TH 10 in Elk River.
    - o The TAC agreed that further study of TH 10 to the west is necessary to come to a solid recommendation in this area.
    - o The TAC group proposed an interim solution of a RCUT at Jarvis and a partial RCUT at Alpine with no connection/realignment between Jarvis and Alpine. This would improve safety at the intersections, but without signalization delay would still be excessive. Existing median openings could possibly be used for two of the RCUT U-turns.
    - o

#### **4. Public Involvement**

- Angie shared an evaluation scoring example. The TAC thought it would be good for an open house setting to easily display how the concepts were evaluated
- Meeting with the Anoka County Board on Feb 26
- Planning to meet with the Steering Committee the week of March 11<sup>th</sup>, property owner meetings the week of March 18<sup>th</sup>
- Open house planned for early April

- Angie will provide noted that we have shifted engagement with the public to late February/March to allow for time to dismiss concepts and be in conference on what is moving forward for public consumption. She noted that this does not extend the study and we are still on track with our overall predetermined schedule.

#### **5. Next Steps/Upcoming Meetings**

- Next TAC meeting is planned for March 21<sup>st</sup> to further evaluate options and determine what will be presented at the open house.



# **Ramsey Highway 10 Corridor Improvements Technical Advisory Committee (TAC) Meeting #6**

**March 21, 2019  
Ramsey City Hall  
The Lake Itasca Meeting Room  
10:00 am – 12:00 pm**

## **MINUTES**

**Attendees:** Tim Gladhill, Bruce Westby, Elwyn Tinklenberg, Sean Sullivan, Chloe McGuire Brigl, Melissa Barnes (phone), Derek Lehrke, Ashley Roup, Joe MacPherson, Jack Forslund, Angie Bersaw, Ross Tillman, Kelsey Retherford

### **1. Introductions and Meeting Overview**

- The purpose of the TAC meeting was to recap on recent agency meetings, review updates to the concepts and new concepts, review cost estimates, and discuss input on the draft Tier 2 evaluation summary.

### **2. Recap Recent Meetings**

- Angie recapped the input received at the Anoka County Board Meeting (February 26<sup>th</sup>)
  - i. There were no major concerns with project direction thus far.
  - ii. Mixed feelings on the need for railroad grade separation at Sunfish Lake Blvd
    - Commissioner Look desired a rail grade separation at both Ramsey Blvd and Sunfish Lake Blvd; others were mixed on need for grade separation at both locations and were supportive of studying alternative cost-effective solutions that stays true to intent of Hwy 10 Access Planning Study.
  - iii. Important to keep momentum to fund Hwy 10 improvements
    - Elwyn requested Bolton & Menk identify potential next steps to start utilizing the \$3.5 M of funding at Ramsey Blvd
- Angie recapped the Design Workshop (March 8<sup>th</sup>)
  - i. The workshop had staff from all agencies involved come together to brainstorm more ideas of possible options for TH 10 at Sunfish Lake Blvd.
  - ii. The key findings were:
    - At-grade rail was found to be acceptable
    - New variations were devised for the Overpass with RIRO but with TH 10 going over Sunfish Lake Blvd
      - Looked at full movement access
      - Limited movement access
      - Different traffic control option
    - Collector-Distributor Road idea
      - This was another idea that came out of the workshop but when drawing it up it was determined that there was not sufficient space to fit this

### 3. Concept Development and Evaluation

- *Ramsey Blvd Concepts*
  - Ross and Kelsey reviewed the concepts at Ramsey Blvd
  - Options still left for Ramsey:
    - o Tight Diamond, Folded WB Off Tight Diamond, Overpass with RI/RO, and Tight Diamond with W Frontage Rd
    - o Tight Diamond (Option 2), Folded WB Off Tight Diamond (Option 4), Overpass with RI/RO (Option 7A) were all the same as shown at the last TAC meeting
    - o Overpass with RI/RO (Option 7B) was a modified option that moved the westbound RI/RO west of Ramsey Blvd based on comments from the last TAC about utilizing the parcels west of Ramsey since they are a full take and trying to minimize the parcel impact to the east of Ramsey. Although this option has a lower ROW cost than Option 7A, the overall cost is higher due to more retaining wall needed and additional lanes needed with a four-legged vs three-legged intersection of Ramsey and the Frontage Rd.
    - o Tight Diamond with W Frontage Rd (Option 9) was presented as an option. This option:
      - Keeps most of the properties west of Ramsey which were all shown as full takes in the other options.
      - The frontage road west of Ramsey was shown along the WB TH 10 alignment that the parcels which are already only ~160-300 feet deep would not become smaller.
      - Requires reconstruction of WB TH 10 from Ramsey to Armstrong and requires partial reconstruction of the WB Exit Ramp at Armstrong. City concerned with any reconstruction and/or closures of Armstrong Blvd ramps during future construction at Ramsey and Sunfish. Bolton & Menk noted there may be an option that avoids impacts to Armstrong Blvd but would require acquisition of a few properties since they would not be able to be served with the frontage road.
      - These properties to the west do not currently have city sewer or water which would need to be added (need to factor in cost of this, City to provide cost).
      - City to determine tax base implications to keep versus acquire these properties for consideration with overall costs of this improvement option.
      - Question was brought up if police and fire would be okay with the length of this road ending in a cul-de-sac.
      - M&G Trailer has plans to redevelop their site
      - RV world is planning to expand. Since they do not have the space to expand at their current location they may need to consider relocating.
      - BMI to send maps with parcel acquisition assumptions.
    - o Costs were presented for each of the Ramsey options
      - Option 7A is the lowest cost option even though it has the highest ROW cost. Option 9 cost will be higher once the cost of sewer and water is added.
    - o A Cost-Benefit graph with all the Ramsey options were shown
      - Graph shows that Option 7A. Overpass with RI/RO is the lowest cost option with a high benefit. All other options offer a slightly higher benefit at a greater cost

- The project benefit was determined scoring all criteria from the evaluation matrix evenly. Green measures scored three points, yellow scored 2 points and red scored one point.
- *Sunfish Blvd Concepts*
  - Ross and Kelsey reviewed the concepts at Sunfish Lake Blvd.
  - Options still left for Sunfish:
    - Same as last time: Sunfish Overpass with RI/RO, Grade Separated Roundabout, Center Turn Overpass
    - New options: brought back the High-T concept, new flyover concept, and TH 10 Overpass with RI/RO options envisioned at the design workshop
  - New Option: High T with Ped Overpass (Option 7A)
    - This option was brought back as the pedestrian accommodations were not fully analyzed and cost had not been determined. The ped bridge over TH 10 would need such a significant clearance that it would require a double loop to get pedestrians up or down which is not a desirable accommodation
  - New Option: High T with Ped Underpass (Option 7B)
    - This option shows the pedestrian accommodation through a tunnel under TH 10. This would result in a tunnel that is ~400 feet long which is not a desirable accommodation
  - New Option: Flyover (Option 8)
    - This option was analyzed as it would have minimal ROW impacts and overall cost, however, eliminating direct access between TH 10 and Sunfish would result in a large increase in traffic along the frontage road between Sunfish and Thurston (over 7000 ADT) which would have major delays and queues extending the length of the frontage road.
  - New Option: RI/RO with WB Exit Ramp (Option 9A)
    - This option consists of a RI/RO for eastbound TH 10 traffic, provides direct access to Sunfish for WB TH 10 traffic exiting, and eliminates access onto WB TH 10 from Sunfish. The 2017 SBR movement is 1500 veh/day that would be displaced (100-200 during the peak hours today and through 2045 as this is not a movement anticipated to have much growth).
    - The concept shows a roundabout at the intersection of Sunfish and the Frontage Rd, but the traffic control could be a signal as well. A preliminary look at traffic volumes showed that queuing would not extend to the railroad tracks.
  - New Option: RI/RO (Option 9B)
    - This option is similar to Option 9A, but has a RI/RO for both directions of TH 10 traffic allowing for all movements. RI/RO location can be moved and actual design could be tighter so that it is less impactful to properties.
    - City stressed that council will question the ease of the heavy southbound to eastbound TH 10 movement. Bolton & Menk should quantify the time it takes today vs with this design. Could be less time with this design due to the delay at the signal today.
  - Costs were presented for each of the Sunfish options
    - The new RI/RO options were found to be the lowest cost other than the Flyover option which cannot function with the traffic volumes. The SPUI is the most expensive option due to the large cost of the TH 10 bridge.
  - A Cost-Benefit graph with all the Sunfish options were shown
    - The graph shows that the option with a lower cost and high benefit is the full RI/RO (Option 9B). The RI/RO w/WB Exit Ramp (Option 9A) is the same



- cost, but the benefit is slightly lower since it does not provide access to all movements.
  - The High-T and Flyover options are shown to have the lowest benefit.
  - The TAC agreed based on cost and the evaluation that the SPUI, High-T options and Flyover could be eliminated.
- Frontage Rd concepts were also presented for the area southeast of the intersection.
  - Option 1 is what is currently shown in the Sunfish options. This cost is included for all of the Sunfish options. The option would require the full take of a few of the properties on the west end and partial takes of others. Total cost is estimated to be about \$5.7 M with ROW acquisition accounting for \$3.4 M
  - Option 2 follows the same alignment as Option 1, but utilizes existing roadway not starting until Tungsten St. This option greatly reduces ROW costs as no full takes are needed.
  - Option 3 is the most costly with ROW acquisition totaling \$10.5 M. The City requested the road be shown straight so that it minimizes impacts to a parcel with development planned.
  - TAC recommended updating all of the Sunfish concepts to show/include the cost of Frontage Rd Option 2 instead of Option 1.
- *West End Concepts*
  - An interim option was discussed at the last TAC meeting that would utilize as much of the existing roadway as possible to keep costs low.
  - The interim option has unsignalized RCUTs at both Jarvis and Alpine. The cost for improvement on TH 10 is estimated to be ~\$1 M.
  - Other modifications to the surrounding roadway network would also be needed that were not included in the cost to provide access to the RCUTs and limit access elsewhere.

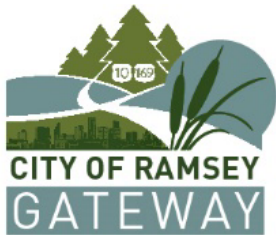
#### **4. Public Involvement**

- Angie shared upcoming meetings.
- The City Council update is planned for April 9<sup>th</sup>
- The Anoka County Council update will be on April 1<sup>st</sup>.
- Other meetings are TBD pending council updates.
- Melissa updated the group that MnDOT Metro has a meeting planned with District 3 staff to discuss a potential joint study of TH 10 to the west.

#### **5. Next Steps/Upcoming Meetings**

- Next TAC meeting is planned to be after the open house. Material for the open house will be sent out to TAC members for approval via email. Tentatively the open house is planned for May with the next and final TAC meeting planned for June.





# **Ramsey Highway 10 Corridor Improvements Technical Advisory Committee (TAC) Meeting #9**

**June 20, 2019  
Ramsey City Hall  
Council Chambers  
10:00 am – 12:00 pm**

## **MINUTES**

**Attendees:** Tim Gladhill, Bruce Westby, Sean Sullivan, Chloe McGuire Brigl, Melissa Barnes, Ashley Roup, Joe MacPherson, Steve Peterson, Angie Bersaw, Eric Johnson, Ashley Hudson

### **1. Welcome and Meeting Overview**

- The purpose of the TAC meeting was to recap on recent elected official input, discuss agency support for the recommended vision, and next steps for the project

### **2. Recap Public Input**

- Ashley reviewed the business and property owner input summary and the public open house input summary
- Angie reported a concern was raised by residents along Riverdale Drive near Sunfish Lake Boulevard regarding the right-in/right-out improvement options. Their concern was the additional traffic that would be routed onto Riverdale Drive from the southbound Sunfish Lake Blvd to eastbound Highway 10 movement with these options. Bolton & Menk reviewed the traffic analysis and found an additional 5,300-6,000 vehicles per day could be expected on Riverdale Drive with these options in 2045. The total daily volumes on Riverdale Drive with these options is projected to be 8,000 vehicles per day in 2045 which is within the range that a two-lane roadway can adequately carry. In comparison, the projected total volumes for improvement concepts such as the Center Turn Overpass and Grade-Separated Roundabout are in the range of 2,300 daily vehicles on Riverdale Drive in 2045.

To address this concern, Bolton & Menk developed an additional concept that would provide a more traditional loop ramp for the southbound Sunfish Lake Blvd to eastbound Hwy 10 movement, rather than the right-in/right-out. These options would result in a total of 3,400 vehicles per day on Riverdale Drive in 2045 but would also come at a cost of approximately \$4-6 million more than the same options without the loop ramp. The TAC determined to revisit this issue during preliminary design.

### **3. Concept Evaluation Documentation**

Angie reviewed a summary of the concept development and evaluation process to-date with this study. She noted this would form the basis of the final report.

### **4. Recommended Vision**

The TAC recommended the Folded Tight Diamond Concept at Ramsey Boulevard. This concept was recommended due to its ability to effectively accommodate future traffic operations and all users, to minimize right-of-way impacts where possible, to effectively use property that must be acquired in the northwest quadrant of the intersection, and to meet the needs of a community gateway through familiar interchange design and railroad grade separation. The cost estimate

for this improvement concept is \$52-58 million (in 2025 dollars) which includes construction, right-of-way acquisition and Right-of-Way Acquisition Loan Fund (RALF) payback, and engineering.

The TAC recommended to continue planning for the frontage road connection on the north side of Highway 10 between Ramsey Boulevard and Sunfish Lake Boulevard. This frontage road was identified in the 2014 Highway 10 Access Planning Study. The cost estimate for this improvement concept is \$12-14 million (in 2025 dollars) which includes construction, right-of-way acquisition and Right-of-Way Acquisition Loan Fund (RALF) payback, and engineering.

The TAC recommended two improvement options for the City Council and County Transportation Committee consideration at Sunfish Lake Boulevard. Both options are more non-traditional interchange designs that include at-grade right-in/right-out movements for access to/from Highway 10. This type of at-grade configuration was considered as means to keep costs down, consistent the intention of the 2014 Highway 10 Access Planning Study. The primary difference between the two improvement concepts is railroad grade separation or not. The TAC felt whether or not railroad grade separation was needed at Sunfish Lake Boulevard was a policy decision to be determined by the City Council and County Board.

The first option – a Sunfish Lake Blvd overpass of Highway 10 and the BNSF railroad with right-in/right-out access to Highway 10. The cost estimate for this improvement concept is \$61-68 million (in 2025 dollars) which includes construction, right-of-way acquisition and Right-of-Way Acquisition Loan Fund (RALF) payback, and engineering.

The second option is illustrated in Figure 24 and is a Highway 10 overpass of Sunfish Lake Boulevard with at-grade railroad crossing and right-in/right-out access to Highway 10. The concept illustrates a roundabout on Sunfish Lake Boulevard, but it is assumed a traffic signal could also work. The cost estimate for this improvement concept is \$34-38 million (in 2025 dollars) which includes construction, right-of-way acquisition and Right-of-Way Acquisition Loan Fund (RALF) payback, and engineering.

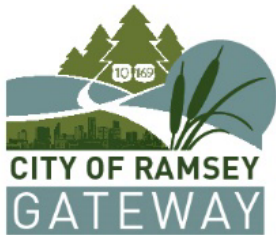
## **5. Funding Strategy**

Angie noted Bolton & Menk is preparing a BUILD application on behalf of the City of Ramsey for the Ramsey Blvd and Sunfish Lake Blvd project. The TAC agreed to discuss potential funding strategies further at the next meeting.

## **6. Next Steps**

The next steps in the project are:

- Highway 10 Coalition Update – June 26
- Anoka County Transportation Committee - TBD
- Ramsey City Council - TBD
- Next TAC Meeting – July 18
- Property Owner Meetings – TBD
- Interchange Review Committee – Summer 2019



# **Ramsey Highway 10 Corridor Improvements Technical Advisory Committee (TAC) Meeting #8**

**July 18, 2019  
Ramsey City Hall  
Council Chambers  
9:30 am – 11:00 am**

## **MINUTES**

**Attendees:** Tim Gladhill, Bruce Westby, Sean Sullivan, Chloe McGuire Brigl, Melissa Barnes, Ashley Roup, Joe MacPherson, Jack Forslund, Steve Peterson, Angie Bersaw, Ross Tillman, Eric Johnson, Ashley Hudson

### **1. Welcome and Meeting Overview**

- The purpose of the TAC meeting was to recap on recent elected official and property owner meetings, review the recommended vision for Sunfish Lake Blvd and Ramsey Blvd (east end), and discuss funding need and strategy.

### **2. Recap Recent Meetings**

- Angie recapped the input received at the Highway 10 Working Group (June 26<sup>th</sup>)
- Angie and Tim recapped the Ramsey City Council meeting (July 16<sup>th</sup>)
  - i. The council wants to include RR grade-separation at Sunfish Lake Blvd and not sacrifice the transportation and safety benefit for the price included
  - ii. Tim noted that it would be good to have MnDOT and Anoka County at the next City Council meeting so the council can hear the agency input from them
- Angie and Joe recapped the Anoka County Transportation Committee meeting (July 17<sup>th</sup>)
  - i. The county has concern for the price tag too far exceeding the \$100M mark and losing interest from politicians

### **3. Funding Strategy**

- Ashley reviewed the draft funding plan which included existing and place holders for firm funding commitments from project partners. The draft funding plan also included potential competitive funding sources and a preliminary plan of which years to apply, the max award or request, the eligible project items a funding source can be used on, and the grant agreement and program years associated with each. The draft funding plan further totaled up firm funds, estimated likelihood of success in potential competitive funding sources, and the preliminary project cost breakdown in 2025 dollars.
- Eric reviewed how a similar funding plan started and evolved for fully funding the Highway 10 project in Anoka.
  - i. Review of Firm Funding
    - Joe stated that the \$3.5M for RR grade separation is broken down in the following way:
      - \$2M was awarded to the county as result of the City of Ramsey legislative request from LRIP program. This source can be listed under the City of Ramsey firm funds in the draft funding plan.

- Joe stated that Anoka County has money set aside to begin design on the county road interchanges.
      - BMI to provide a scope and fee for Phase II (A and B) for potential city and county partnership to fund need to start the next phase and pursue funding opportunities.
    - Joe stated that County Transit Improvement Board (CTIB) funds were not solely tied to RR crossings anymore and money may be available for the interchange/rr grade-separation projects.
    - Tim noted that including the McKinley Street connection would make the City of Anoka a contributing partner. Discussion between each city staff is still an action item for this incentive.
    - Melissa stated that she was uncertain how much was available in MnDOT RR safety dollars but she will check into it.
    - Melissa stated that the MnDOT CHIP has \$10.5M set aside for 2022-24 pavement preservation from Jarvis Street to Thurston Ave.
  - ii. Review of potential competitive Funding Opportunities
    - Ashley noted that the first application was submitted for BUILD requesting \$25M in July 15, 2019
    - Steve stated that the Regional Solicitation interchange category max award will increase to \$10M for the 2020 solicitation
    - Steve noted that strategically Sunfish Lake Blvd should potentially be the first ask as it was listed as a higher priority in the Intersection Conversion Study than Ramsey Blvd.
    - Steve noted that the Regional Solicitation applications will be due in early April 2020 and preliminary awards will be announced in November or December of 2020.
    - Eric asked Melissa if she knew the future of the MNFP. Melissa estimated that the program would hold another solicitation in the next two years. She said there was still money allocated for it but would check into how those dollars were planned to be used. Eric said that he last heard that MnDOT was going to use it for their projects and not release a future solicitation.
  - iii. Review of Anoka Highway 10 funding plan
    - Eric stated that Regional Solicitation was the first competitive funding source secured and then they went after everything else
    - Eric noted that Anoka County was very helpful in navigating politics to gather support and maintain momentum for securing funds

#### **4. Next Steps/Upcoming Meetings**

- Ramsey City Council Meeting – August 12<sup>th</sup>
- Phase II (A & B) scope and fee

#### **5. Action Items**

- Bolton & Menk:
  - i. Phase II (A & B) scope and fee to city and county week of 7/22
- City of Ramsey:
  - i. Discuss McKinley Street connection with City of Anoka
- Anoka County:
  - i. Check availability of County Transit Improvement Board (CTIB) funds
  - ii. Attend August 12 Ramsey City Council meeting
- MnDOT:
  - i. Check into future of MNHP and any other upcoming potential competitive

funding sources

- ii. Check on availability of funds for RR safety
- iii. Attend August 12 Ramsey City Council meeting



# **Ramsey Highway 10 Corridor Improvements Technical Advisory Committee (TAC) Meeting #9**

**September 19, 2019  
Ramsey City Hall  
Council Chambers  
10:00 am – 12:00 pm**

## **MINUTES**

**Attendees:** Tim Gladhill, Bruce Westby, Sean Sullivan, Chloe McGuire Brigl, Melissa Barnes, Ashley Roup, Joe MacPherson, Steve Peterson, Angie Bersaw, Eric Johnson, Ashley Hudson

### **1. Welcome and Meeting Overview**

- The purpose of the TAC meeting was to recap on recent elected official input, discuss agency support for the recommended vision, and next steps for the project

### **2. Recap Elected Official Input**

- Angie and Joe recapped the Anoka County Transportation Committee (September 3)

The Anoka County Transportation Committee considered the TAC and City Council recommendations at their September 3, 2019 meeting. The Anoka County Transportation Committee expressed support for trying to secure funding for the City's recommendation – Folded Tight Diamond at Ramsey Blvd and Sunfish Lake Blvd Overpass of Highway and Railroad – for a period of two years. However, several County Commissioners expressed concern with the overall cost of the project and the potential inability to find enough funding to make the project a reality. Therefore, the County Transportation Committee qualified their recommendation to revisit the need for rail grade separation at Sunfish Lake Boulevard if funding does not develop in the next two years or by approximately 2022.

- Angie and Tim recapped the Ramsey City Council meeting (September 10)

The Ramsey City Council expressed support for the TAC's recommendation for a Folded Tight Diamond Interchange concept at Ramsey Boulevard and the Sunfish Lake Boulevard Overpass of Highway 10 and the BNSF Railroad. The Council's position on the need for rail grade separation at Sunfish Lake Boulevard is to provide efficient and safe access to the community and the large industrial park located off Sunfish Lake Boulevard.

The Council also expressed support towards a future McKinley Street extension into the City of Anoka to better facilitate connections between industrial users and to support construction staging during the Anoka Highway 10 project in 2023-24.

On the west end of the corridor, the Council supported the TAC's recommendation for a future joint study with Elk River and to revisit the interim proactive safety improvement with MnDOT if conditions dictate an improvement.

-



### **3. Agency Support for Recommended Vision**

General agency support and roles were discussed in terms of next steps. MnDOT expressed support for the city/county initiatives to further the vision for Highway 10 yet noted no funding beyond regular maintenance is planned or programmed for Highway 10 improvements at this time. MnDOT advised the best opportunity to put together funding for projects such as these are to keep the costs as low as possible.

Anoka County and the City of Ramsey agreed to collaborate on legislative and funding requests and to discuss a funding partnership for the next steps in the project such as implementation plan, preliminary interchange approval, and preliminary design.

### **4. Funding Strategy Approach**

Partners discussed hypothetical funding scenarios for one large project or individual interchange projects. Anoka County and the City of Ramsey expressed interest in pursuing CRISI funding through the current solicitation. Bolton & Menk will provide a cost estimate to the City and County for development of a CRISI application and next steps for the project.

Ramsey City Council

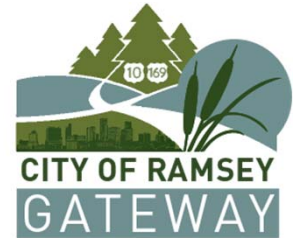
# **Ramsey Gateway Highway 10 Project**

## **City Council Update**

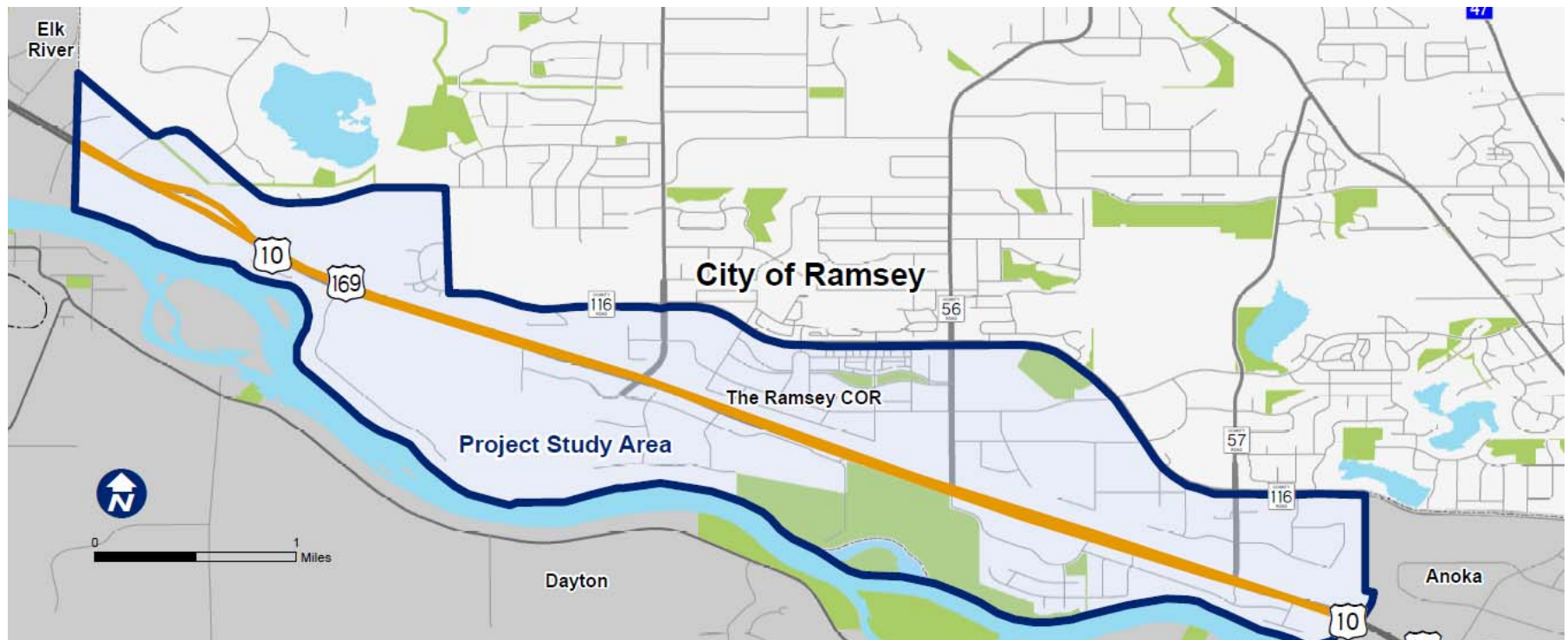
December 11, 2018



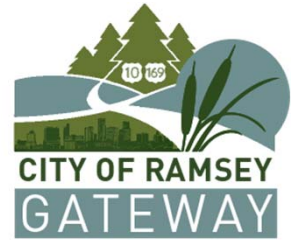
# Meeting Overview



- ✓ Study Recap
- ✓ Concept Development & Evaluation
- ✓ Public Involvement Update
- ✓ Next Steps



# Project Overview



<https://www.youtube.com/watch?v=Zc3qhNxF82o&feature=youtu.be>

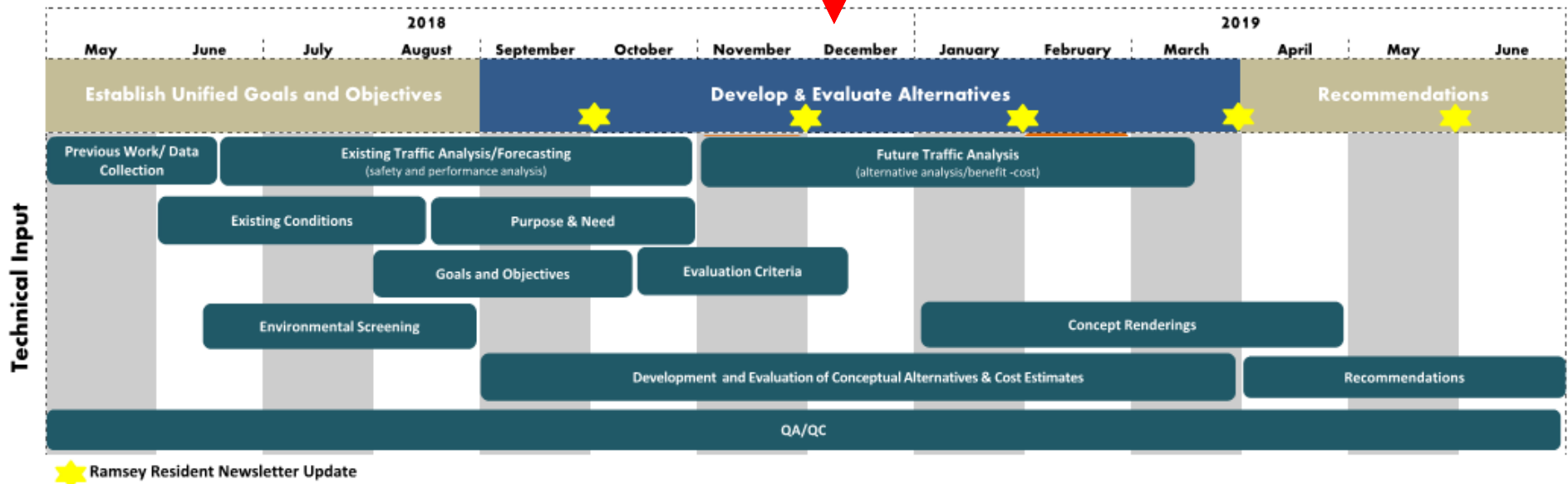
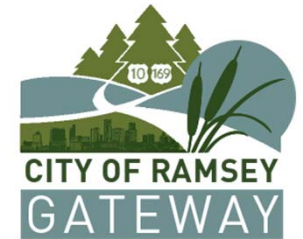


# Goals and Objectives

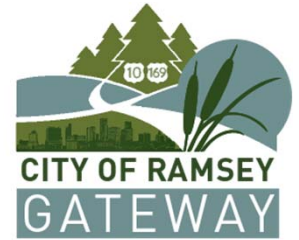
City of Ramsey Strategic Goal	Ramsey Gateway Highway 10 Project	
	Goal	Objective
<i>Smart, Citizen-Focused Government</i>	<b>Safely accommodate all users (motor vehicles, freight, rail, transit, pedestrians, bicyclists)</b>	Eliminate fatal and serious injury crashes
		Reduce all crashes in both frequency and severity
		Provide safe pedestrian and bicycle facilities along roadways and at crossings of roads and rail
		Minimize vehicle delay from railroad operations that results in backups across adjacent intersections and onto Highway 10
<i>A Connected and Active Community</i>	<b>Provide efficient mobility and access for all modes of travel</b>	Provide acceptable mobility and system reliability on Highway 10 for access to Ramsey and beyond including regional and statewide tourism destinations
		Ensure acceptable vehicle delay and travel times for arterial highways (e.g., Highway 10, Sunfish Lake Blvd, Ramsey Blvd, and Armstrong Blvd)
		Serve the projected regional and local growth demands
		Provide reasonable and responsible access to optimize mobility and reduce the need for vehicles to enter onto Highway 10 for short trips
		Provide convenient access for pedestrians and bicyclists to serve demand
<i>Financial Stability</i>	<b>Develop a financially responsible infrastructure implementation plan</b>	Develop projects and phasing that meet schedule and funding constraints
		Minimize right-of-way costs
		Minimize lifecycle costs
		Maximize benefit-cost of improvements
		Maximize potential to secure multiple funding scenarios
<i>A Balance of Rural Character and Urban Growth</i>	<b>Support plans to build a connected and recognizable Highway 10 corridor</b>	Attract visitors and residents to the Highway 10 corridor by car, train/transit, bike or foot
		Create a cohesive and inviting aesthetic including appropriate signage, lighting and landscape
		Define right-of-way needs for clarity to affected businesses and property owners
		Accommodate existing and future land uses
		Promote business expansion
		Support connections to Ramsey assets and destinations (parks, trails, The COR, etc.) from either side of Highway 10
		Seek consistency with state, regional and local plans
	<b>Provide infrastructure improvements compatible with the natural and built environment</b>	Avoid impacts to environmental resources
		Minimize impacts to the built environment



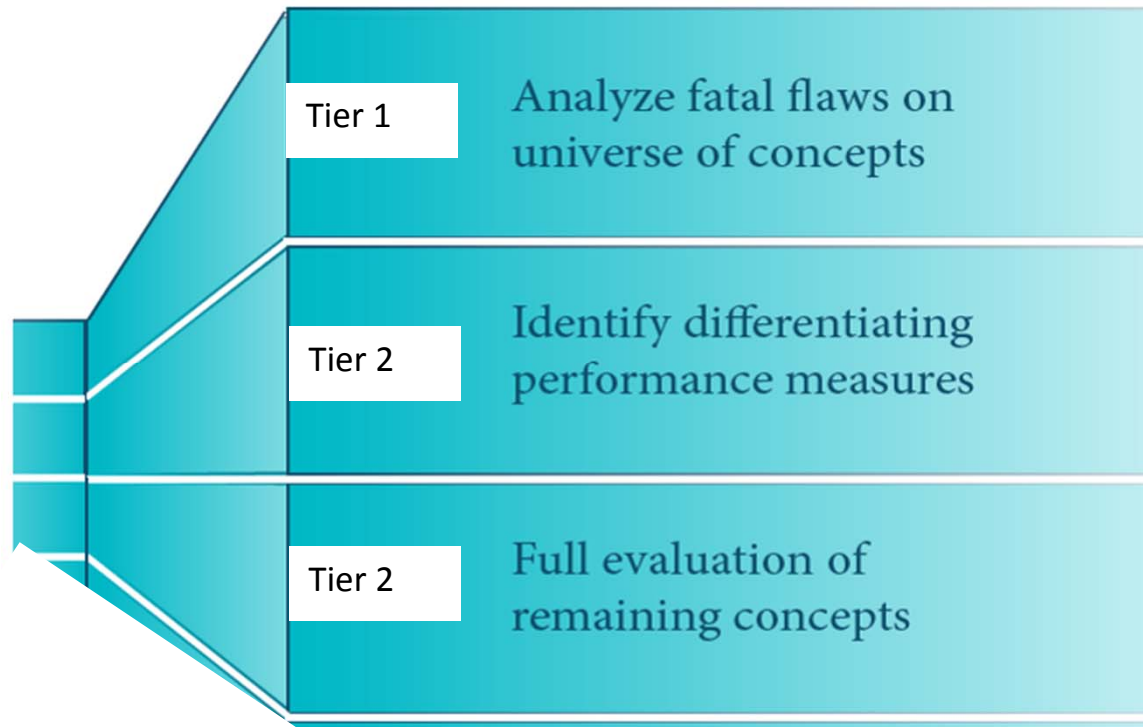
# Project Schedule



# Concept Evaluation Two Tier Process



Universe  
of  
Concepts





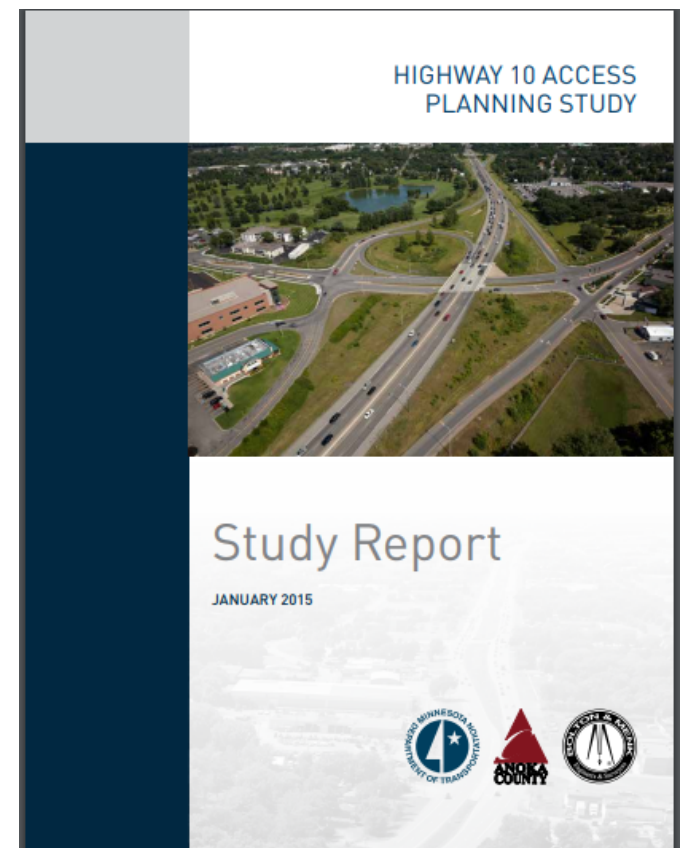
# Universe of Concepts (Started from Access Planning Study)

## East End

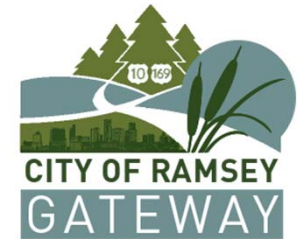
- Grade separate Sunfish Lake Blvd
- Grade separate Ramsey Blvd
- Railroad grade separation at Sunfish Lake Blvd
- Railroad grade separation at Ramsey Blvd
- Supporting frontage road connections

## West End

- Reduced Conflict intersection at Alpine Drive
- Reduced Conflict intersection at Bowers Drive
- Supporting frontage road connections

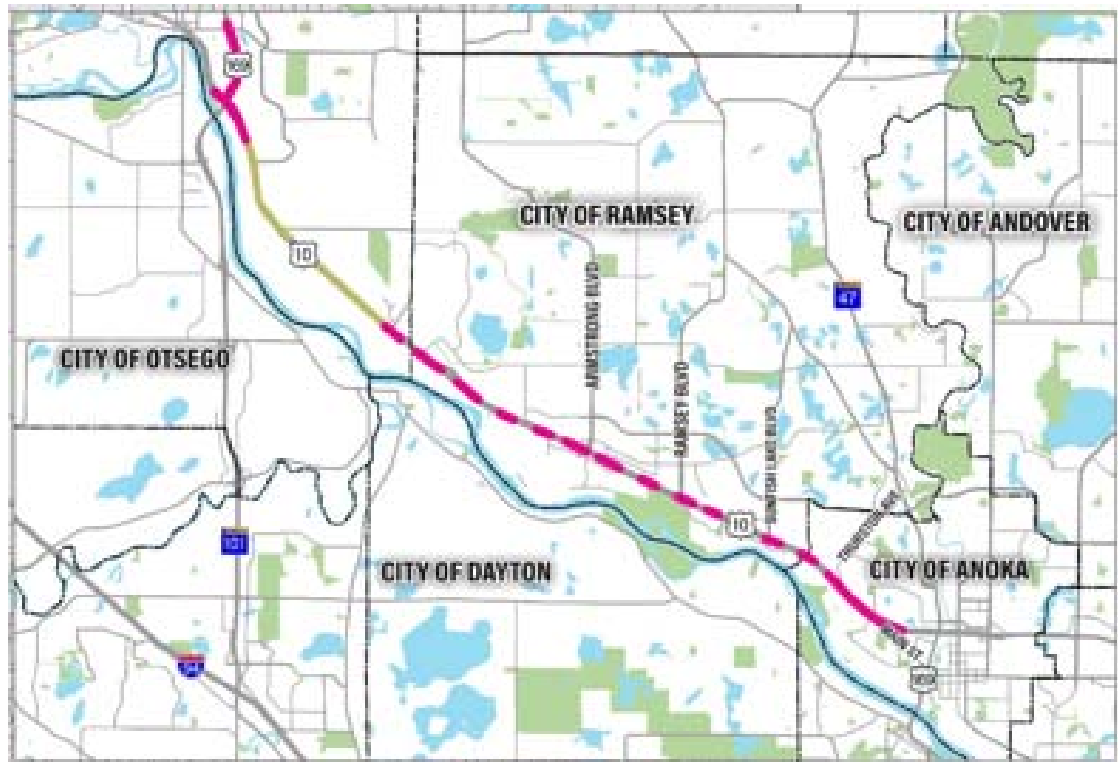


# Concept Development



## New Findings

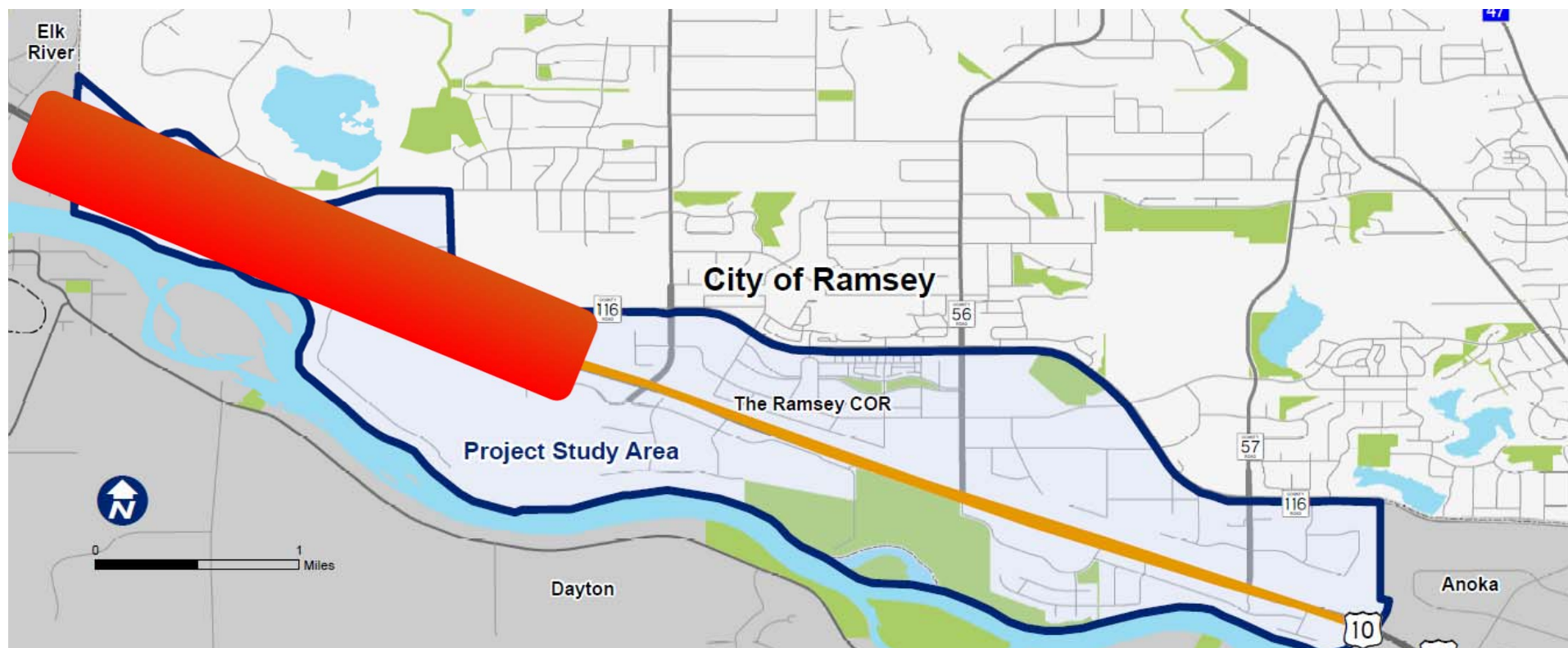
- 2025 and 2045 traffic forecasts
- Influence of Anoka and Elk River projects complete by 2025
- Not practical to phase interchange construction
  - Allows for study of additional interchange types
- At-grade solutions limited





# West End Universe of Concepts

- Jarvis/Alpine and Bowers Drive
  - At-Grade Full Access
  - At-Grade Reduced Conflict (non-signalized)
  - At-Grade Reduced Conflict (signalized)

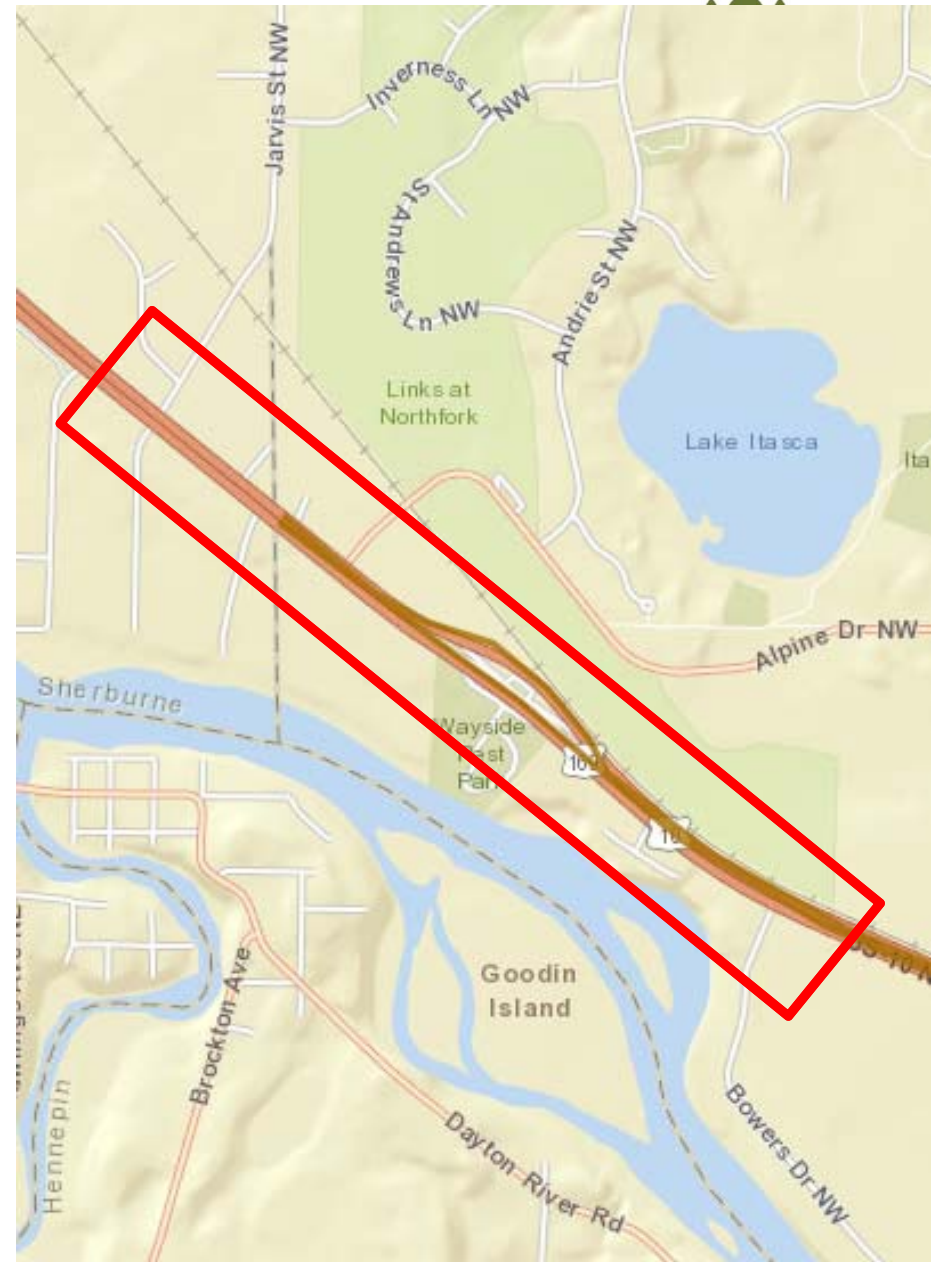




# Tier 1 Screening

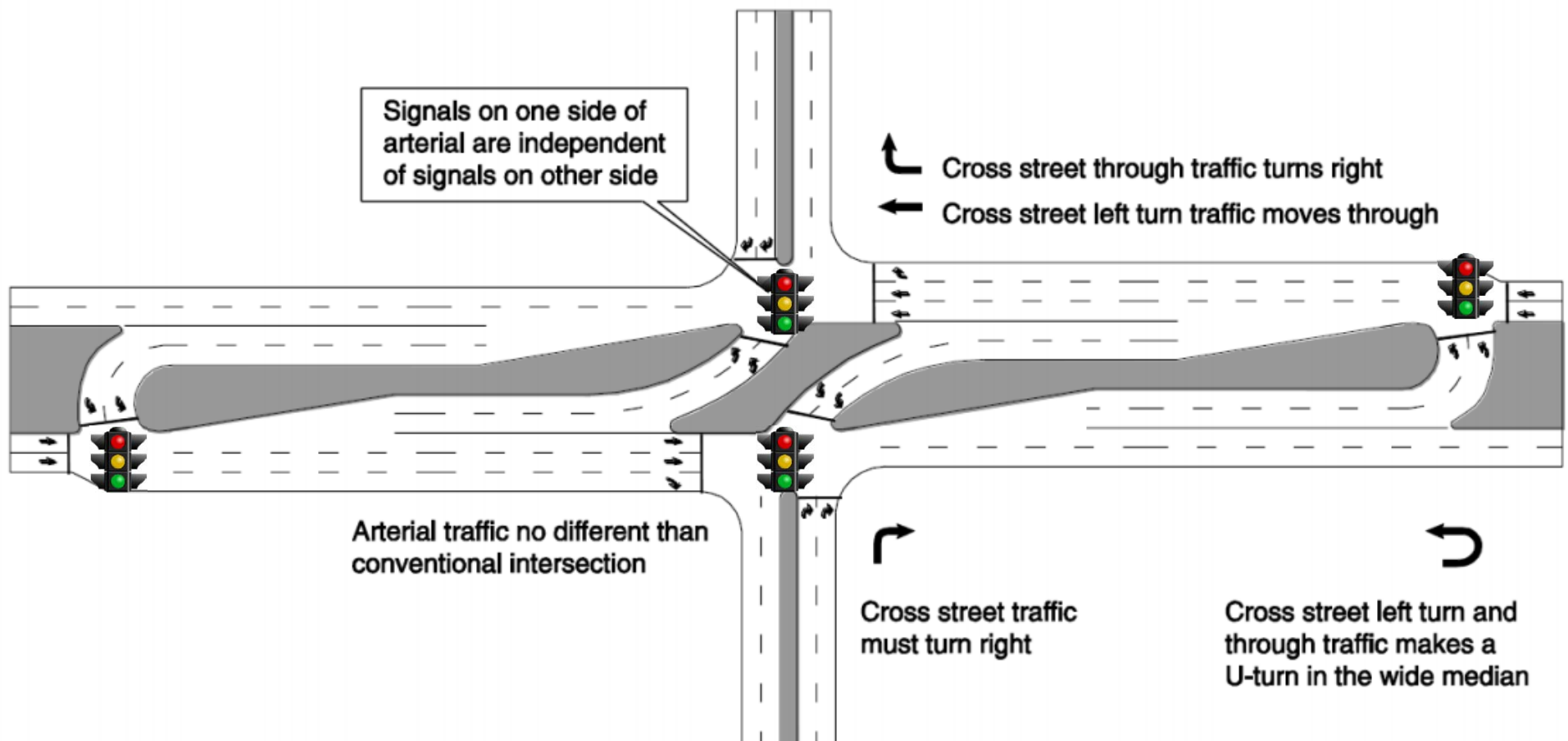
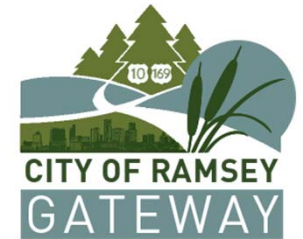
## West End

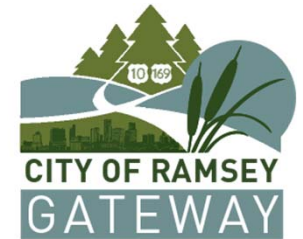
- Concepts Dismissed
  - At-Grade Full Access (non-signalized)
  - At-Grade Reduced Conflict (non-signalized)
- Conflicting Goals
  - Goal 1: Safety
  - Goal 2: Operations





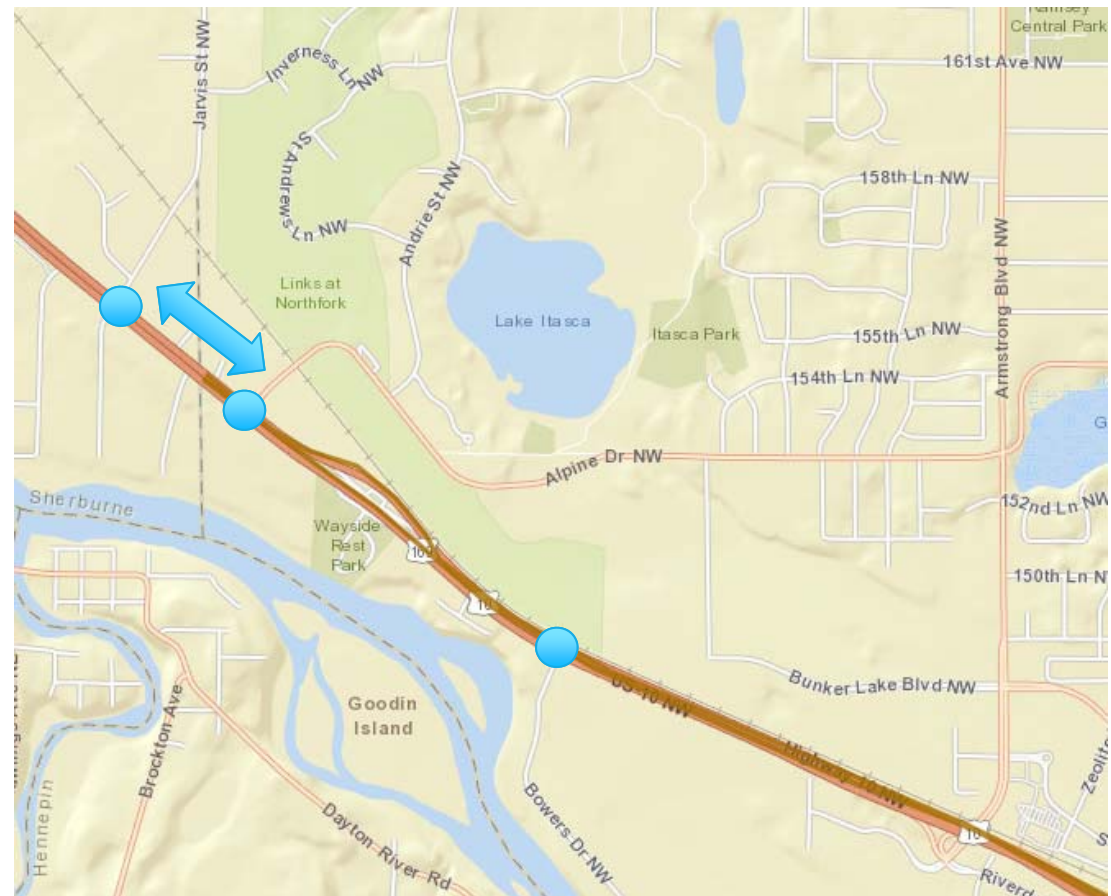
# Signalized RCUT Example





# Concepts to Carry Forward

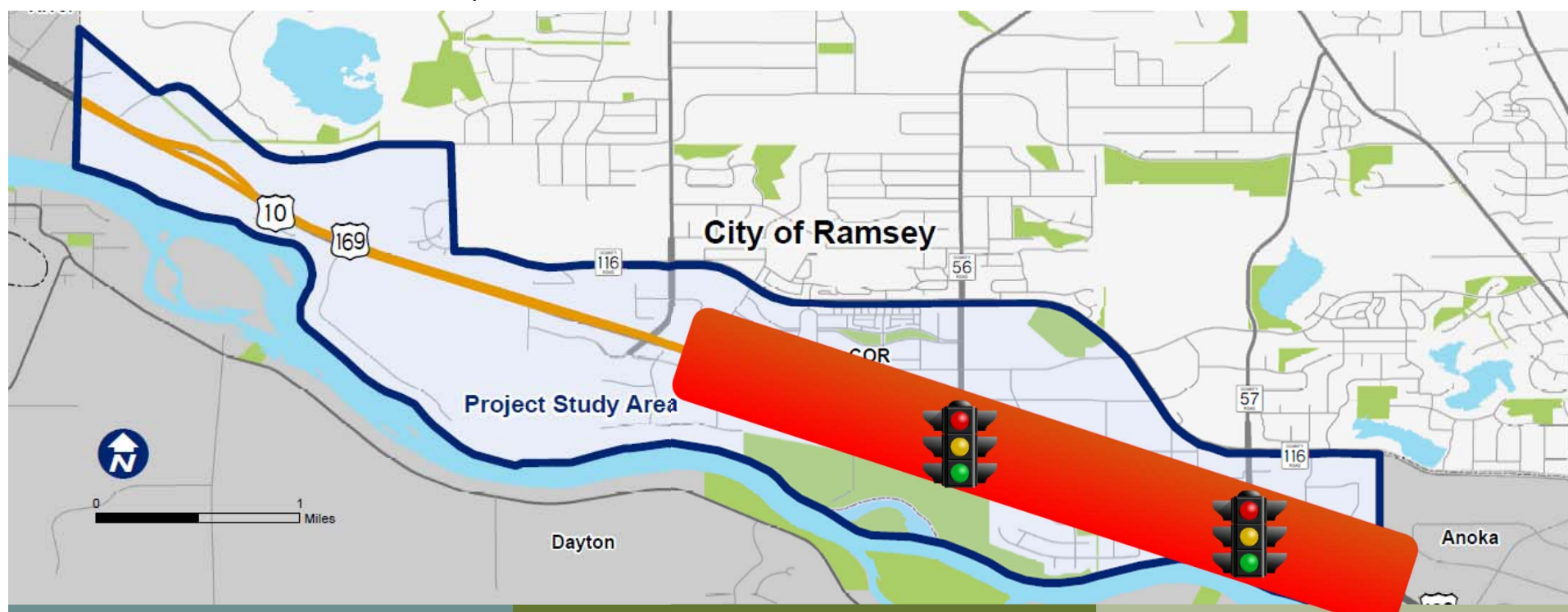
- West End:
  - Signalized RCUT at Jarvis St **OR** Alpine Drive
  - Right-In/Right-Out at Bowers Drive
  - Frontage Road Connections





# East End Universe of Concepts

- 6-lane Highway 10
- Ramsey Blvd
  - At-Grade
  - Partial Grade Separation
  - Full Grade Separation
  - Railroad At-Grade
  - Railroad Grade Separation
- Sunfish Lake Blvd
  - At-Grade
  - Partial Grade Separation
  - Full Grade Separation
  - Railroad At-Grade
  - Railroad Grade Separation





# Tier 1 Screening

## East End

- Concepts Dismissed

- 6-lane Highway 10
- At-Grade Full Access at Ramsey & Sunfish Lake
- Traditional Full Access Grade-Separation at both Ramsey & Sunfish Lk
  - Traditional full access grade-separation at Sunfish Lake Blvd\*
  - Partial grade-separation at Ramsey Blvd
- Railroad underpass at Sunfish Lake Blvd

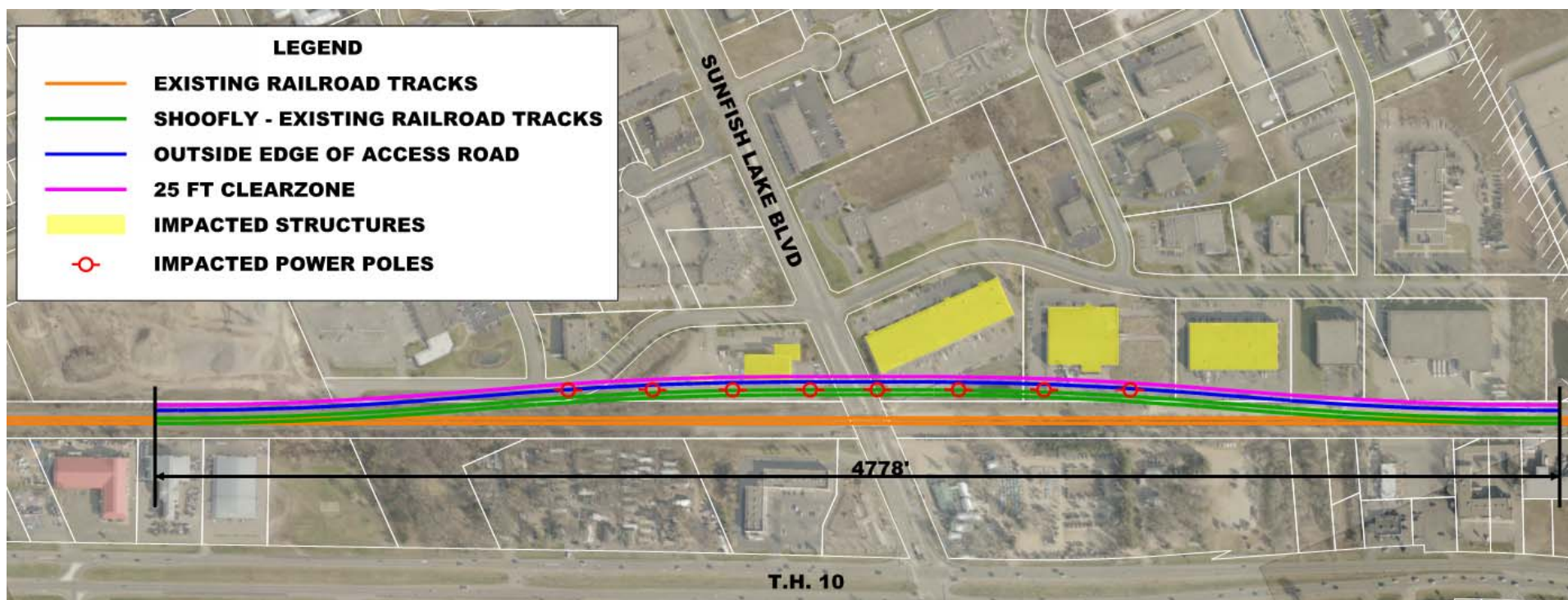
- Conflicting Goals

- Goal 1: Safety
- Goal 2: Operations
- Goal 3: Cost
- Goal 4: Support plans/business
- Goal 5: Compatible with environment

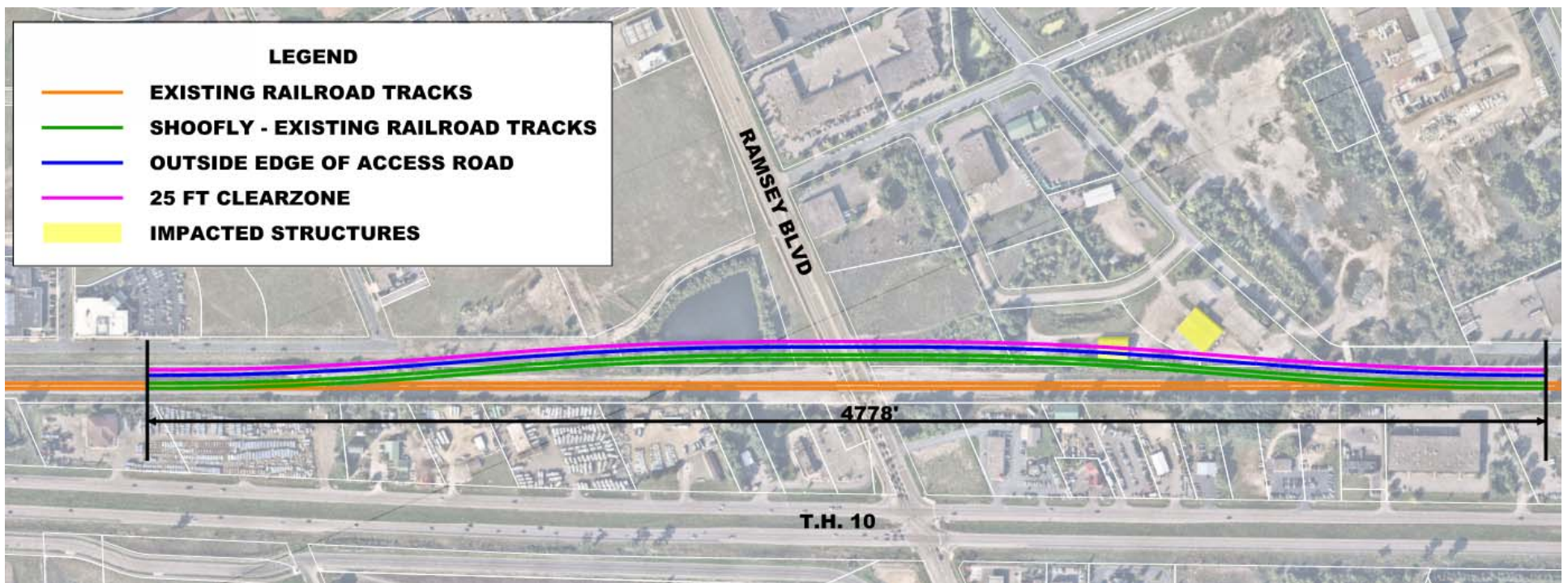
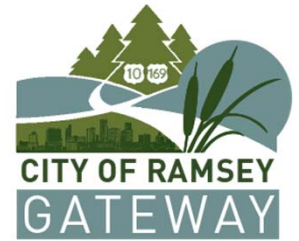
*\*Will evaluate non-traditional grade separation options (e.g., overpass with RI/RO and rail grade separation)*



# Sunfish Lake Blvd Railroad Underpass

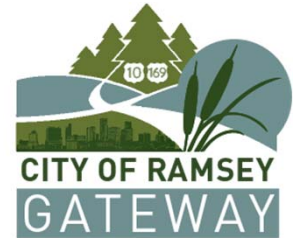


# Ramsey Blvd Railroad Underpass





# Concepts to Carry Forward

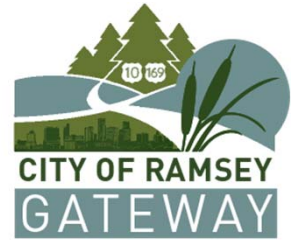


- Ramsey Blvd:
  - Railroad Overpass
  - Railroad Underpass
  - Traditional Full Access Grade Separations
    - Standard Diamond Interchange
    - Tight Diamond Interchange
    - Folded Diamond Interchange
  - Non-Traditional Full Access Grade Separation
    - Overpass with Right-in/Right-out



# Concepts to Carry Forward

- Sunfish Lake Blvd:
  - Partial Access Grade Separation
    - High T (at-grade Railroad)
  - Non-Traditional Full Access Grade Separation
    - Overpass with Right-in/Right-out (Railroad overpass)

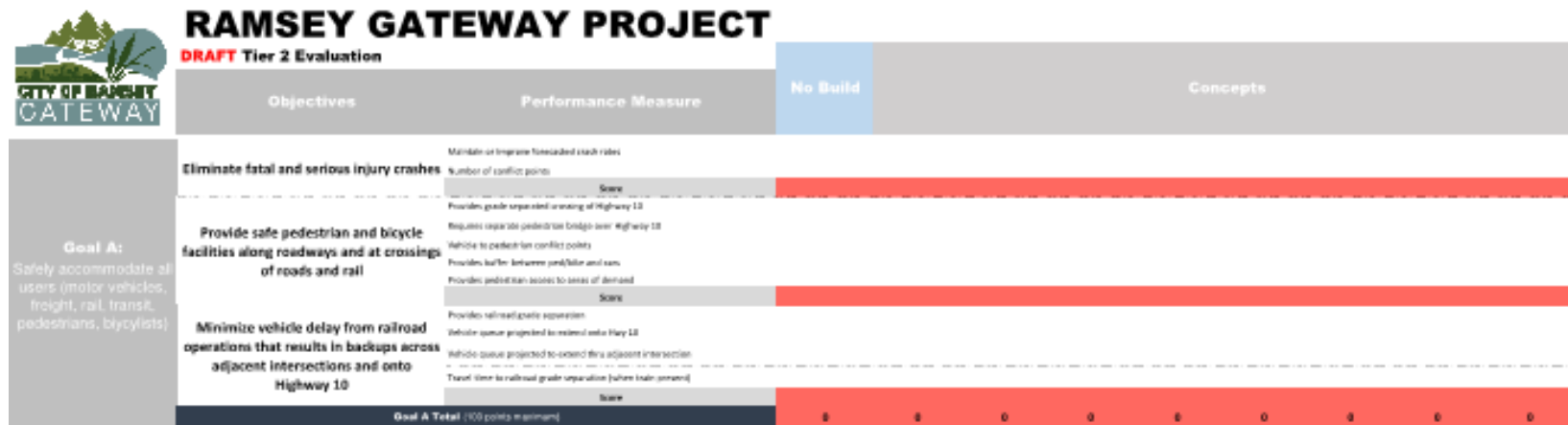


High T - Hwy 13 at CSAH 101 (Savage)



Overpass with RI/RO – Hwy 169 at CSAH 3 (Belle Plaine)

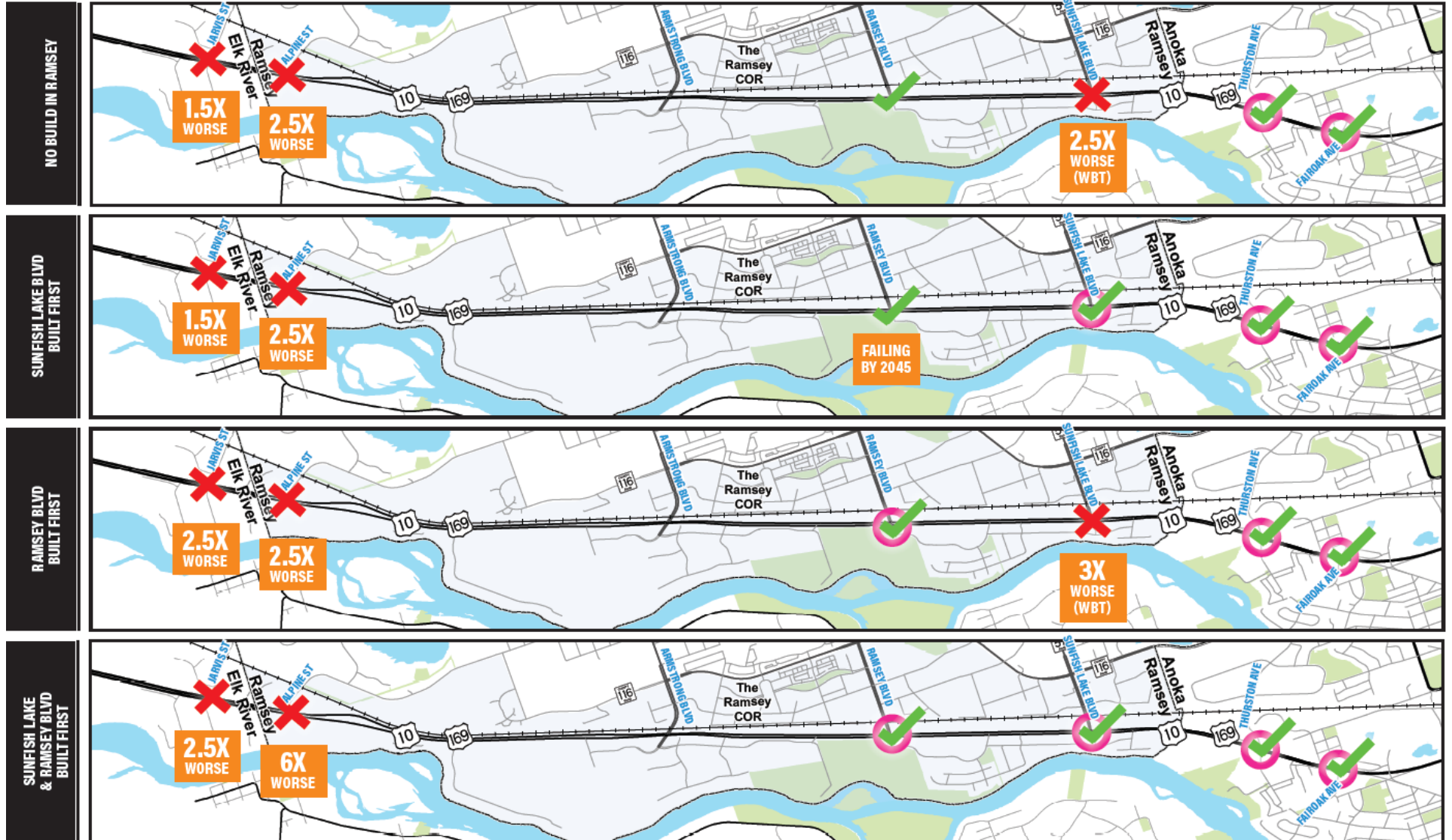
- Develop Concepts
- Complete Tier 2 Evaluation





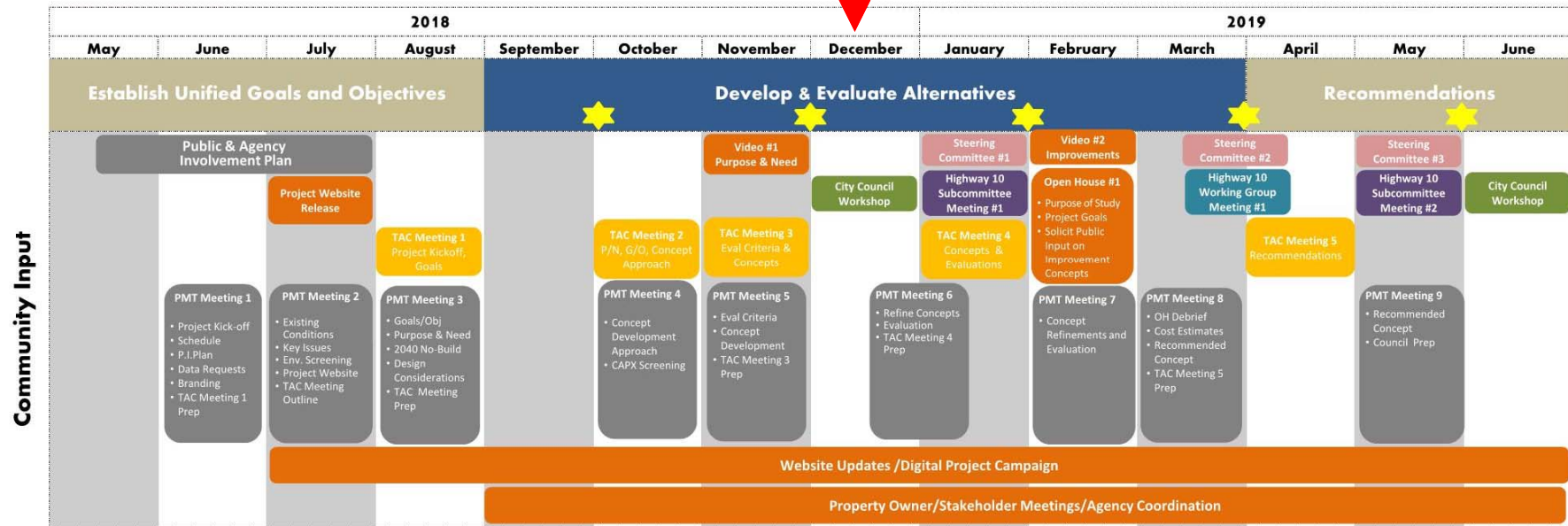
# RAMSEY GATEWAY - WHERE TO INVEST FIRST?

To begin to analyze where investment should start, traffic modeling was used to understand operational impacts of each first build scenario shown below.



# Public Involvement & Next Steps

- Steering Committee – January
- Highway 10 Subcommittee – January
- Public Open House – February



# **Ramsey Gateway Highway 10 Project**

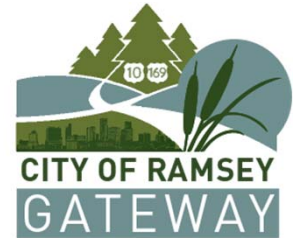
## **City Council Workshop**

January 29, 2019

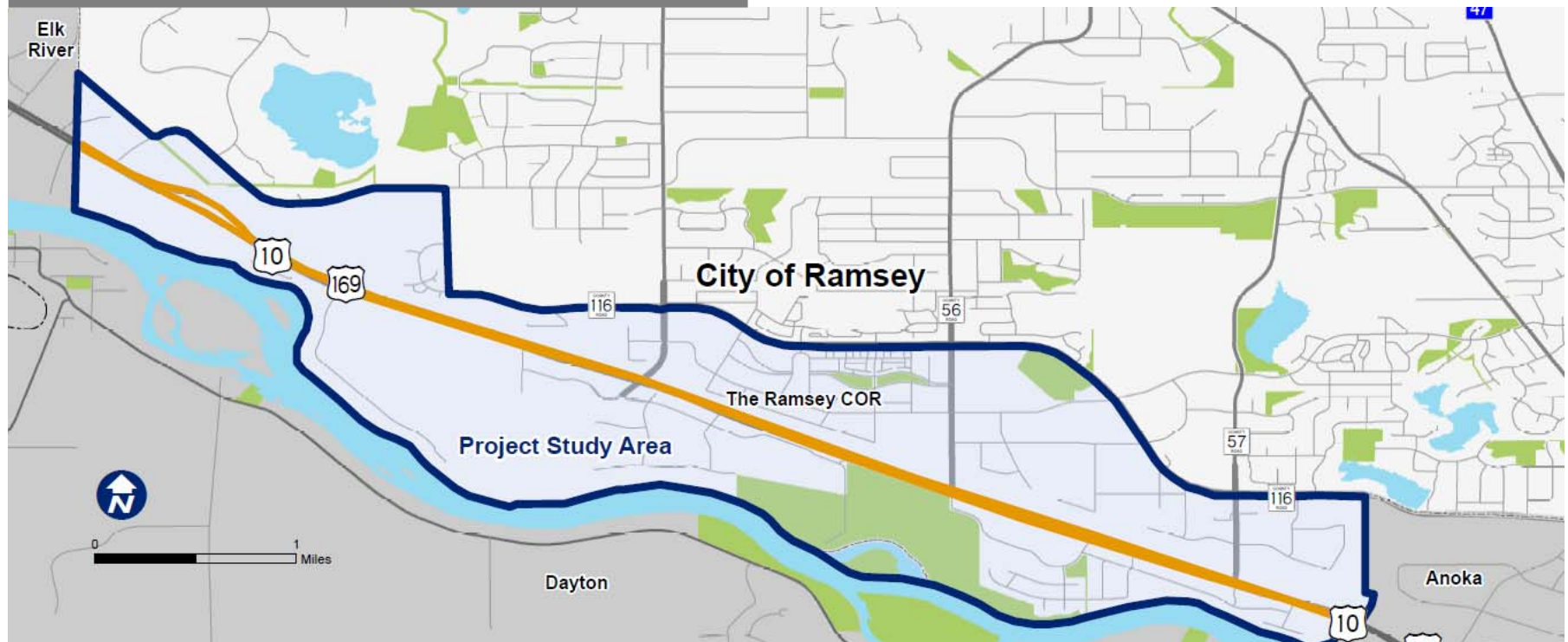


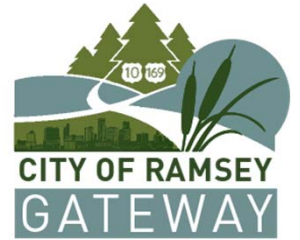


# Meeting Overview



- ✓ Study Recap
- ✓ Purpose of Council Update
- ✓ Draft Improvement Concepts
- ✓ Concept Evaluation
- ✓ Schedule and Next Steps



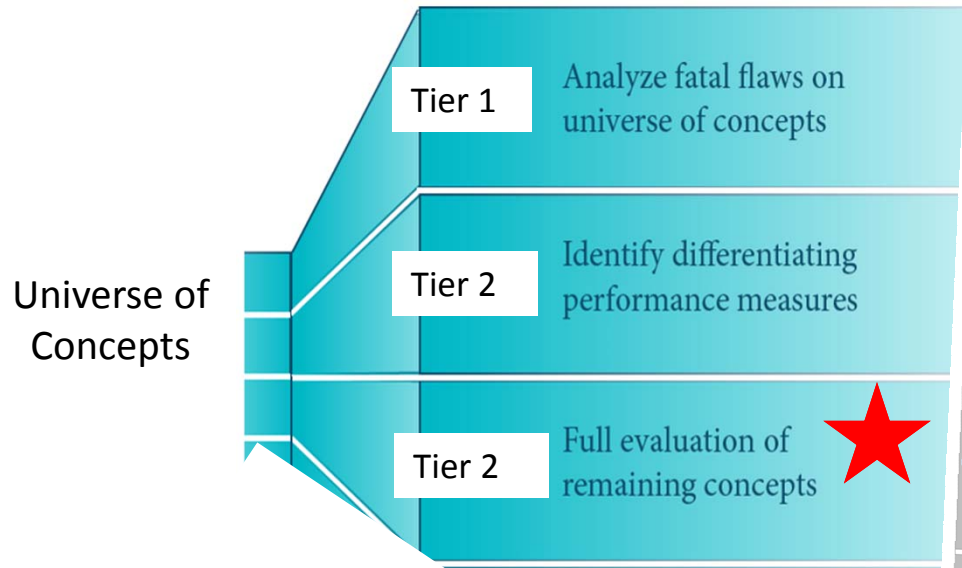
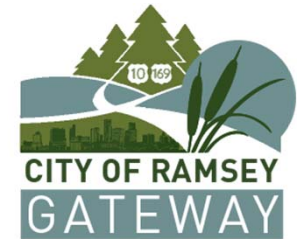



# Ramsey Blvd Concepts – See Link

- Railroad Grade Separation Options
- Standard Diamond
- Tight Diamond
- Folded EB On Tight Diamond
- Folded WB Off Tight Diamond
- Folded EB On & WB Off Tight Diamond
- Folded EB On & Semi-folded WB Off Tight Diamond
- Single Point Urban Interchange (SPUI)
- Overpass with Right-In/Right-Out



# Concept Evaluation Process



 <b>RAMSEY GATEWAY PROJECT</b> Highway 10/169 Concept <b>DRAFT</b> Evaluation		Sunfish Lake Blvd				
Objectives	Performance Measure	No Build	No Build	Right of Way	High T	No Build
Goal A: Safely accommodate all users (motor vehicles, freight, rail, transit, pedestrians, bicyclists)	Eliminate fatal and serious injury crashes	Minimize or improve forecasted crash rates Number of conflict points Score				
	Provide safe pedestrian and bicycle facilities along roadways and at crossings of roads and rail	Provide grade separated crossing of Highway 10 Require separate pedestrian bridge over Highway 10 Require pedestrian crossing points Provide buffer between pedestrian and cars Provide pedestrian access to street of demand Score				
	Minimize vehicle delay from railroad operations that results in backups across adjacent intersections and onto Highway 10	Provide railroad grade separation Vehicle space projected to extend onto Hwy 10 Vehicle space projected to extend from adjacent intersection Travel time to railroad grade separation (after built present) Score				
	<b>Goal A Total (100 points maximum)</b>		5	5	5	5
Goal B: Provide efficient mobility and access for all modes of travel	Provide acceptable mobility and system reliability on Highway 10 for access to Ramsey and beyond including regional	Ramp Clearing, Accessible (Green & Green) onto Hwy 10 Hwy 10 travel time Score				
	Ensure acceptable vehicle delay and travel times for arterial highways (e.g., Sunfish Lake Blvd, Ramsey Blvd, and Armstrong Blvd)	Order Street Delay Clearing Accessible Total Interchange Delay Reconstructed VMT Score				
	Provide reasonable and responsible access to optimize mobility and reduce the need for vehicles to enter onto Highway 10 for short trips	Number of vehicles on Highway 10 Number of forecasted local trips removed from Highway 10 Score				
	<b>Goal B Total (100 points maximum)</b>		5	5	5	5
Goal C: Develop a financially responsible infrastructure implementation plan	Minimize right-of-way costs	Estimated right-of-way cost Number of Full Acquisition Properties Number of Partial Acquisition Properties Score				
	Maximize benefit-cost of improvements	B/C ratio Score				
	Maximize potential to secure multiple funding scenarios	Anticipated competitive status for funding sources Score				
	<b>Goal C Total (100 points maximum)</b>		5	5	5	5
Goal D: Support plans to build a connected and recognizable Highway 10 corridor	Attract visitors and residents to the Highway 10 corridor by car, train/transit, bike or foot	Safe and efficient connections for all transportation modes Score				
	Create a cohesive and inviting aesthetic including appropriate signage, lighting and landscape	Score for signage/gateways/landscapes Street scene elements and landscaping opportunities Score				
	Promote business expansion	Local and regional connection to existing businesses Provide local and regional connection to developable areas Viability of existing and planned commercial areas Score				
	Seek consistency with state, regional and local plans	Consistent with City of Ramsey Comp Plan Consistent with Steele County Comp Plan Match MNDOT access spacing guidelines Score				
	<b>Goal D Total (100 points maximum)</b>		5	5	5	5
Goal E: Provide infrastructure improvements compatible with the natural and built environment	Avoid impacts to environmental resources	Risk of impacts to historic/cultural resources Risk of impacts to natural resources Impact on air quality Score				
	Minimize impacts to the built environment	Local road of noise impacts Score				
	<b>Goal E Total (100 points maximum)</b>		5	5	5	5

# Evaluation Measures - Differentiators



Project Goals	Measures
Safely accommodates all users	Pedestrian-Vehicle Conflict Points
	Perceived Pedestrian Comfort
Provide efficient mobility and access for all modes of travel	Design Year Traffic Operations
	Requires a Separate Pedestrian Bridge
	Community Connectivity - Provides all movements
	Provides Railroad Grade Separation
	Ease of Business Access - Retail
	Ease of Business Access - Industrial
Compatible with the natural and built environment	Access to Business Park
	Potential Property Impacts*
	Impact to Regional Park
Develop a financially responsible infrastructure implementation plan	Impact to Public Works Campus
	Relative Cost Comparison
Support plans to build a connected and recognizable Highway 10 corridor	Constructability/Long Term Maintenance
	Likelihood of Railroad Approval
	Agency Support to Carry Concept Forward

*\*Assessment based on planning-level concepts and will require further review to verify actual impacts.*

# Ramsey Blvd Evaluation



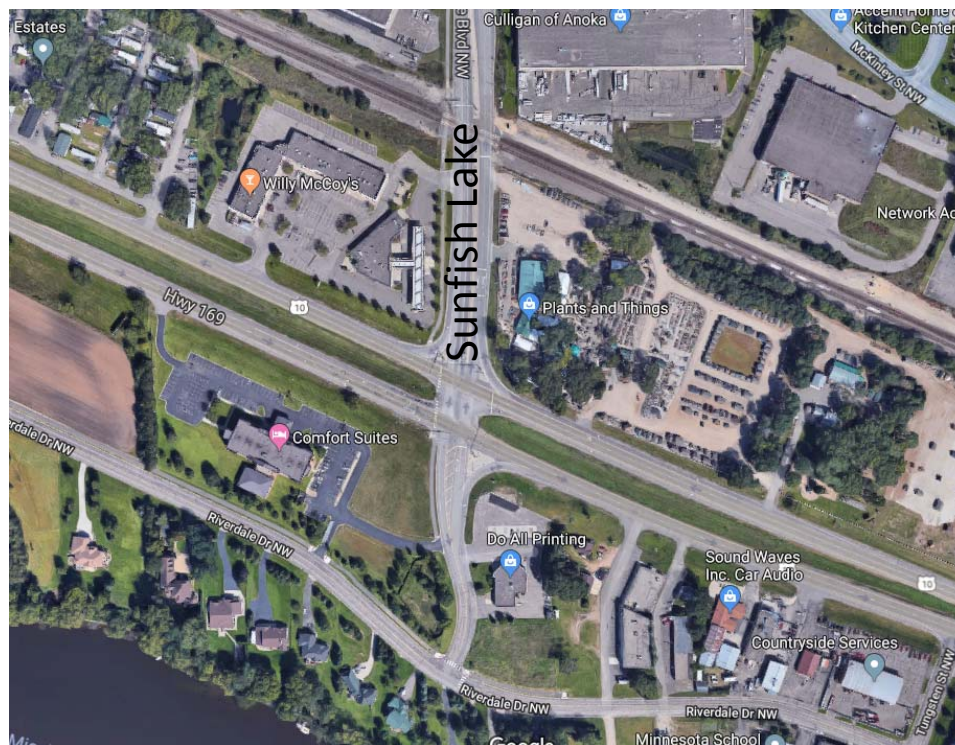
Measure	No Build	RAMSET BLVD OVER RAILROAD CONCEPTS									RAMSET BLVD UNDER RAILROAD CONCEPTS									Notes
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		
		Standard Diamond	Tight Diamond	Folded EB On Tight Diamond	Folded WB Off Tight Diamond	Folded EB On & WB Off Tight Diamond	Folded EB On & Semi-Folded WB Off Tight Diamond	Overpass with Right-In/Right-Out	Single Point Urban Interchange (SPUI)		Standard Diamond	Tight Diamond	Folded EB On Tight Diamond	Folded WB Off Tight Diamond	Folded EB On & WB Off Tight Diamond	Folded EB On & Semi-Folded WB Off Tight Diamond	Overpass with Right-In/Right-Out	Single Point Urban Interchange (SPUI)		
Pedestrian-Vehicle Conflict Points		13	23	23	43	27	47	47	27	23	23	23	43	27	47	47	27	23		Conflict points were counted where crosswalks and sidewalks connections will be provided
Perceived Pedestrian Comfort																				
Design Year Traffic Operations																				Design year 2045
Ease of Business Access - Retail	From ED TH 18	N/A	N/A								N/A									Access traveling to Holiday Gar Station. Green - add <60 seconds Yellow - add 60-120 seconds Red - add 120+ seconds
	From WB TH 18	N/A	N/A								N/A									
Ease of Business Access - Industrial	From ED TH 18	N/A																		Access traveling to 143rd Ave at Ebony St Green - add <60 seconds Yellow - add 60-120 seconds Red - add 120+ seconds
	From WB TH 18	N/A																		
Potential Property Impacts*		N/A																		
Impact to Regional Park		N/A	21 Acres	4 Acres	21 Acres	4 Acres	21 Acres	21 Acres	4 Acres	4 Acres	21 Acres	4 Acres	21 Acres	4 Acres	21 Acres	21 Acres	4 Acres	4 Acres		Any impact is a concern because the park is already smaller than the average regional park.
Impact to Public Works Campus		N/A																		Underpass options require a right-of-way which impacts the existing Public Works Campus
Relative Cost Comparison		N/A	+10%	+13%	+11%	+13%	+11%	+11%	+18%	+20%	+6%	Median Cost	+7%	+3%	+10%	+10%	Median Cost	+51%		Green: +10% Median Cost Yellow: +7-10% Median Cost Red: +10% Median Cost
Constructability/Long Term Maintenance		N/A																		Underpass options require a right-of-way which influences the construction schedule and requires extra measures for drainage. Additionally TH 18 grade change is more impactful to traffic than Ramsey grade change.
Likelihood of Railroad Approval		N/A																		Discussion with BNSF Railroad indicates strong preference for an overpass.
Agency Support to Carry Concept Forward		N/A	No Support		No Support		No Support	No Support		No Support	No Support	No Support	No Support	No Support	No Support	No Support	No Support	No Support		

\*Assessment based on planning-level concepts and will require further review to verify actual impacts.



# Sunfish Lake Blvd Concepts – See Link

- Railroad At-Grade and Grade Separation Options
- Overpass with Right-In/Right-Out
- Standard Diamond
- Tight Diamond
- Single Point Urban Interchange
- Grade-Separated Roundabout
- Center Turn Overpass
- High-T





# Sunfish Lake Blvd Evaluation



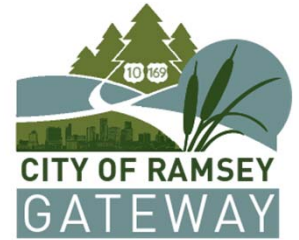
		No Build	SUNFISH LAKE BLVD CONCEPTS										
			GRADE SEPARATED RAILROAD CROSSING							AT GRADE RAILROAD CROSSING			
			1A	1B	3	4	5A	6A	7	2	5B	6B	
Measure			Overpass with Right-Inf Right Out	Overpass with Right-Inf Right Out	Standard Diamond	Tight Diamond	Single Point Urban Interchange (SPUI)	Grade Separated Roundabout	Center Turn Overpass	High-T	Single Point Urban Interchange (SPUI)	Grade Separated Roundabout	Notes
Pedestrian-Vehicle Conflict Points		7	26	17	30	30	30	30	30	23	30	30	Conflict points were counted where crosswalk and drive/walk connections will be provided
Perceived Pedestrian Comfort										Assume separate ped bridge			
Design Year Traffic Operations													Design year 2045
Requires a Separate Pedestrian Bridge		N/A	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	
Community Connectivity - Provide all movements													
Ease of Business Access - Retail	From ED TH 18	N/A											Assume traveling to Delta All Printing Green - add 60 seconds Yellow - add 60-120 seconds Red - add 120 seconds
	From WD TH 18	N/A											
Ease of Business Access - Industrial	From ED TH 18	N/A											Assume traveling to McKinley St at Unity St Green - add 60 seconds Yellow - add 60-120 seconds Red - add 120 seconds
	From WD TH 18	N/A											
Access to Business Park		N/A											
Potential Property Impacts													
Provides Required Grade Separation													
Relative Cost Comparison		N/A	+6%	+6%	+12%	+20%	+20%	+11%	Median Cost	-38%	-11%	-13%	Green: <10% Median Cost Yellow: +7-10% Median Cost Red: >10% Median Cost
Constructability/Long Term Maintenance		N/A											TH 18 grade change is more impactful to traffic than Sunfish Lake grade change.
Agency Support to Carry Concept Forward		N/A			No Support	No Support				No Support			

\*Assessment based on planning-level concepts and will require further review to verify actual impacts.

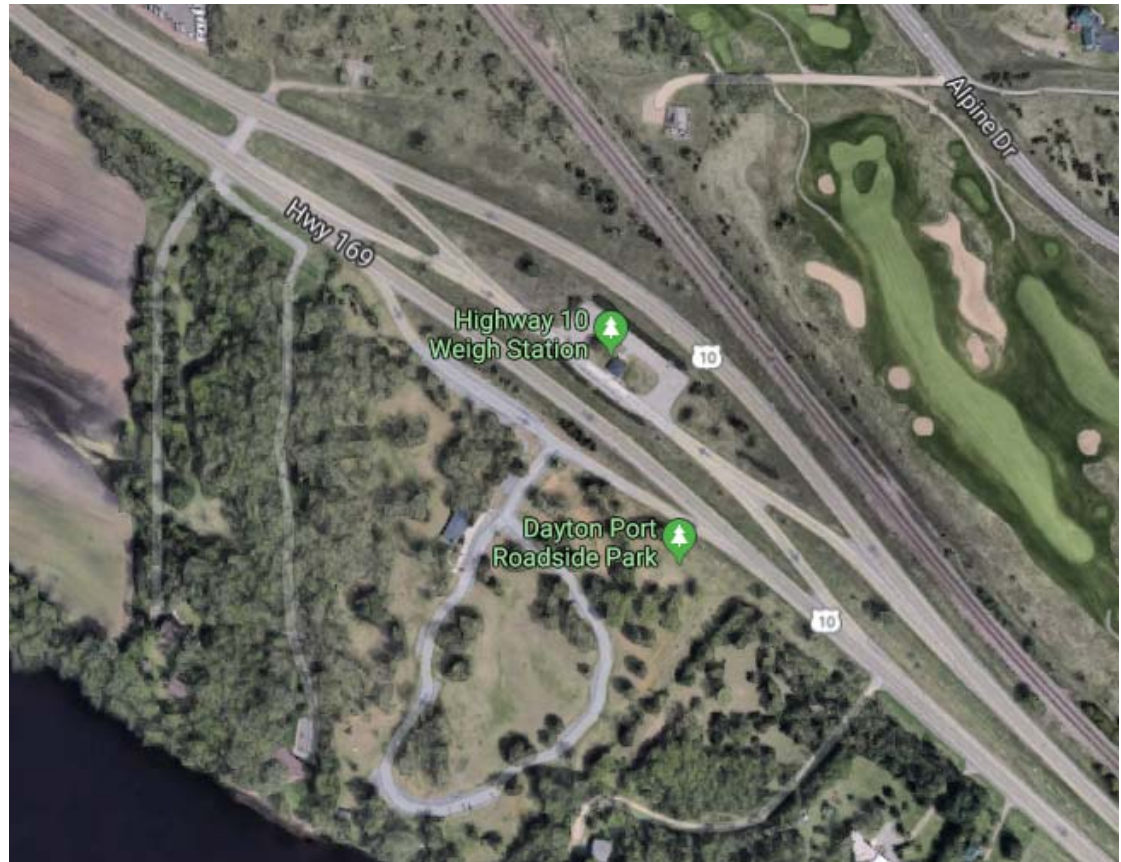
# West End Concepts



# MnDOT Rest Area/Weigh Station Input

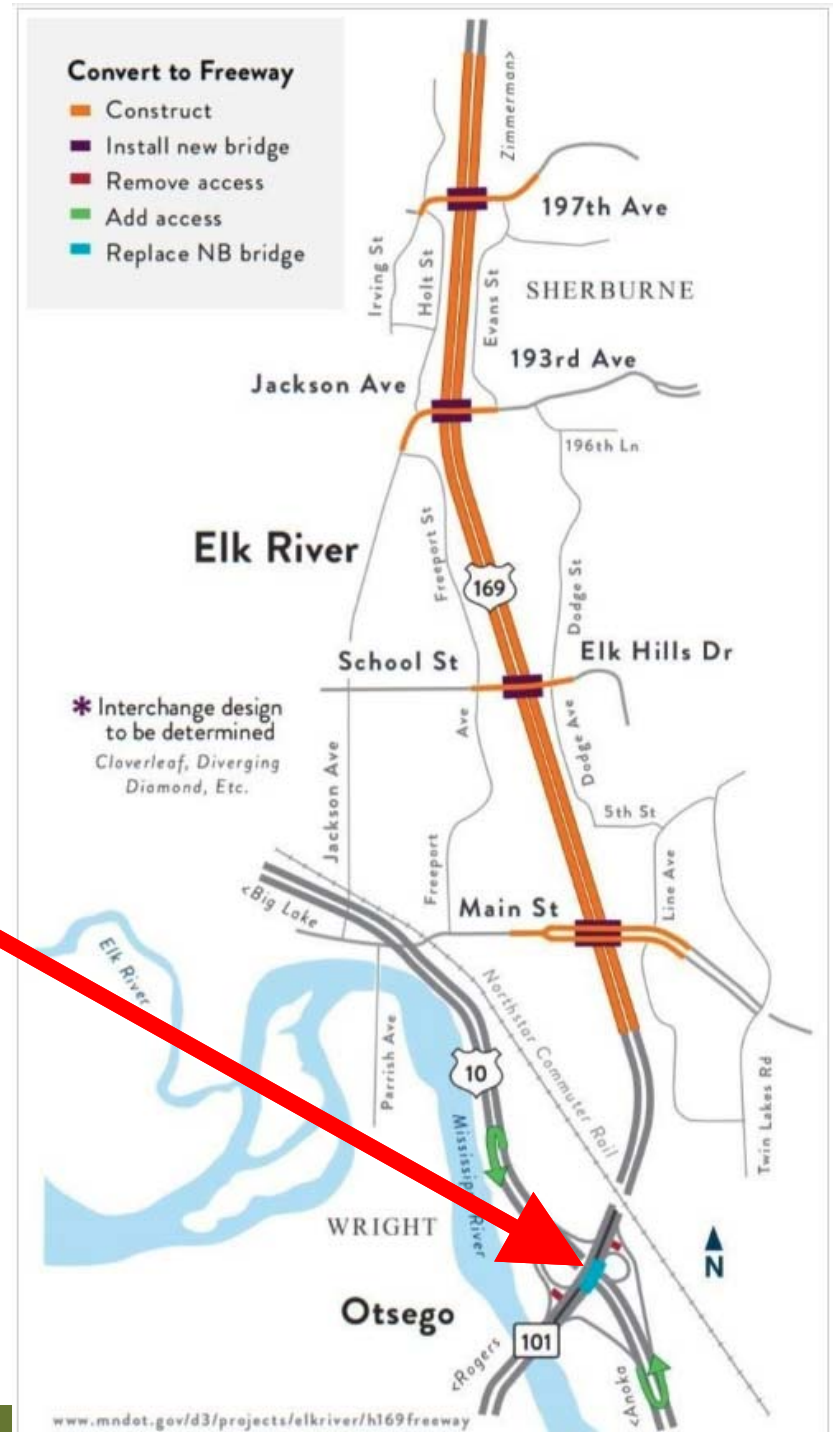


- Weigh station accel/decel lanes substandard length
- Weigh station closed during peak traffic hours for safety
- No plans to close weigh station
- Rest Area entrance/exit confusing





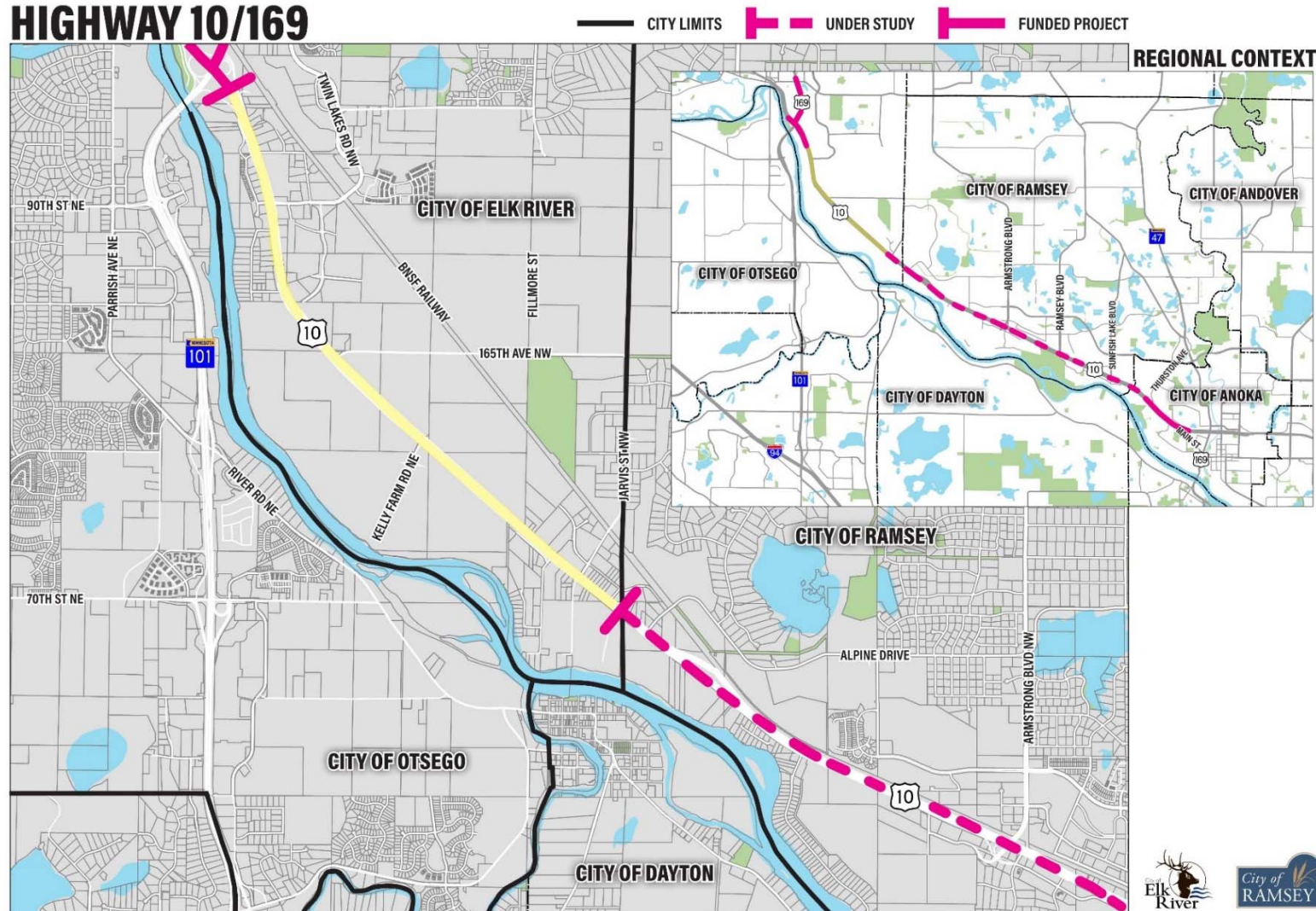
# TH 10 at TH 101/ TH 169 (Elk River)



# Corridor Vision West of Ramsey Unknown

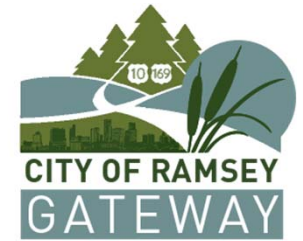


## HIGHWAY 10/169

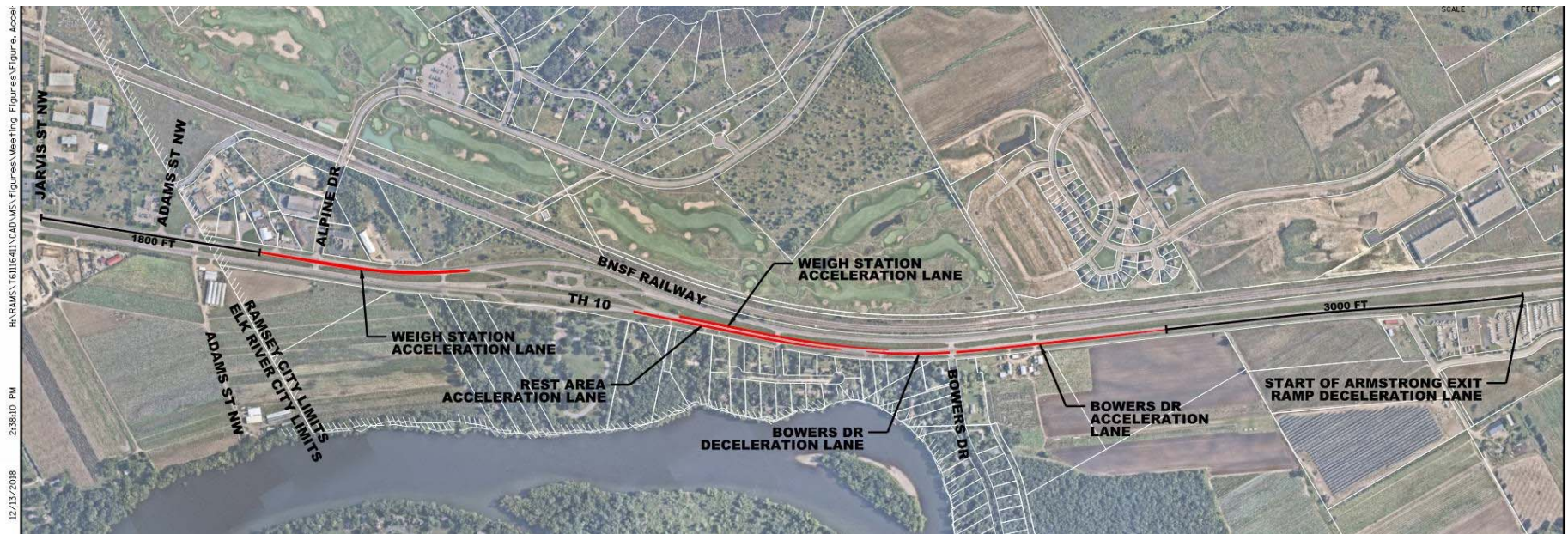




# West End Range of Concepts - See Link



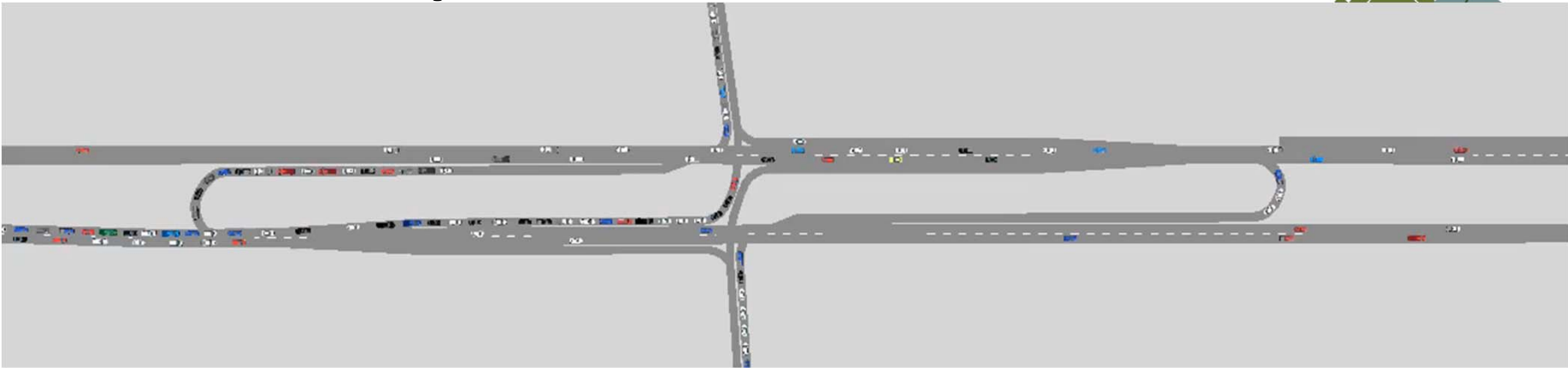
- Signalized RCUT
- Overpass at with RIRO
- Right-in/Right-out at Bowers Dr
- Lengthen accel/decel to weigh station
- Rest Area scenarios
  - Remains in current location
  - Expand to north side Hwy 10 for WB access
  - No longer exists in study area



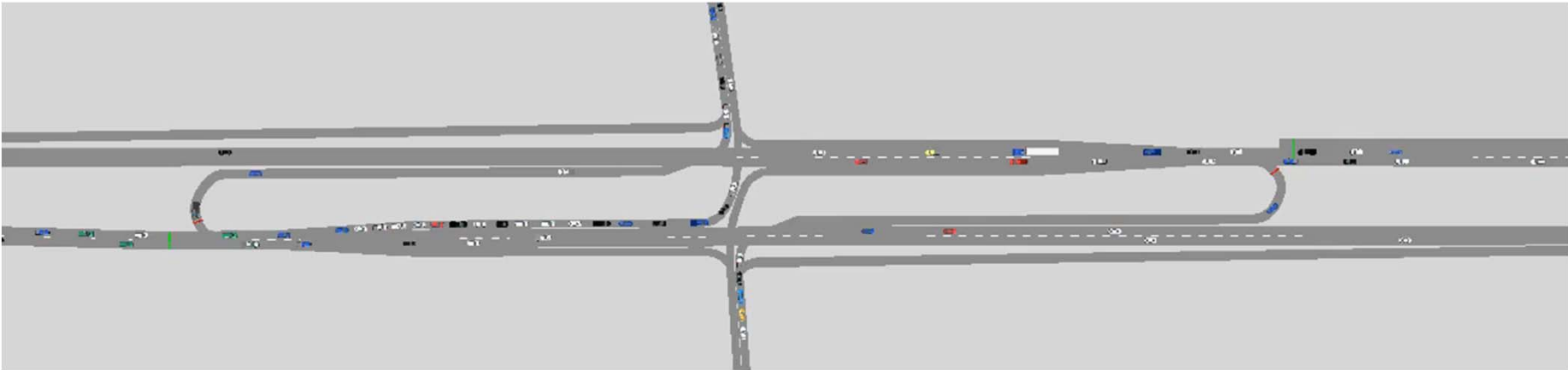
# West End Concepts



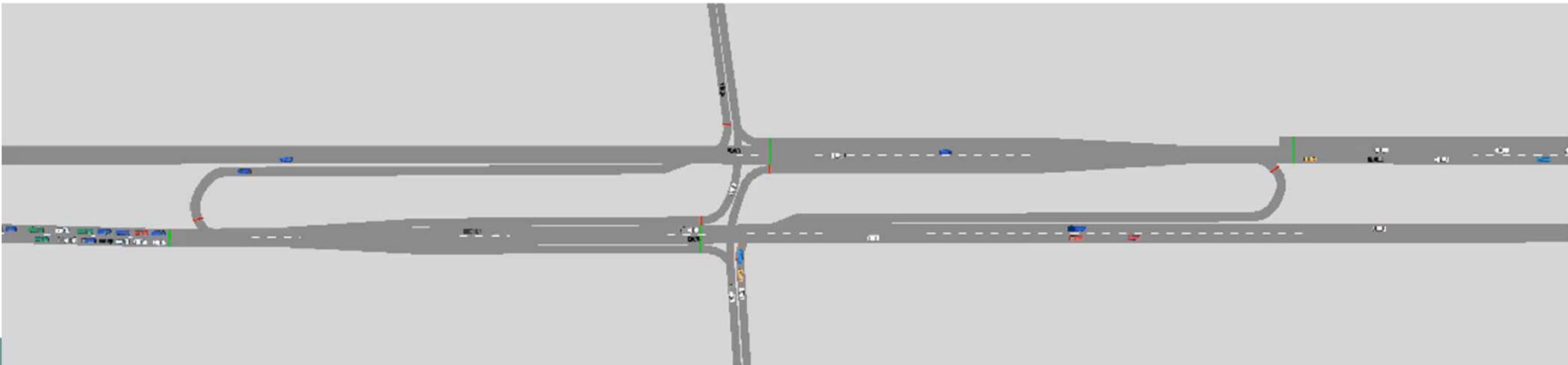
UNSIGNALIZED



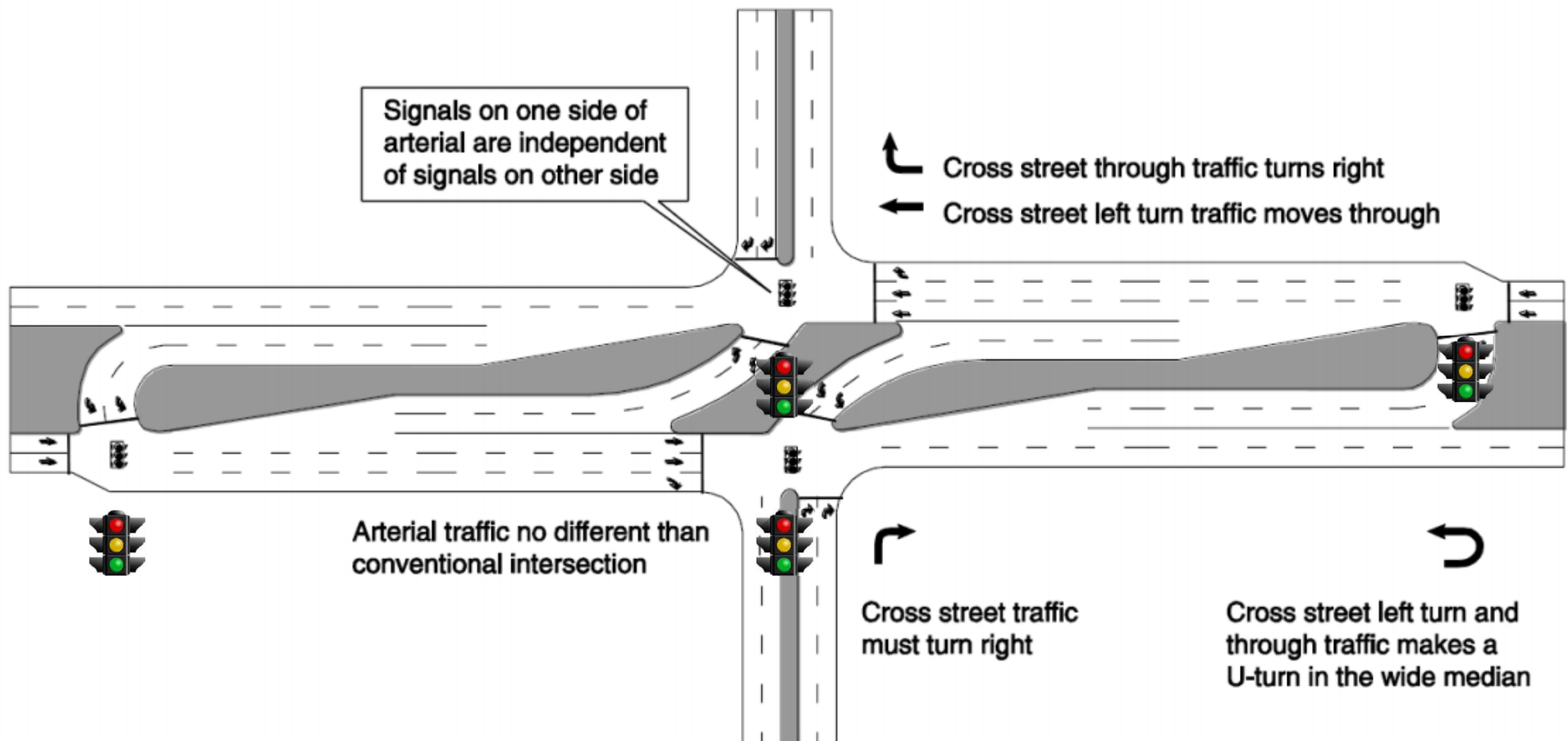
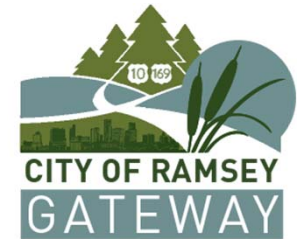
SIGNALIZED U-TURN



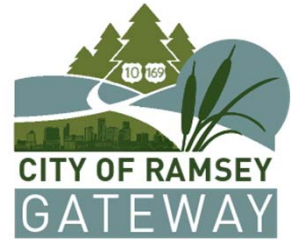
SIGNALIZED



# Signalized RCUT Example

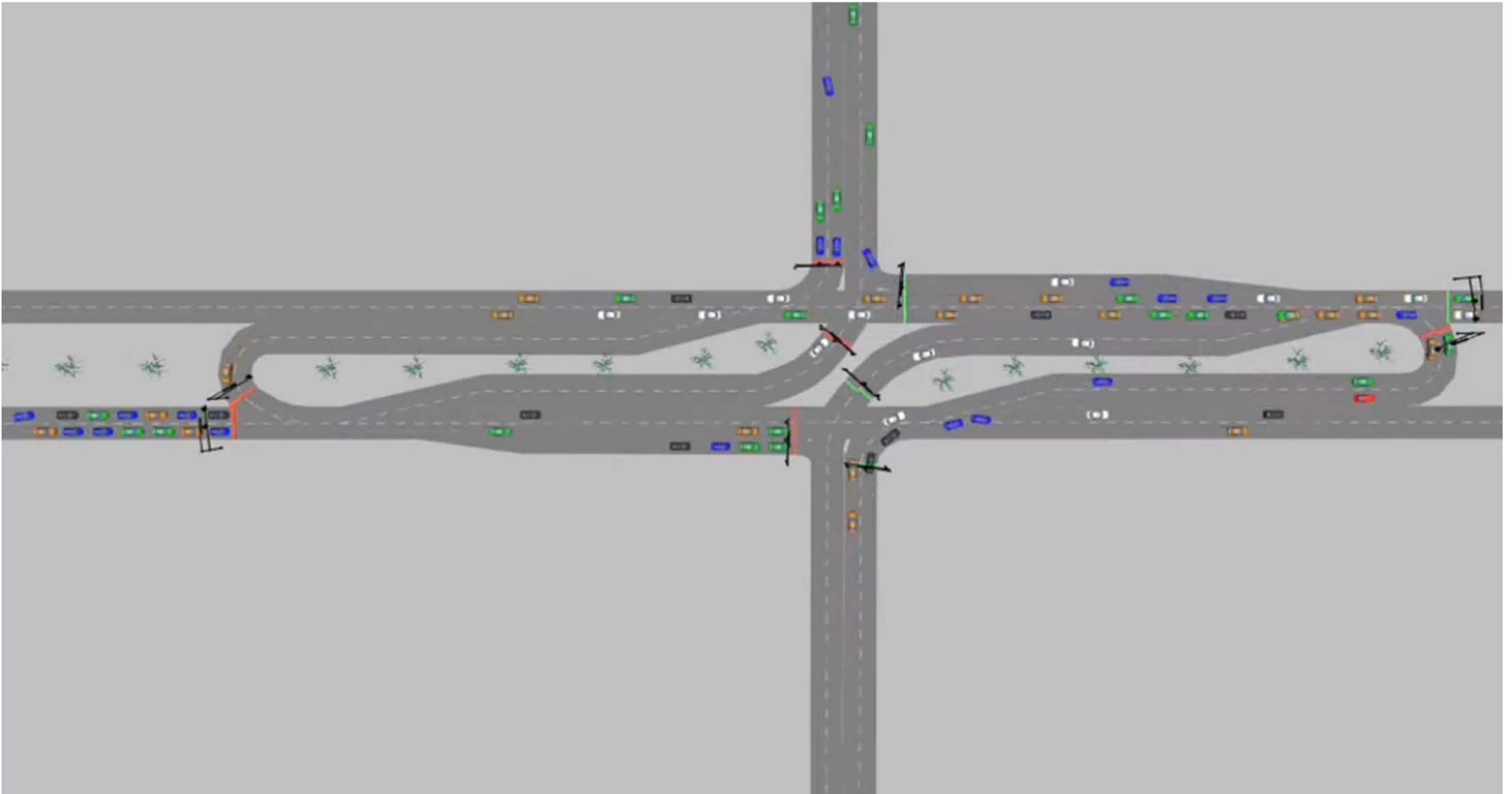


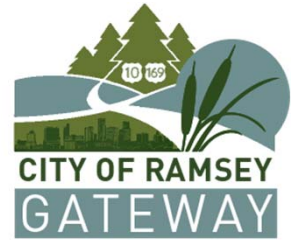
[https://www.youtube.com/watch?time\\_continue=2&v=tnSETIn90hc](https://www.youtube.com/watch?time_continue=2&v=tnSETIn90hc)



# Concept Development

## Signalized RCUT Example





## West End Evaluation Criteria

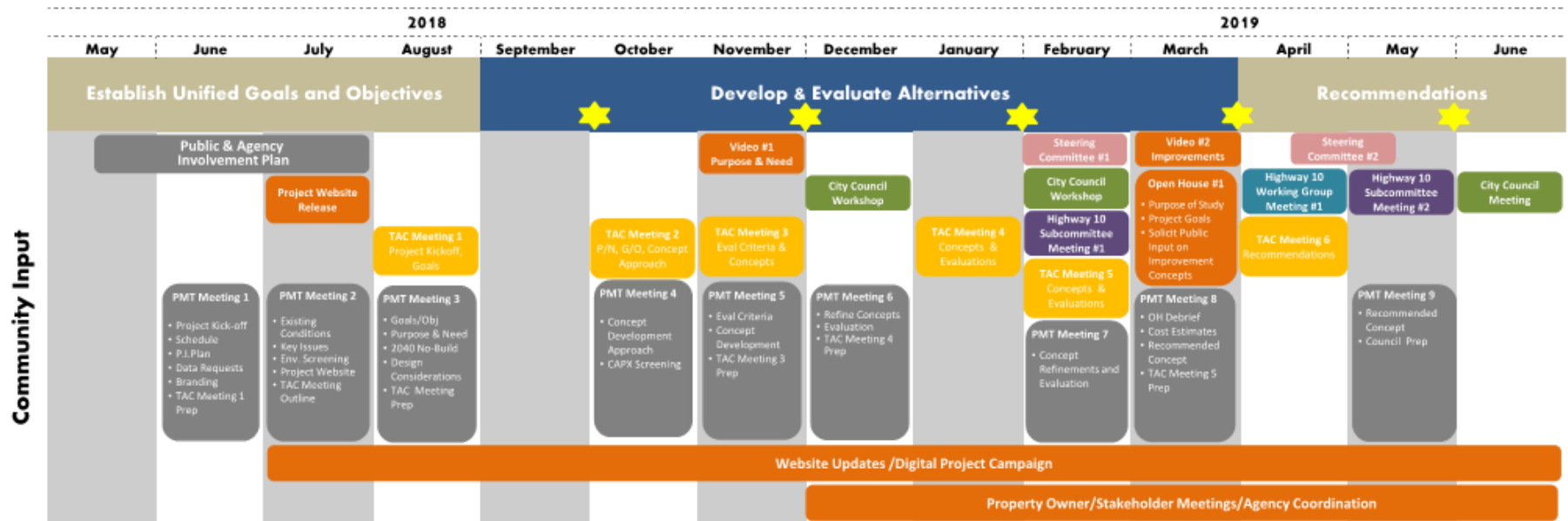
- Traffic Operations/Safety
- Access
- Property Impacts
- Cost

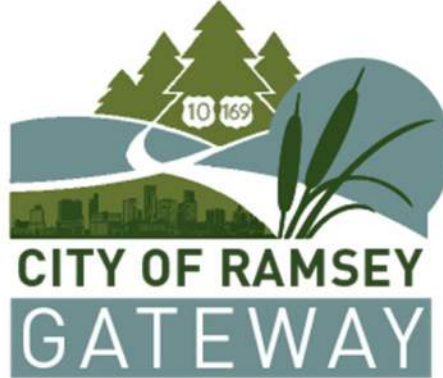




# Public Involvement Plan

- Steering Committee – February/Early March
- Property Owner Meetings – Early March
- Open House – March

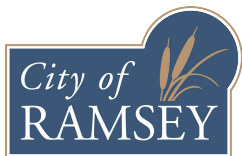




# Ramsey Highway 10 Corridor Improvements

## City of Ramsey Council Workshop

April 9, 2019



**Anoka County**  
MINNESOTA

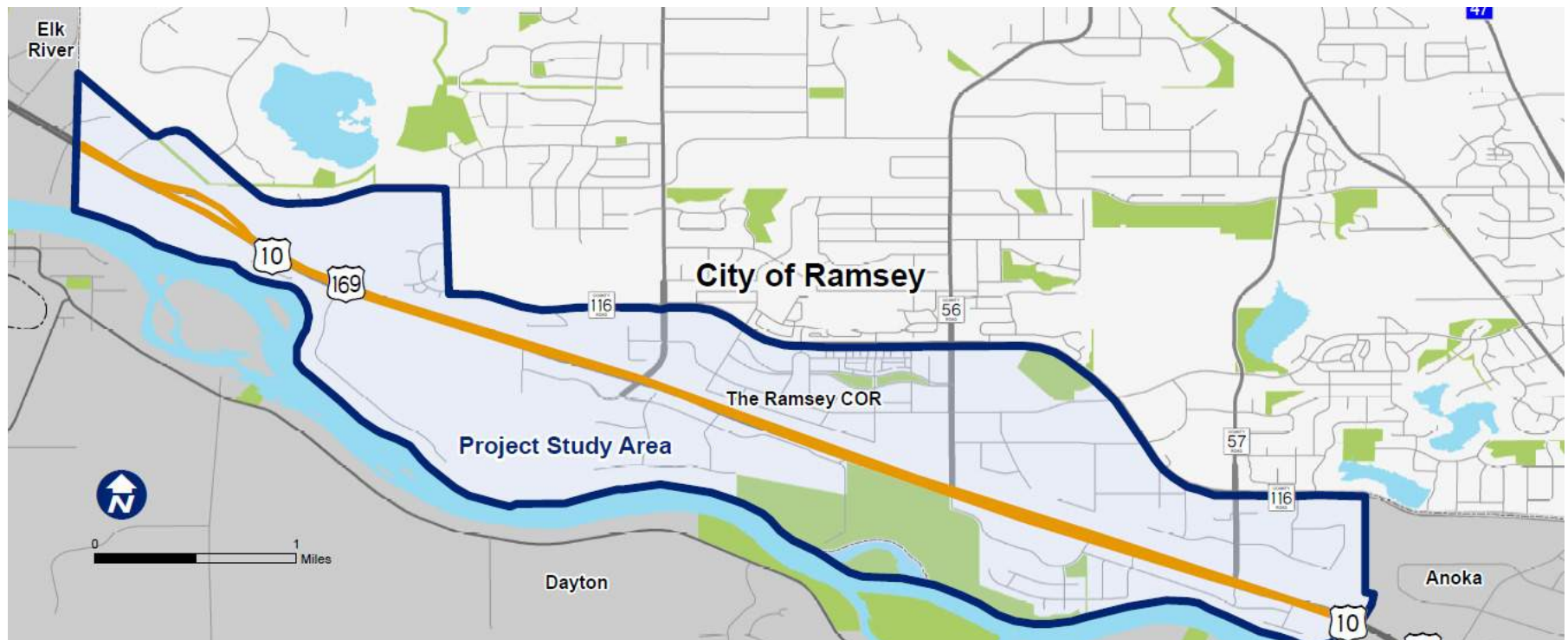
Respectful, Innovative, Fiscally Responsible





# Meeting Overview

- ✓ Improvement Concept Update
- ✓ Public Involvement Next Steps





# Ramsey Blvd Concepts

- Railroad Grade Separation on All Concepts
- Tight Diamond
- Folded WB Off Tight Diamond
- Overpass with Right-In/Right-Out
- Tight Diamond with W Frontage Rd

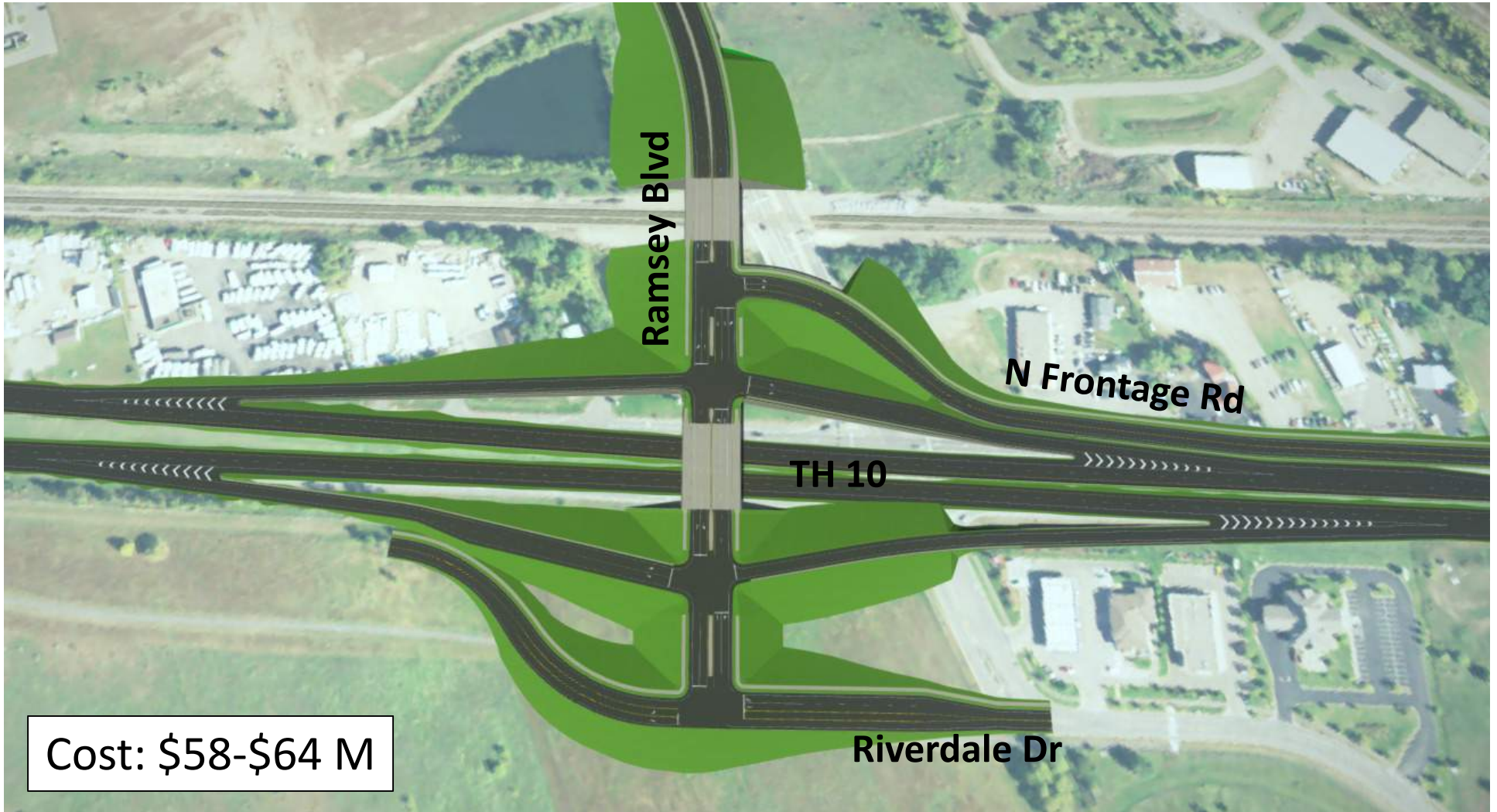






# Ramsey Blvd Concepts

## Tight Diamond (Option 2)



Cost: \$58-\$64 M

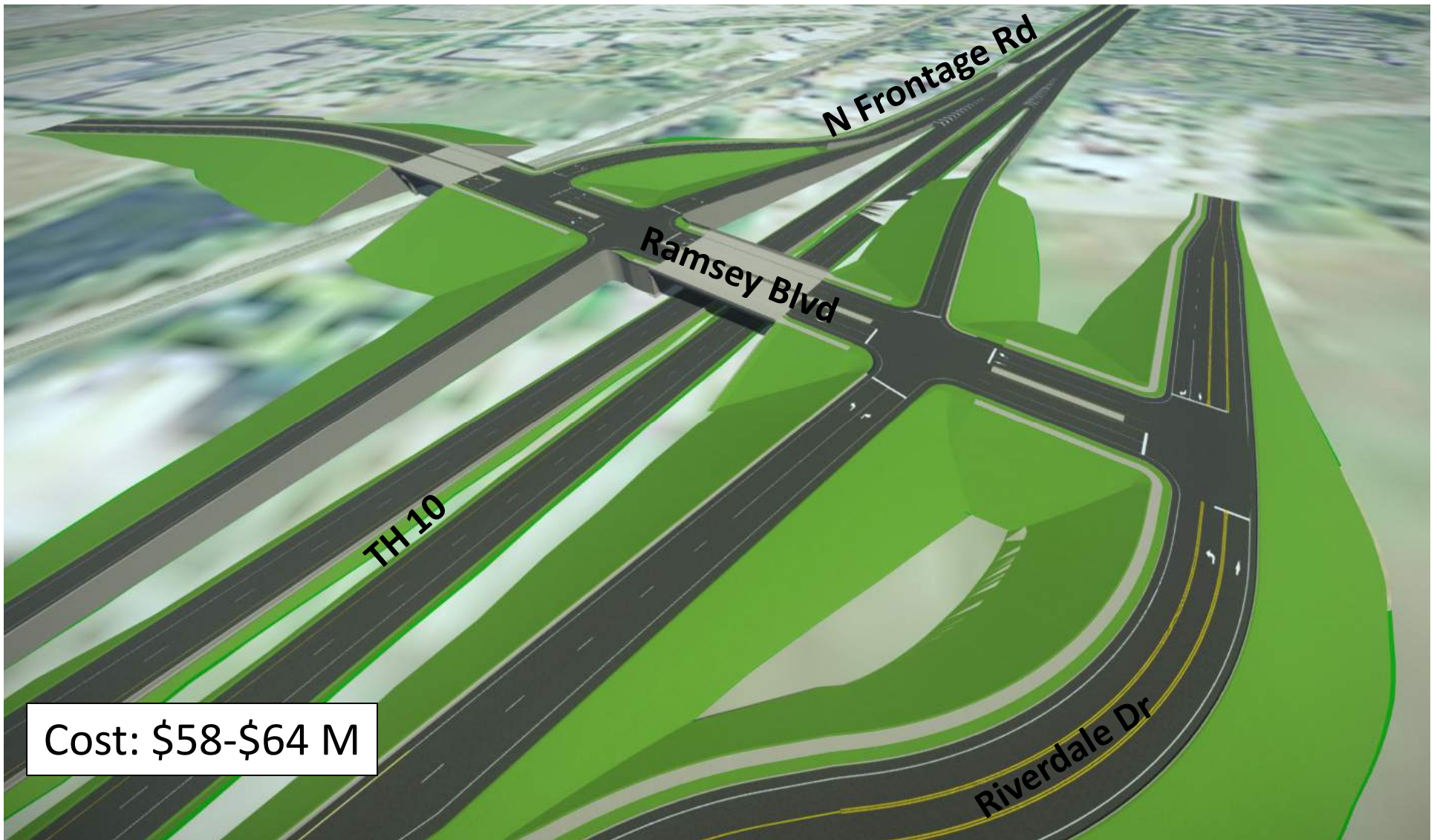




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# Ramsey Blvd Concepts

## Tight Diamond (Option 2)



Cost: \$58-\$64 M

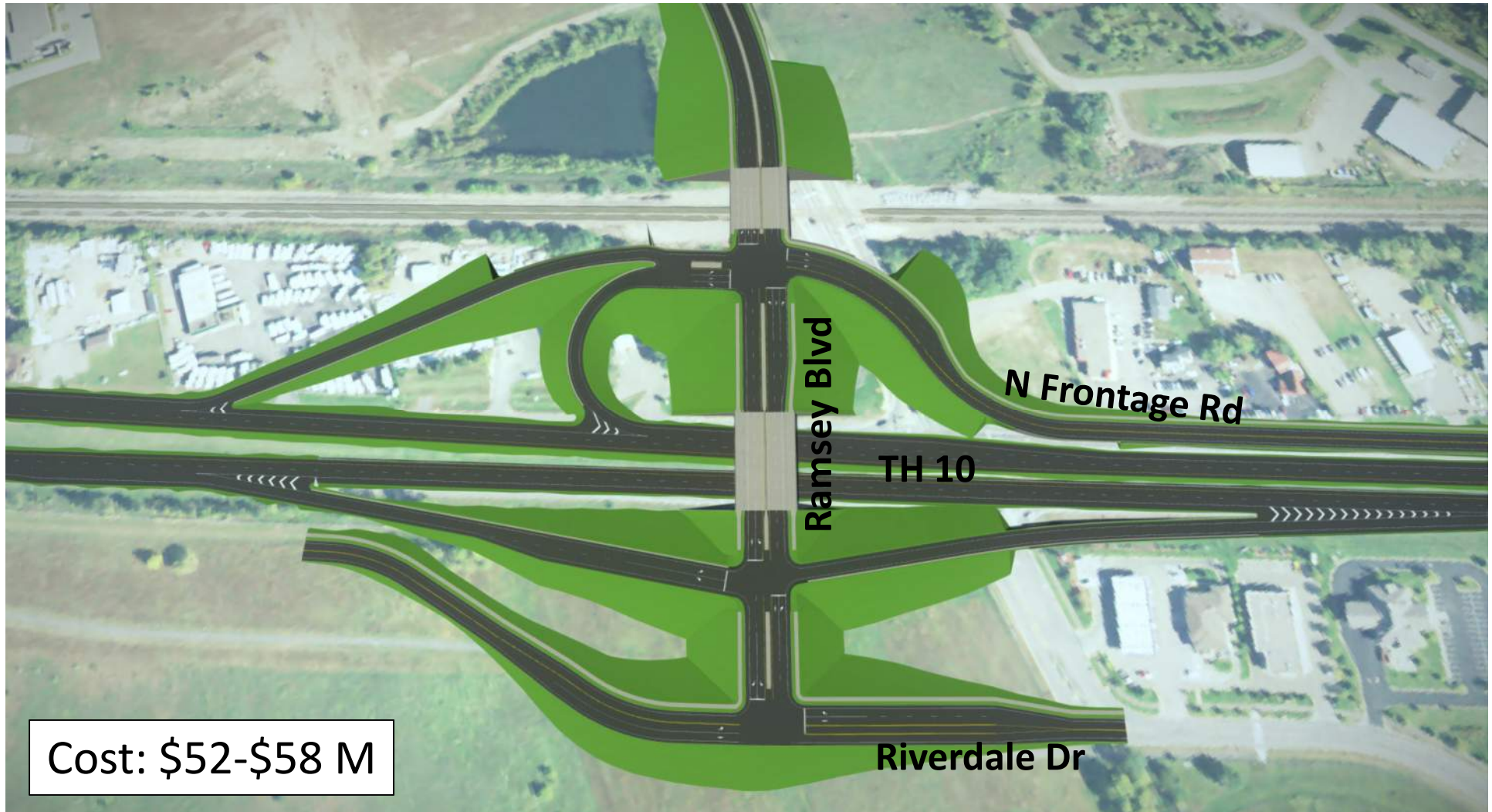




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# Ramsey Blvd Concepts

## Folded WB Off Tight Diamond (Option 4)

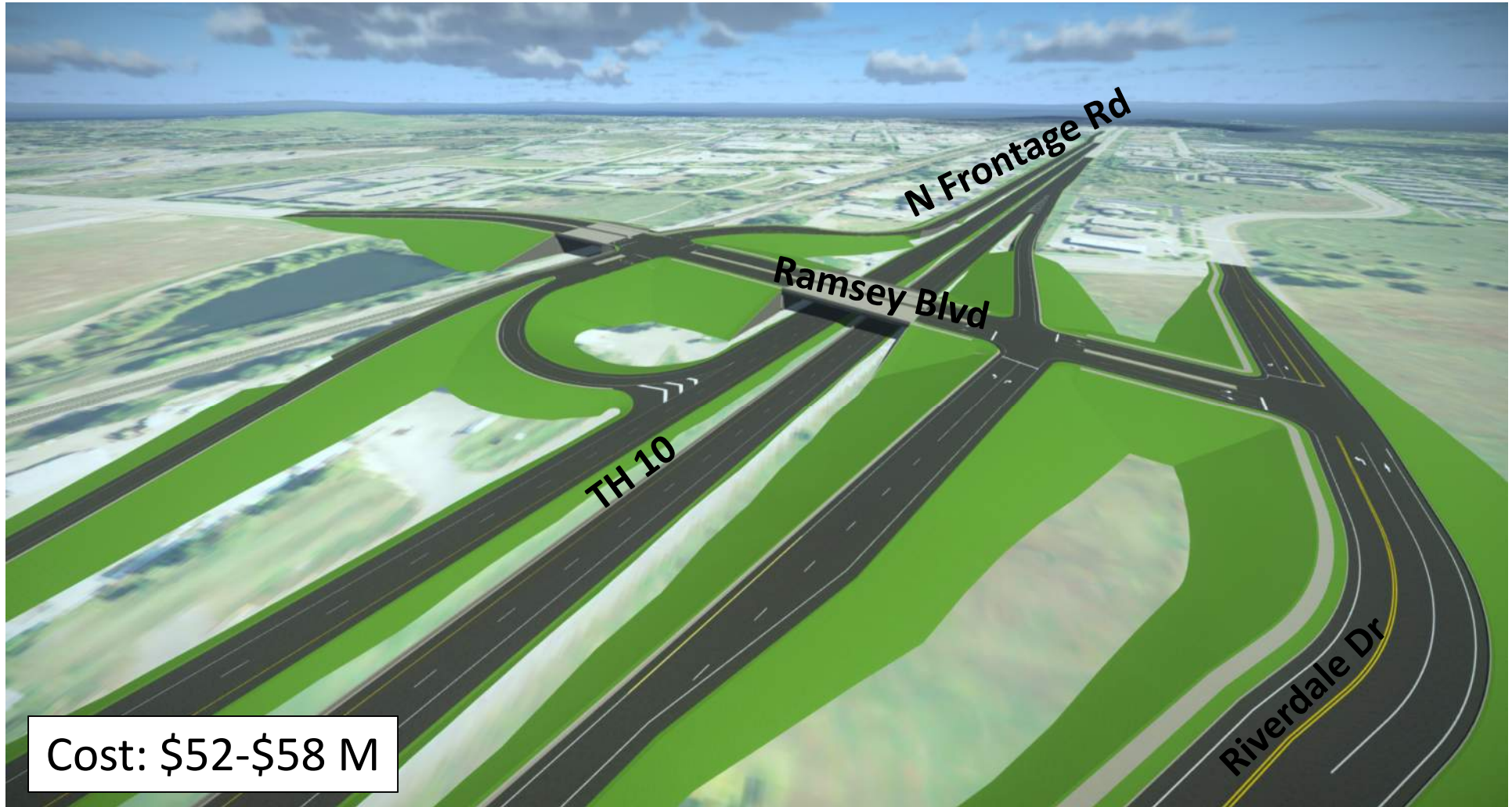




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# Ramsey Blvd Concepts

## Folded WB Off Tight Diamond (Option 4)



Cost: \$52-\$58 M





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# Ramsey Blvd Concepts

## Overpass with Right-In/Right-Out (Option 7A)



Cost: \$46-\$51 M

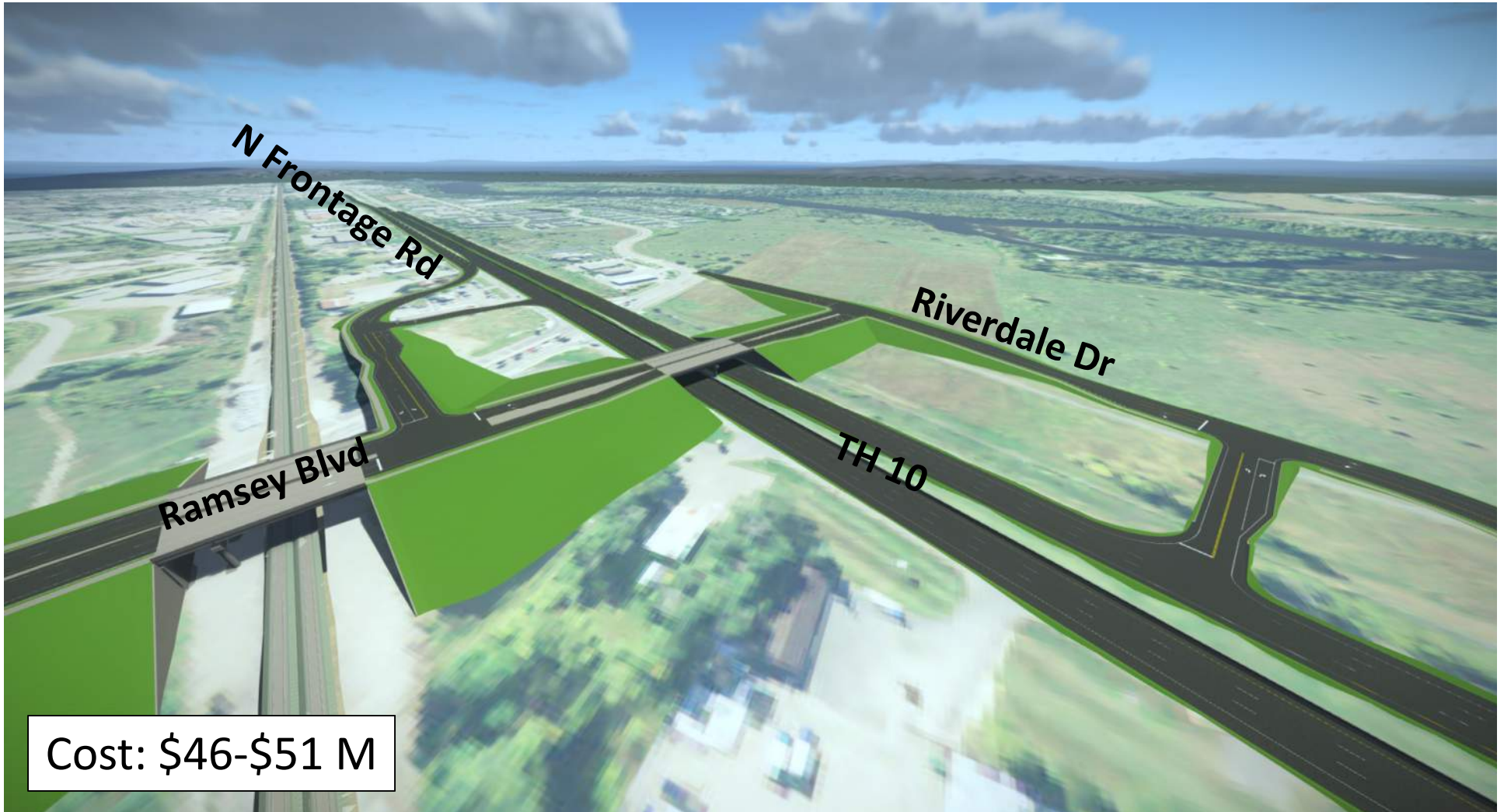




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# Ramsey Blvd Concepts

## Overpass with Right-In/Right-Out (Option 7A)



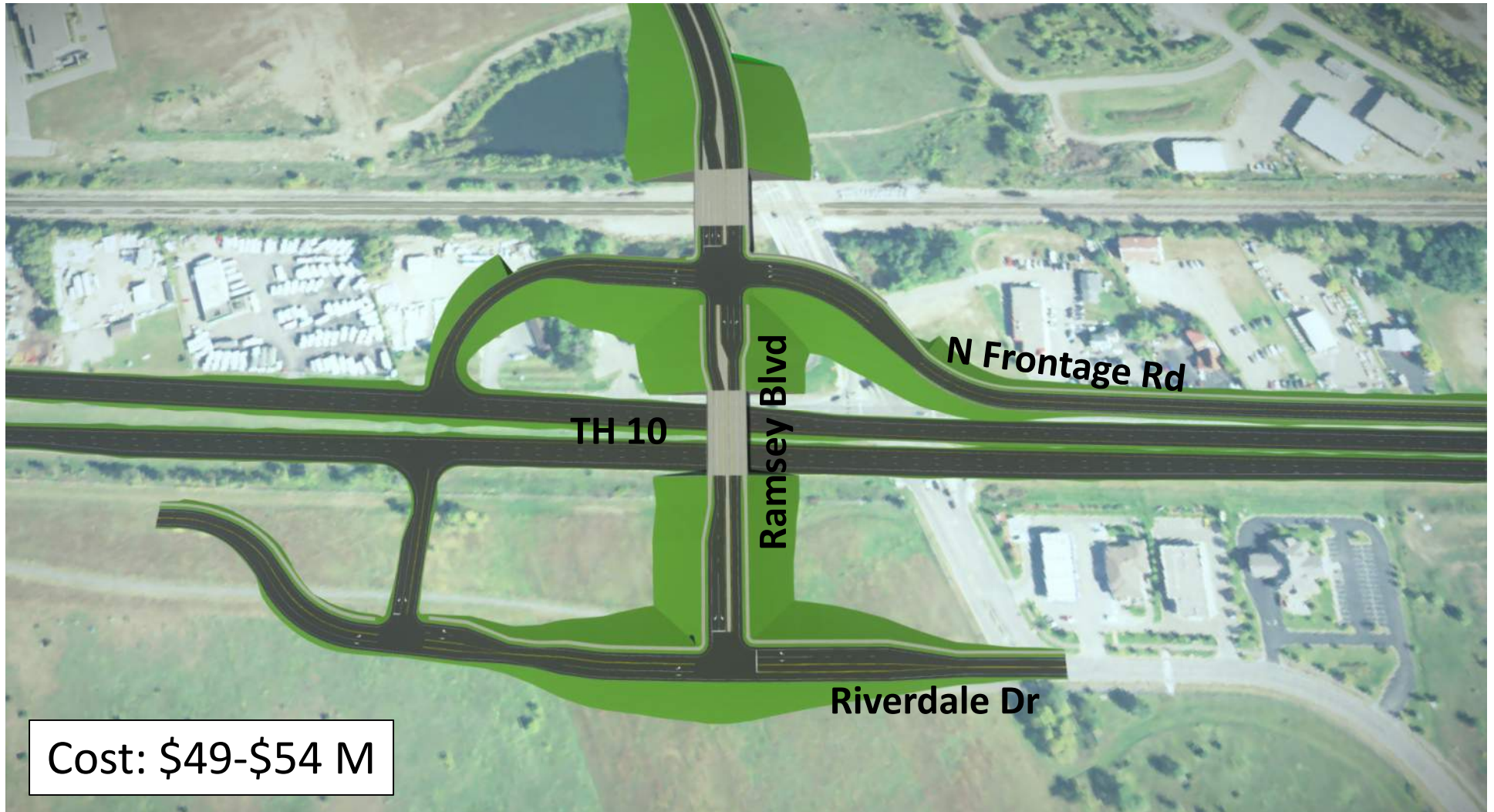




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# Ramsey Blvd Concepts

## Overpass with Right-In/Right-Out (Option 7B)



Cost: \$49-\$54 M



# Ramsey Blvd Concepts

Overpass with Right-In/Right-Out (Option 7B)







# Ramsey Blvd Concepts

## Tight Diamond with W Frontage Rd (Option 9)



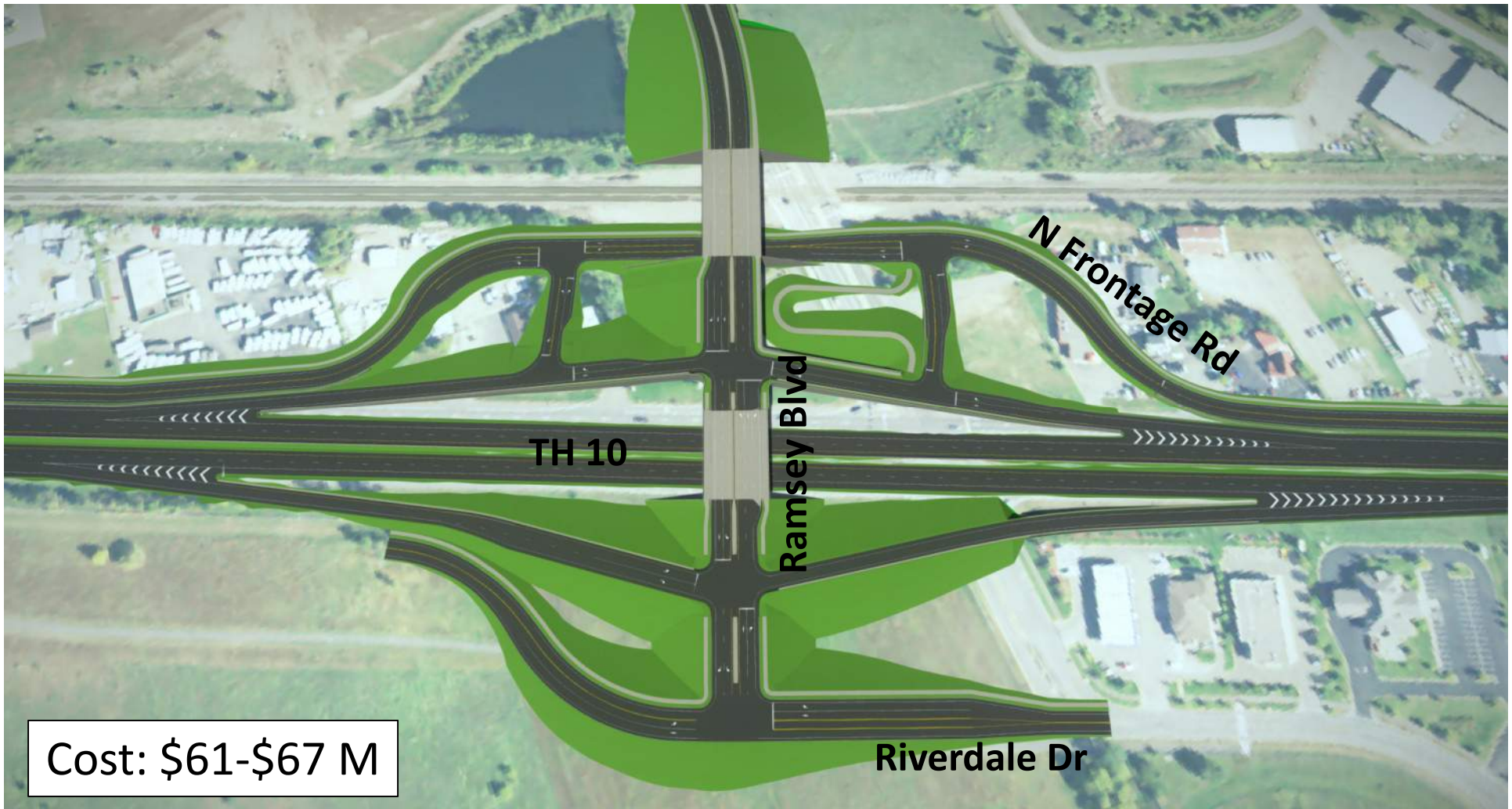
Cost: \$61-\$67 M



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# Ramsey Blvd Concepts

## Tight Diamond with W Frontage Rd (Option 9)



Cost: \$61-\$67 M

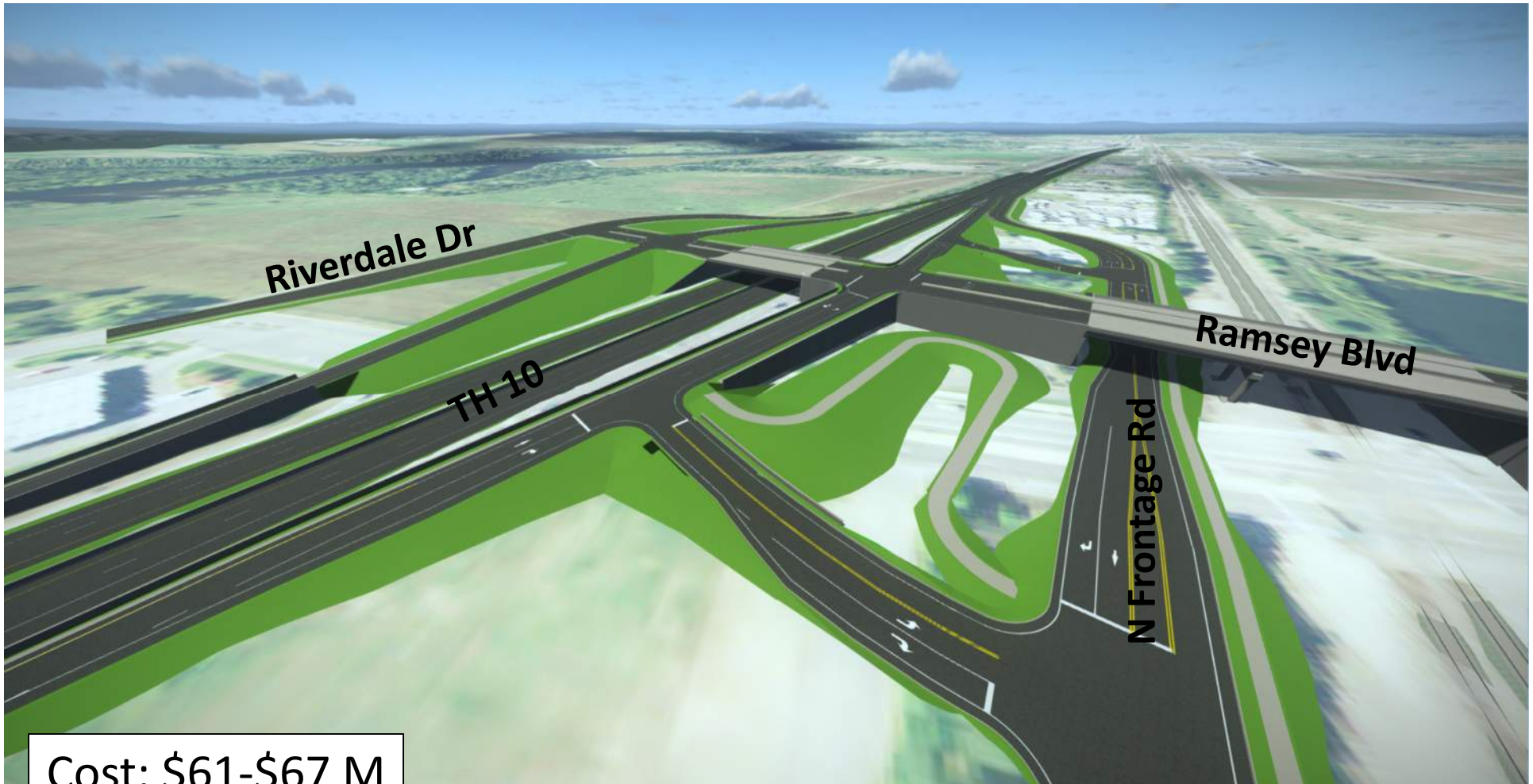




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# Ramsey Blvd Concepts

## Tight Diamond with W Frontage Rd (Option 9)



Cost: \$61-\$67 M





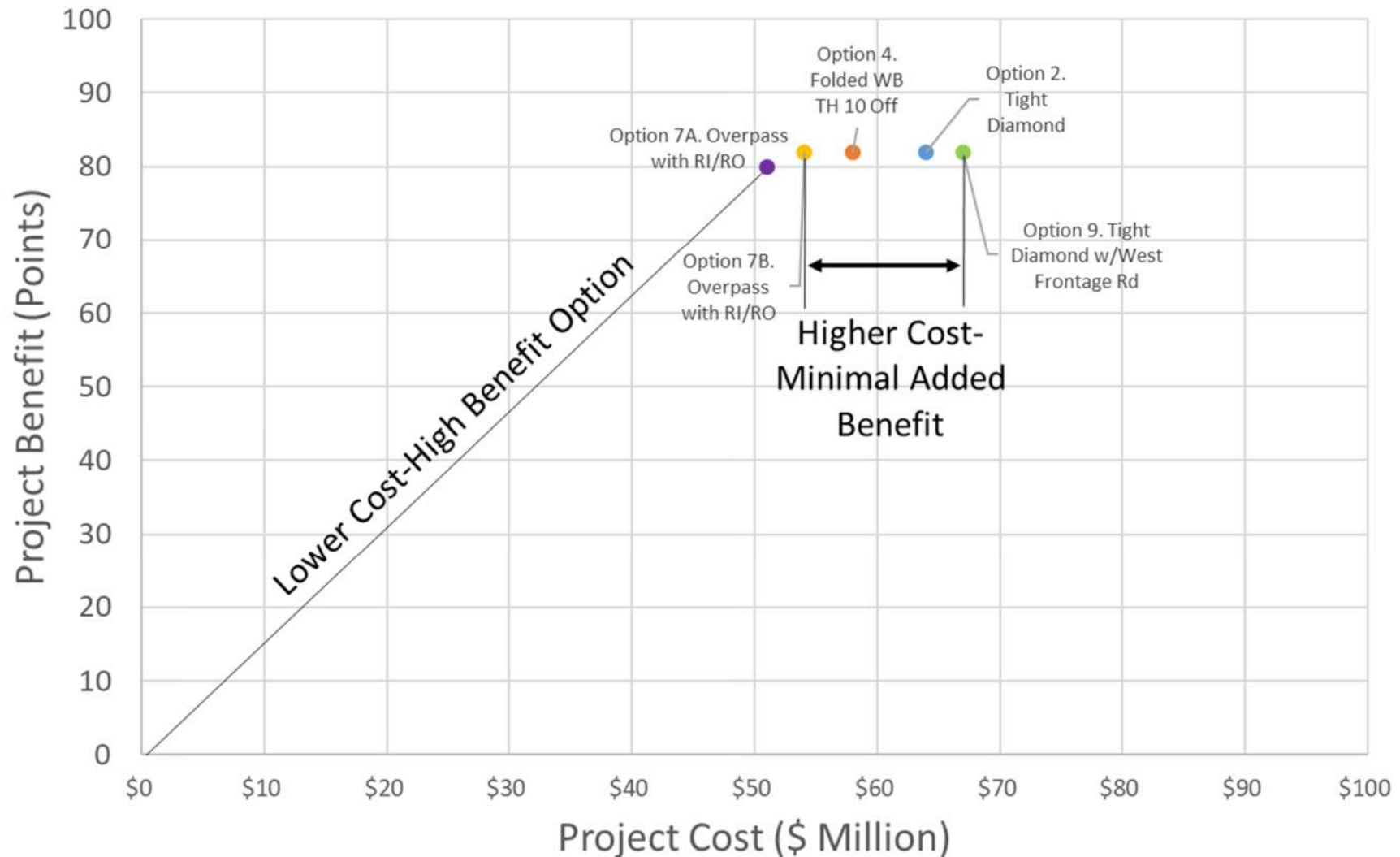
# Ramsey Blvd Preliminary Costs

Ramsey Over Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Option 2. Tight Diamond	\$34 - \$38 M	\$16 - \$18 M	\$6.8 - \$7.6 M	<b>\$58 - \$64 M</b>
Option 4. Folded WB TH 10 Off	\$30 - \$34 M	\$16 - \$18 M	\$6.1 - \$6.7 M	<b>\$52 - \$58 M</b>
Option 7A. RIRO	\$23 - \$25 M	\$18 - \$20 M	\$4.6 - \$5.0 M	<b>\$46 - \$51 M</b>
Option 7B. RIRO	\$27 - \$30 M	\$16 - \$18 M	\$5.5 - \$6.0 M	<b>\$49 - \$54 M</b>
Option 9. Tight Diamond with W Frontage Rd	\$41 - \$45 M	\$12 - \$13 M	\$8.2 - \$9.0 M	<b>\$61 - \$67 M</b>



# Ramsey Blvd Preliminary Costs

## Ramsey Options: Cost - Benefit





## Frontage Road between Ramsey & Sunfish



- Cost: \$12 - \$14 M



# Sunfish Lake Blvd Concepts

- Railroad Grade Separation:
  - Sunfish Overpass with Right-In/Right-Out
- At-Grade Rail Options:
  - Grade-Separated Roundabout
  - Center Turn Overpass
  - Hwy 10 Overpass with Right-In/Right-Out
    - One option with full movement
    - One option with limited movement





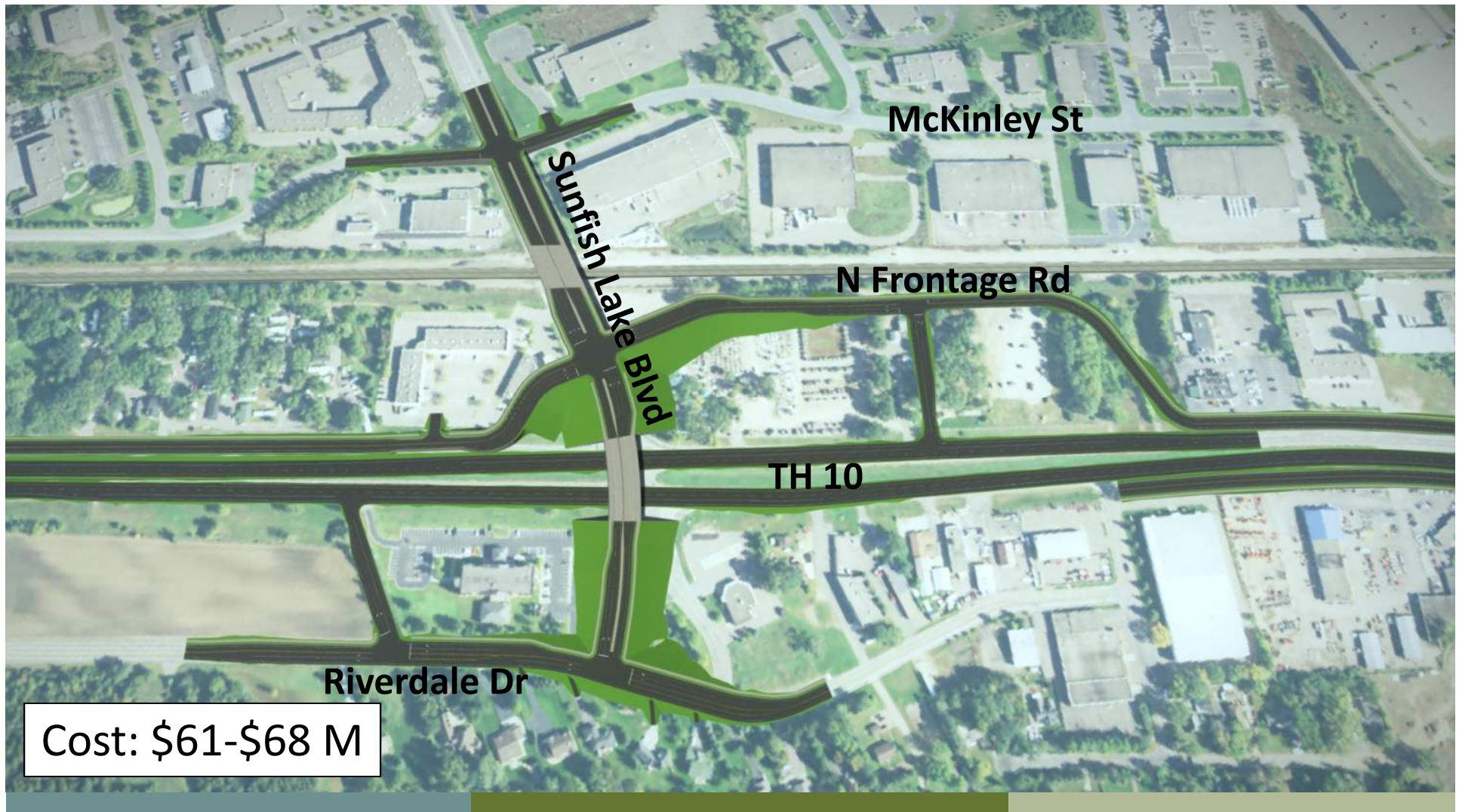


# Sunfish Lake Blvd Concepts



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Overpass with Right-In/Right-Out (Option 1A)  
Rail Grade Separation





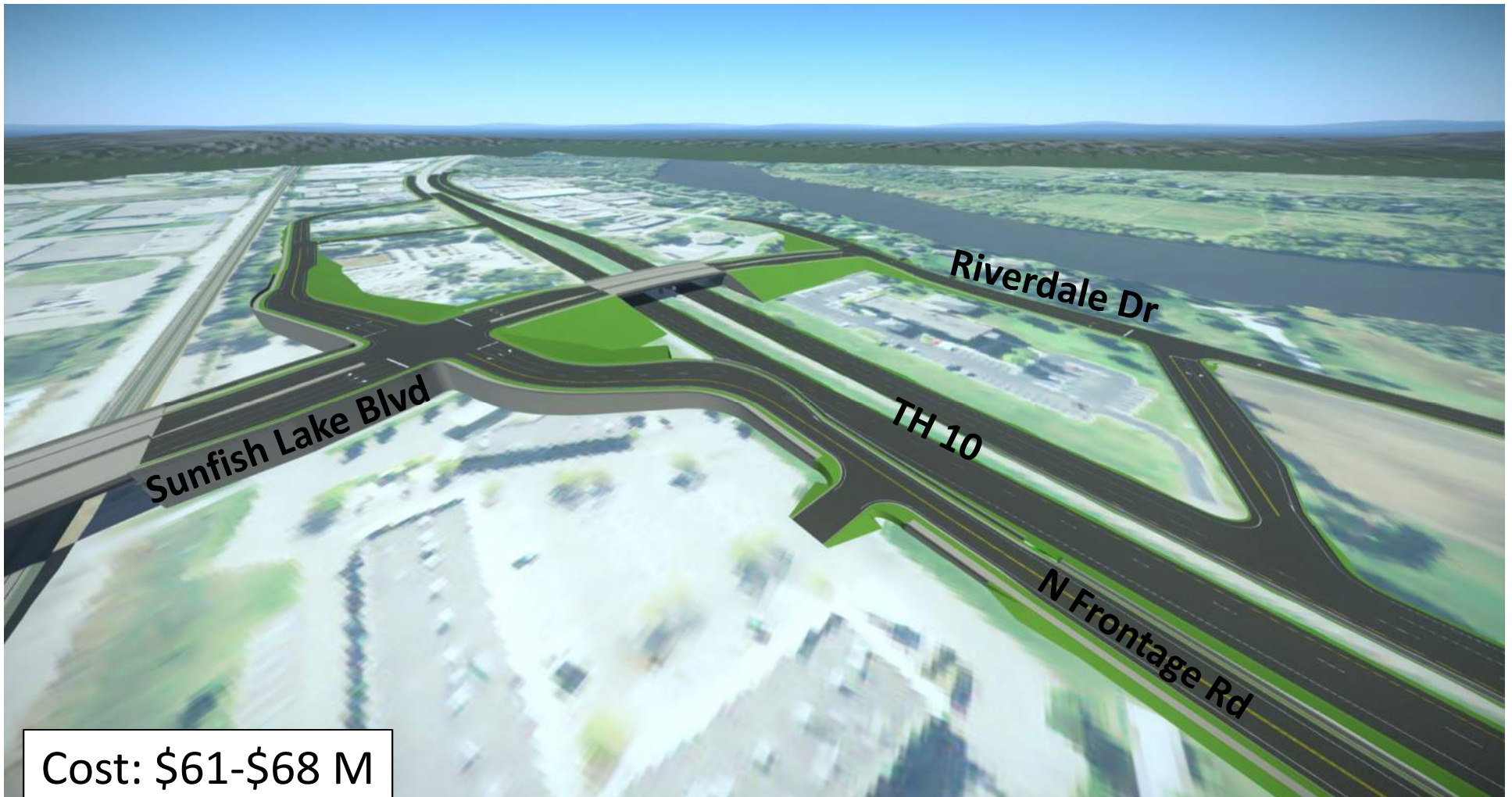


# Sunfish Lake Blvd Concepts



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Overpass with Right-In/Right-Out (Option 1A)  
Rail Grade Separation







# Sunfish Lake Blvd Concepts



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Overpass with Right-In/Right-Out (Option 1B)  
Rail Grade Separation





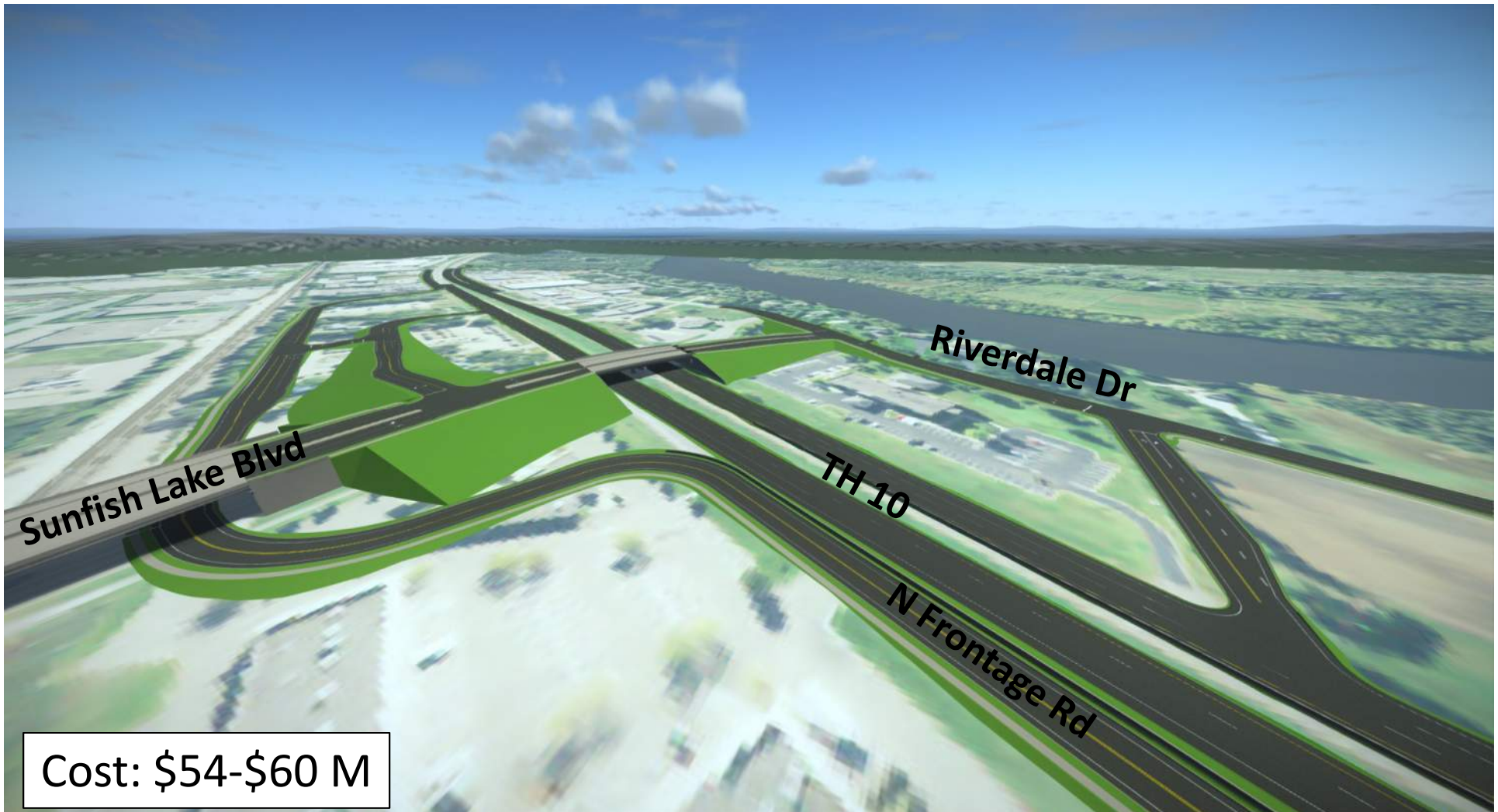


# Sunfish Lake Blvd Concepts



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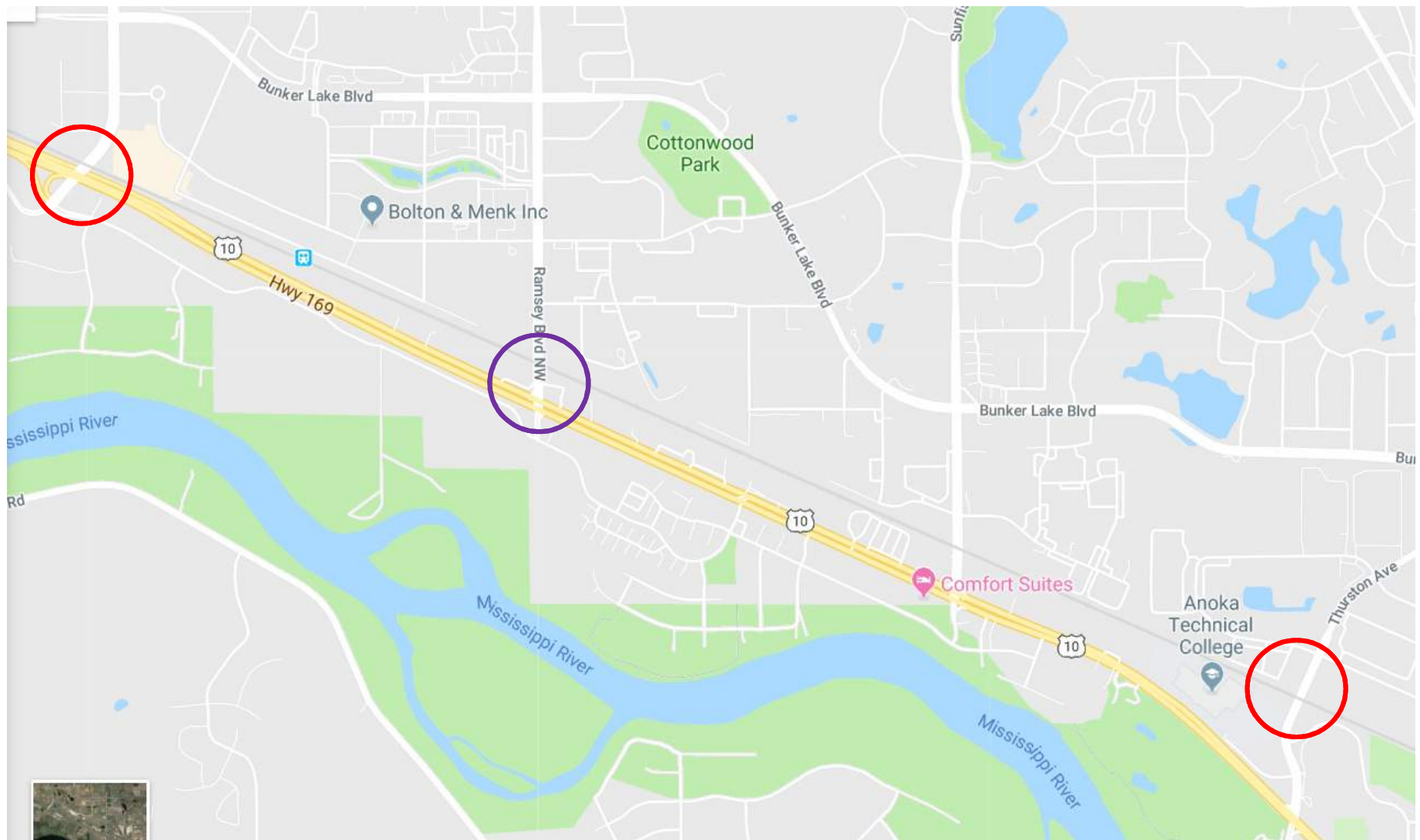
Overpass with Right-In/Right-Out (Option 1B)  
Rail Grade Separation







# Existing & Proposed Rail Grade Separation

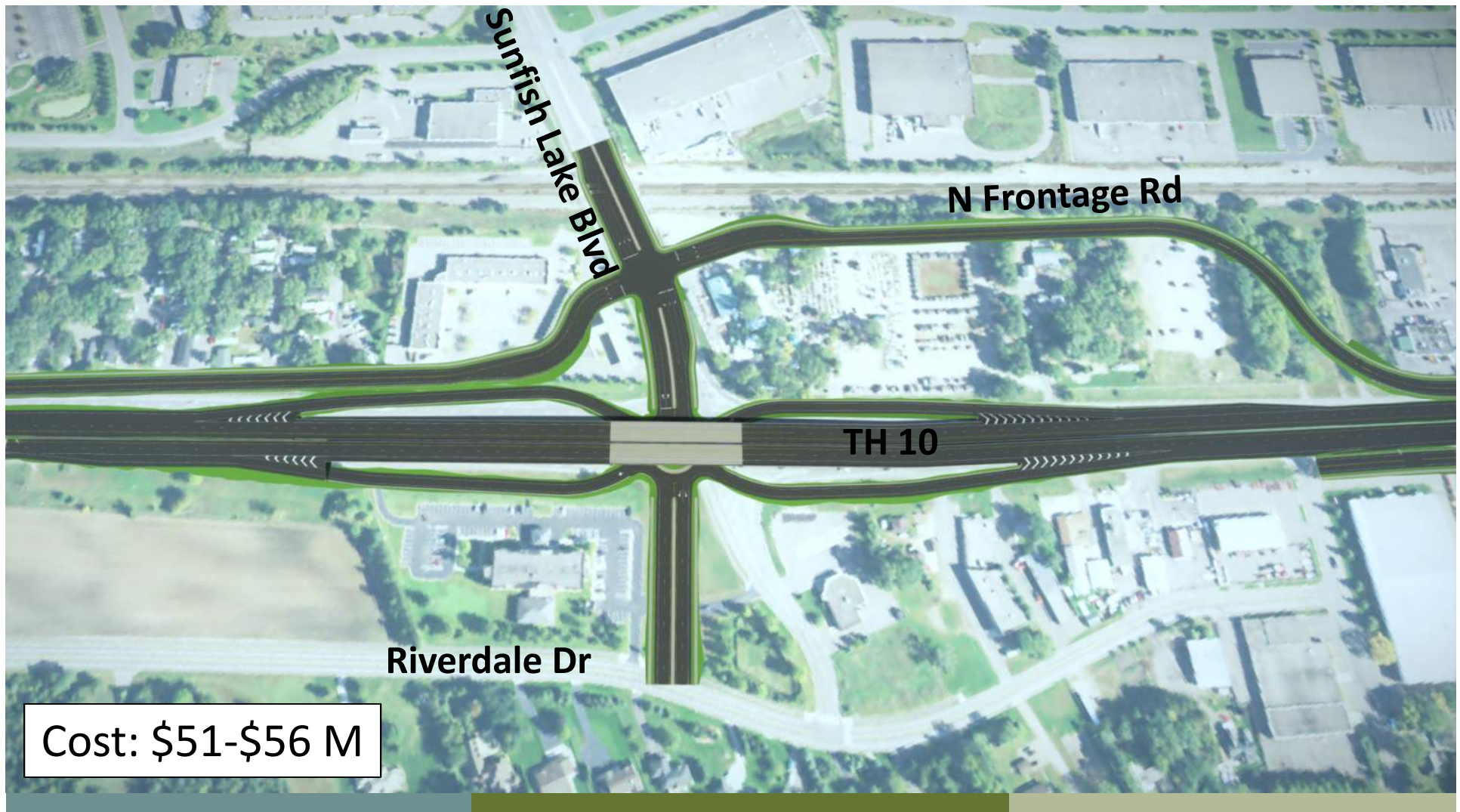




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# Sunfish Lake Blvd Concepts

Grade Separated Roundabout (Option 5B)  
At-Grade Rail



Cost: \$51-\$56 M



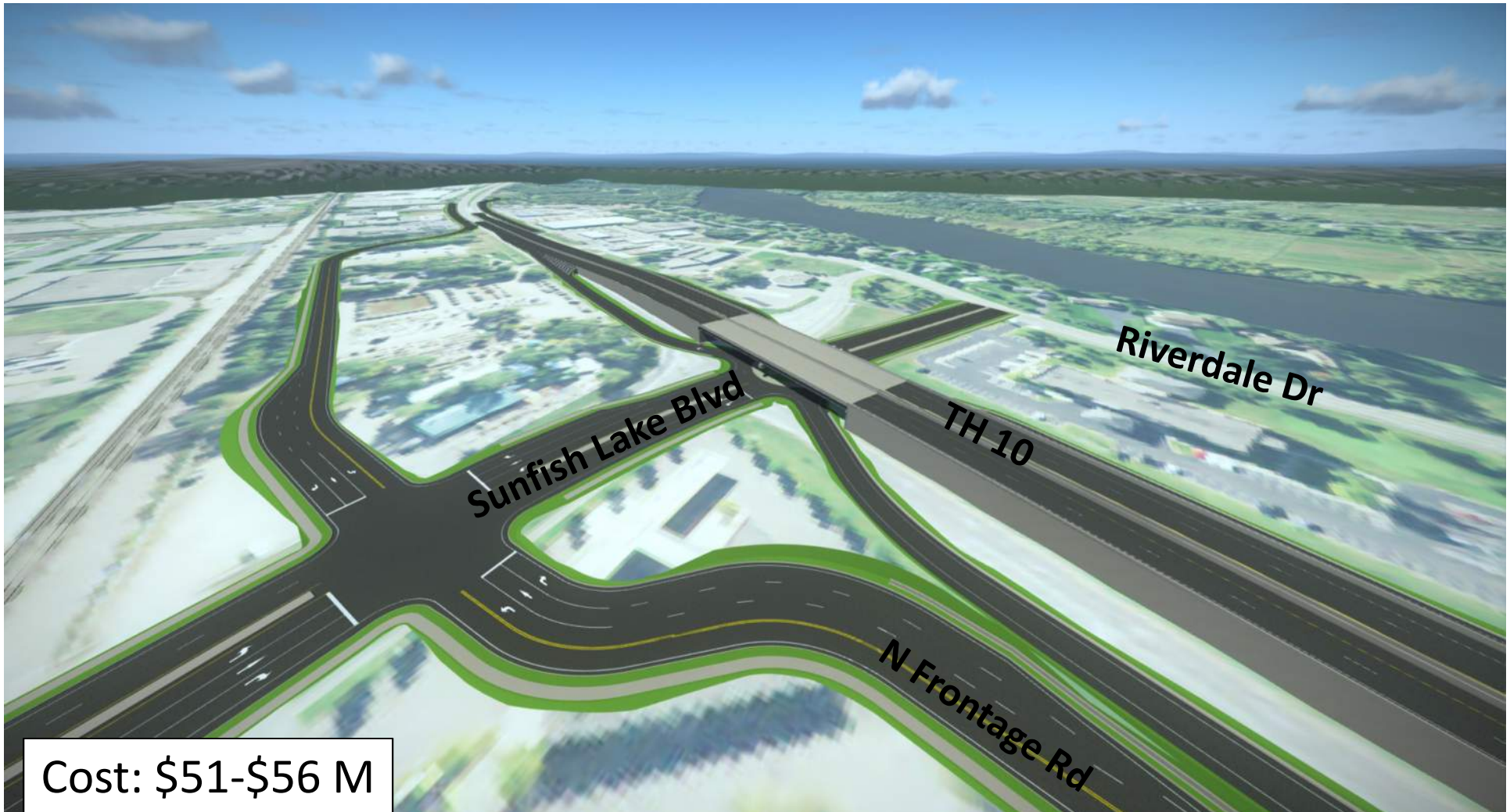


# Sunfish Lake Blvd Concepts



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TRANSPORTATION

Grade Separated Roundabout (Option 5B)  
At-Grade Rail







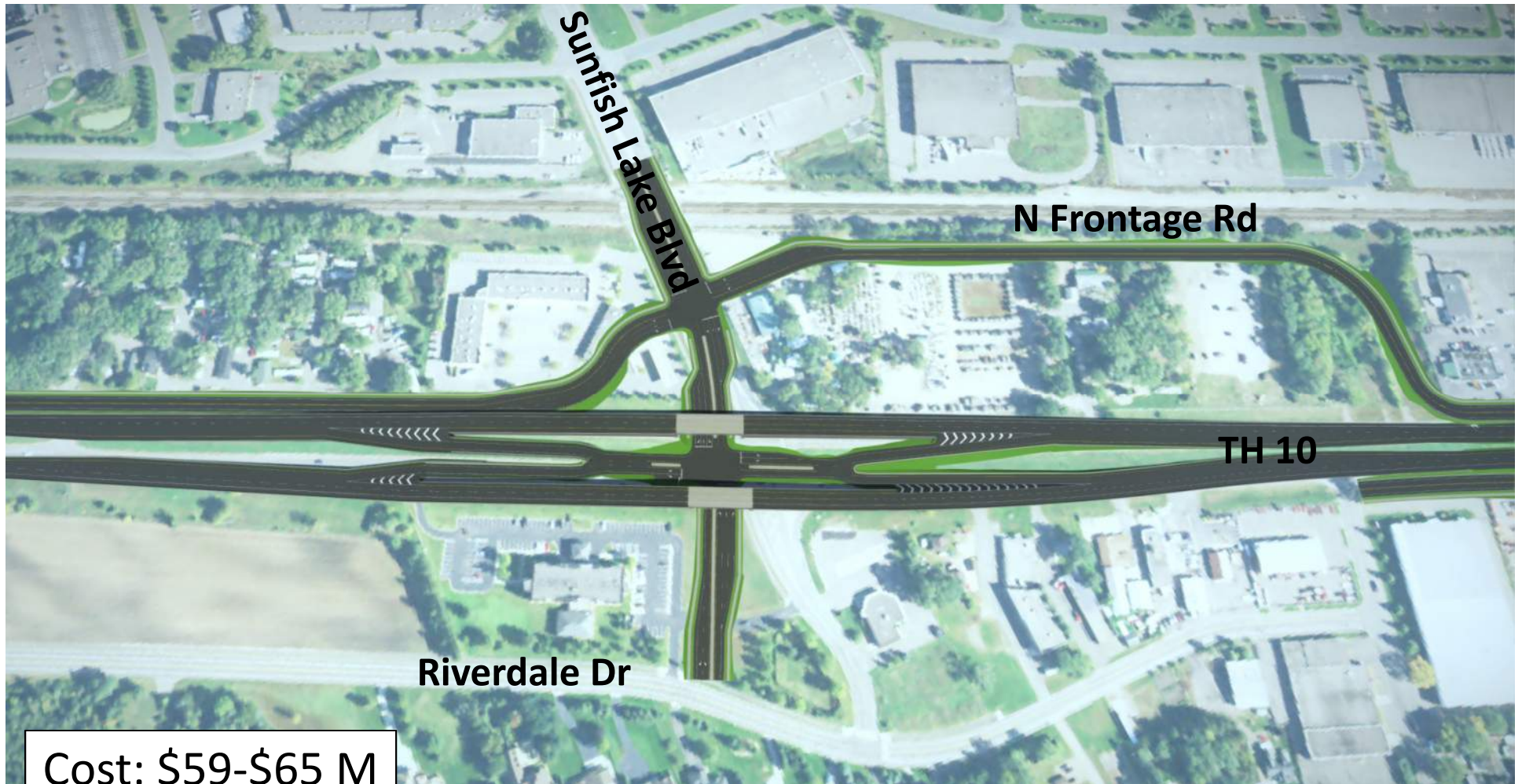
# Sunfish Lake Blvd Concepts

Center Turn Overpass (Option 6B)

At-Grade Rail



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# Sunfish Lake Blvd Concepts

Center Turn Overpass (Option 6B)

At-Grade Rail



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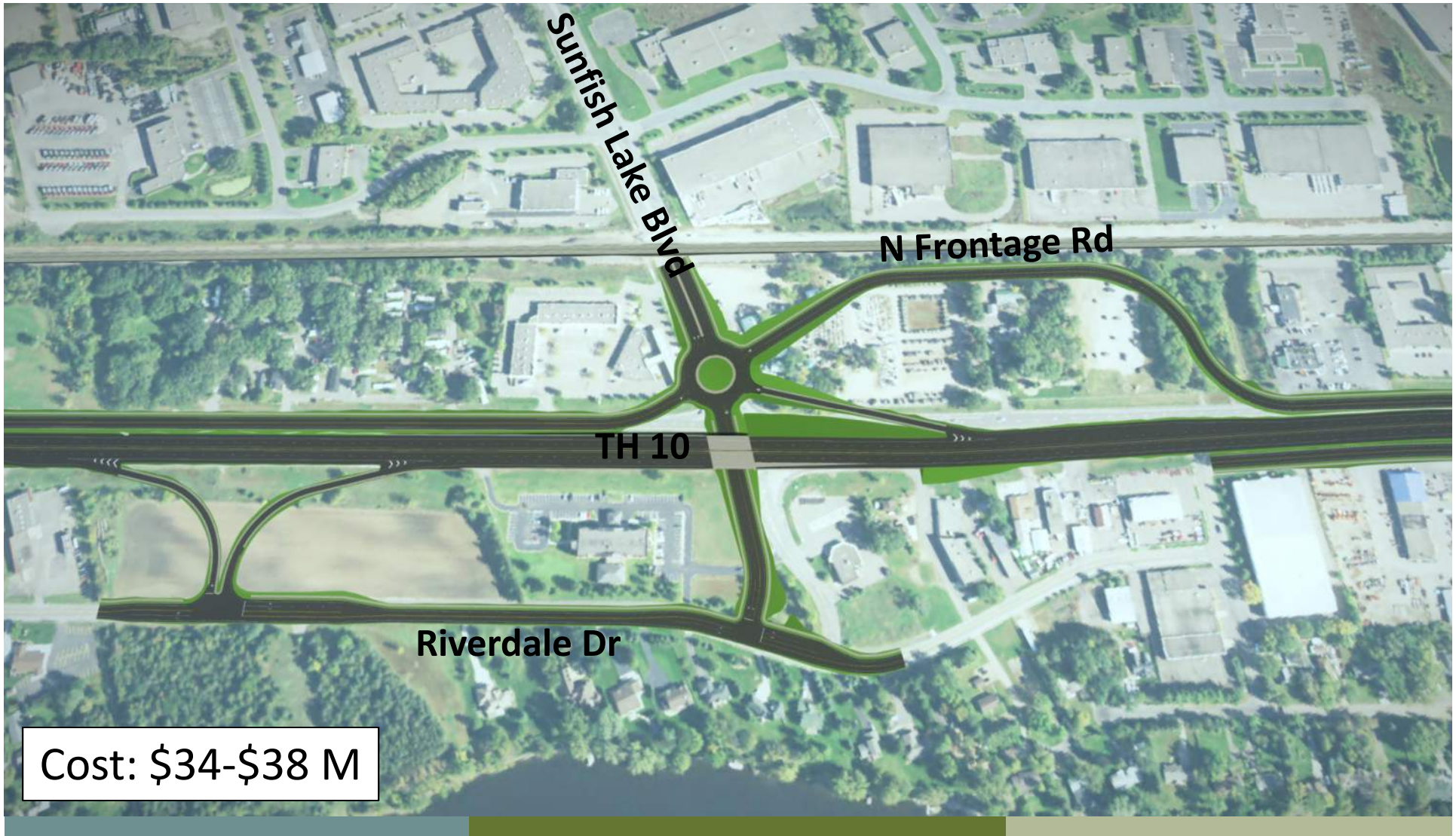




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# Sunfish Lake Blvd Concepts

Right-In/Right-Out with WB Exit Ramp (Option 9A)  
At-Grade Rail





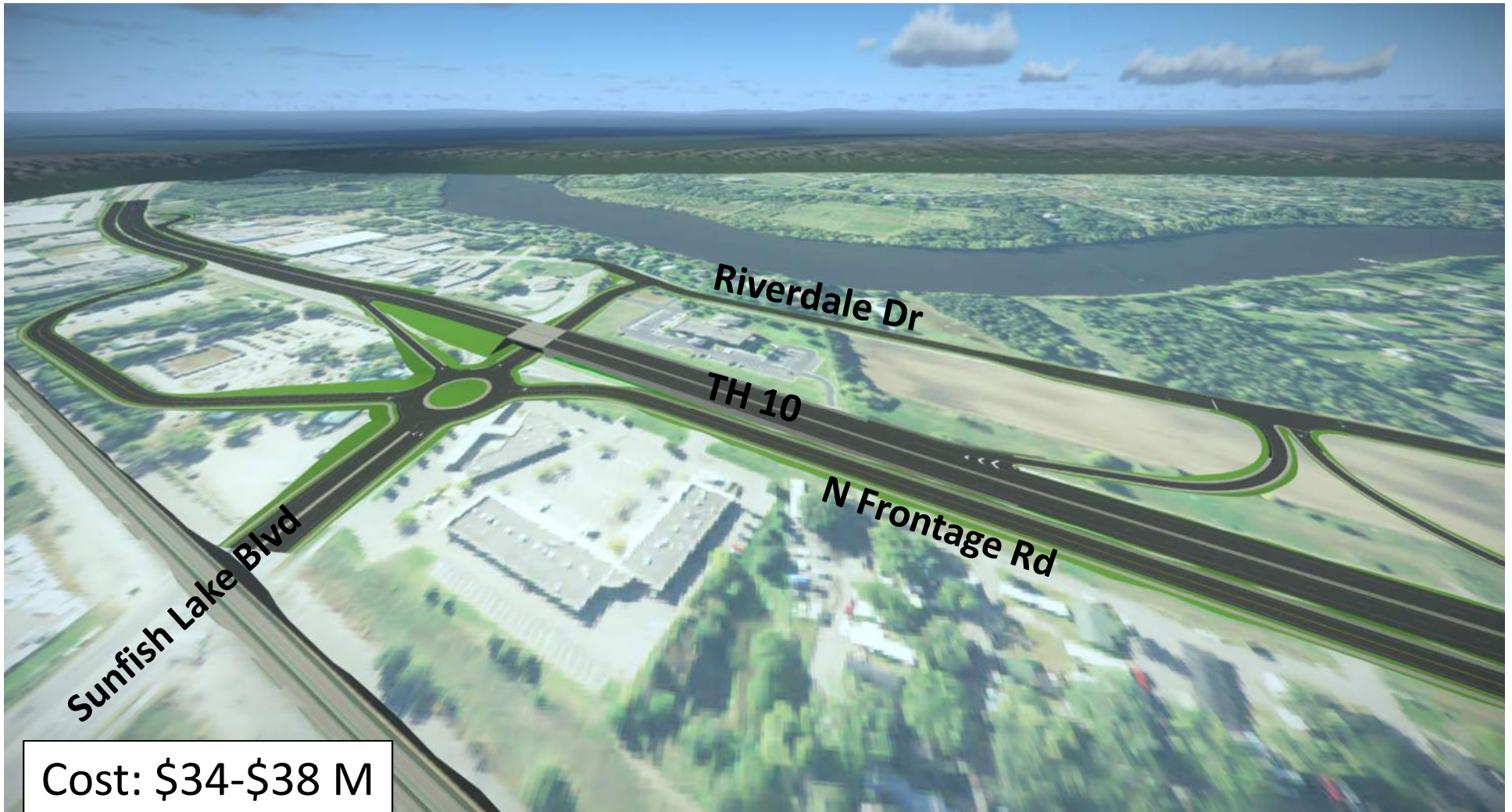


# Sunfish Lake Blvd Concepts



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Right-In/Right-Out with WB Exit Ramp (Option 9A)  
At-Grade Rail



Cost: \$34-\$38 M





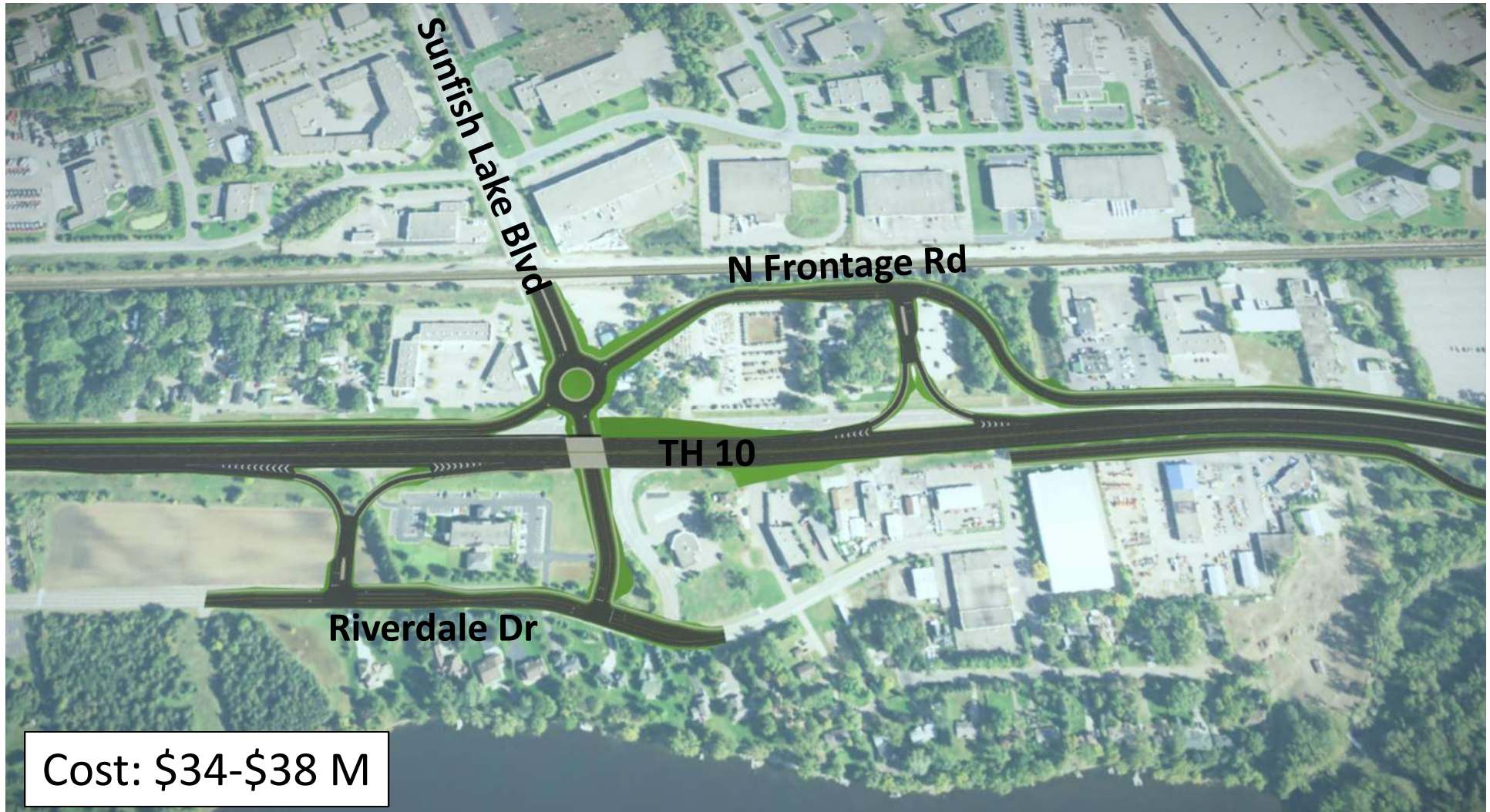
# Sunfish Lake Blvd Concepts

Right-In/Right-Out (Option 9B)

At-Grade Rail



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# Sunfish Lake Blvd Concepts

Right-In/Right-Out (Option 9B)

At-Grade Rail

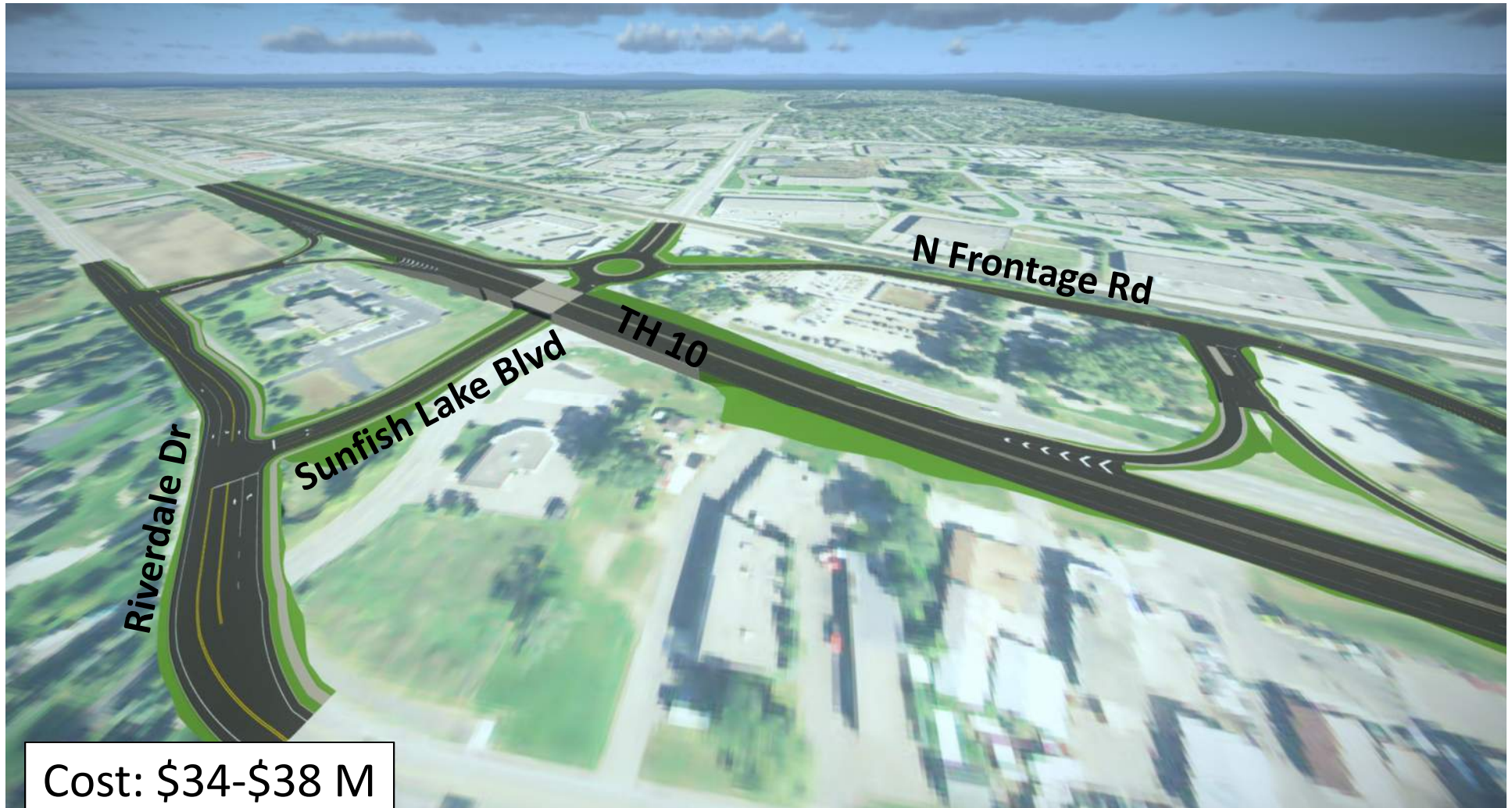


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Cost: \$34-\$38 M



Anoka County  
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## Frontage Road Option



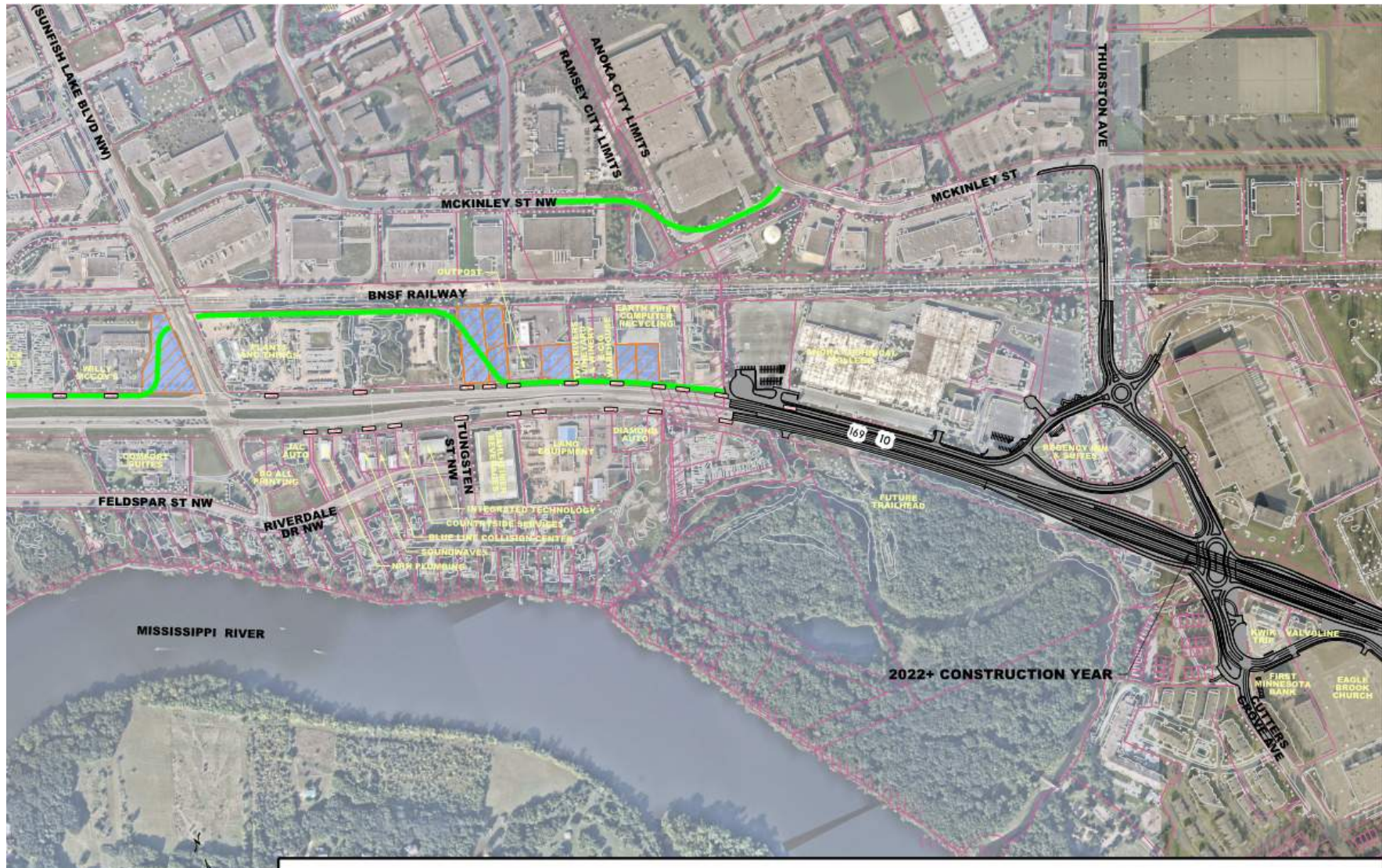
- **Total Cost: \$2.4 M**
  - Construction: \$1.4 M
  - ROW: \$700k
  - Engineering: \$300k





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# Anoka Solution





# Sunfish Lake Blvd Preliminary Costs

Sunfish Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Option 1A. RIRO (Over RR)	\$41 - \$46 M	\$12 - \$13 M	\$8.3 - \$9.1 M	<b>\$61 - \$68 M</b>
Option 1B. RIRO (Over RR)	\$35 - \$39M	\$12 - \$13 M	\$7.1 - \$7.8 M	<b>\$54 - \$60 M</b>
Option 5B. GSR (At Grade RR)	\$33 - \$36 M	\$12 - \$13 M	\$6.5 - \$7.2 M	<b>\$51 - \$56 M</b>
Option 6B. Center Turn (At Grade RR)	\$40 - \$44 M	\$11 - \$12 M	\$7.9 - \$8.8 M	<b>\$59 - \$65 M</b>
Option 9A. RIRO w/WB Exit Ramp (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.8 - \$4.2 M	<b>\$34 - \$38 M</b>
Option 9B. RIRO (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.9 - \$4.3 M	<b>\$34 - \$38 M</b>



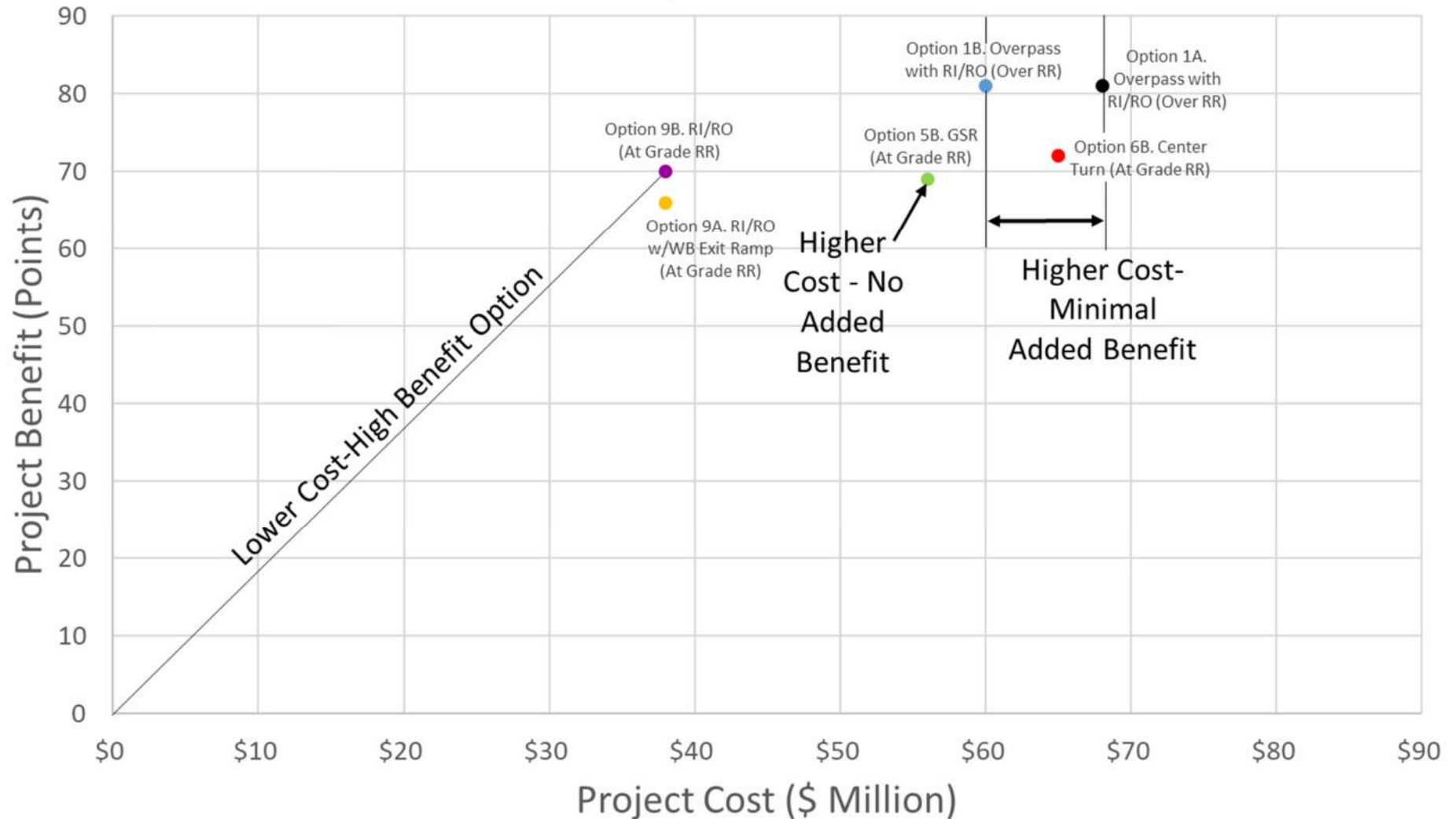




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# Sunfish Lake Blvd Preliminary Costs

## Sunfish Options: Cost - Benefit





## Range of Total Cost – East End

### Both Grade Separated Rail

#### TOTAL COST:

Ramsey (RR Grade Separated)  
Sunfish (RR Grade Separated)  
Frontage Rd (Ramsey to Sunfish)

\$112 - \$149 M

### One At-Grade Rail

#### TOTAL COST:

Ramsey (RR Grade Separated)  
Sunfish (At Grade RR)  
Frontage Rd (Ramsey to Sunfish)

\$92 - \$146 M

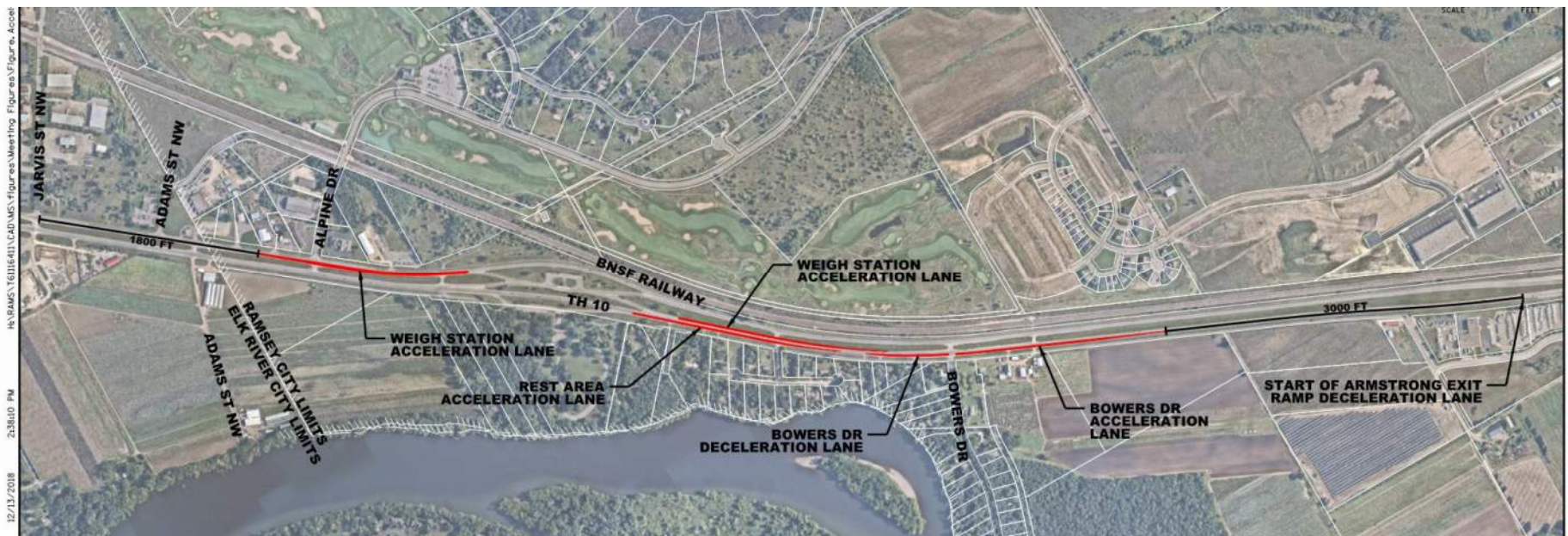


# West End Concepts



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- Interim Option – Unsignalized RCTs at Jarvis & Alpine
- Document Alternatives Studied (signalized RCT, overpass)
- Future Joint Study (MnDOT D3, Metro and Cities)
  - Determine Hwy 10 corridor vision into Elk River

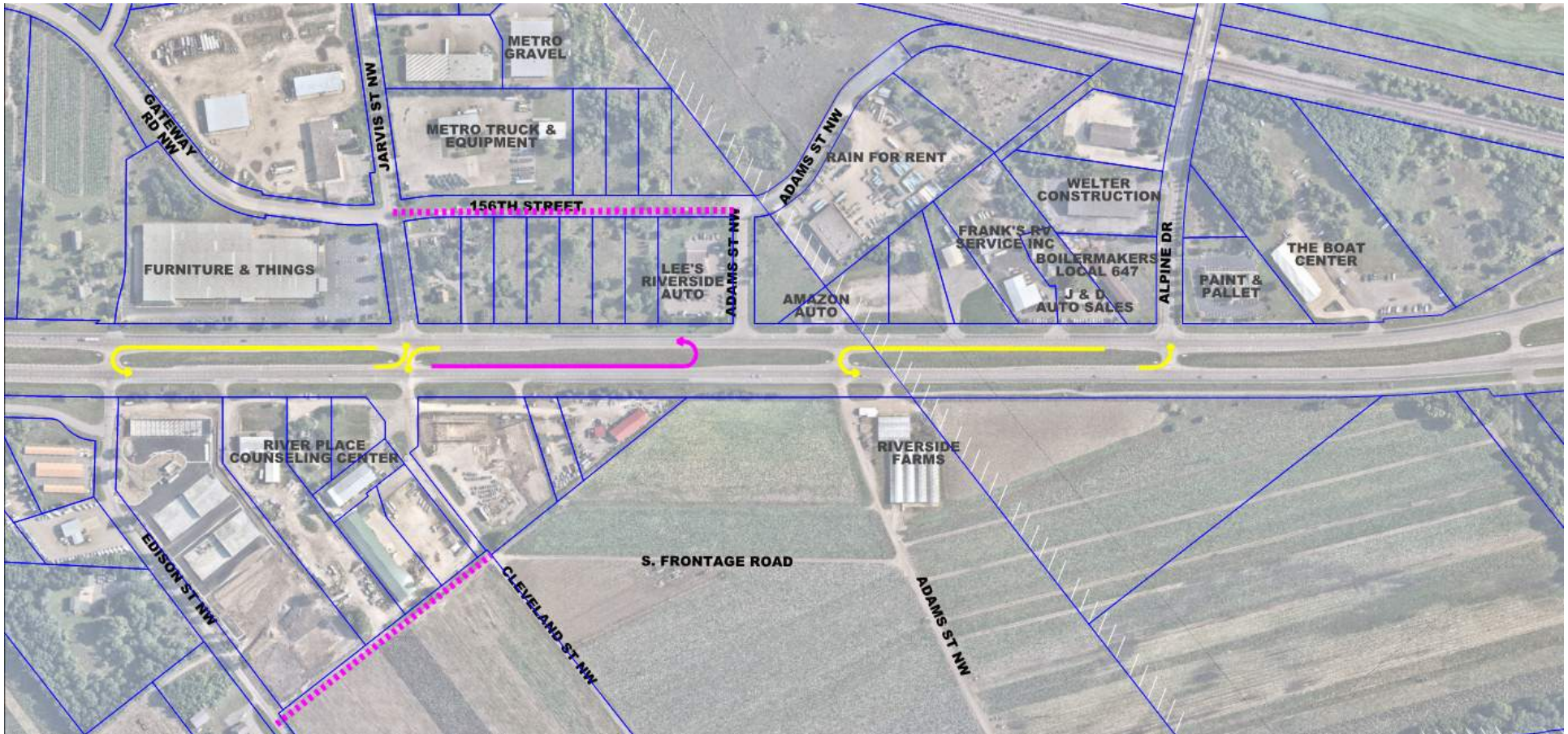






# Interim Option

## Unsignalized RCUTs at Jarvis and Alpine



- Total Cost: ~\$1 M

- Minor Reconstruction
- New Turn Lane
- ... Possible Roadway Connection





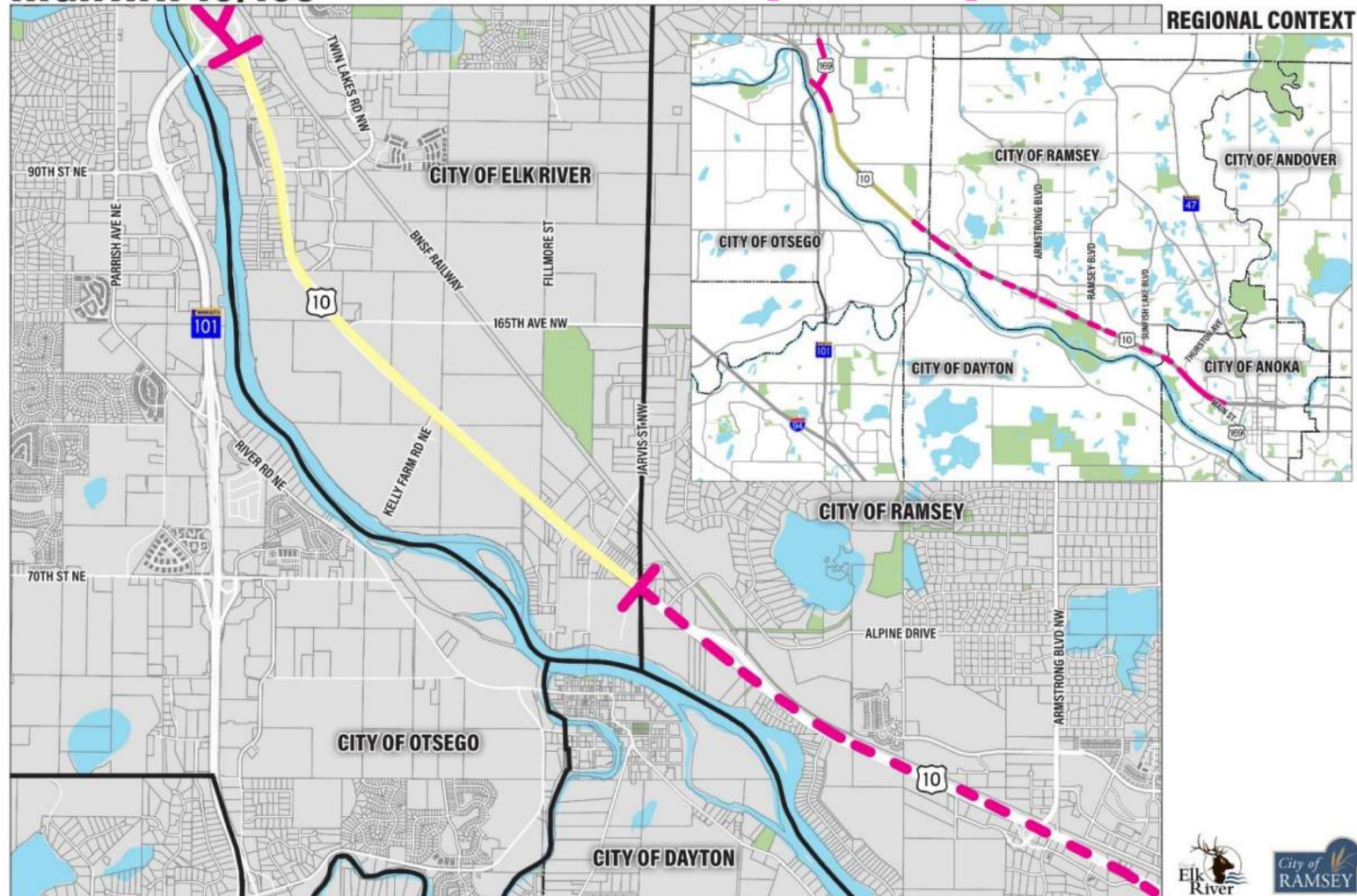
# Future Study



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## HIGHWAY 10/169

— CITY LIMITS     UNDER STUDY     FUNDED PROJECT









# Elk River Future Land Use

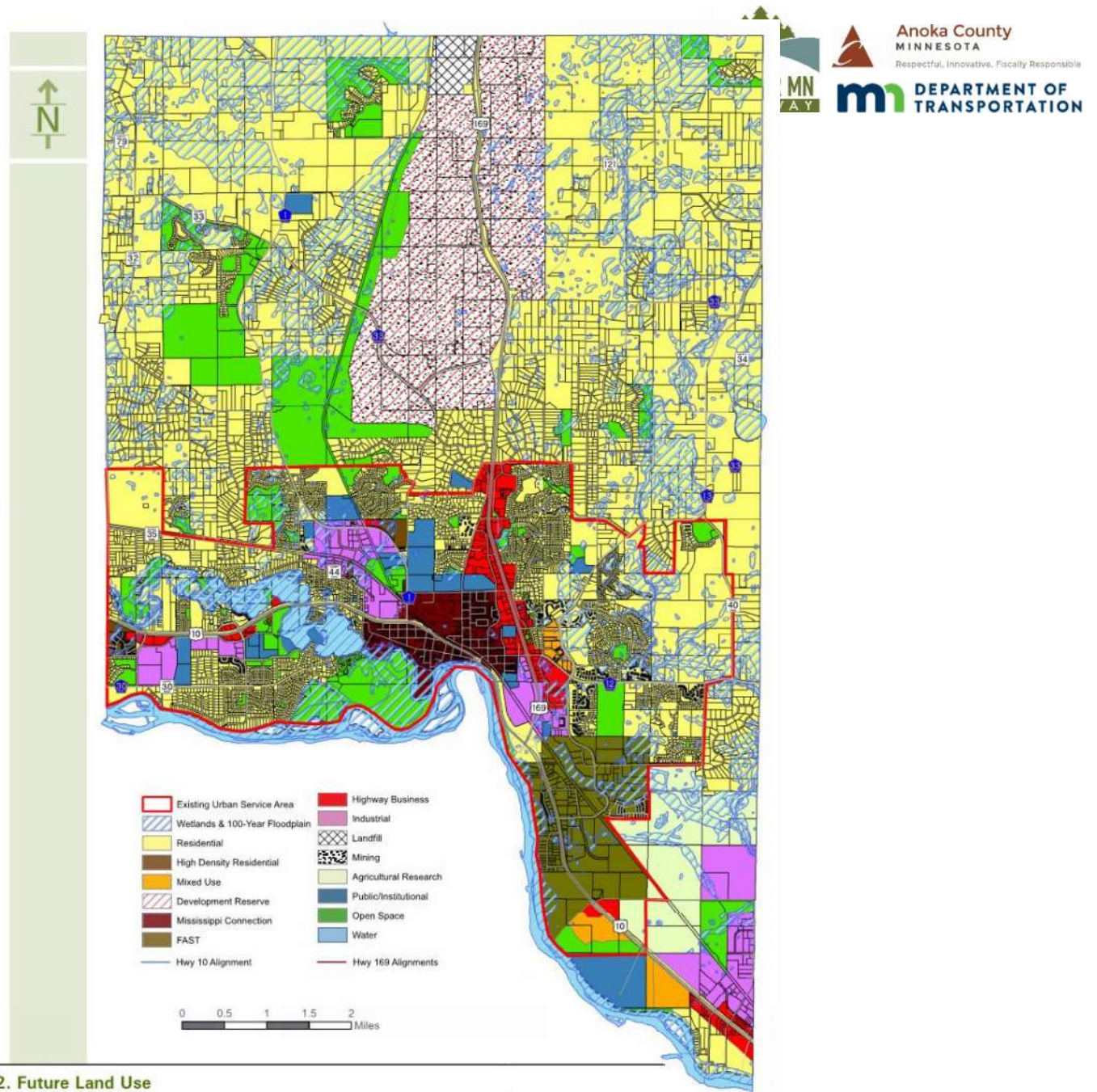


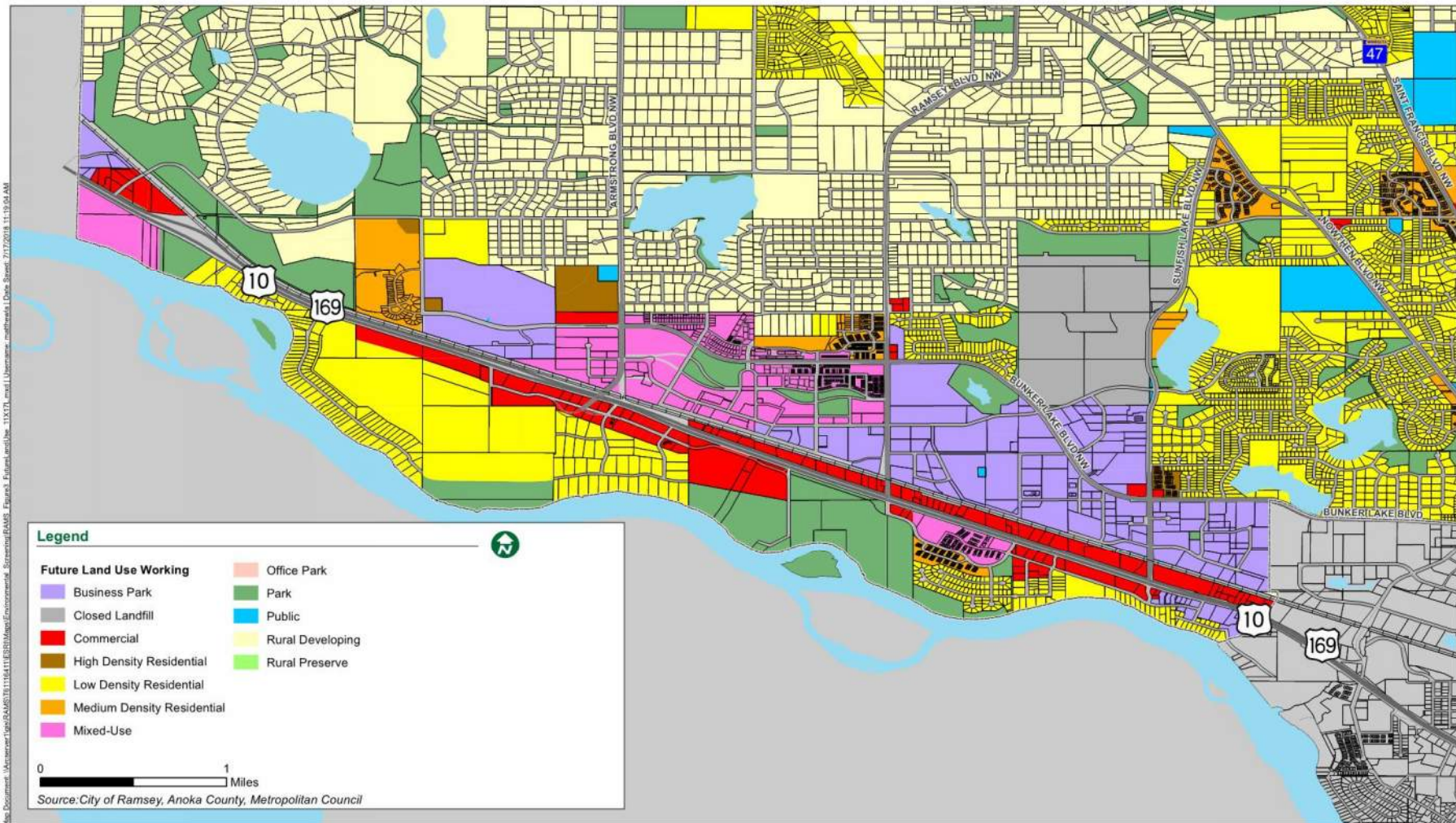
Figure 5-2. Future Land Use





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# Ramsey Future Land Use

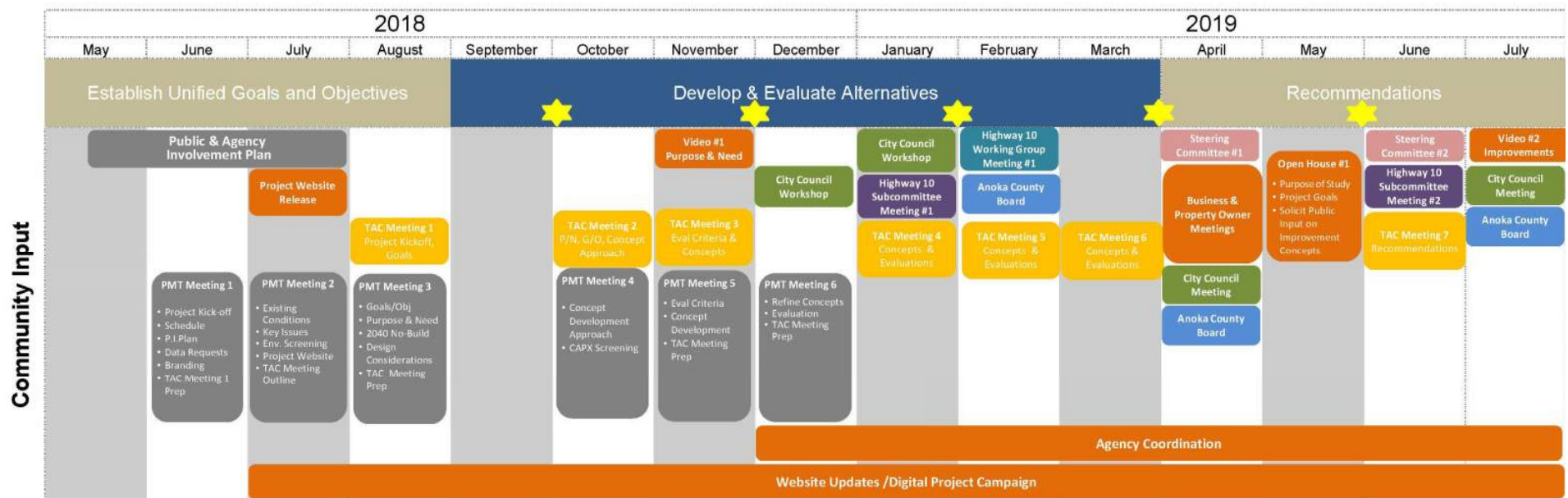






# Public Involvement Plan

- Steering Committee – April
- Property Owner Meetings – April/May
- Open House/Input ID – May
- Next TAC Meeting - June



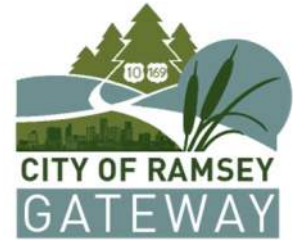
# **Ramsey Highway 10 Corridor Improvements**

**City of Ramsey  
City Council Work Session**

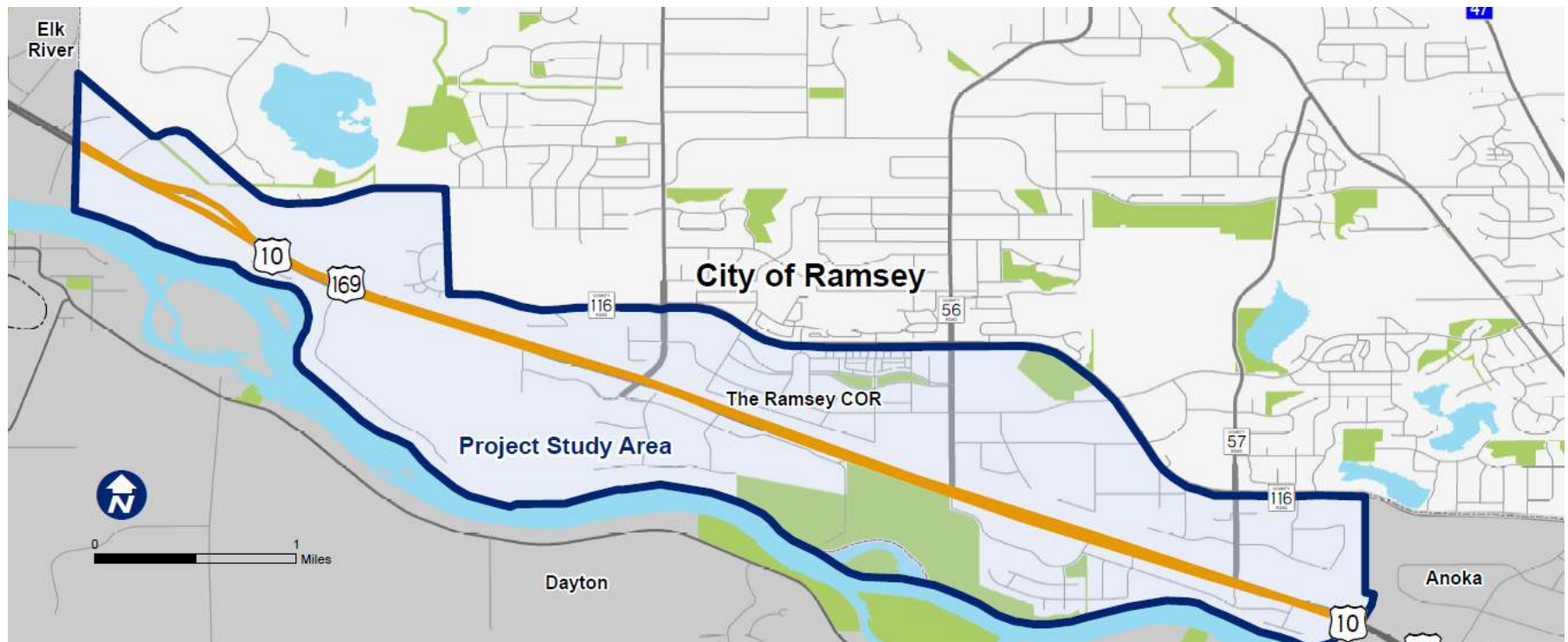
July 16, 2019



# Meeting Overview



- ✓ Recap Public Input
- ✓ Ramsey Blvd TAC Recommendation
- ✓ Sunfish Lake Rail Grade Separation?
- ✓ Next Steps





## Ramsey Gateway Highway 10 Project Business & Property Meetings

Ramsey City Hall - 7:30 - 8:30 am

Wednesday, May 22, 2019

Sunfish Lake Blvd Group

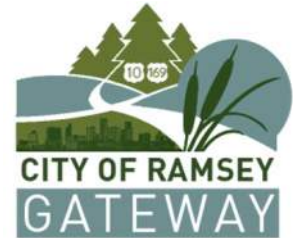
Thursday, May 23, 2019

Ramsey Blvd Group

Meeting Format:  
Presentation and  
Group Discussion

13

Business & Property  
Owners Signed In



### What We Heard

Desire to know  
**construction**  
time line and  
impacts to properties



Desire for **frontage roads**  
to be constructed before  
Highway 10 reconstruction  
and completion of the  
Anoka Highway 10 project

Concern that  
**non-traditional**  
**Highway 10 access**  
may confuse customers

Concern for impacts to  
**recent investments**  
or **lost revenue** due to  
unknowns



**\*Roundabouts**  
are not ideal for  
industrial park access



Concern with business  
visibility impacted by  
potential Highway  
10 median barrier.

**Riverdale Drive** is heavily  
used by traffic avoiding  
backups on Highway 10  
and many  
bicyclists



**\*Space for snow  
removal and  
storage is  
an issue**



**\*Sunfish Lake Blvd  
roadway bridge over  
railroad not perceived  
as necessary**



**\*Drainage  
is an issue  
along Highway 10**







## Ramsey Gateway Highway 10 Project

### Public Open House

Tuesday, June 4, 2019

Ramsey City Hall

5 pm-7 pm

Open House Format:  
Project Informational  
Boards and Discussion

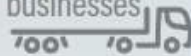
102

Attendees Signed In



## What We Heard

Frontage road connections are important and need to accommodate large trucks to and from businesses



Desire for selection of alternatives that are most **fundable and efficient** as a single vision for Highway 10 in Ramsey

How attendees heard about the open house:

89% Mailing  
7% Email  
2% Social Media  
2% Word-of-Mouth

Desire to know **construction time line and impacts** to properties



Desire to see project sensitivity for environmental resources, planned green space, storm water management, traffic speed enforcement, and cost of lost tax base

Concern for roundabout **safety, efficiency and potential backups** on the frontage roads and highway.



**Riverdale Drive** is heavily used by traffic avoiding backups on Highway 10 and many bicyclists



\* Mixed perception on the need for a **roadway bridge over the railroad** with reconstruction of the Sunfish Lake Blvd and Highway 10 intersection



\* Riverdale Drive residents were unsupportive of alternatives that add highway access points and a large amount of frontage road traffic in front their properties

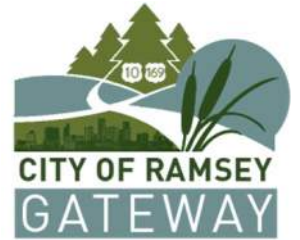


\* specific to Sunfish Lake Blvd



## Study Review

- Picked up from 2014 Study
  - \$300M+ freeway vision not realistic with available funding
  - Identified multiple options \$98-\$110M vision (2014 \$)
  - Rail grade separation not reviewed in detail
- Current Work
  - Looked at existing, 2025 & 2045 conditions
  - Developed purpose & need framework
  - Identified goals & objectives
  - Dismissed concepts not consistent with above
  - More detail on rail grade separations



# Ramsey Blvd Concepts

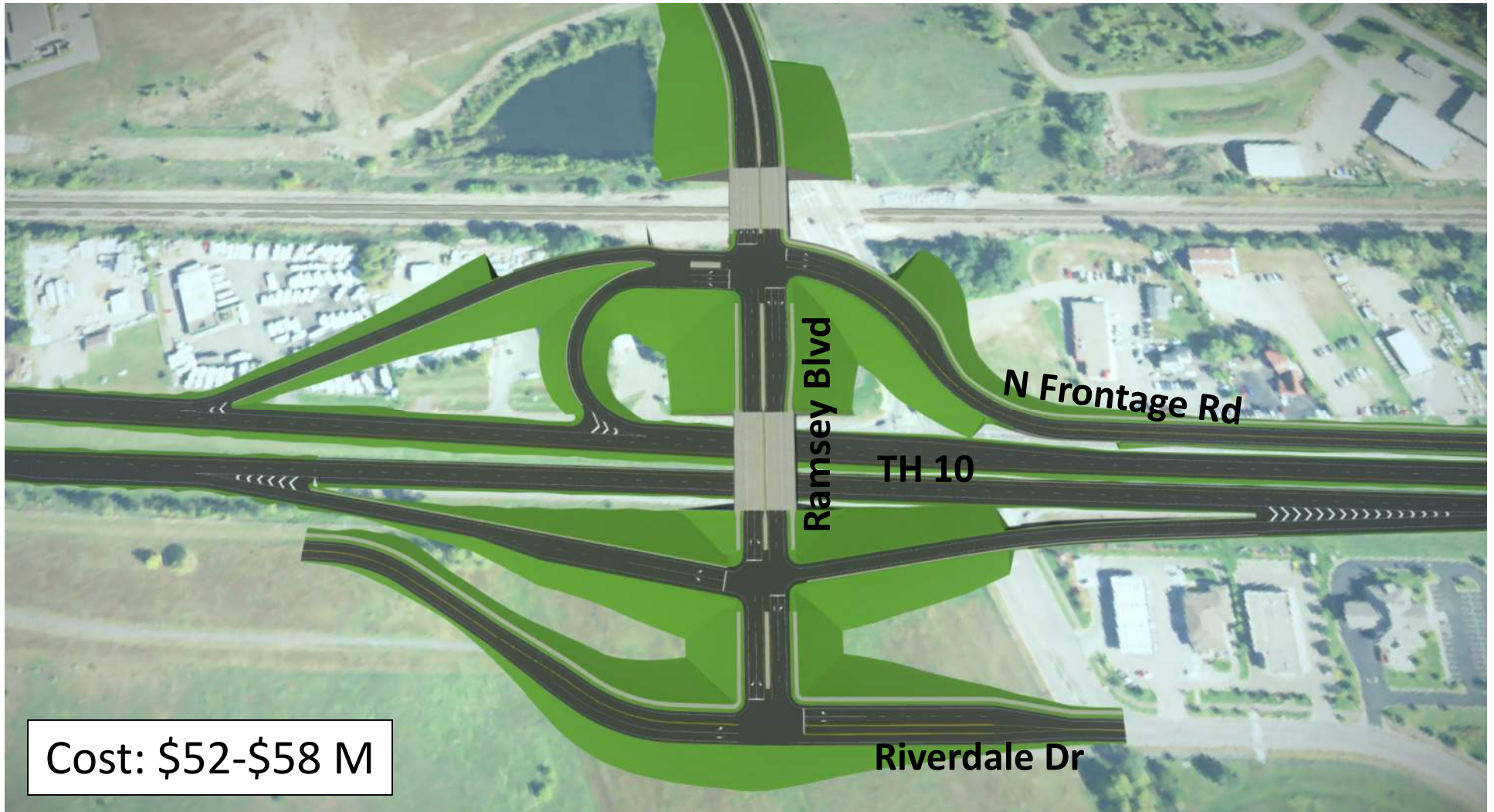
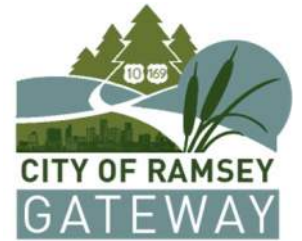
- Railroad Grade Separation on All Concepts
- Entrance/Exit Ramp Options:
  - Tight Diamond
  - Folded WB Off Tight Diamond
  - Overpass with Right-In/Right-Out
  - Tight Diamond with W Frontage Rd





# TAC Recommendation

## Ramsey Blvd Folded Tight Diamond



Cost: \$52-\$58 M





# Lowest Cost

## Ramsey Blvd Overpass with Right-In/Right-Out



# Ramsey Blvd Preliminary Costs



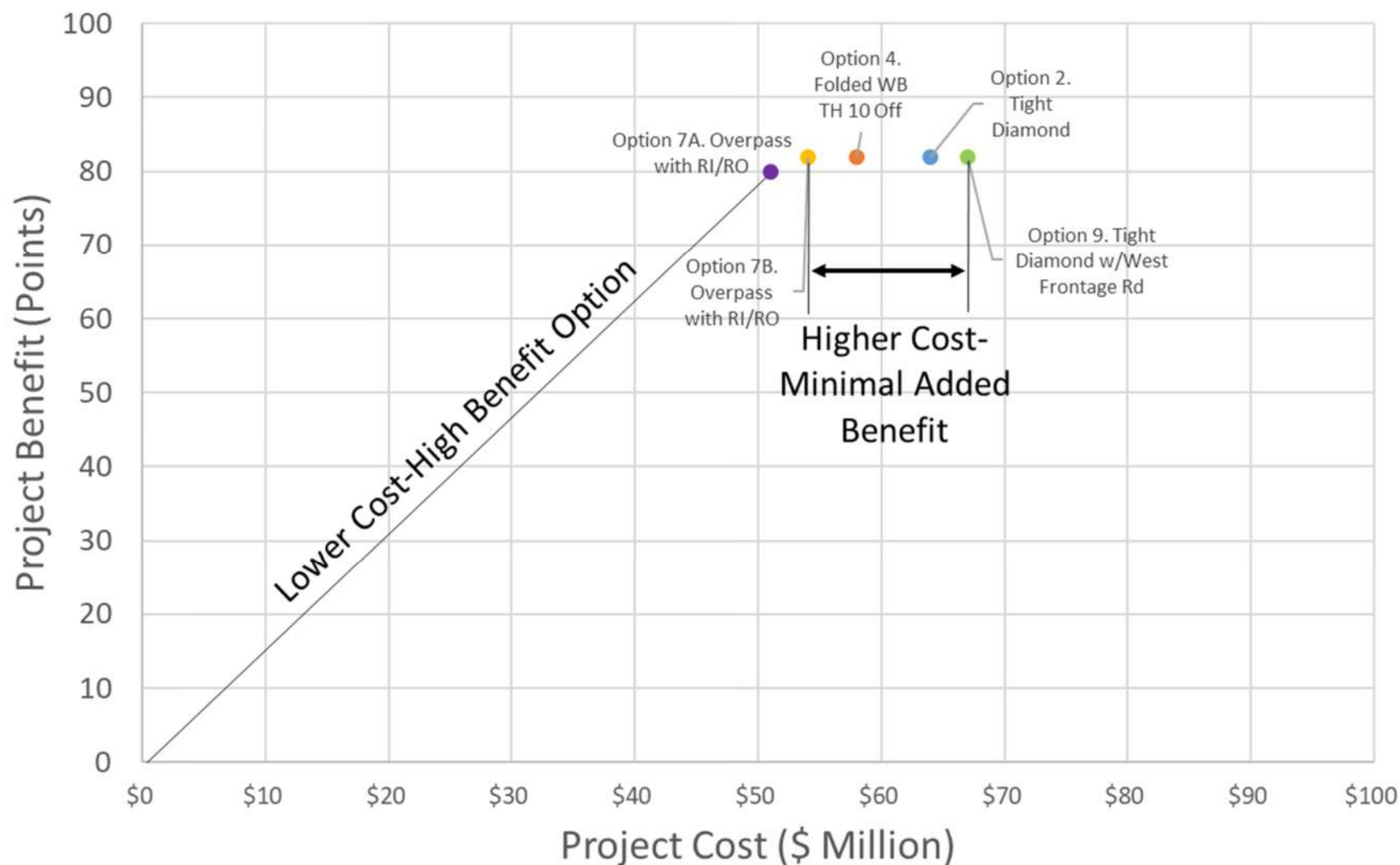
Ramsey Over Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Option 2. Tight Diamond	\$34 - \$38 M	\$16 - \$18 M	\$6.8 - \$7.6 M	<b>\$58 - \$64 M</b>
Option 4. Folded WB TH 10 Off	\$30 - \$34 M	\$16 - \$18 M	\$6.1 - \$6.7 M	<b>\$52 - \$58 M</b>
Option 7A. Overpass with RIRO	\$23 - \$25 M	\$18 - \$20 M	\$4.6 - \$5.0 M	<b>\$46 - \$51 M</b>
Option 7B. Overpass with RIRO	\$27 - \$30 M	\$16 - \$18 M	\$5.5 - \$6.0 M	<b>\$49 - \$54 M</b>
Option 9. Tight Diamond with Frontage Rd	\$41 - \$45 M	\$12 - \$13 M	\$8.2 - \$9.0 M	<b>\$61 - \$67 M</b>





# Ramsey Blvd Preliminary Costs

## Ramsey Options: Cost - Benefit





# Sunfish Lake Boulevard Concepts



## Railroad Grade Separation:

- Overpass with Right-In/Right-Out

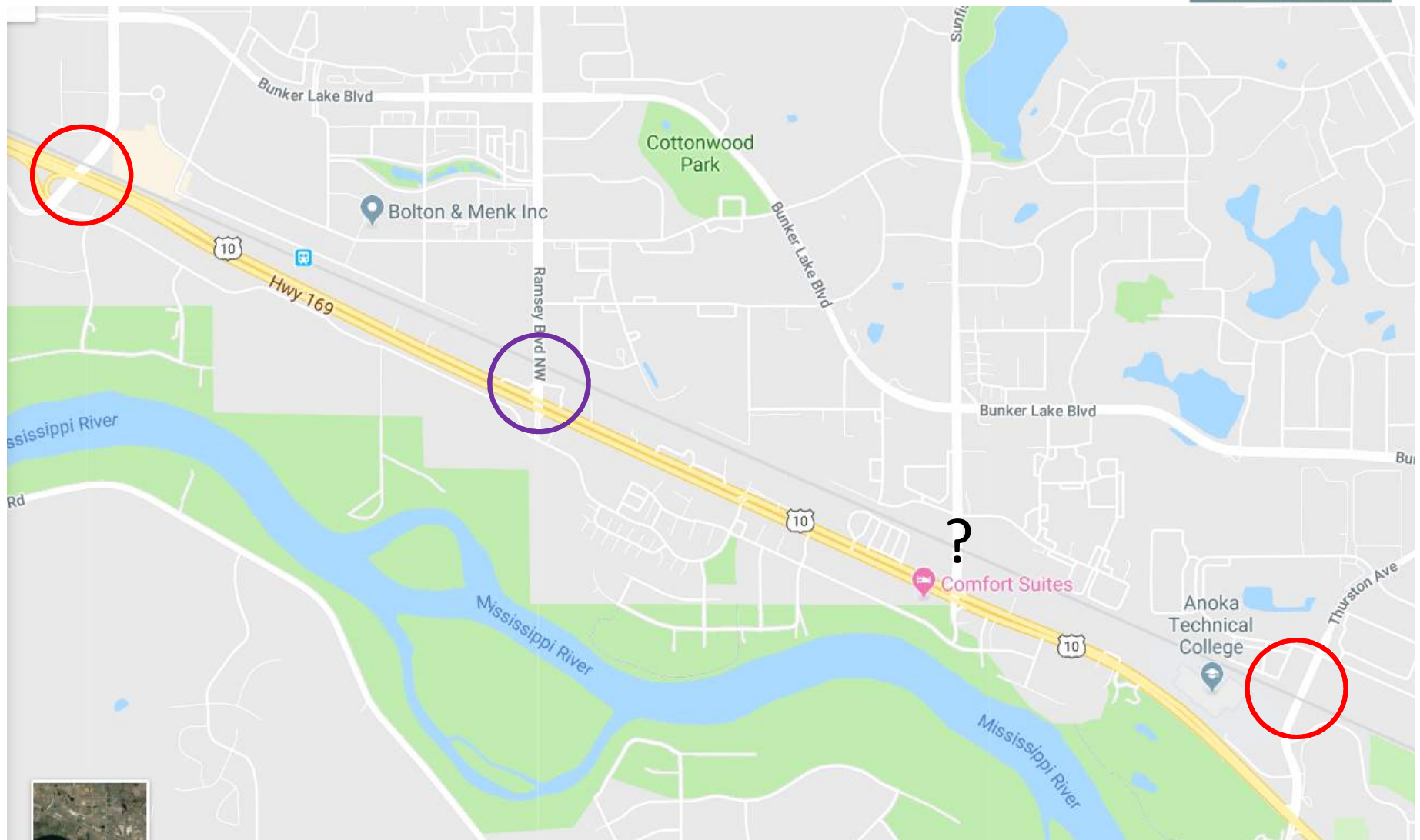
## At-Grade Rail Options:

- Grade-Separated Roundabout
- Center Turn Overpass
- Overpass with Right-In/Right-Out
  - Full Access
  - Reduced Access (No WB on ramp)
- New Loop Ramp Concepts
  - Modified Overpass with RI/RO & loop
  - Modified RI/RO Roundabout & loop





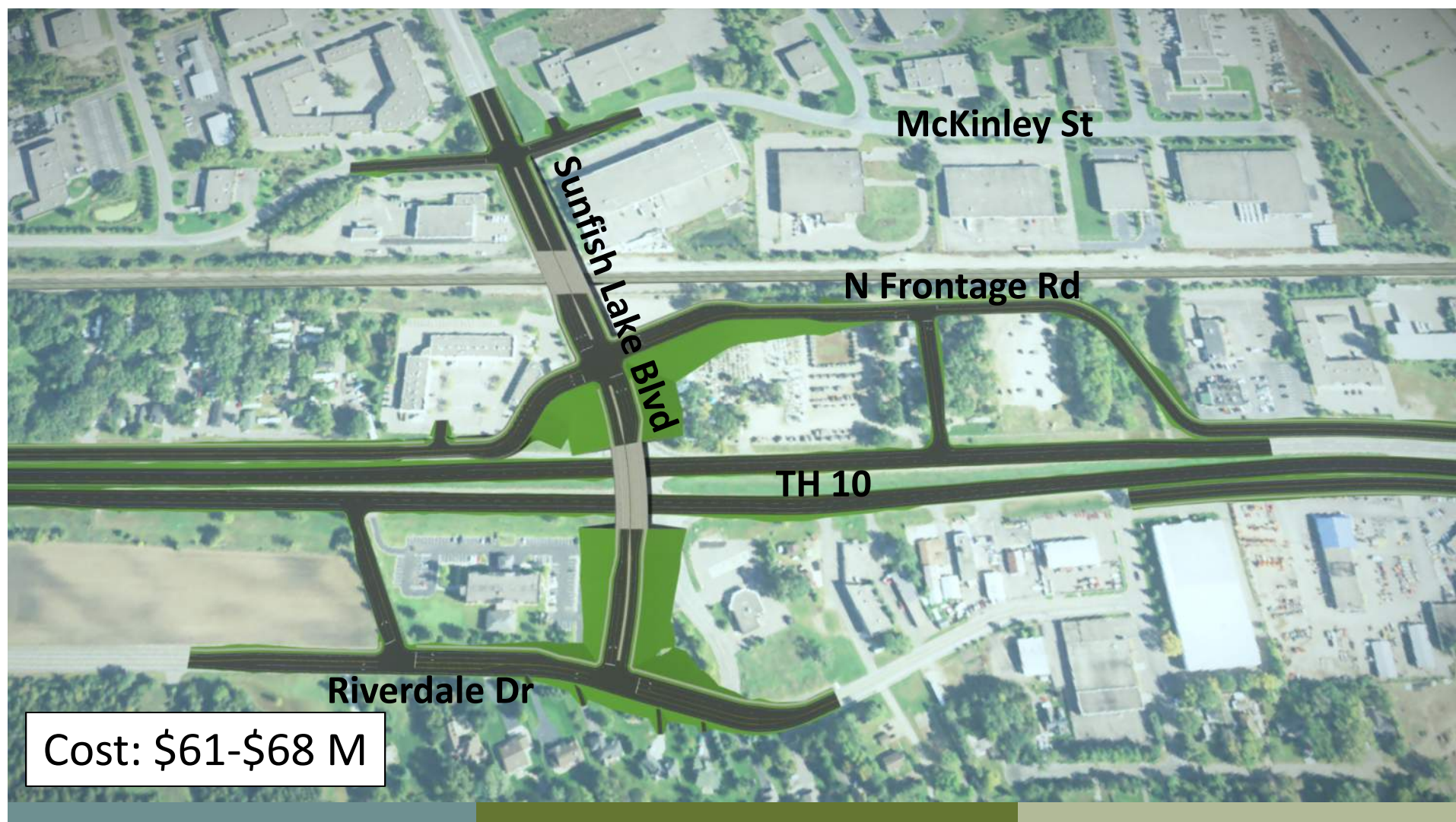
# Existing & Proposed Rail Grade Separation





# Sunfish Lake Blvd Concepts

Overpass with Right-In/Right-Out – Option A  
Rail Grade Separation

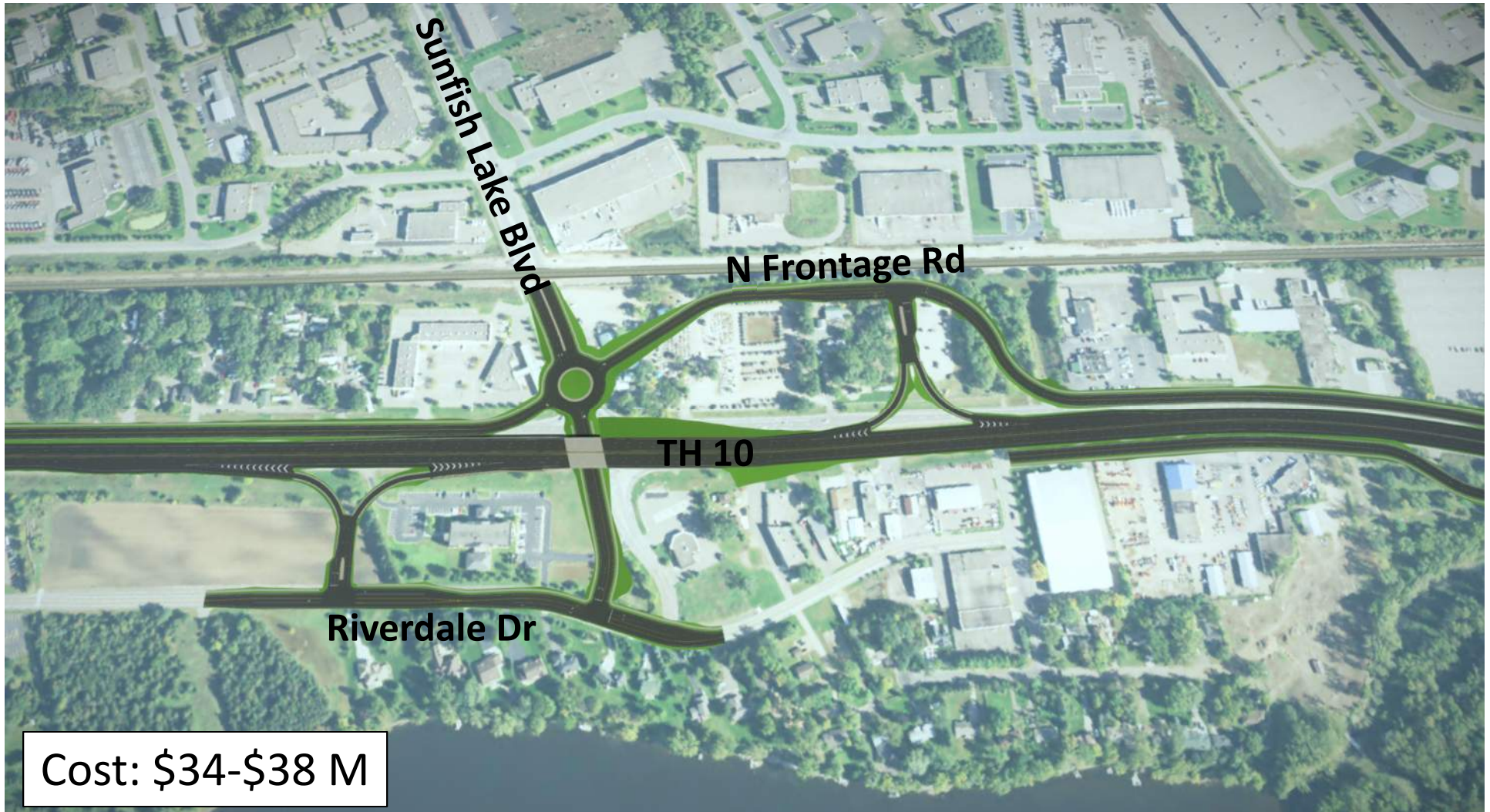
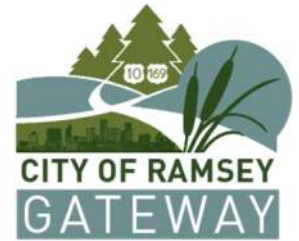




# Sunfish Lake Blvd Concepts

Right-In/Right-Out With Roundabout (Full Access)

At-Grade Rail



Cost: \$34-\$38 M



# Sunfish Lake Blvd Preliminary Costs

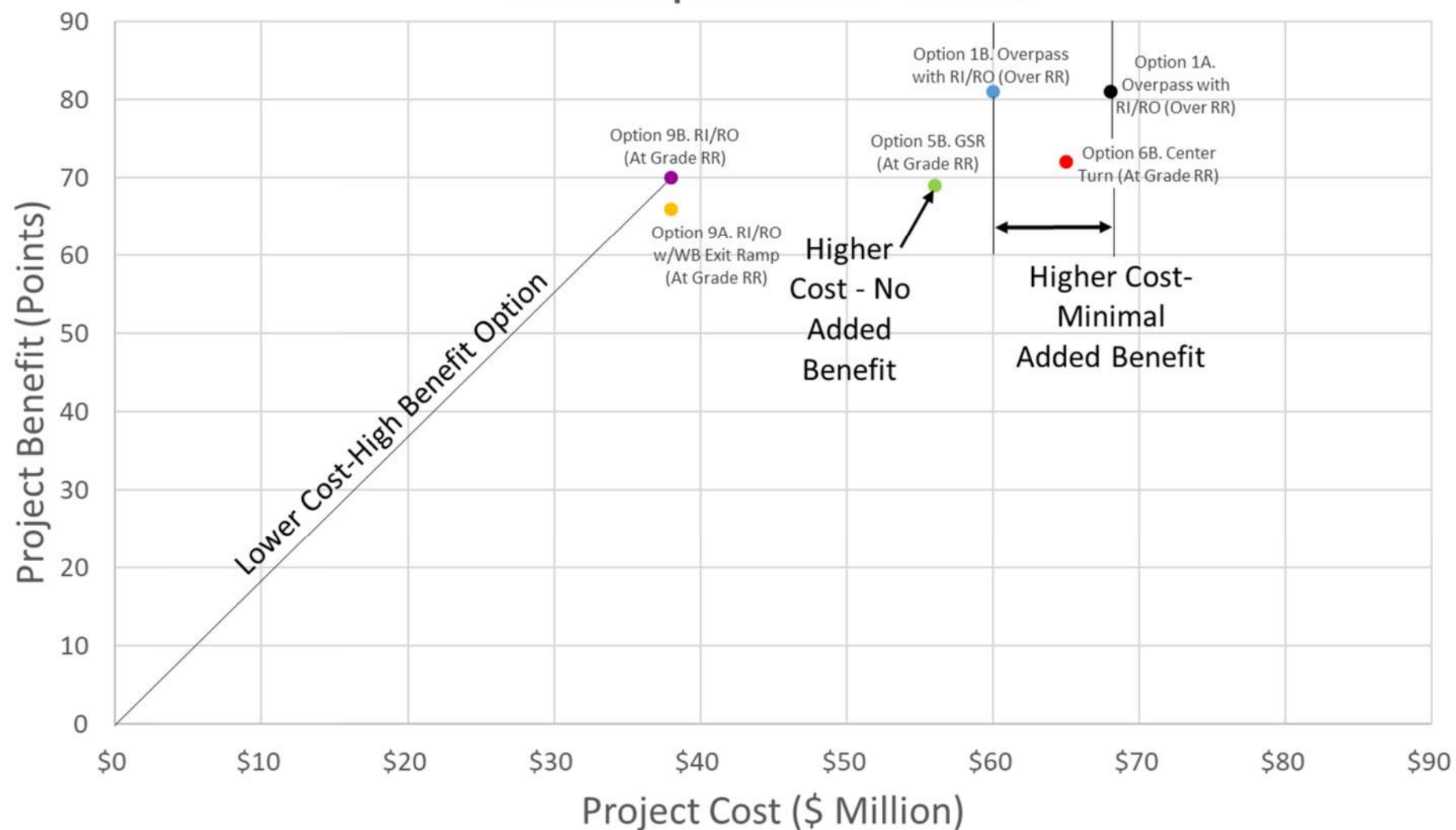
Sunfish Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Option 1A. Overpass with RIRO (Over RR)	\$41 - \$46 M	\$12 - \$13 M	\$8.3 - \$9.1 M	\$61 - \$68 M
Option 1B. Overpass with RIRO (Over RR)	\$35 - \$39M	\$12 - \$13 M	\$7.1 - \$7.8 M	\$54 - \$60 M
Option 5B. Grade Separated RAB (At Grade RR)	\$33 - \$36 M	\$12 - \$13 M	\$6.5 - \$7.2 M	\$51 - \$56 M
Option 6B. Center Turn Overpass (At Grade RR)	\$40 - \$44 M	\$11 - \$12 M	\$7.9 - \$8.8 M	\$59 - \$65 M
Option 9A. Overpass w/RIRO, Reduced Access (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.8 - \$4.2 M	\$34 - \$38 M
Option 9B. Overpass w/RIRO, Full Access (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.9 - \$4.3 M	\$34 - \$38 M





# Sunfish Lake Blvd Preliminary Costs

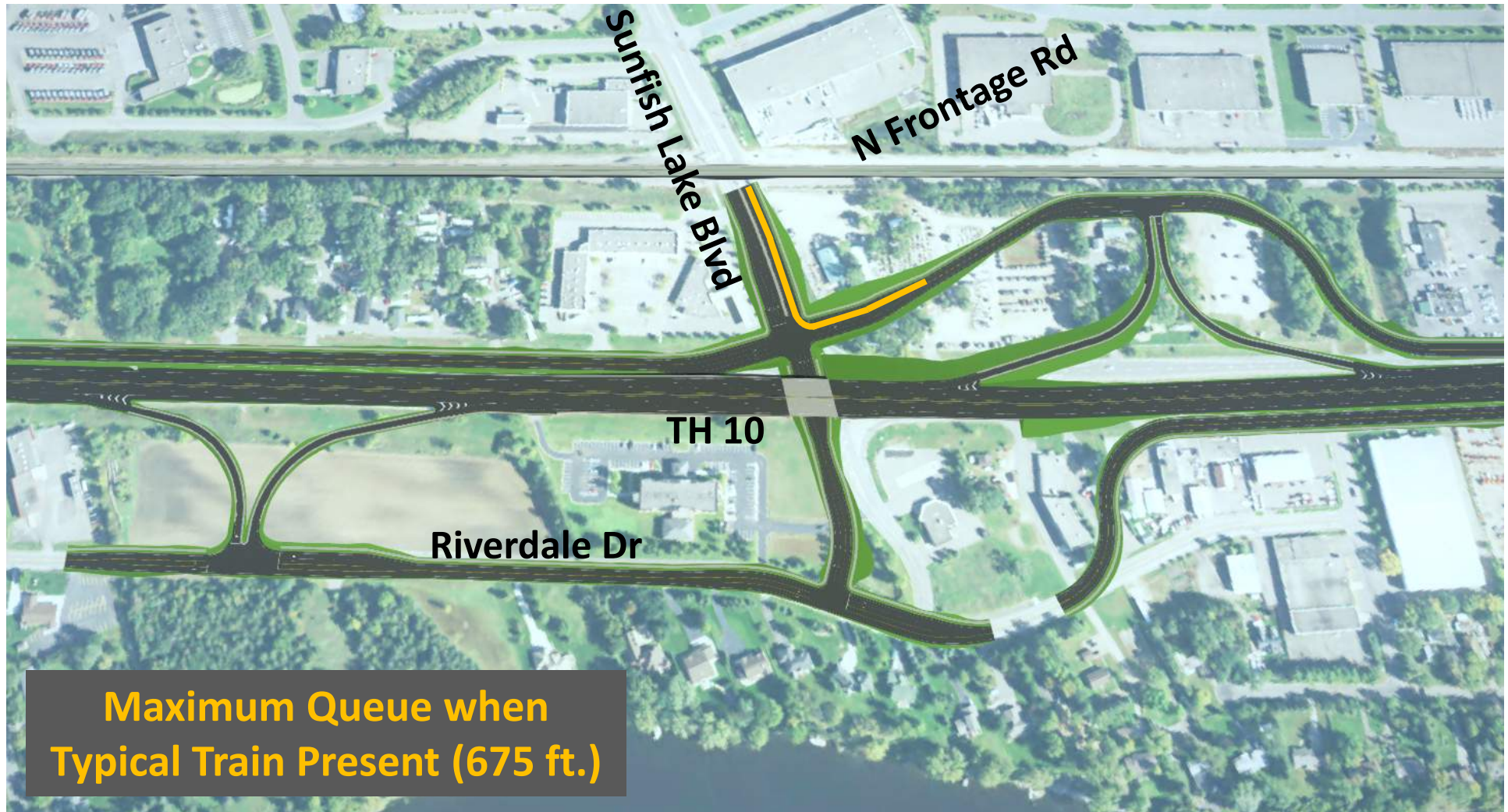
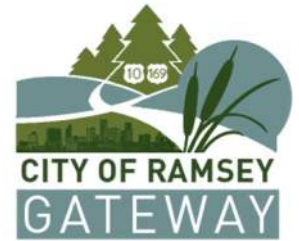
## Sunfish Options: Cost - Benefit



# Sunfish Lake Blvd Concepts

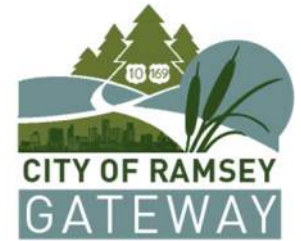
Right-In/Right-Out With RAB/Signal (Full Access)

At-Grade Rail



**Maximum Queue when  
Typical Train Present (675 ft.)**

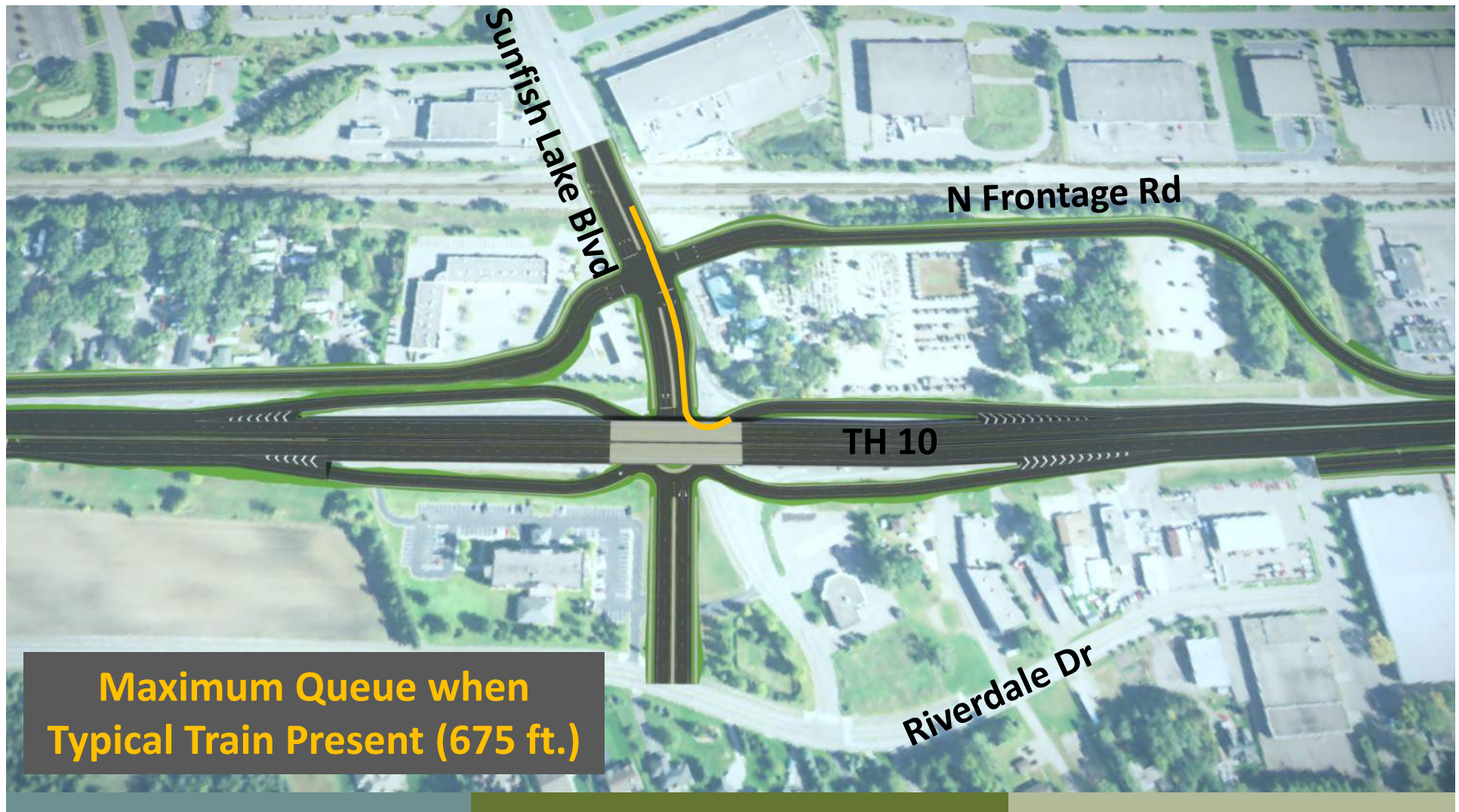




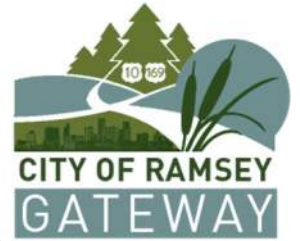
# Sunfish Lake Blvd Concepts

Grade Separated Roundabout

At-Grade Rail







# Frontage Road between Ramsey & Sunfish



- Cost: \$12 - \$14 M



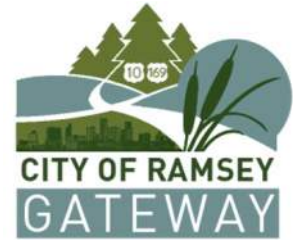
# Frontage Road Option



- **Total Cost: \$2.4 M**



# Tungsten District





# Range of Total Cost – East End

Inflated to 2025 dollars



## Both Grade Separated Rail

### TOTAL COST:

Ramsey Folded Tight Diamond \$52-\$58 M

Sunfish Overpass with RI/RO \$54-\$60 M

Frontage Rd (Ramsey-Sunfish) \$12-\$14 M

**\$118 - 132 M**

## One At-Grade Rail

### TOTAL COST:

Ramsey Folded Tight Diamond \$52-\$58 M

Sunfish RI/RO RAB (Full Access) \$34-\$38 M

Frontage Rd (Ramsey-Sunfish) \$12-\$14 M

**\$98 - 110 M**

### **Highway 10 Access Planning Study ~ \$98 - 110 M (2014 dollars).....\$150-170 M (2025)**

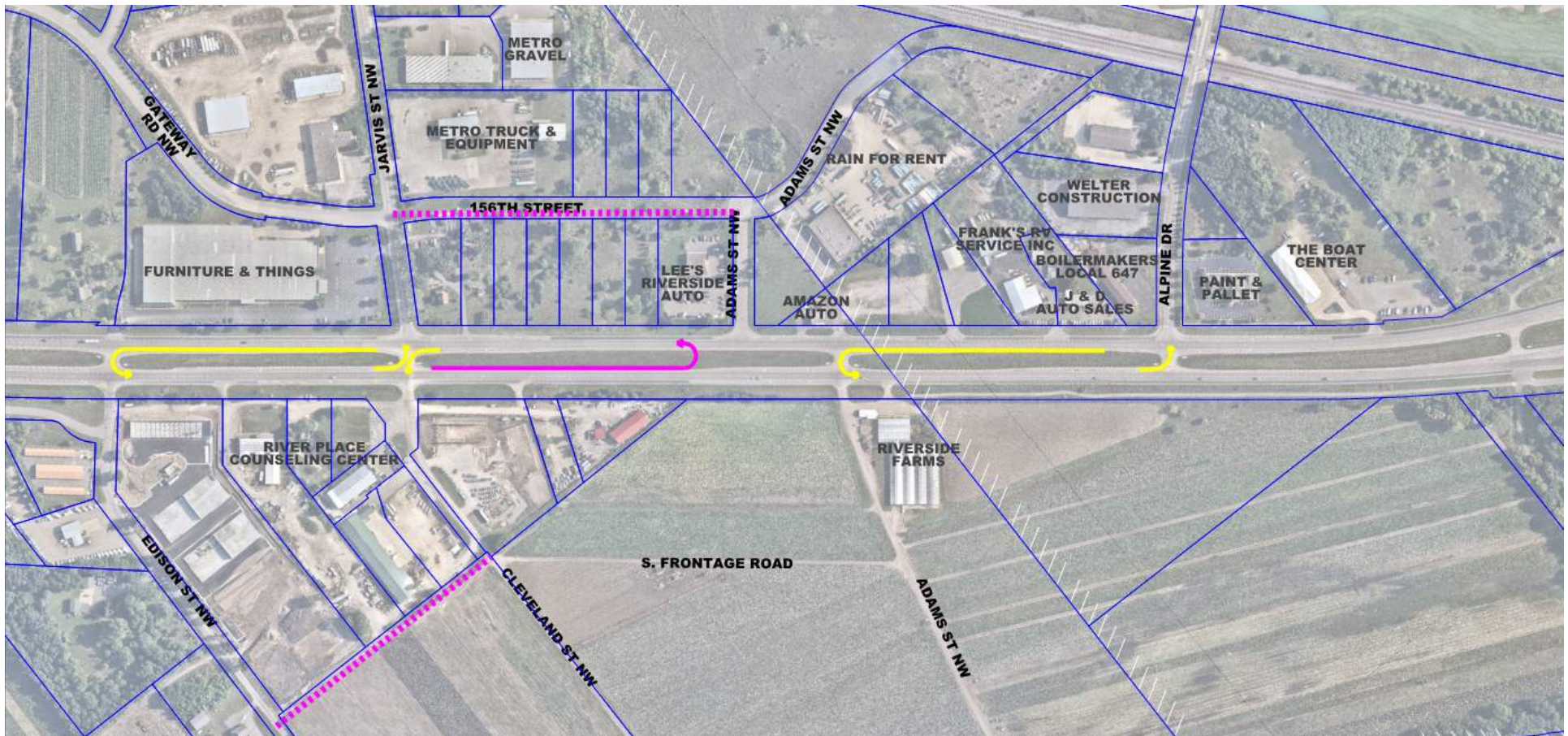
Sunfish Lake Blvd with/without Rail Grade Separation ~\$48 M/ \$36 M

Ramsey Blvd with Rail Grade Separation ~\$50 M

Frontage Road (Ramsey-Sunfish) ~\$12 M

# West End - Interim Option

## Unsignalized RCUTs at Jarvis and Alpine

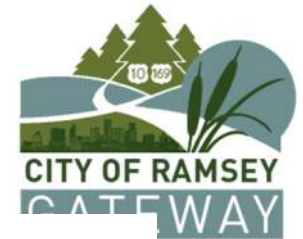


- Total Cost: ~\$1 M

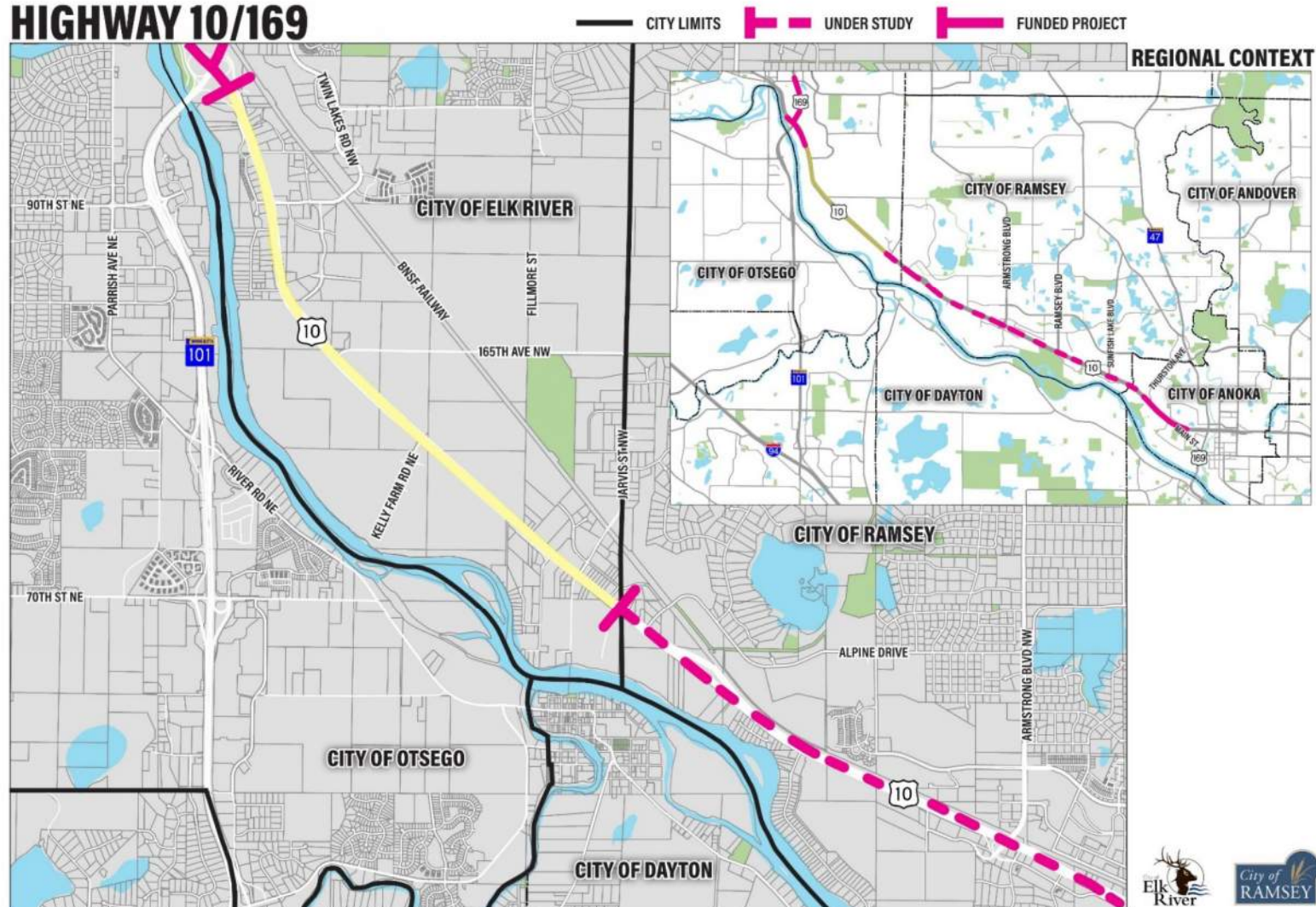
- Minor Reconstruction
- New Turn Lane
- ... Possible Roadway Connection



# Future Study



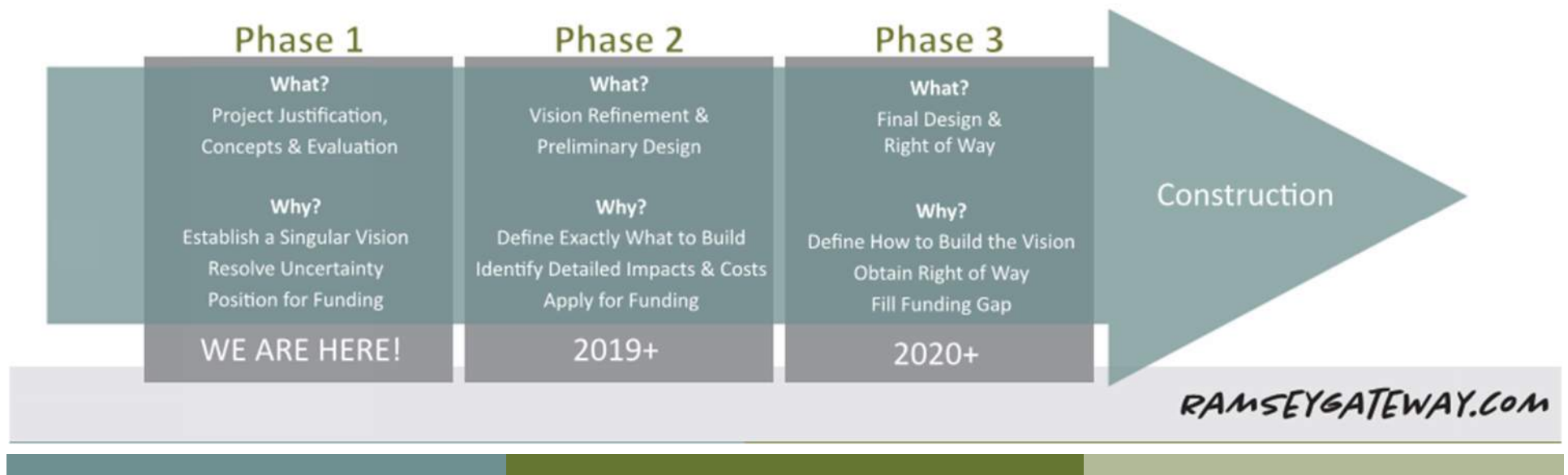
## HIGHWAY 10/169





# Next Steps

- TAC Meeting – July 18
- Property Owner Follow Up Meetings – Ongoing
- Phase II – TBD
  - Interchange Review Committee
  - Implementation Plan
  - Funding Plan
  - Additional Design



# Anoka County Transportation Committee

# **Ramsey Gateway Highway 10 Study**

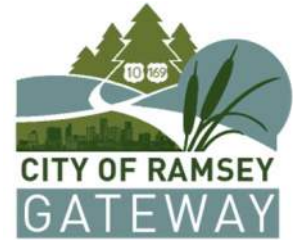
## **Anoka County Board Workshop**

February 26, 2019

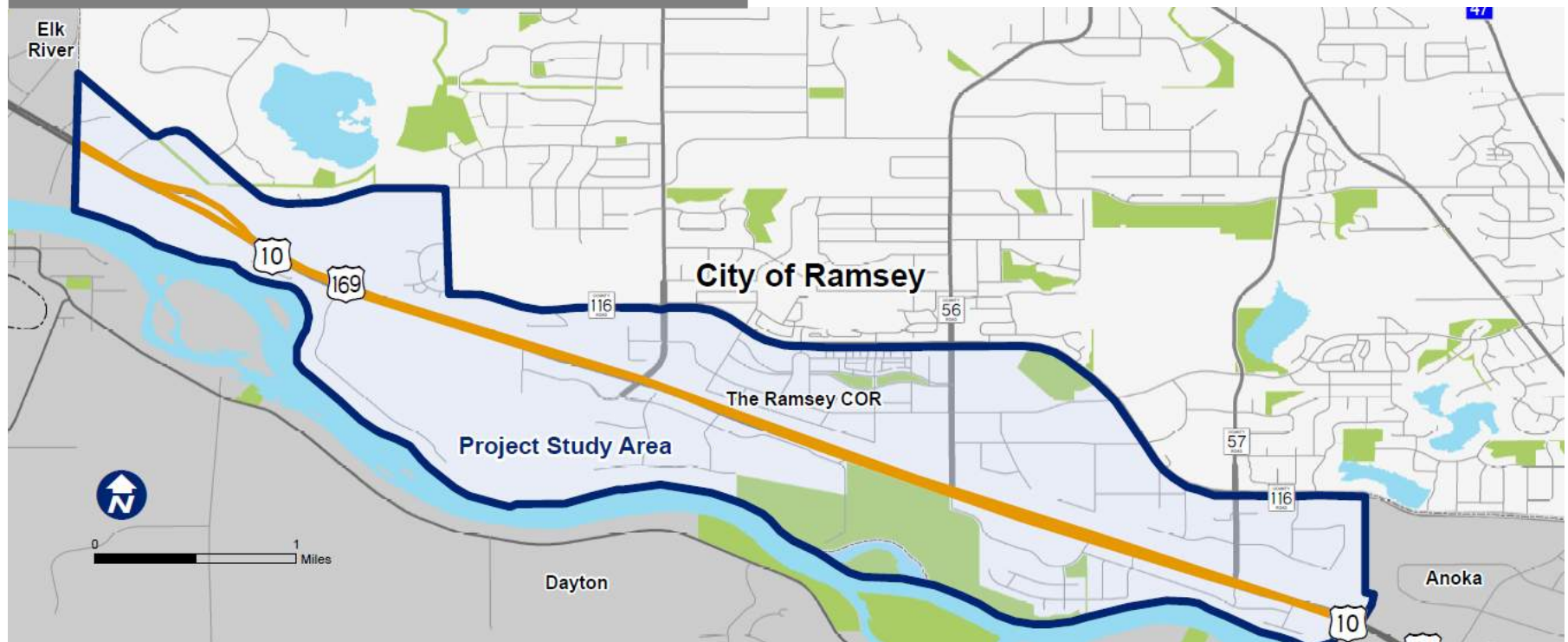




# Meeting Overview



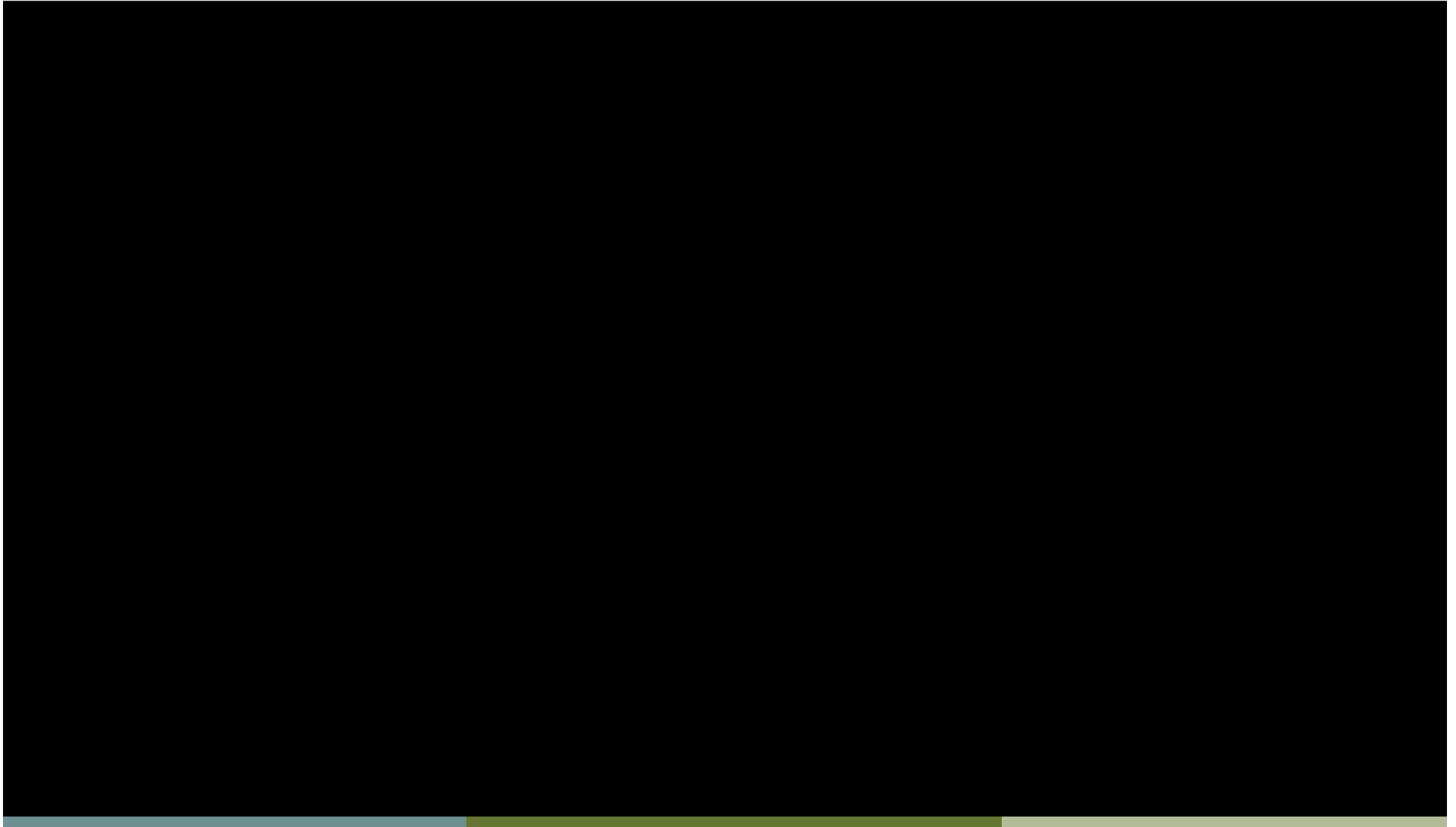
- ✓ Study Recap
- ✓ Draft Improvement Concepts
- ✓ Concept Evaluation
- ✓ Schedule and Next Steps



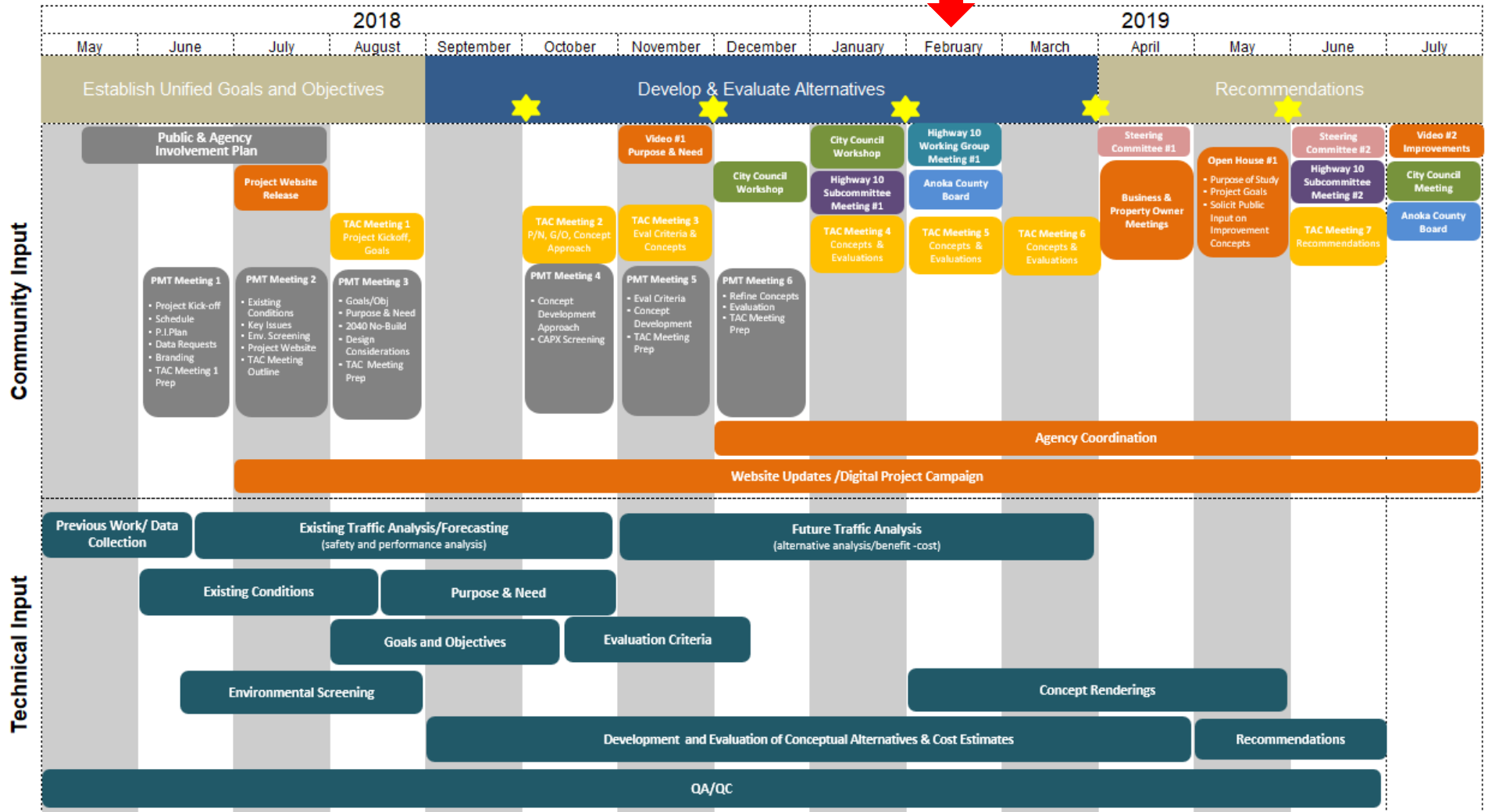
# Project Overview



<https://www.youtube.com/watch?v=Zc3qhNxF82o&feature=youtu.be>



# Schedule



★ Ramsey Resident Newsletter Update





# Ramsey Blvd – Range of Concepts

- Railroad Grade Separation Options
- Standard Diamond
- Tight Diamond
- Folded EB On Tight Diamond
- Folded WB Off Tight Diamond
- Folded EB On & WB Off Tight Diamond
- Folded EB On & Semi-folded WB Off Tight Diamond
- Single Point Urban Interchange (SPUI)
- Overpass with Right-In/Right-Out



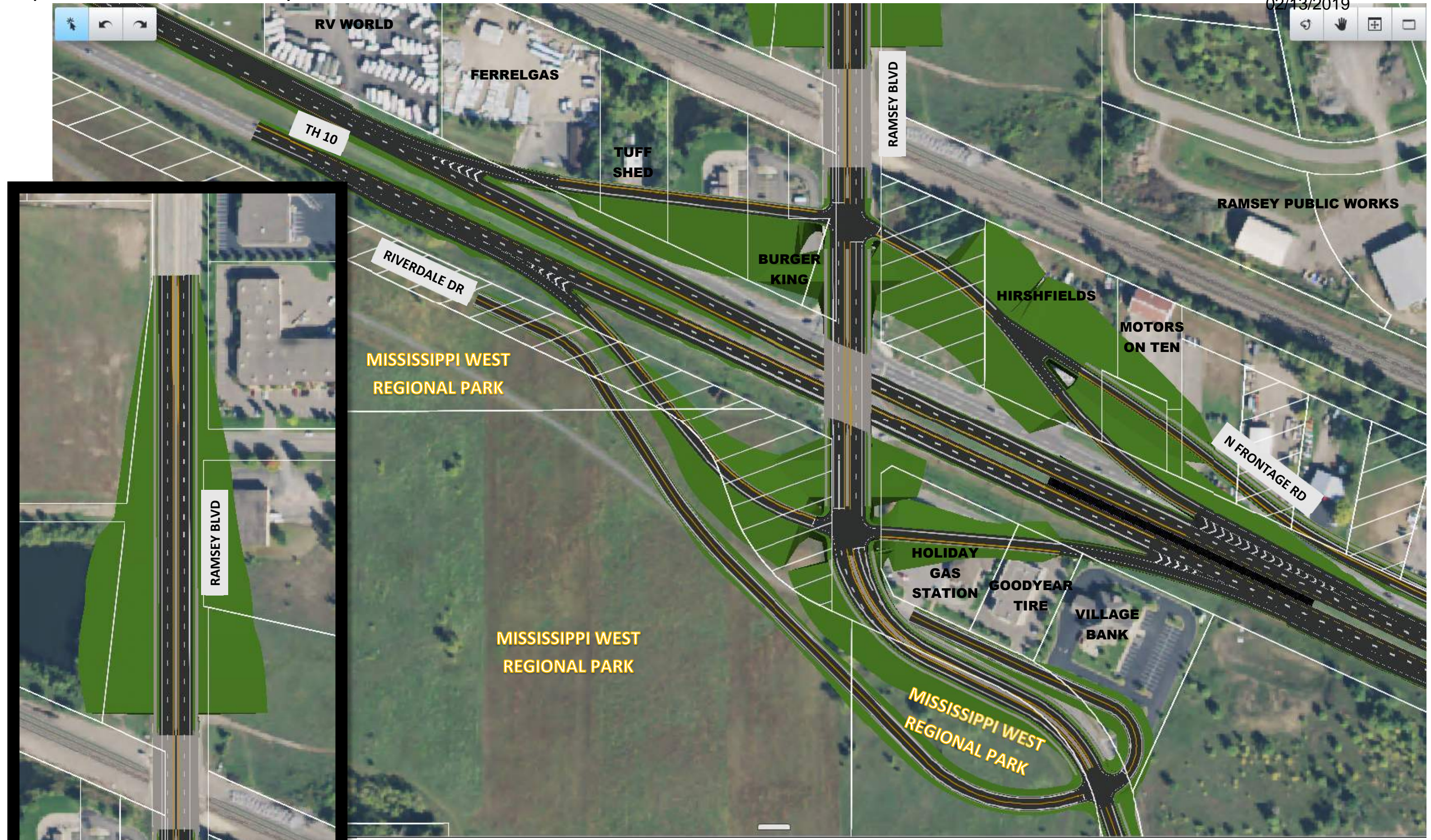


TAC RECOMMENDED DISMISSAL OF CONCEPT

Draft

Option 1. Standard Diamond – Ramsey Over Railroad

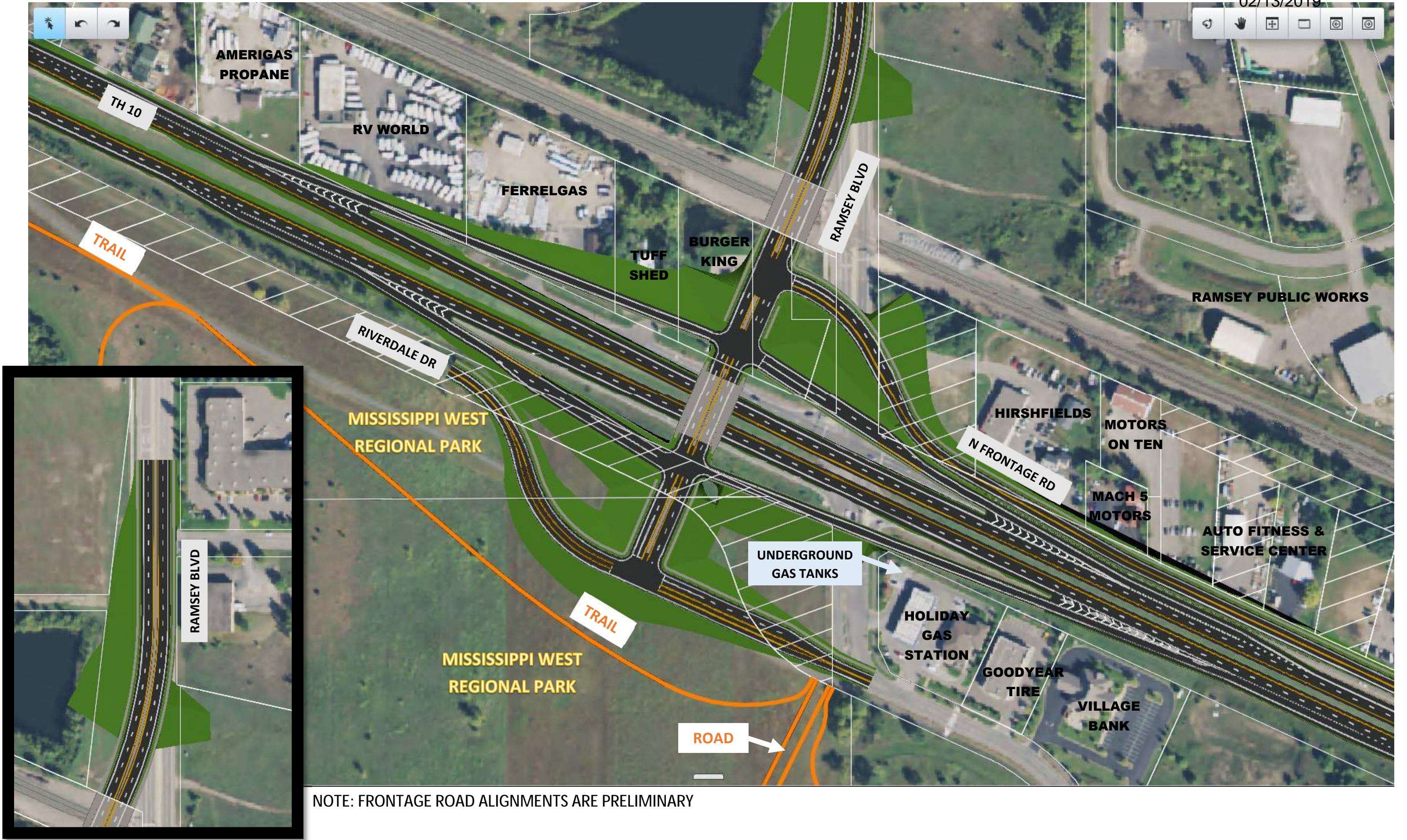
02/13/2019



NOTE: FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY



Option 2. Tight Diamond - Ramsey Over Railroad



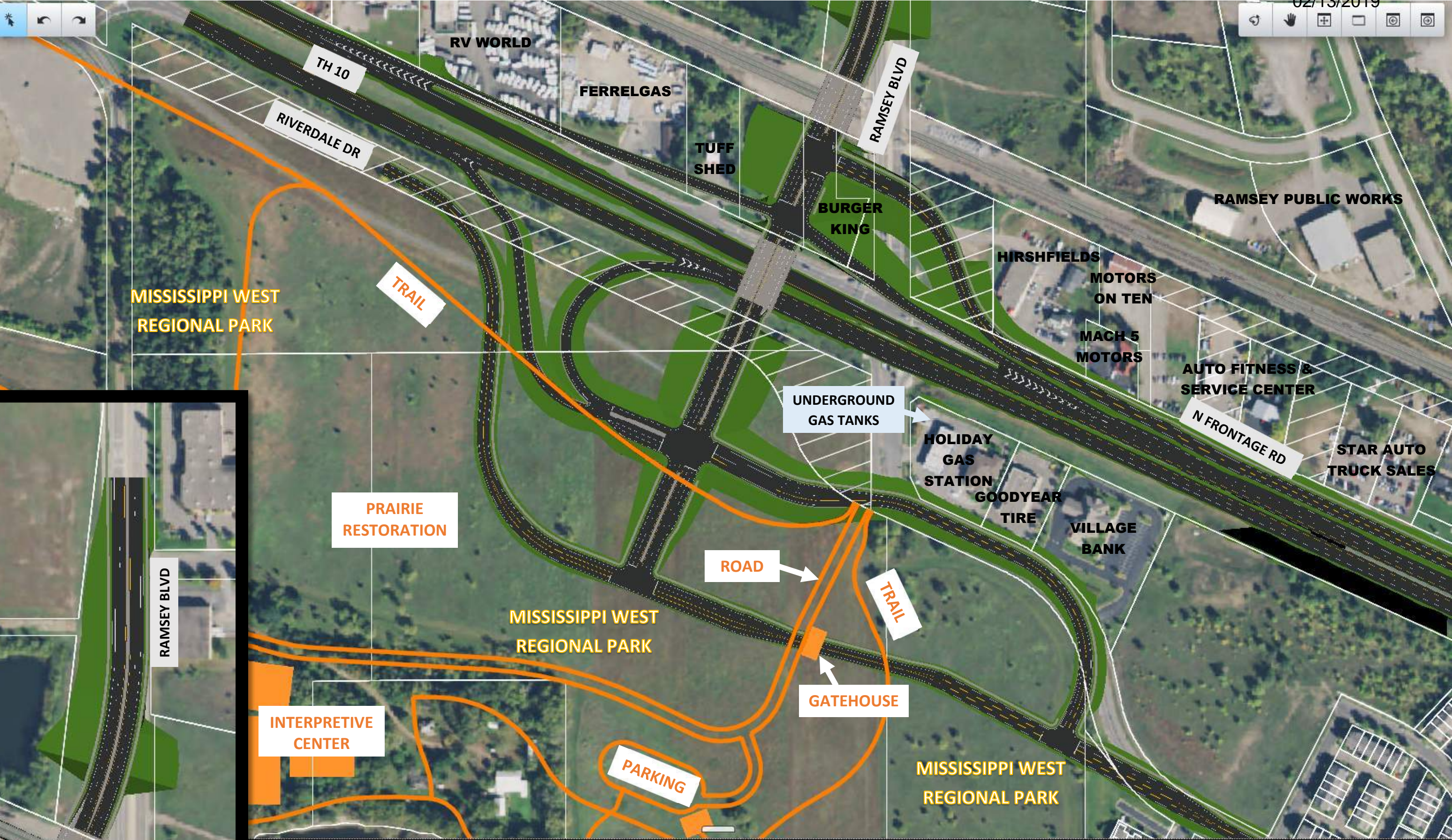


TAC RECOMMENDED DISMISSAL OF CONCEPT

Draft

Option 3. Folded EB TH 10 On Tight Diamond - Ramsey Over Railroad

02/13/2019



NOTE: FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY



[illegible]

1. FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY
2. SIGNAL NEEDED FOR ACCEPTABLE OPERATIONS

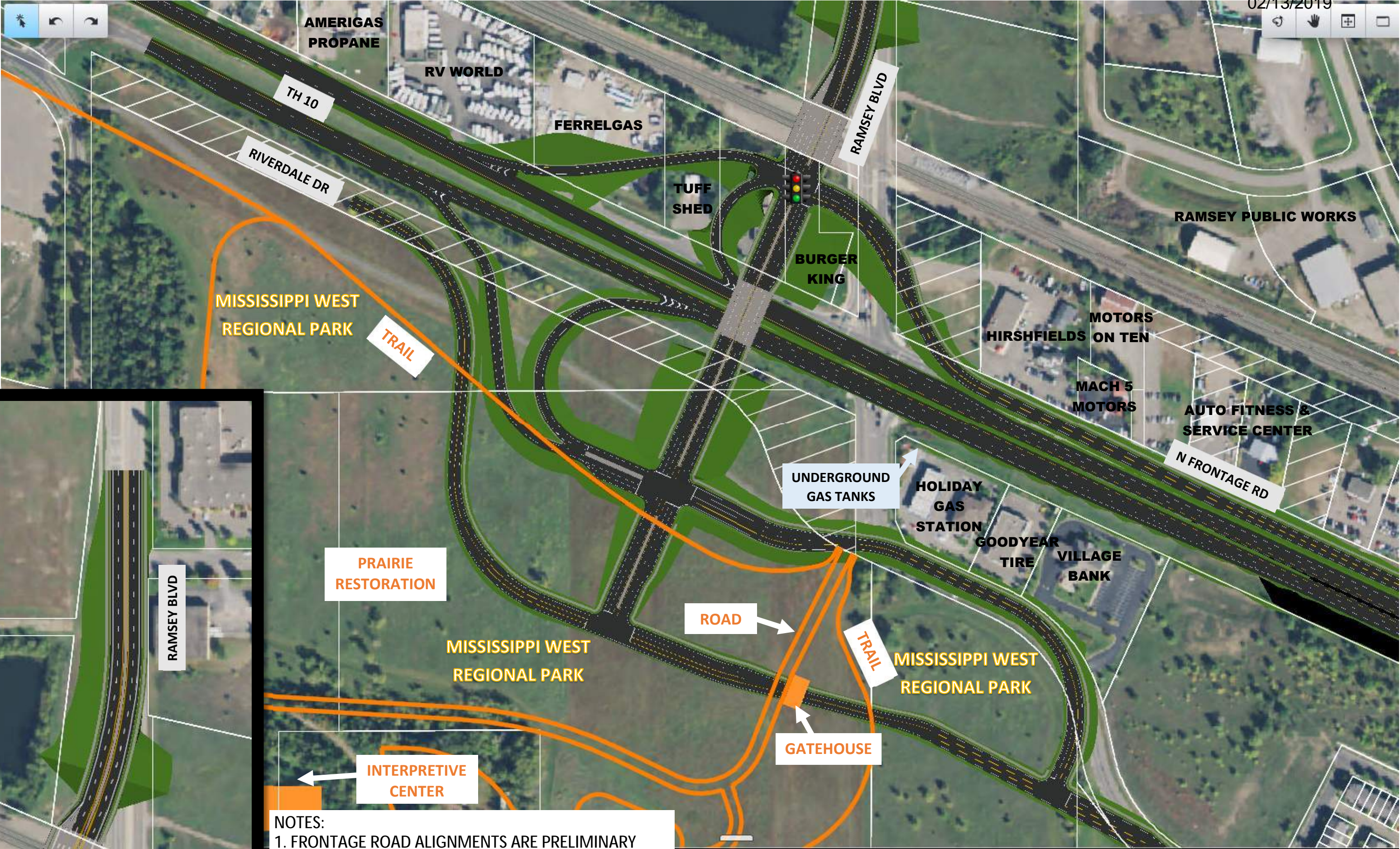


TAC RECOMMENDED DISMISSAL OF CONCEPT

Draft

Option 5. Folded EB TH 10 On and WB TH 10 Off Diamond - Ramsey Over Railroad

02/13/2019



NOTES:  
1. FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY  
2. SIGNAL NEEDED FOR ACCEPTABLE OPERATIONS

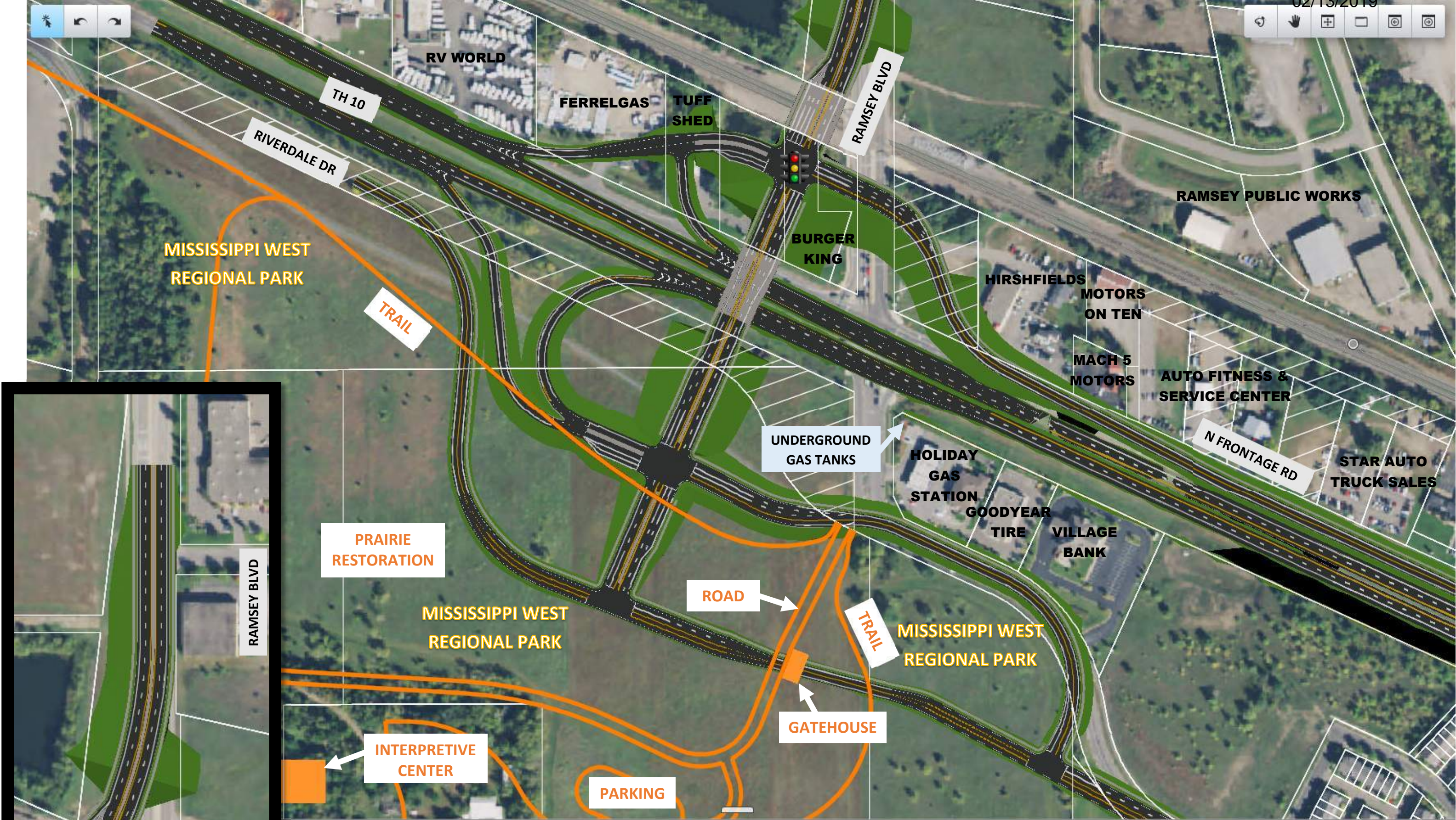


TAC RECOMMENDED DISMISSAL OF CONCEPT

Draft

Option 6. Folded EB TH 10 On and Semi-Folded WB TH 10 Off Diamond - Ramsey Over Railroad

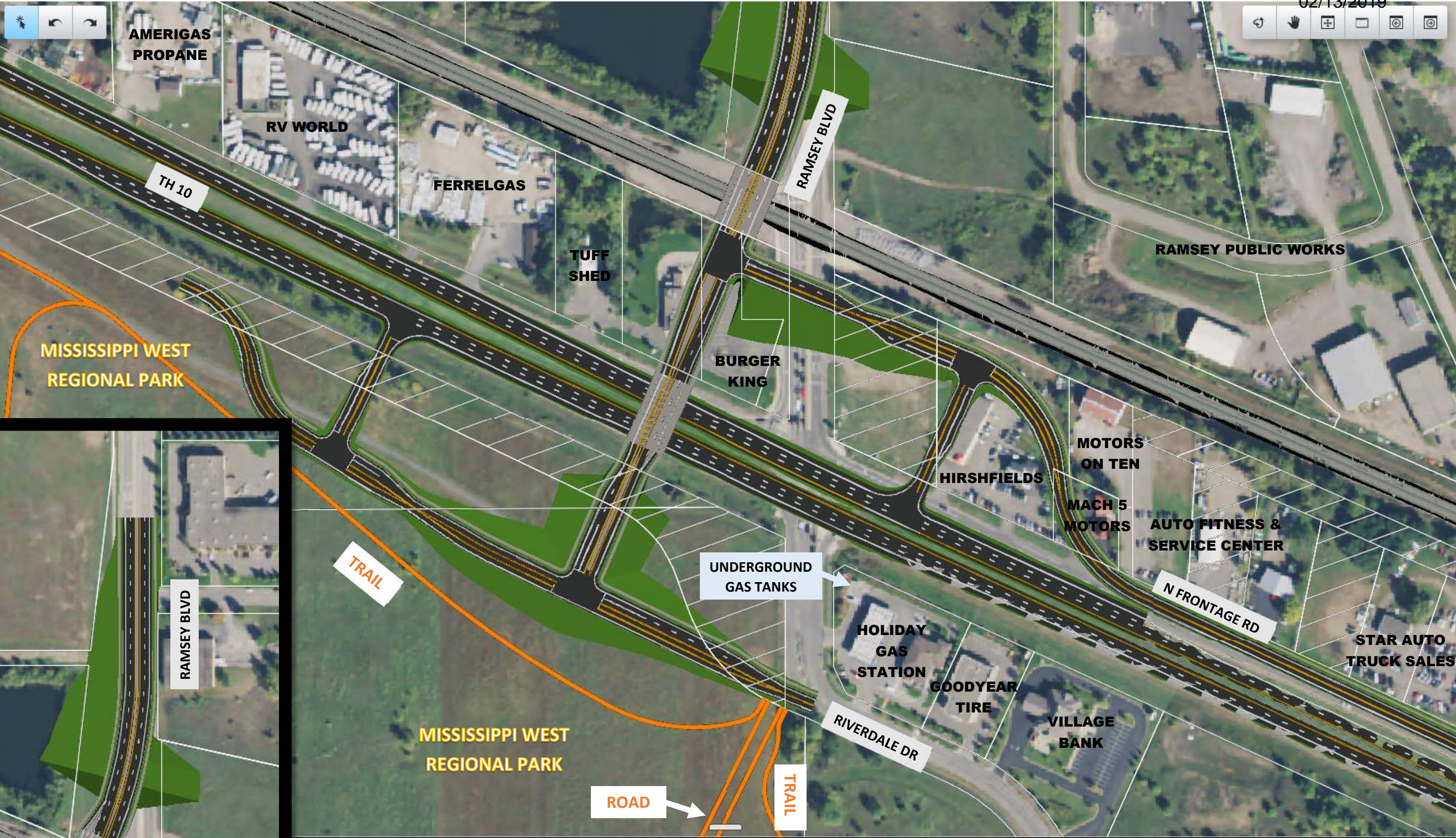
02/13/2019



- NOTES:
- 1. FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY
  - 2. SIGNAL NEEDED FOR ACCEPTABLE OPERATIONS



Option 7. RIRO/Tight Diamond - Ramsey Over Railroad



NOTE: FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY

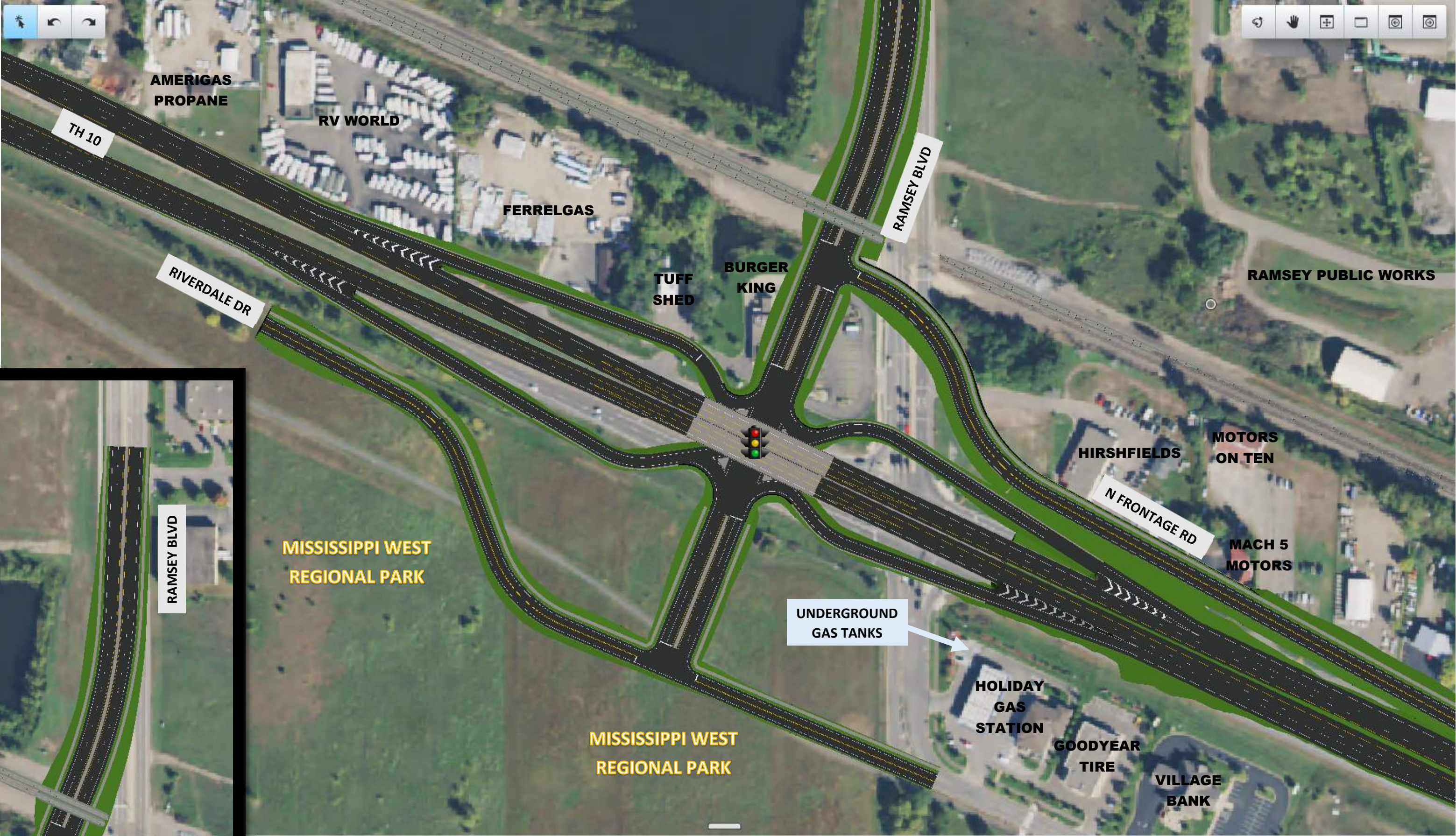


# TAC RECOMMENDED DISMISSAL OF CONCEPT

Draft

02/13/2019

Option 8. SPUI – Under Railroad



- NOTES:
- 1. FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY
  - 2. SIGNAL NEEDED FOR ACCEPTABLE OPERATIONS

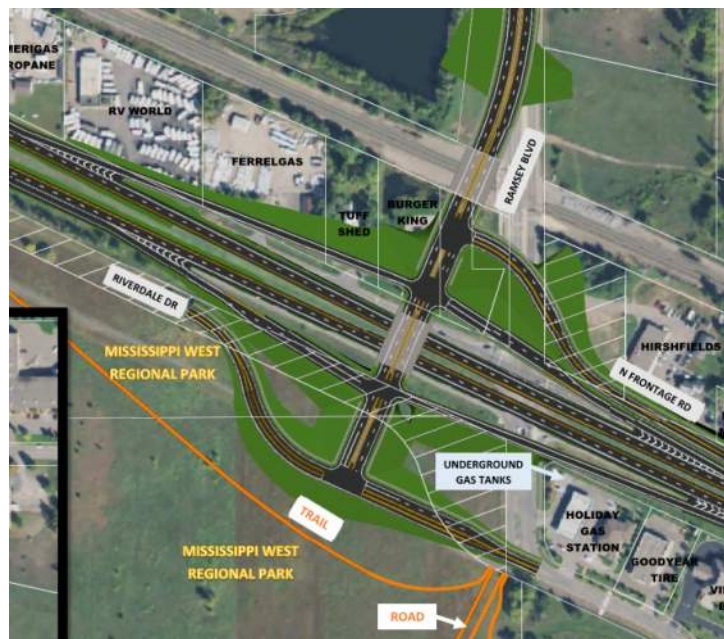


# Ramsey Blvd – Concepts Remaining

- Railroad Overpass Options
- Option 2: Tight Diamond
- Option 4: Folded WB Off Tight Diamond
- Option 7: Overpass with Right-In/Right-Out



Option 7



Option 2



Option 4



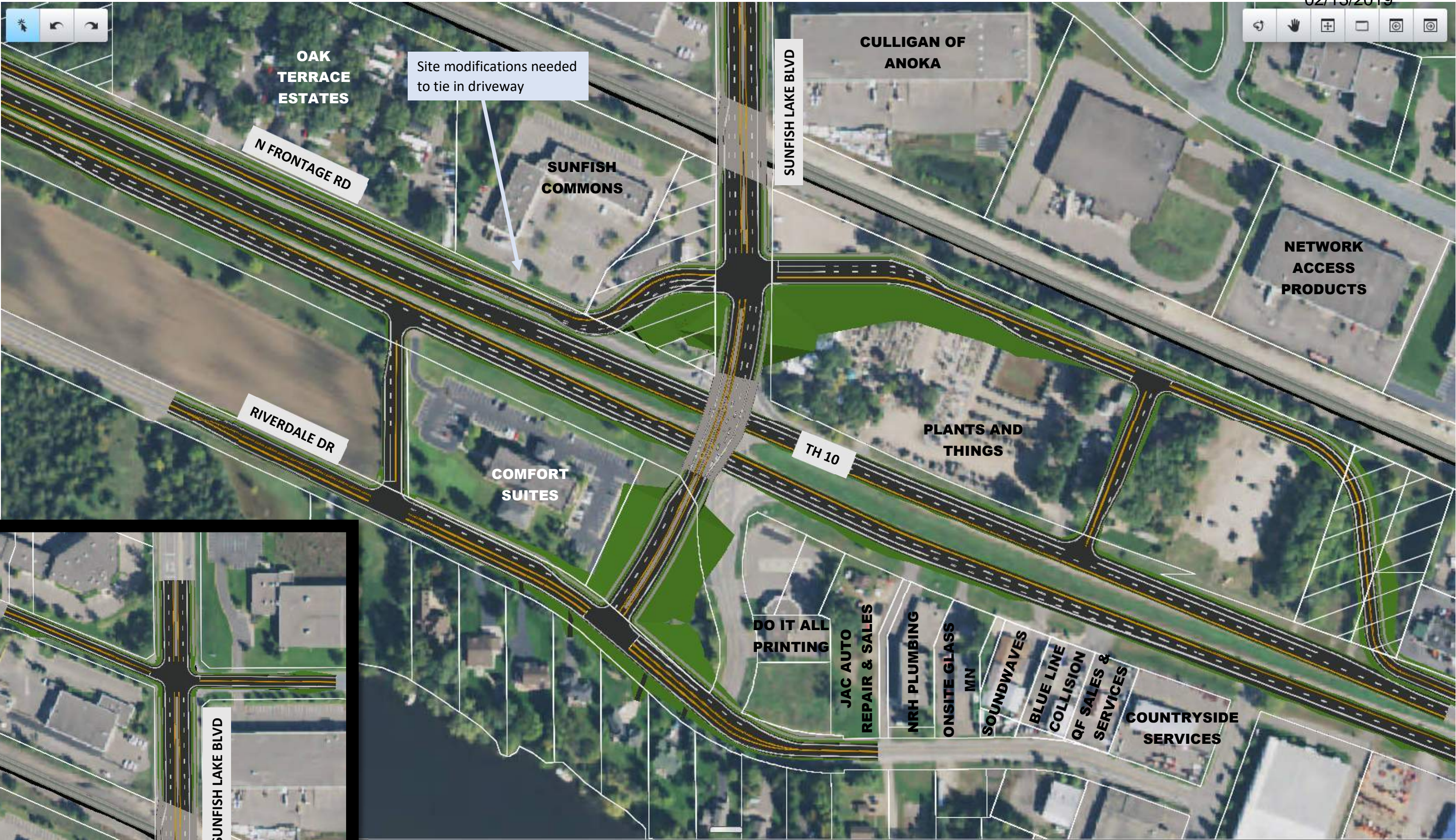
# Sunfish Lake Blvd – Range of Concepts

- Railroad At-Grade and Grade Separation Options
- Overpass with Right-In/Right-Out
- Standard Diamond
- Tight Diamond
- Single Point Urban Interchange
- Grade-Separated Roundabout
- Center Turn Overpass
- High-T





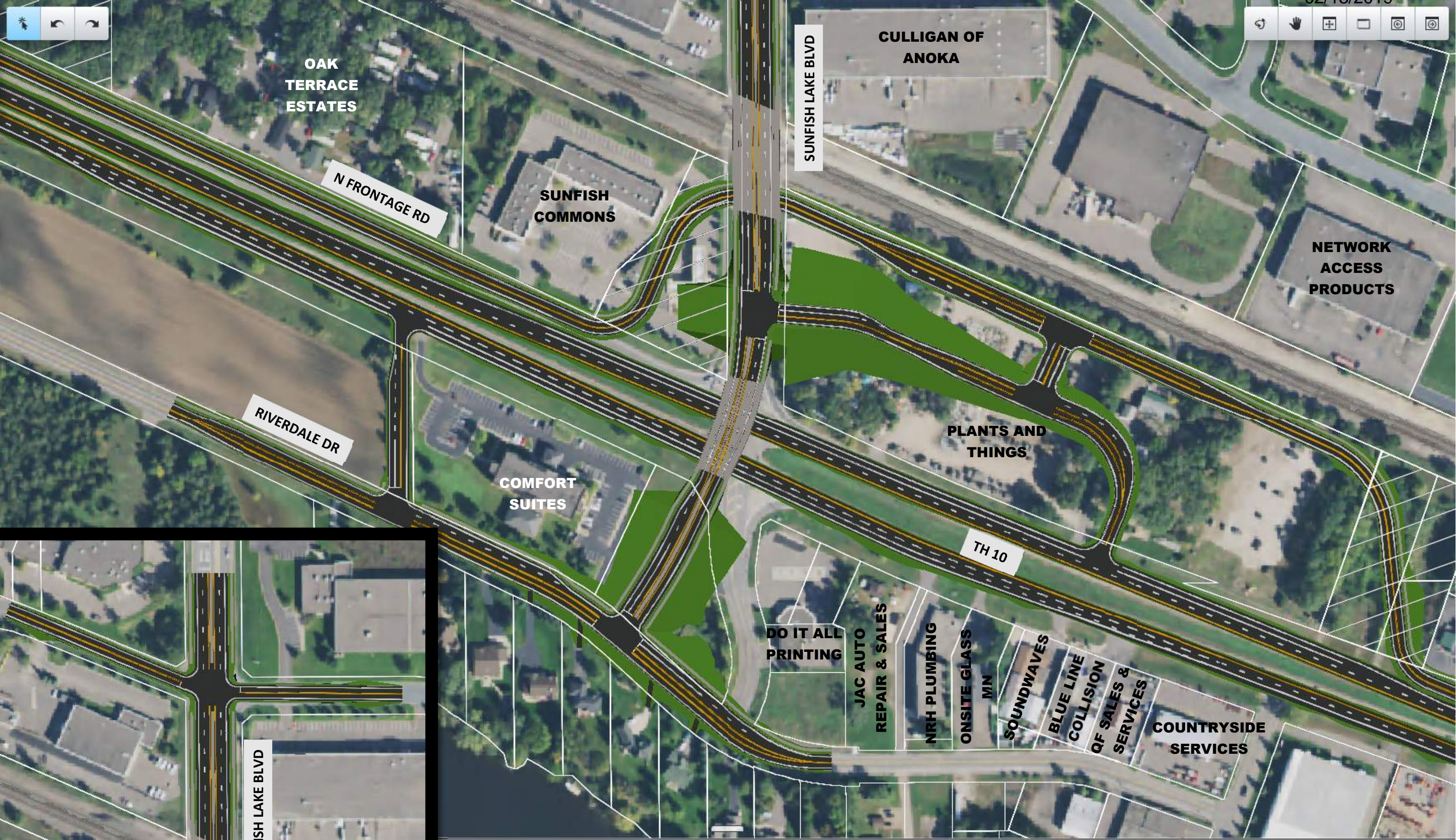
Option 1A. RIRO – Over Railroad



NOTE: FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY



Option 1B. RIRO – Over Railroad



NOTE: FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY



Option 2. High T – At Grade Railroad Crossing



NOTES:  
1. FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY  
2. SIGNAL NEEDED FOR ACCEPTABLE OPERATIONS

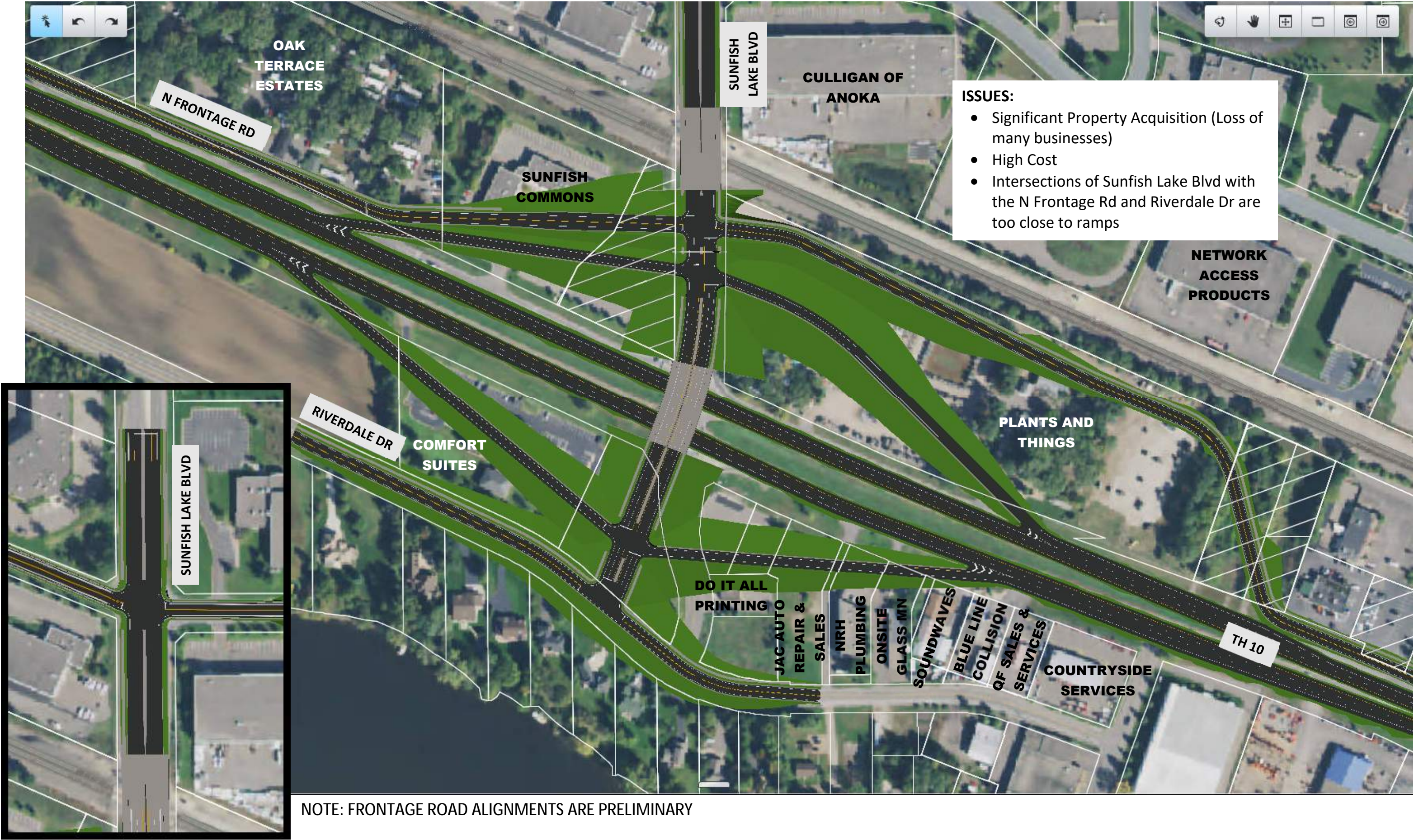


# TAC RECOMMENDED DISMISSAL OF CONCEPT

Draft

02/13/2019

Option 3. Standard Diamond – Over Railroad





# TAC RECOMMENDED DISMISSAL OF CONCEPT

Draft

02/13/2019

## Option 4. Tight Diamond – Over Railroad



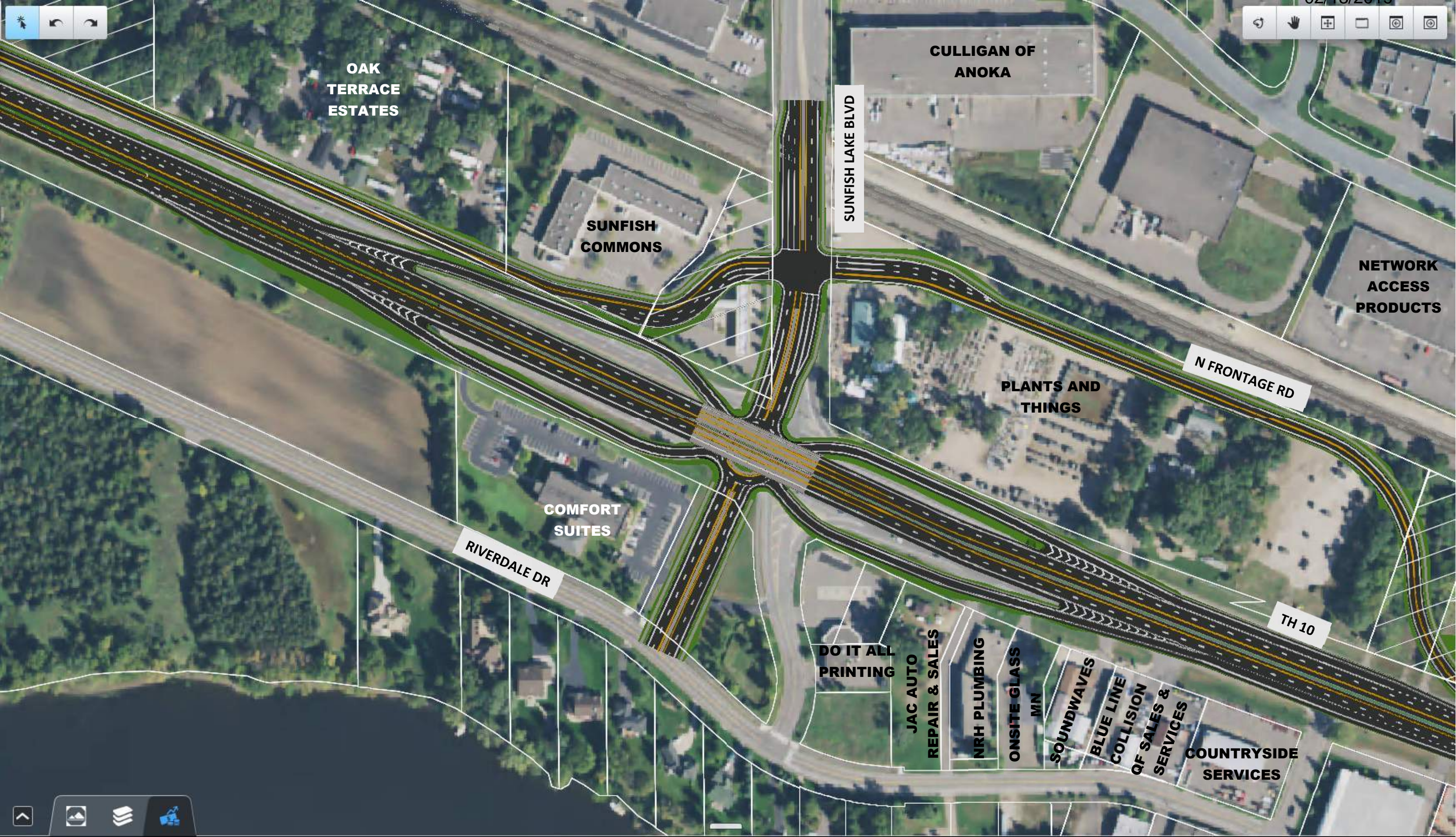




NOTES:  
1. FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY  
2. SIGNAL NEEDED FOR ACCEPTABLE OPERATIONS



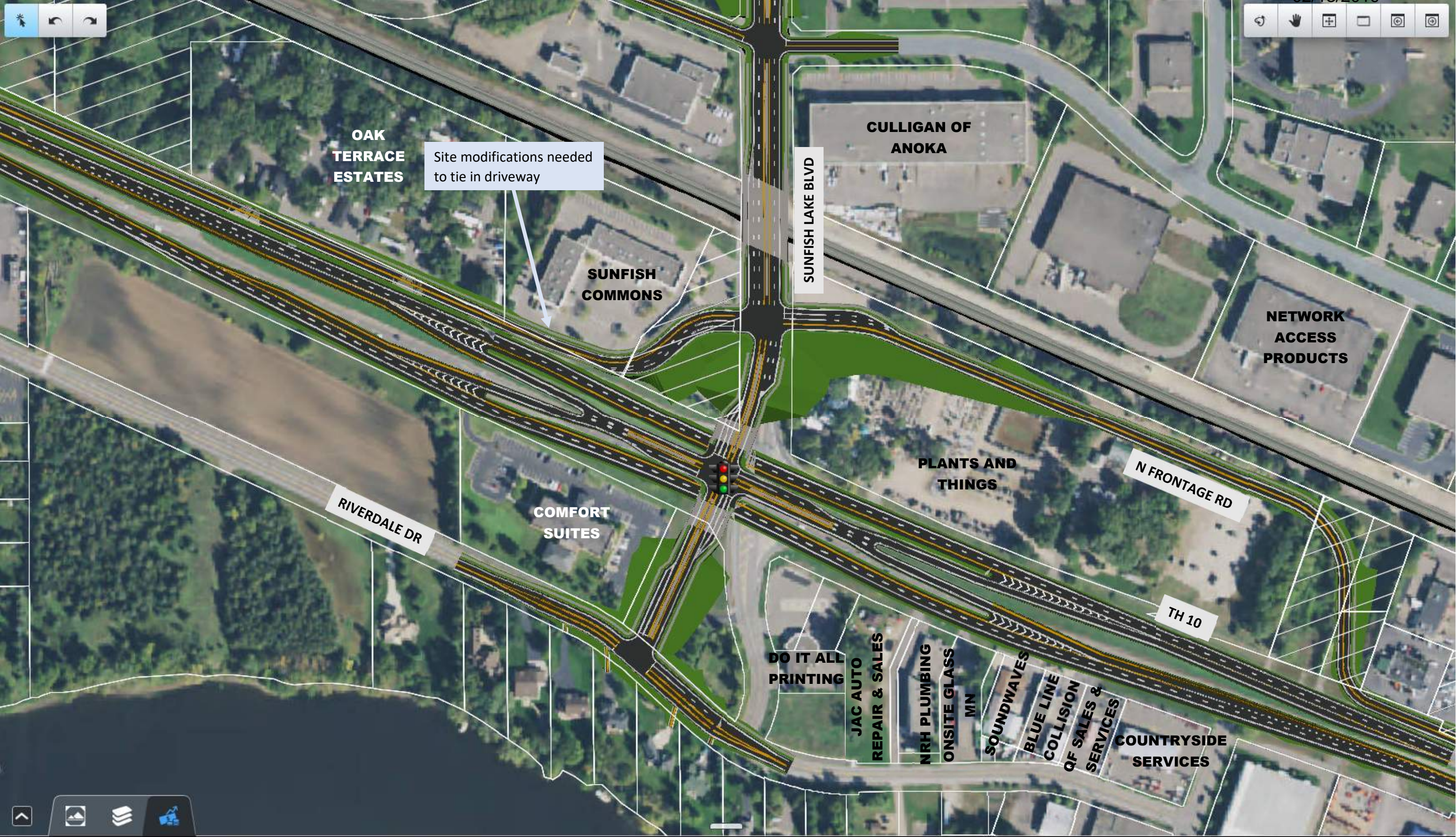
Option 6B. Grade Separated Roundabout



NOTE: FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY



Option 7A. Center Turn Overpass



- NOTES:
- 1. FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY
  - 2. SIGNAL NEEDED FOR ACCEPTABLE OPERATIONS





NOTES:  
1. FRONTAGE ROAD ALIGNMENTS ARE PRELIMINARY  
2. SIGNAL NEEDED FOR ACCEPTABLE OPERATIONS



Example Center Turn Overpass: I-290 at S Austin Blvd in Oak Park, IL



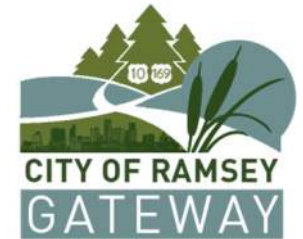


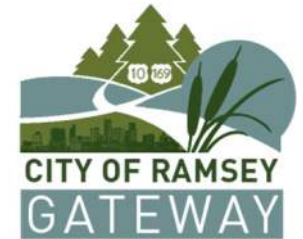


# Sunfish Lake Blvd – Concepts Remaining

- Railroad Overpass Options
  - Option 1A/1B: Overpass with Right-In/Right-Out
  - Option 5A: Single Point Urban Interchange
  - Option 6A: Grade Separated Roundabout
  - Option 7A: Center Turn Overpass
- At-Grade Railroad Options
  - Option 5B: Single Point Urban Interchange
  - Option 6B: Grade Separated Roundabout
  - Option 7B: Center Turn Overpass
- Next Steps: TAC Design Workshop focused on Sunfish Lake Blvd Options

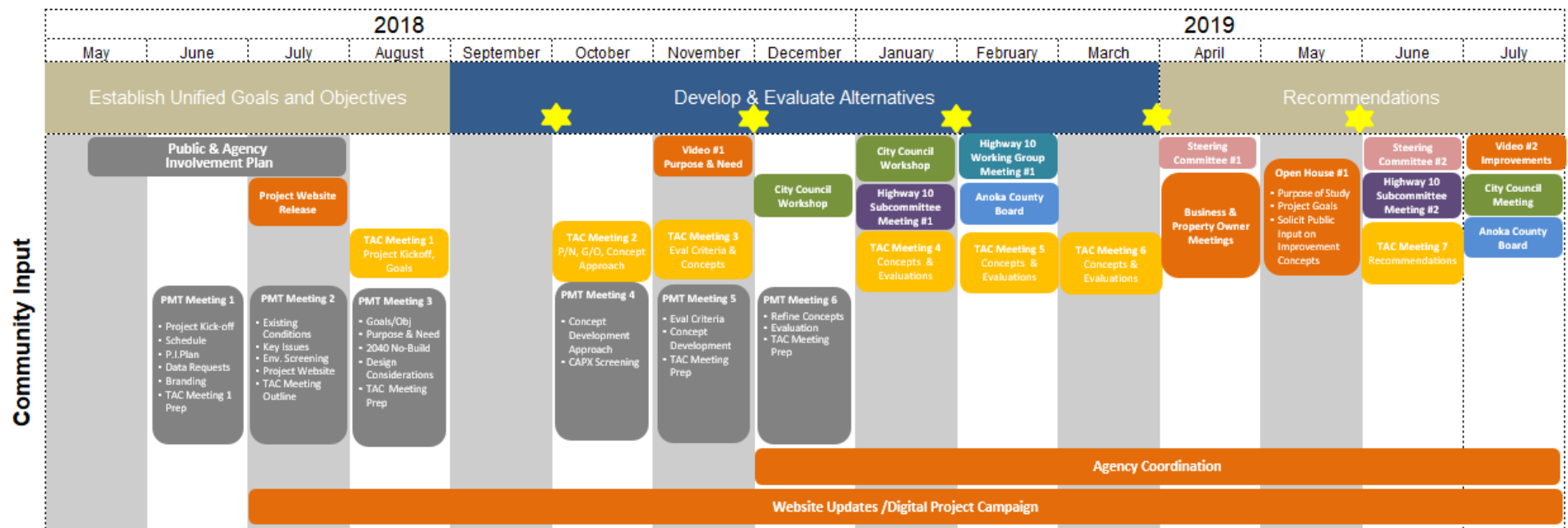
# Project Sequencing Strategy



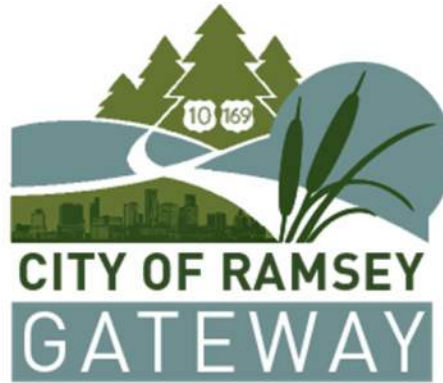


# Public Involvement Plan

- Steering Committee –April
- Property/Business Owner Meetings – April
- Open House – May





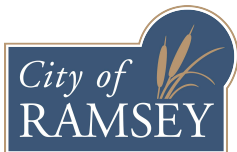


# **Ramsey Highway 10 Corridor Improvements**

## **Anoka County**

### **Transportation Committee Meeting**

April 1, 2019



**Anoka County**  
**MINNESOTA**

Respectful, Innovative, Fiscally Responsible





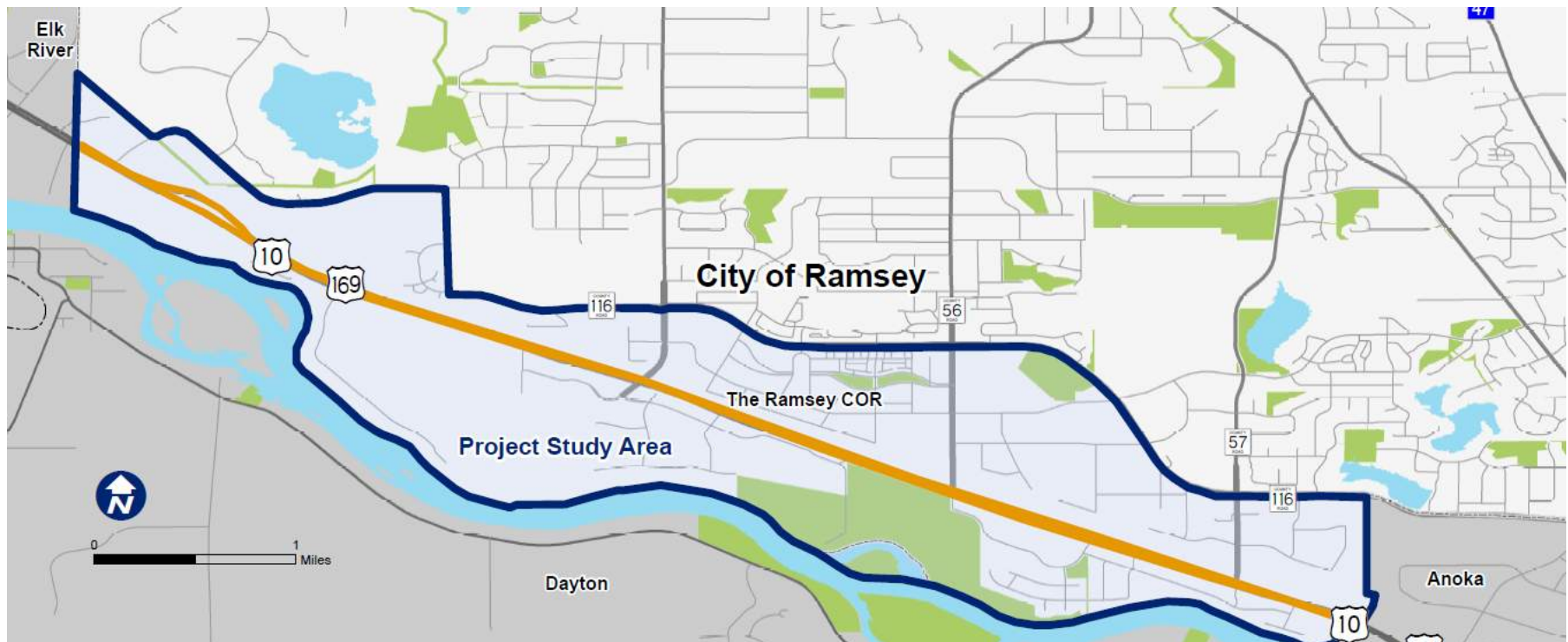
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# Meeting Overview

- ✓ Improvement Concept Update
- ✓ Public Involvement Next Steps





# Ramsey Blvd Concepts

- Railroad Grade Separation on All Concepts
- Tight Diamond
- Folded WB Off Tight Diamond
- Overpass with Right-In/Right-Out
- Tight Diamond with W Frontage Rd



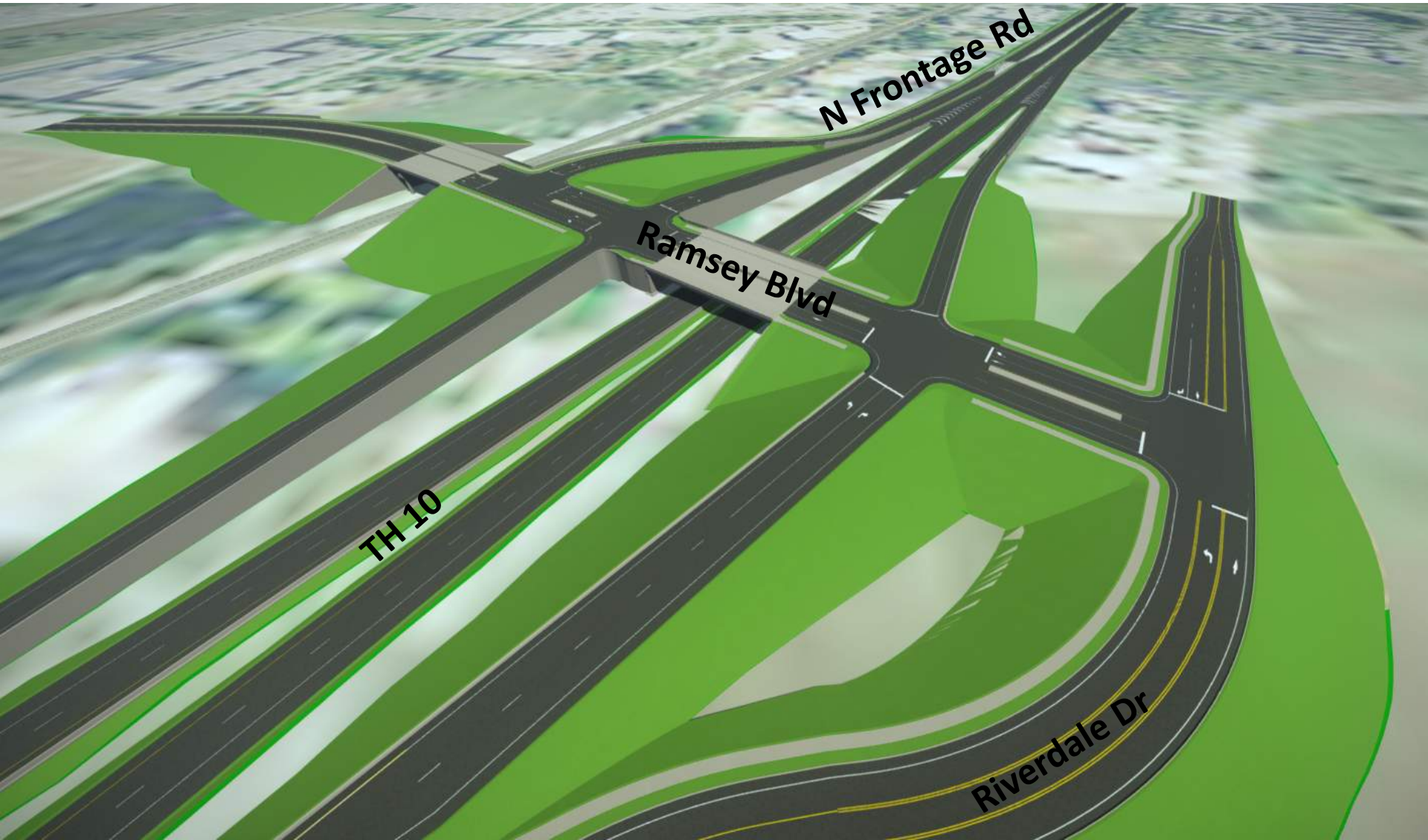


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# Ramsey Blvd Concepts

## Tight Diamond (Option 2)







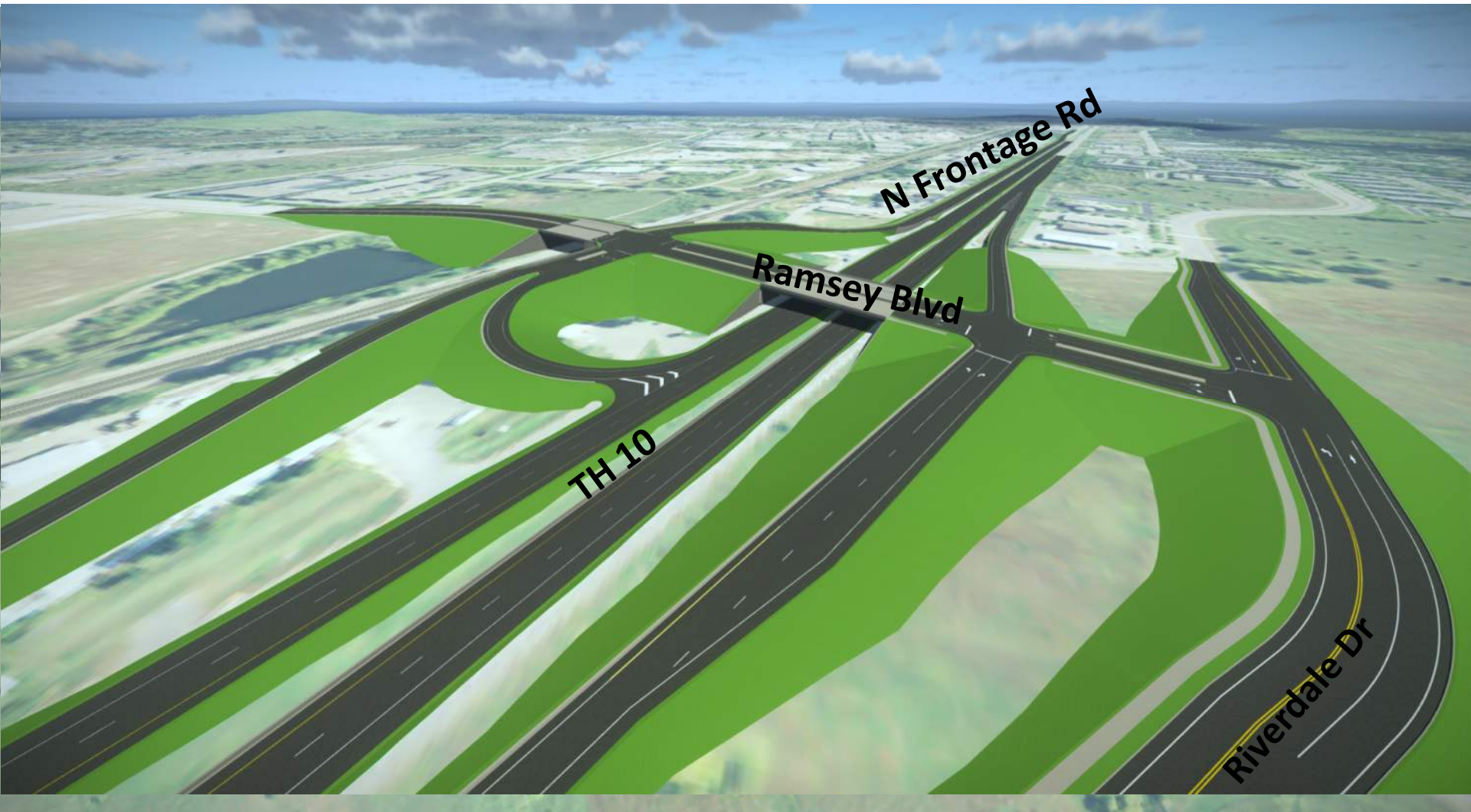
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# Ramsey Blvd Concepts

## Folded WB Off Tight Diamond (Option 4)



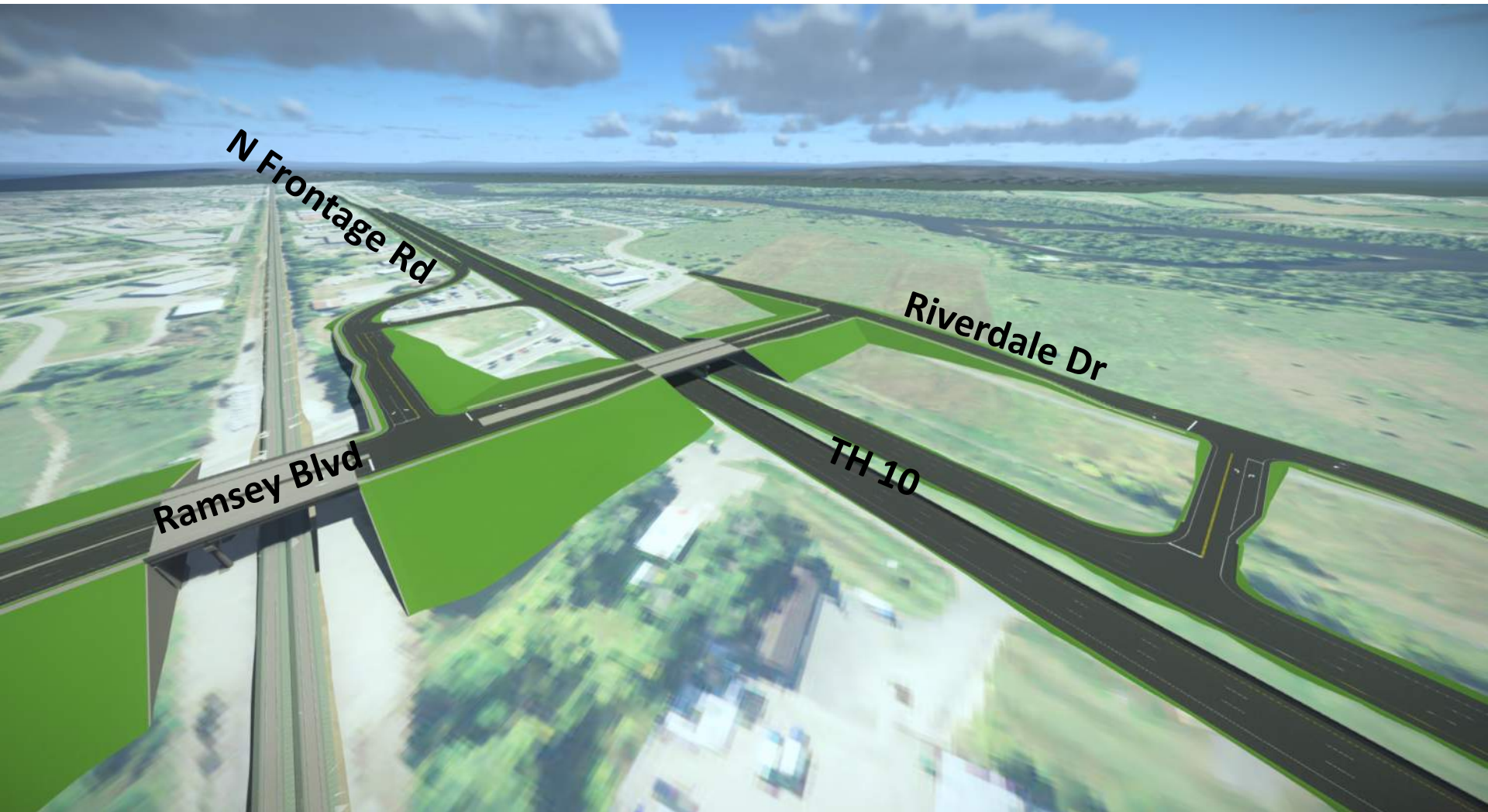


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# Ramsey Blvd Concepts

## Overpass with Right-In/Right-Out (Option 7A)







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# Ramsey Blvd Concepts

## Overpass with Right-In/Right-Out (Option 7B)





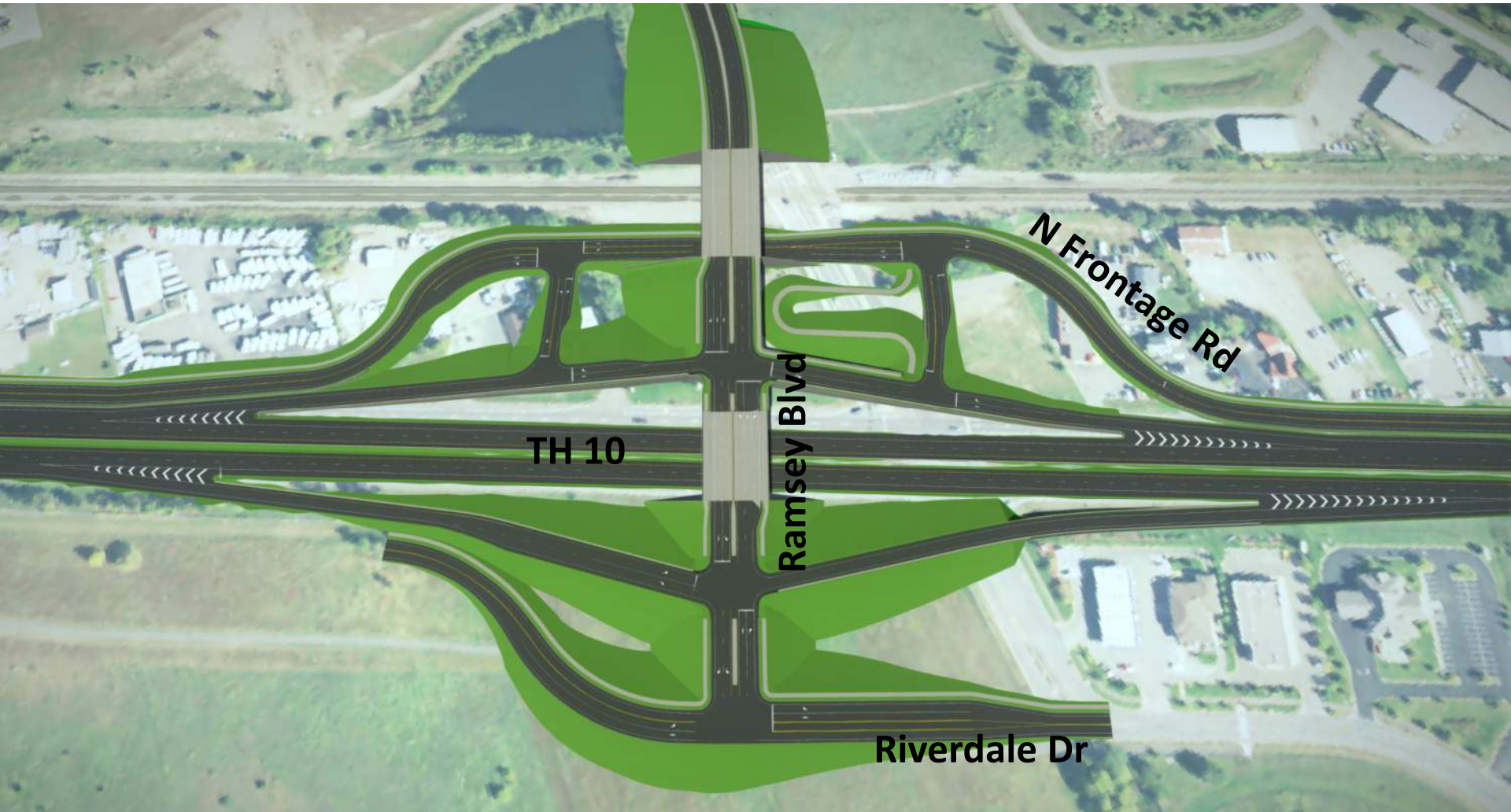
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# Ramsey Blvd Concepts

## Tight Diamond with W Frontage Rd (Option 9)







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# Ramsey Blvd Concepts

## Tight Diamond with W Frontage Rd (Option 9)





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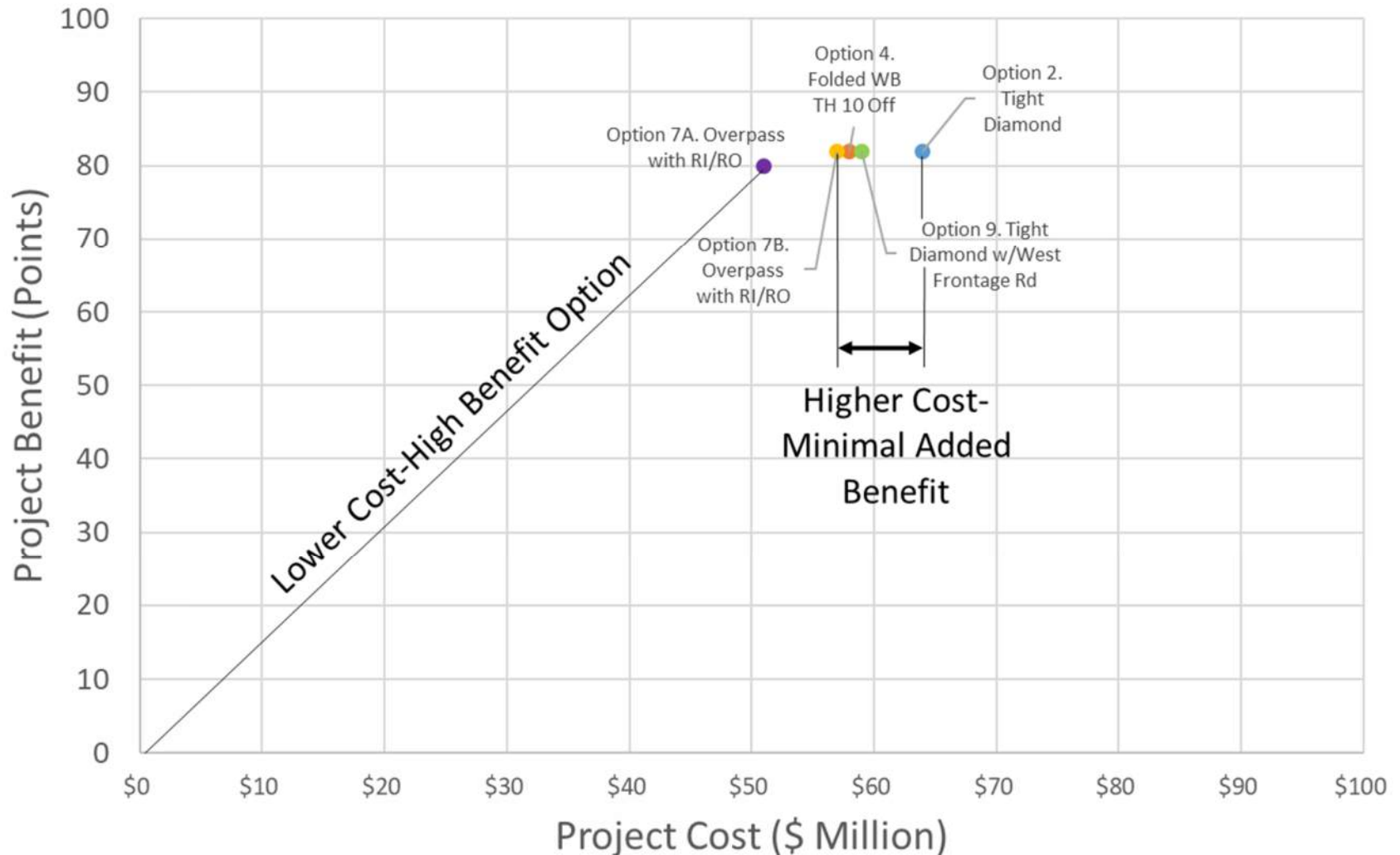
# Ramsey Blvd Preliminary Costs

Ramsey Over Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Option 2. Tight Diamond	\$35 - \$38 M	\$16 - \$18 M	\$6.9 - \$7.7 M	<b>\$58 - \$64 M</b>
Option 4. Folded WB TH 10 Off	\$30 - \$34 M	\$16 - \$18 M	\$6.1 - \$6.7 M	<b>\$52 - \$58 M</b>
Option 7A. RIRO	\$23 - \$25 M	\$18 - \$20 M	\$4.6 - \$5.0 M	<b>\$46 - \$51 M</b>
Option 7B. RIRO	\$27 - \$30 M	\$16 - \$18 M	\$5.3 - \$5.9 M	<b>\$48 - \$53 M</b>
Option 9. Tight Diamond with W Frontage Rd	\$35 - \$39 M	\$12 - \$13 M	\$7.0 - \$7.7 M	<b>\$54 - \$59 M</b>



# Ramsey Blvd Preliminary Costs

## Ramsey Options: Cost - Benefit



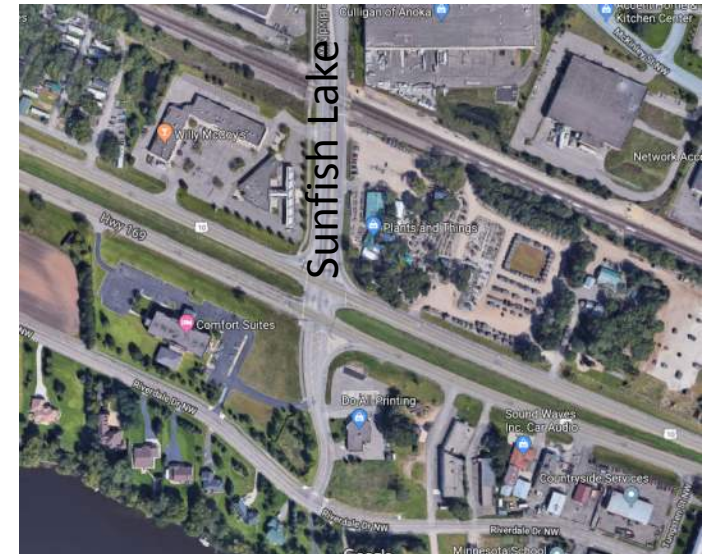


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# Sunfish Lake Blvd Concepts

- Railroad Grade Separation:
  - Sunfish Overpass with Right-In/Right-Out
- At-Grade Rail Options:
  - Grade-Separated Roundabout
  - Center Turn Overpass
  - Hwy 10 Overpass with Right-In/Right-Out
    - One option with full movement
    - One option with limited movement







# Sunfish Lake Blvd Concepts

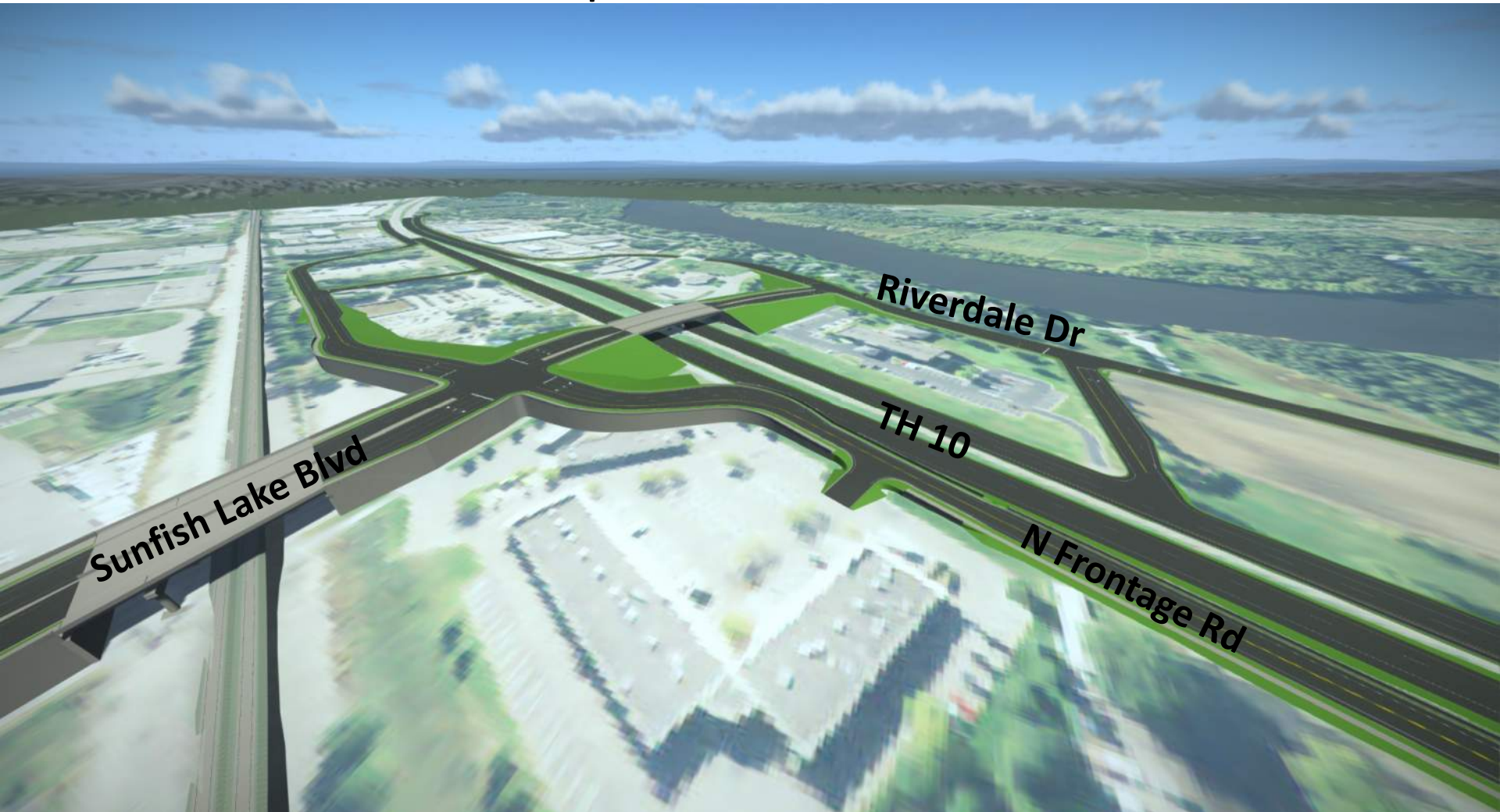


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Overpass with Right-In/Right-Out (Option 1A)  
Rail Grade Separation





# Sunfish Lake Blvd Concepts

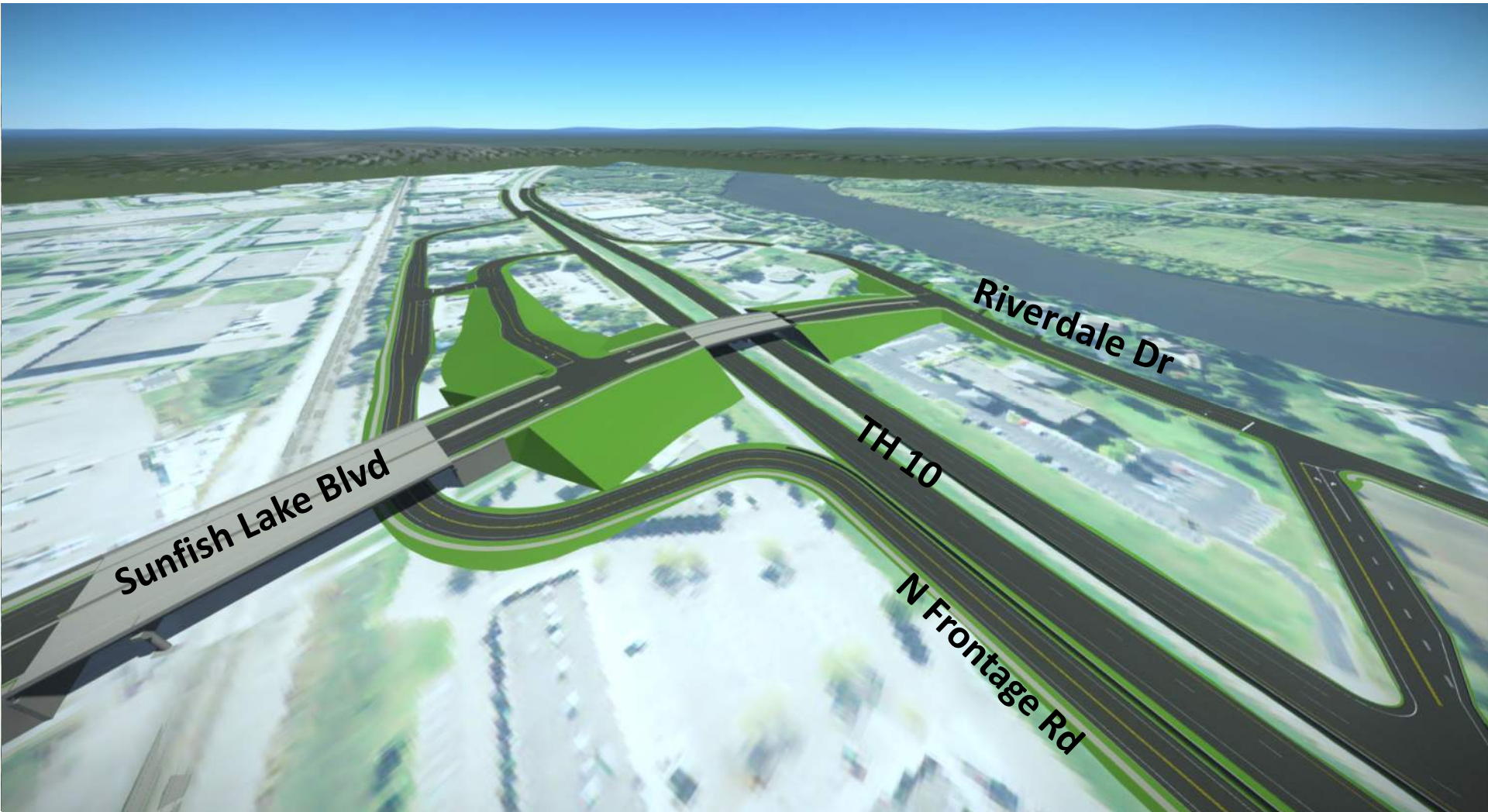


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## Overpass with Right-In/Right-Out (Option 1B) Rail Grade Separation







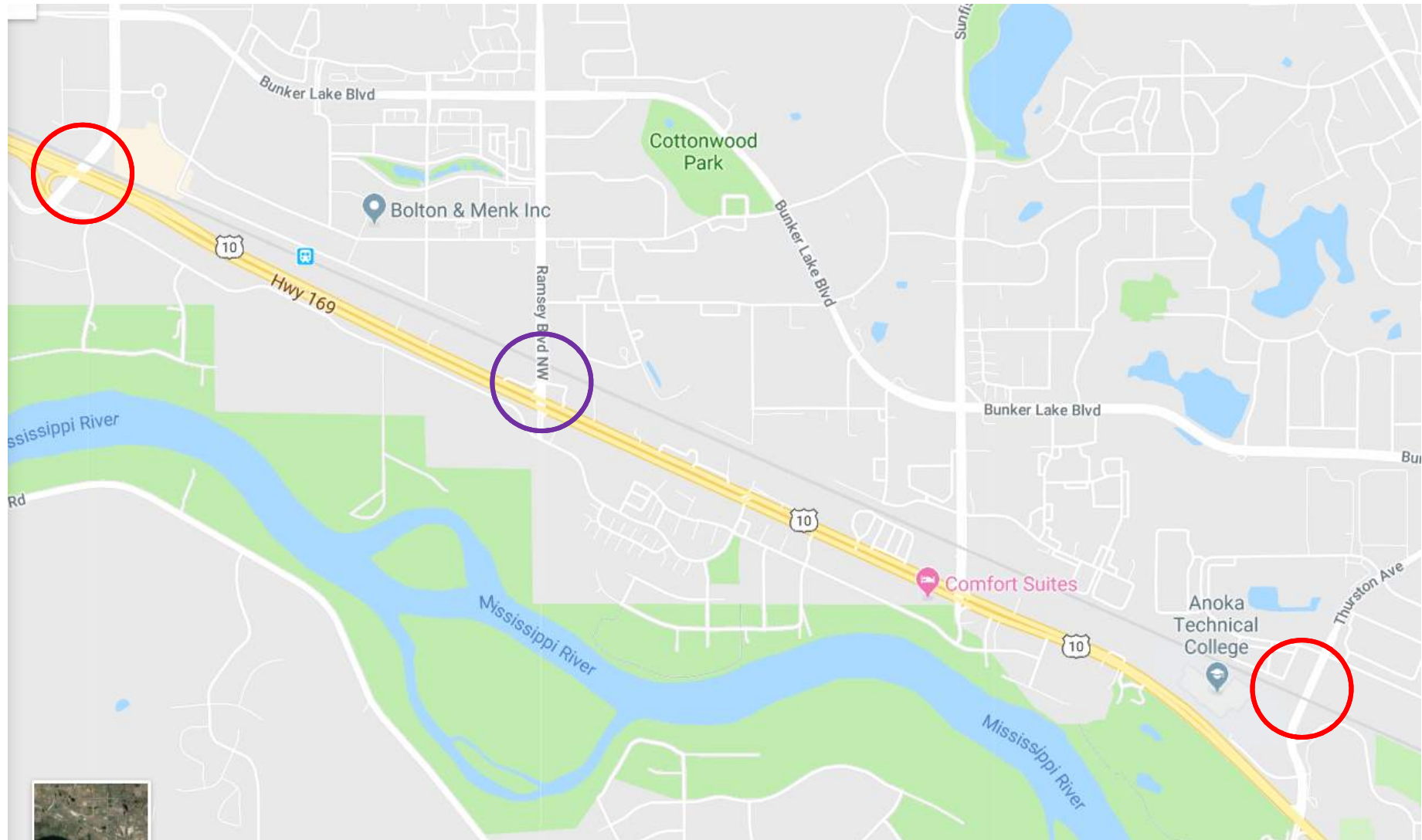
# Existing & Proposed Rail Grade Separation



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# Sunfish Lake Blvd Concepts

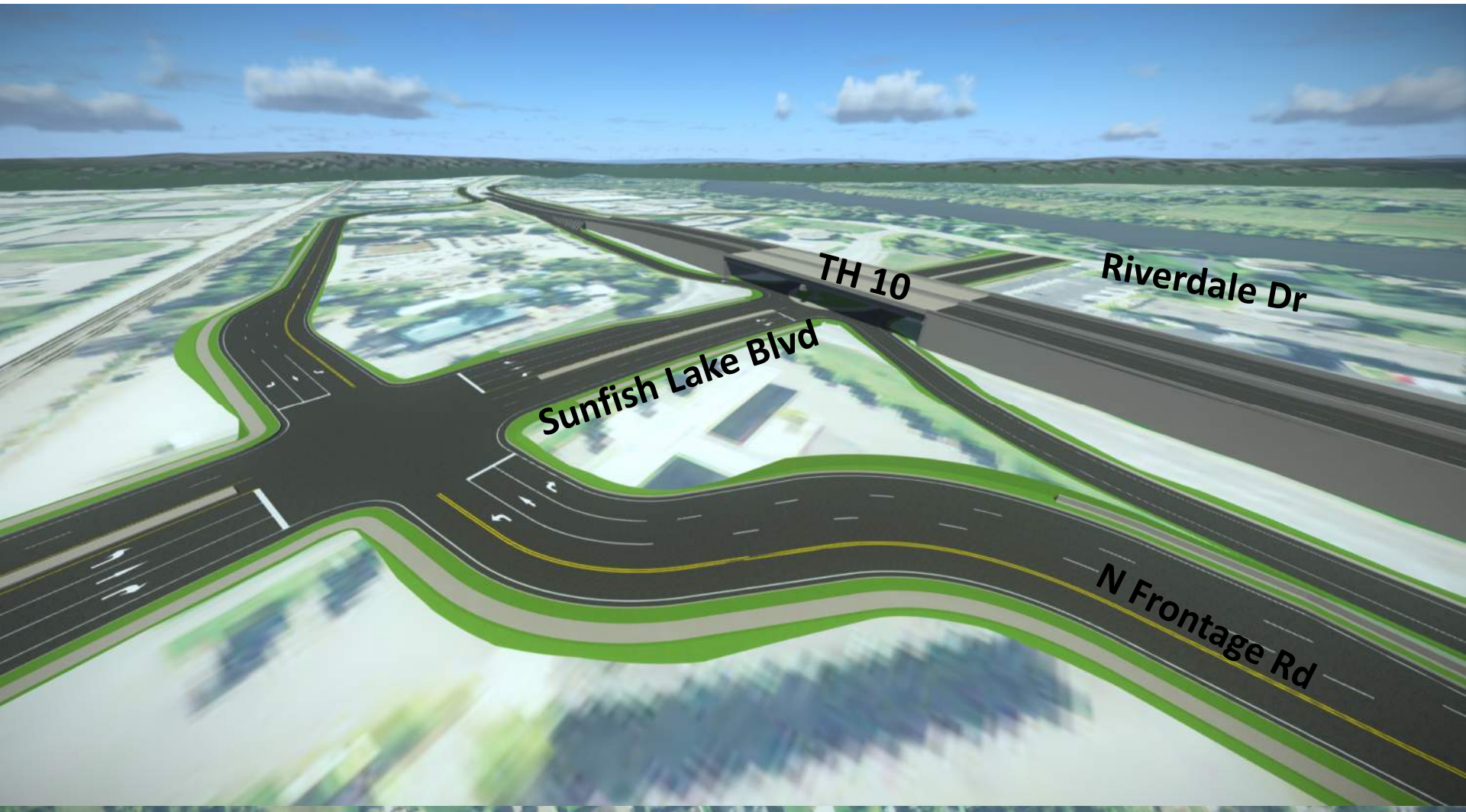
Grade Separated Roundabout (Option 5B)  
At-Grade Rail



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# Sunfish Lake Blvd Concepts

## Center Turn Overpass (Option 6B)

### At-Grade Rail



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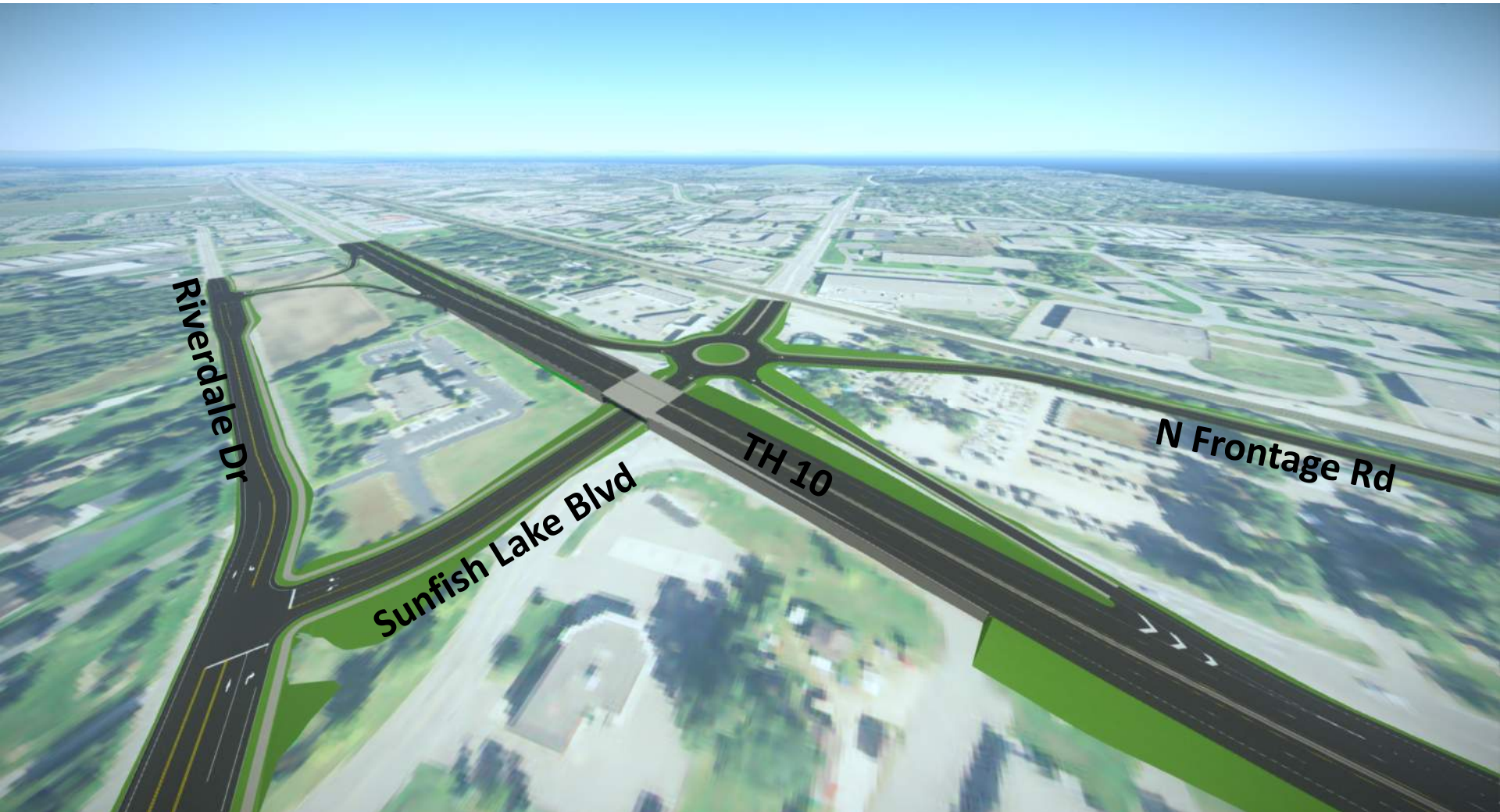


# Sunfish Lake Blvd Concepts

Right-In/Right-Out with WB Exit Ramp (Option 9A)  
At-Grade Rail



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# Sunfish Lake Blvd Concepts

Right-In/Right-Out (Option 9B)

At-Grade Rail

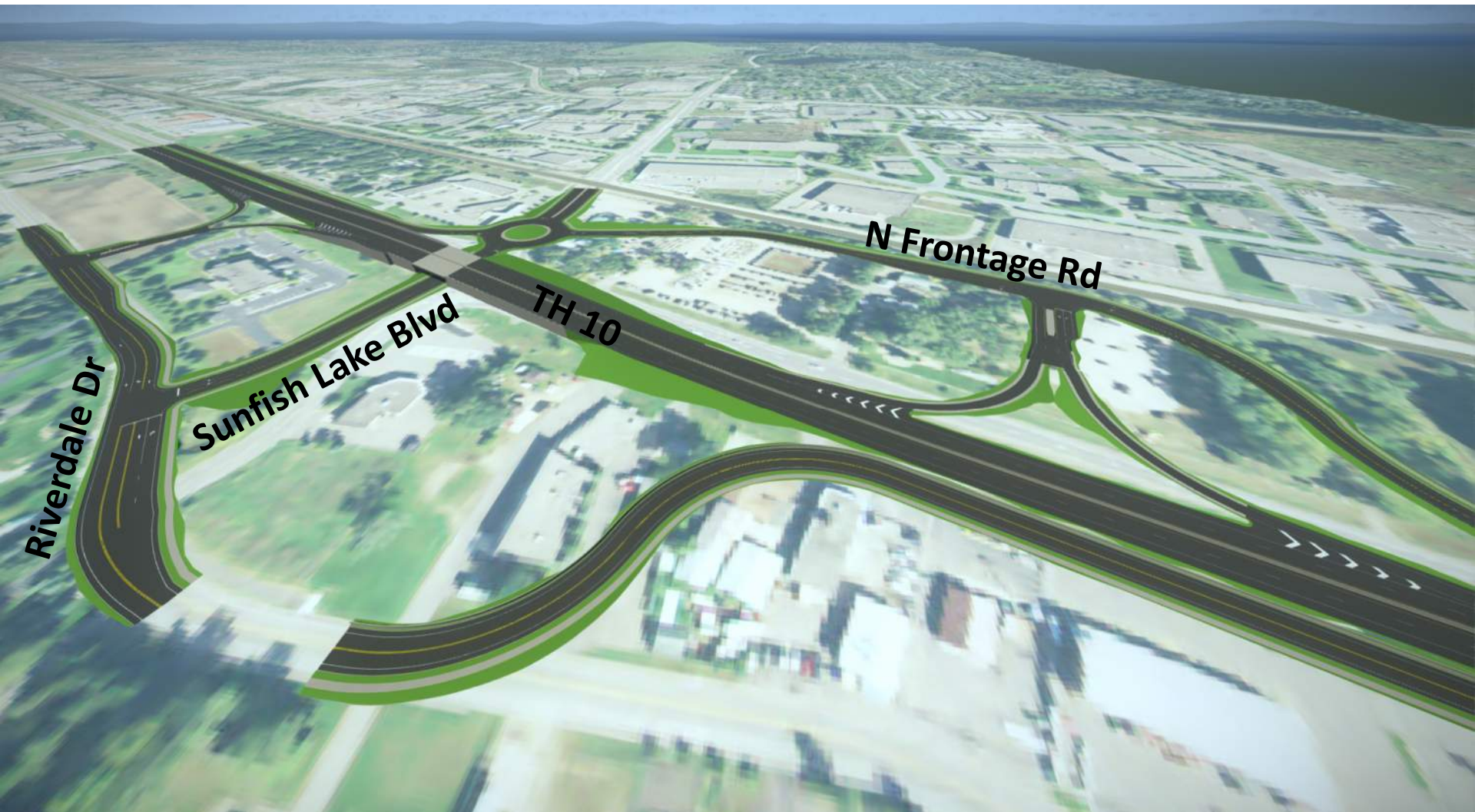


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# Frontage Road Option



- **Total Cost: \$2.4 M**
  - Construction: \$1.4 M
  - ROW: \$700k
  - Engineering: \$300k



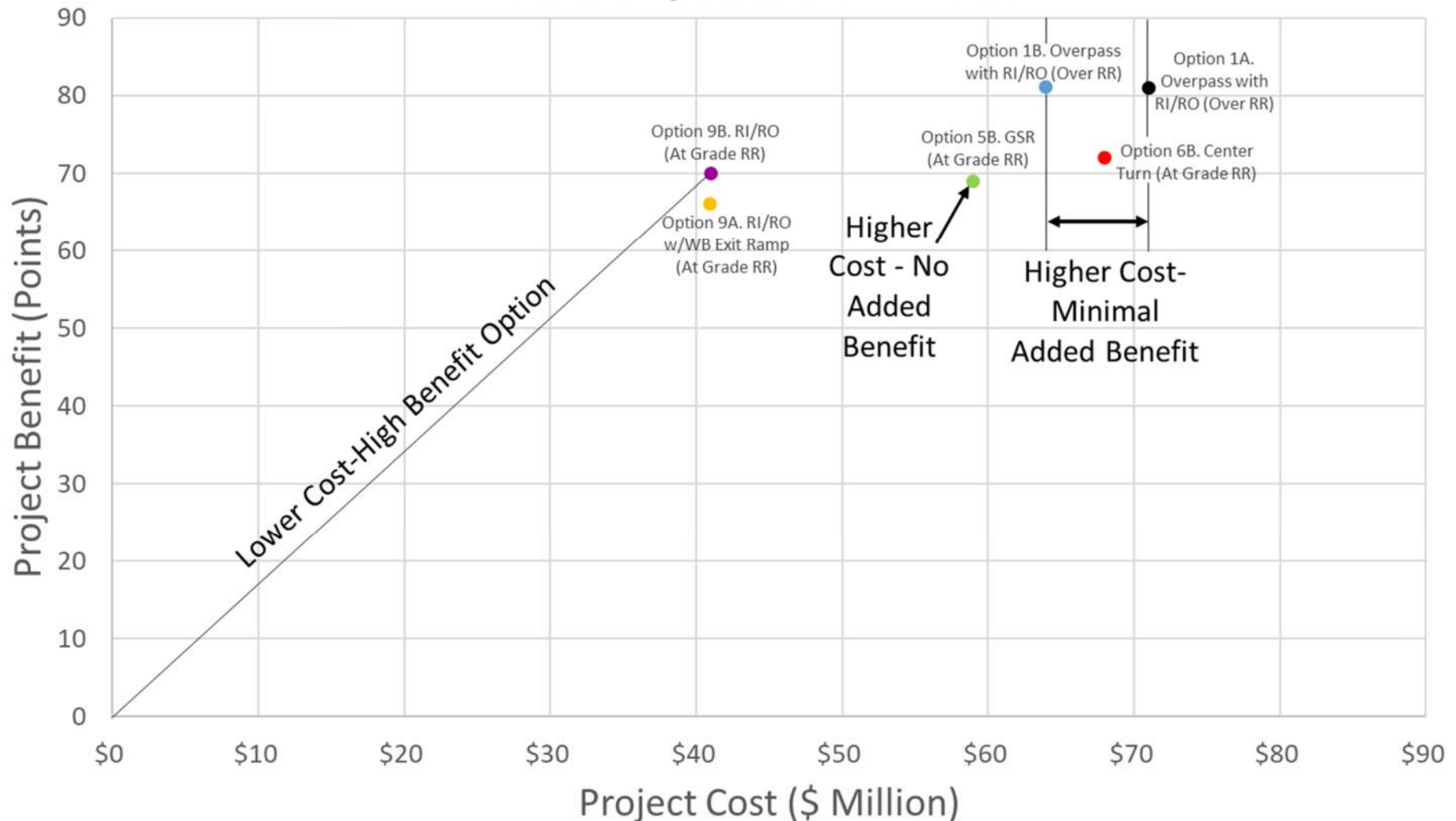


# Sunfish Lake Blvd Preliminary Costs

Sunfish Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Option 1A. RIRO (Over RR)	\$41 - \$46 M	\$12 - \$13 M	\$8.3 - \$9.1 M	<b>\$61 - \$68 M</b>
Option 1B. RIRO (Over RR)	\$35 - \$39M	\$12 - \$13 M	\$7.1 - \$7.8 M	<b>\$54 - \$60 M</b>
Option 5B. GSR (At Grade RR)	\$33 - \$36 M	\$12 - \$13 M	\$6.5 - \$7.2 M	<b>\$51 - \$56 M</b>
Option 6B. Center Turn (At Grade RR)	\$40 - \$44 M	\$11 - \$12 M	\$7.9 - \$8.8 M	<b>\$59 - \$65 M</b>
Option 9A. RIRO w/WB Exit Ramp (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.8 - \$4.2 M	<b>\$34 - \$38 M</b>
Option 9B. RIRO (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.9 - \$4.3 M	<b>\$34 - \$38 M</b>

# Sunfish Lake Blvd Preliminary Costs

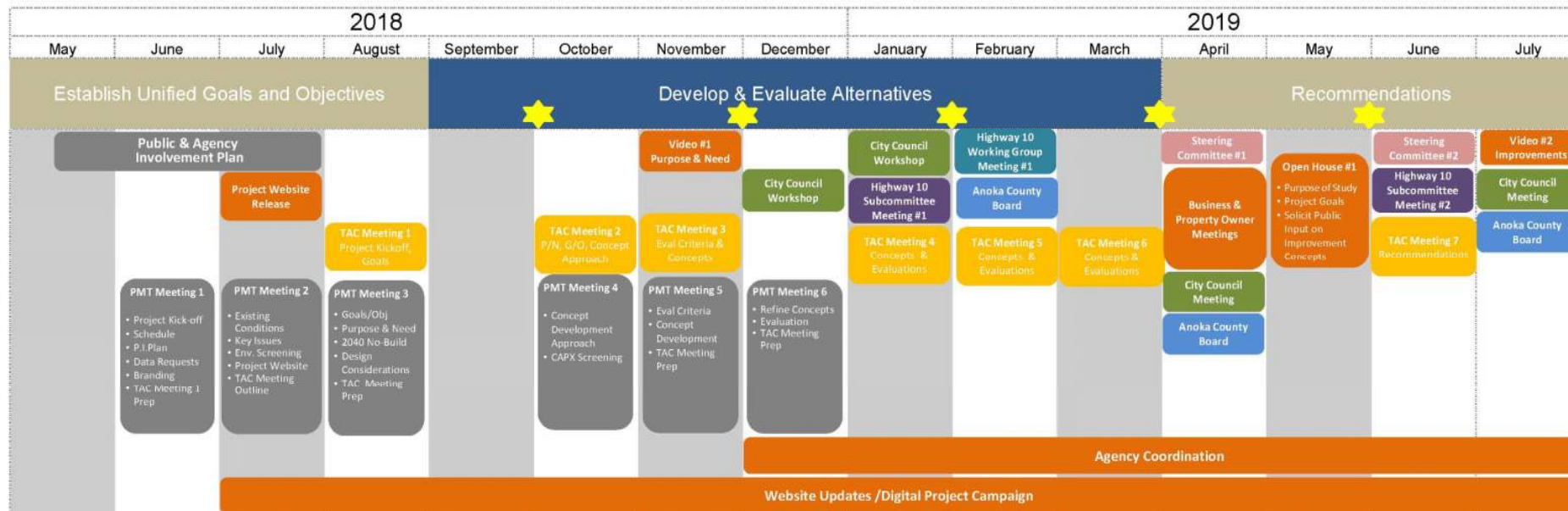
## Sunfish Options: Cost - Benefit





# Public Involvement Plan

- City Council Update – April 9
- Steering Committee – April
- Property Owner Meetings – April
- Open House/Input ID – May
- Next TAC Meeting - June



# **Ramsey Highway 10 Corridor Improvements**

## **Anoka County**

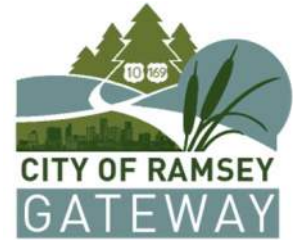
### **Transportation Committee Meeting**

July 17, 2019

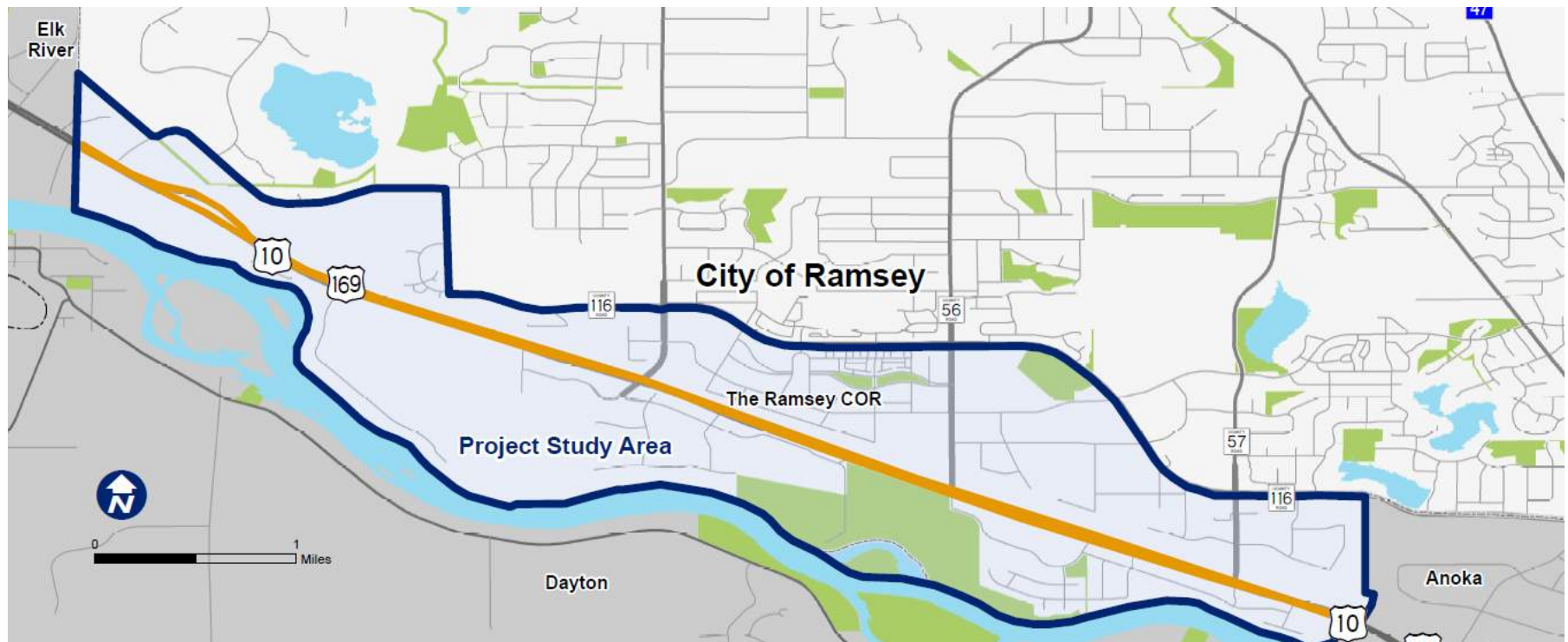




# Meeting Overview



- ✓ Recap Public Input
- ✓ Ramsey Blvd TAC Recommendation
- ✓ Sunfish Lake Rail Grade Separation?
- ✓ Next Steps





## Ramsey Gateway Highway 10 Project Business & Property Meetings

Ramsey City Hall - 7:30 - 8:30 am

Wednesday, May 22, 2019

Sunfish Lake Blvd Group

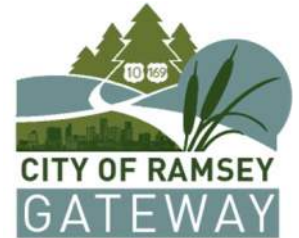
Thursday, May 23, 2019

Ramsey Blvd Group

Meeting Format:  
Presentation and  
Group Discussion

13

Business & Property  
Owners Signed In



### What We Heard

Desire to know  
**construction**  
time line and  
impacts to properties



Desire for **frontage roads**  
to be constructed before  
Highway 10 reconstruction  
and completion of the  
Anoka Highway 10 project

Concern that  
**non-traditional**  
**Highway 10 access**  
may confuse customers

Concern for impacts to  
**recent investments**  
or **lost revenue** due to  
unknowns



**\*Roundabouts**  
are not ideal for  
industrial park access



Concern with business  
visibility impacted by  
potential Highway  
10 median barrier.

**Riverdale Drive** is heavily  
used by traffic avoiding  
backups on Highway 10  
and many  
bicyclists



**\*Space for snow  
removal and  
storage is  
an issue**



**\*Sunfish Lake Blvd  
roadway bridge over  
railroad not perceived  
as necessary**



**\*Drainage  
is an issue  
along Highway 10**





## Ramsey Gateway Highway 10 Project

### Public Open House

Tuesday, June 4, 2019

Ramsey City Hall

5 pm-7 pm

Open House Format:  
Project Informational  
Boards and Discussion

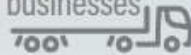
102

Attendees Signed In



## What We Heard

Frontage road connections are important and need to accommodate large trucks to and from businesses



Desire for selection of alternatives that are most **fundable and efficient** as a single vision for Highway 10 in Ramsey

How attendees heard about the open house:

89% Mailing  
7% Email  
2% Social Media  
2% Word-of-Mouth

Desire to know **construction time line and impacts** to properties



Desire to see project sensitivity for environmental resources, planned green space, storm water management, traffic speed enforcement, and cost of lost tax base

Concern for roundabout **safety, efficiency and potential backups** on the frontage roads and highway.



**Riverdale Drive** is heavily used by traffic avoiding backups on Highway 10 and many bicyclists



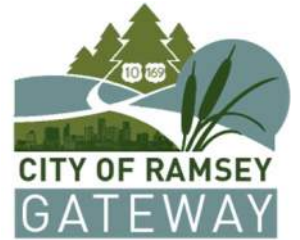
\* Mixed perception on the need for a **roadway bridge over the railroad** with reconstruction of the Sunfish Lake Blvd and Highway 10 intersection



\* Riverdale Drive residents were unsupportive of alternatives that add highway access points and a large amount of frontage road traffic in front their properties



\* specific to Sunfish Lake Blvd



## Study Review

- Picked up from 2014 Study
  - \$300M+ freeway vision not realistic with available funding
  - Identified multiple options \$98-\$110M vision (2014 \$)
  - Rail grade separation not reviewed in detail
- Current Work
  - Looked at existing, 2025 & 2045 conditions
  - Developed purpose & need framework
  - Identified goals & objectives
  - Dismissed concepts not consistent with above
  - More detail on rail grade separations





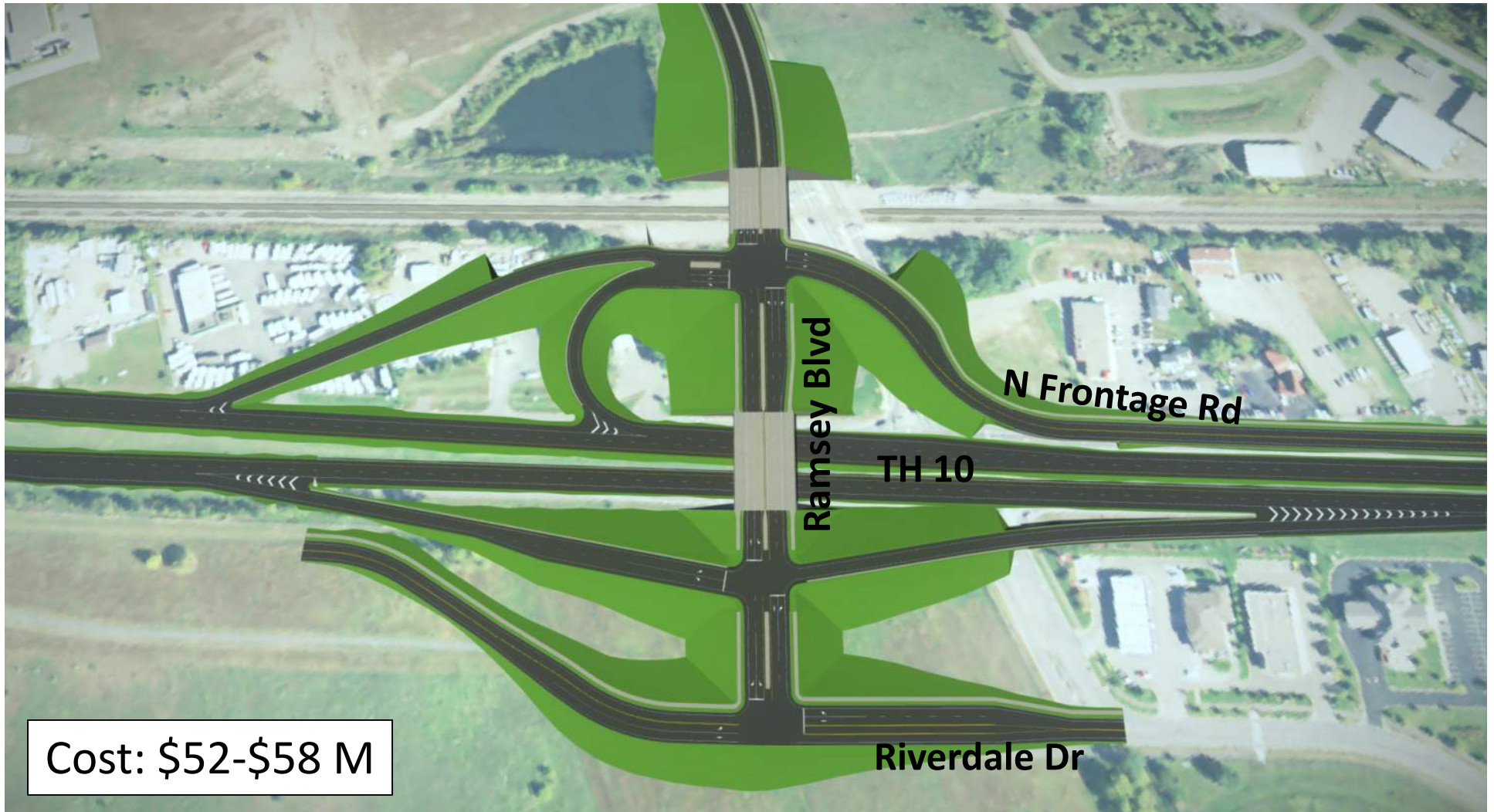
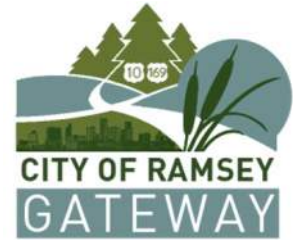
# Ramsey Blvd Concepts

- Railroad Grade Separation on All Concepts
- Entrance/Exit Ramp Options:
  - Tight Diamond
  - Folded WB Off Tight Diamond
  - Overpass with Right-In/Right-Out
  - Tight Diamond with W Frontage Rd



# TAC Recommendation

## Ramsey Blvd Folded Tight Diamond



Cost: \$52-\$58 M





# Lowest Cost

## Ramsey Blvd Overpass with Right-In/Right-Out



# Ramsey Blvd Preliminary Costs



Ramsey Over Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Option 2. Tight Diamond	\$34 - \$38 M	\$16 - \$18 M	\$6.8 - \$7.6 M	<b>\$58 - \$64 M</b>
Option 4. Folded WB TH 10 Off	\$30 - \$34 M	\$16 - \$18 M	\$6.1 - \$6.7 M	<b>\$52 - \$58 M</b>
Option 7A. Overpass with RIRO	\$23 - \$25 M	\$18 - \$20 M	\$4.6 - \$5.0 M	<b>\$46 - \$51 M</b>
Option 7B. Overpass with RIRO	\$27 - \$30 M	\$16 - \$18 M	\$5.5 - \$6.0 M	<b>\$49 - \$54 M</b>
Option 9. Tight Diamond with Frontage Rd	\$41 - \$45 M	\$12 - \$13 M	\$8.2 - \$9.0 M	<b>\$61 - \$67 M</b>

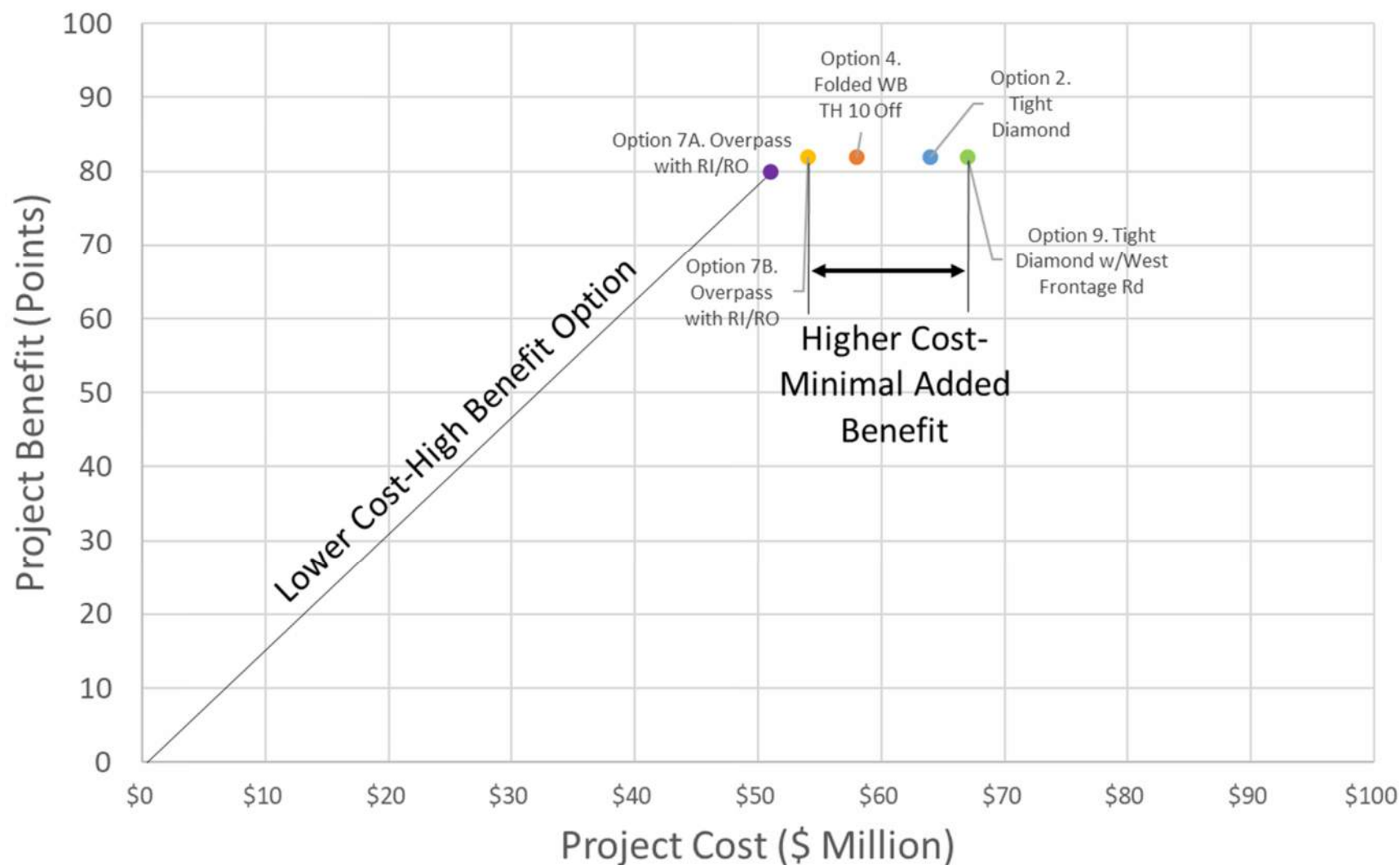






# Ramsey Blvd Preliminary Costs

## Ramsey Options: Cost - Benefit



# Sunfish Lake Boulevard Concepts



## Railroad Grade Separation:

- Overpass with Right-In/Right-Out

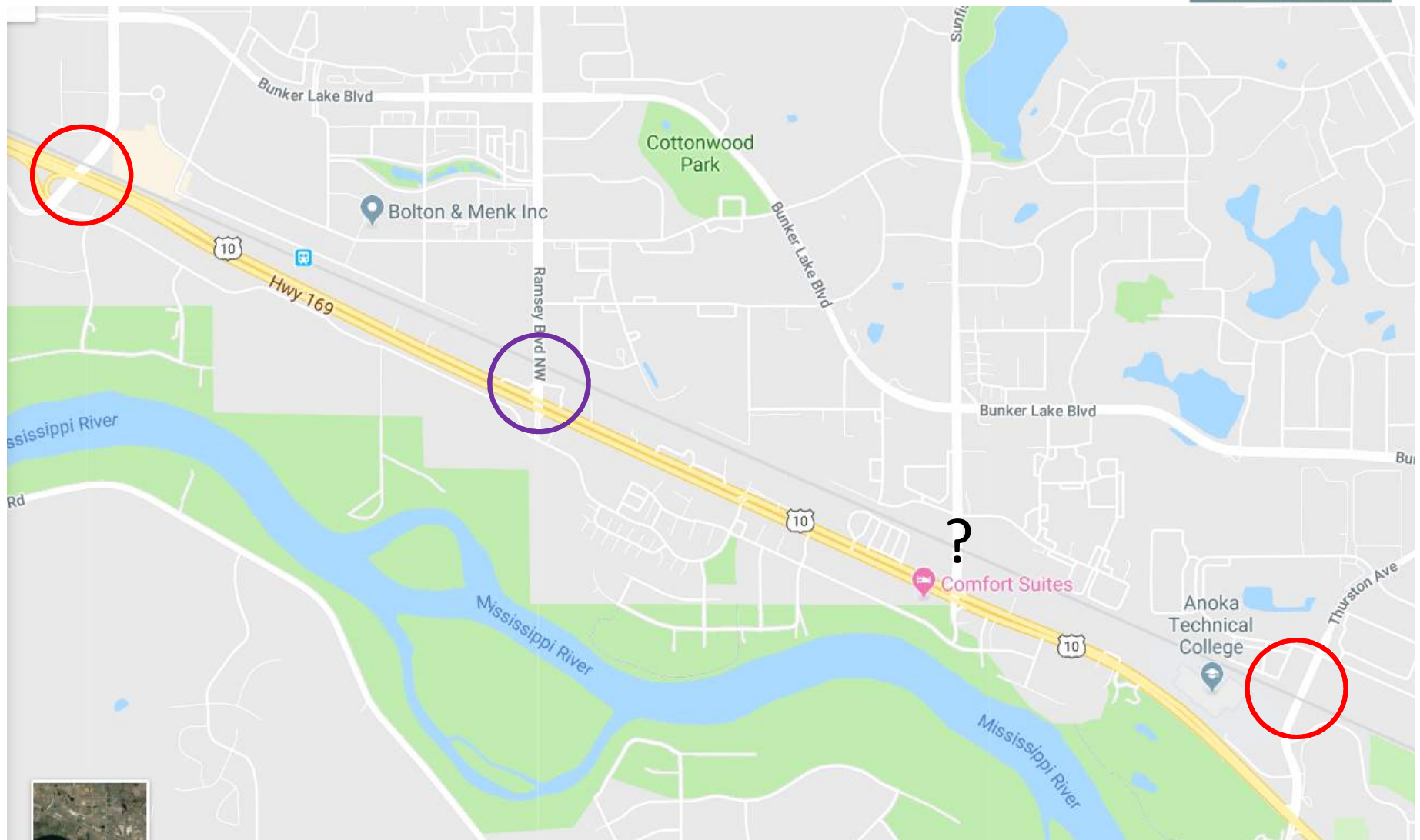
## At-Grade Rail Options:

- Grade-Separated Roundabout
- Center Turn Overpass
- Overpass with Right-In/Right-Out
  - Full Access
  - Reduced Access (No WB on ramp)
- New Loop Ramp Concepts
  - Modified Overpass with RI/RO & loop
  - Modified RI/RO Roundabout & loop



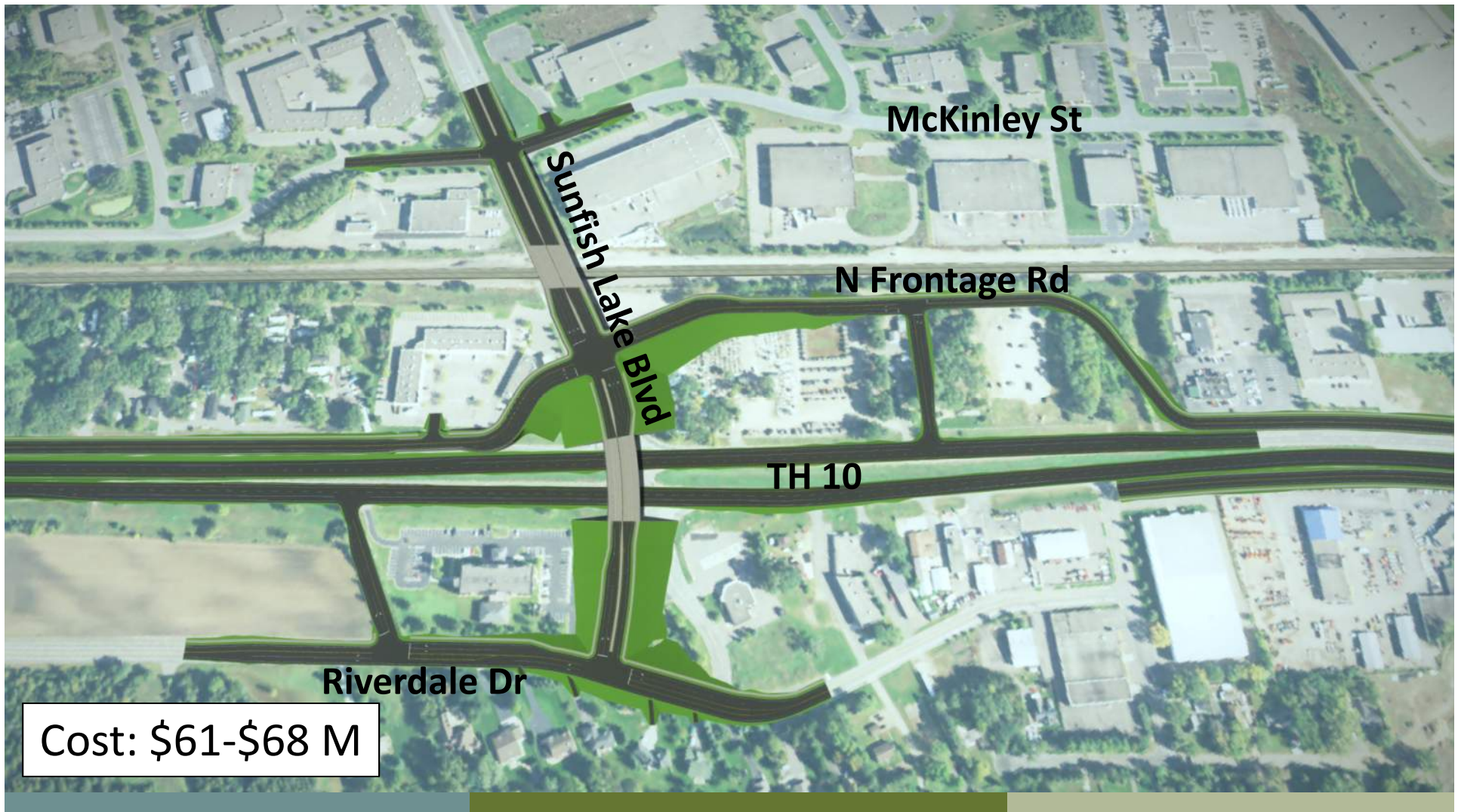
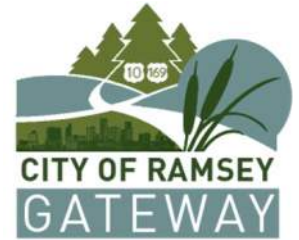


# Existing & Proposed Rail Grade Separation



# Sunfish Lake Blvd Concepts

Overpass with Right-In/Right-Out – Option A  
Rail Grade Separation

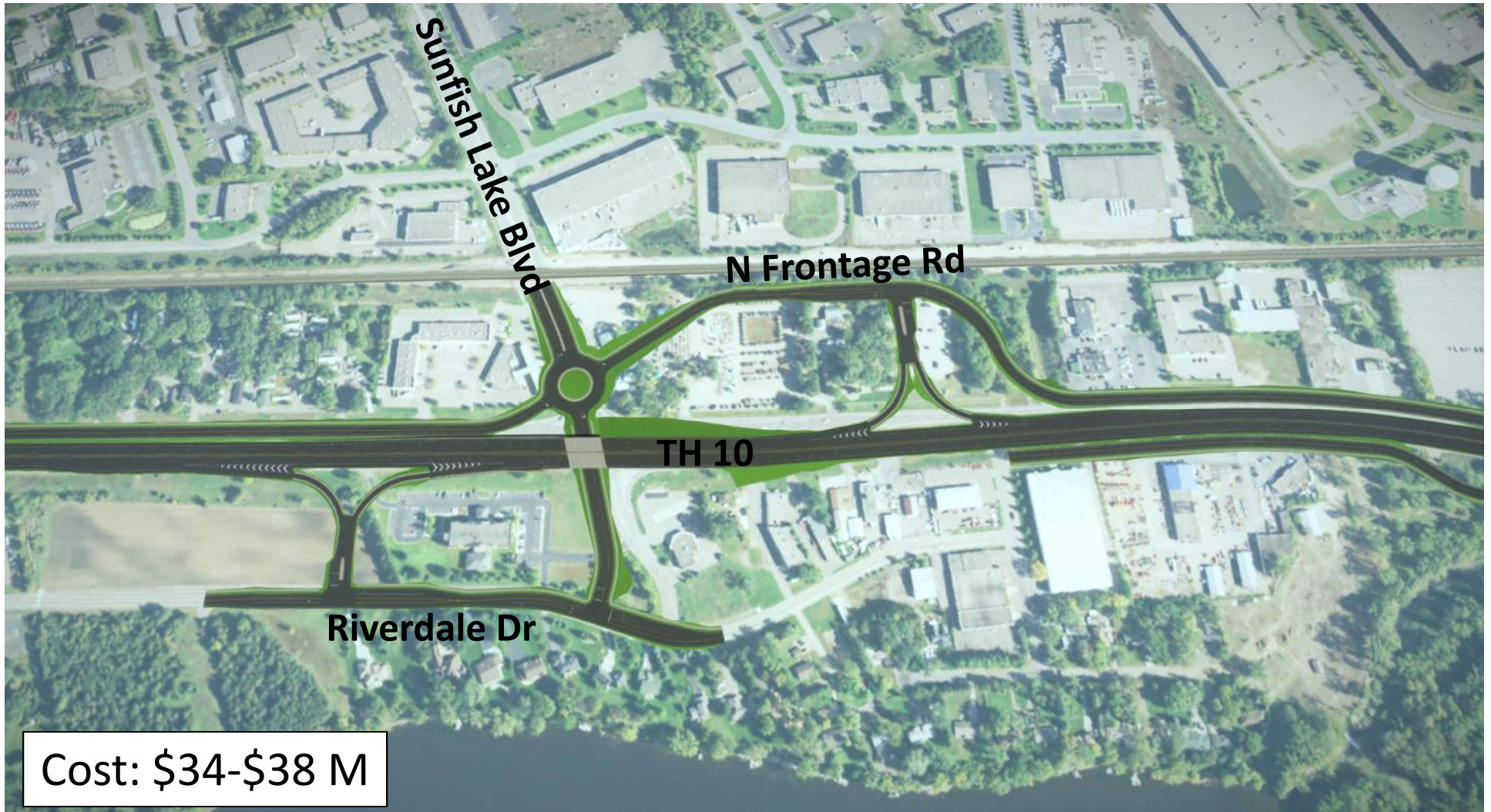
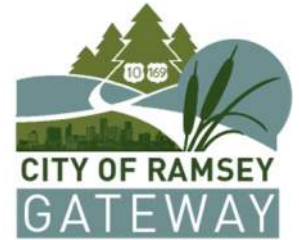




# Sunfish Lake Blvd Concepts

Right-In/Right-Out With Roundabout (Full Access)

At-Grade Rail



Cost: \$34-\$38 M



# Sunfish Lake Blvd Preliminary Costs

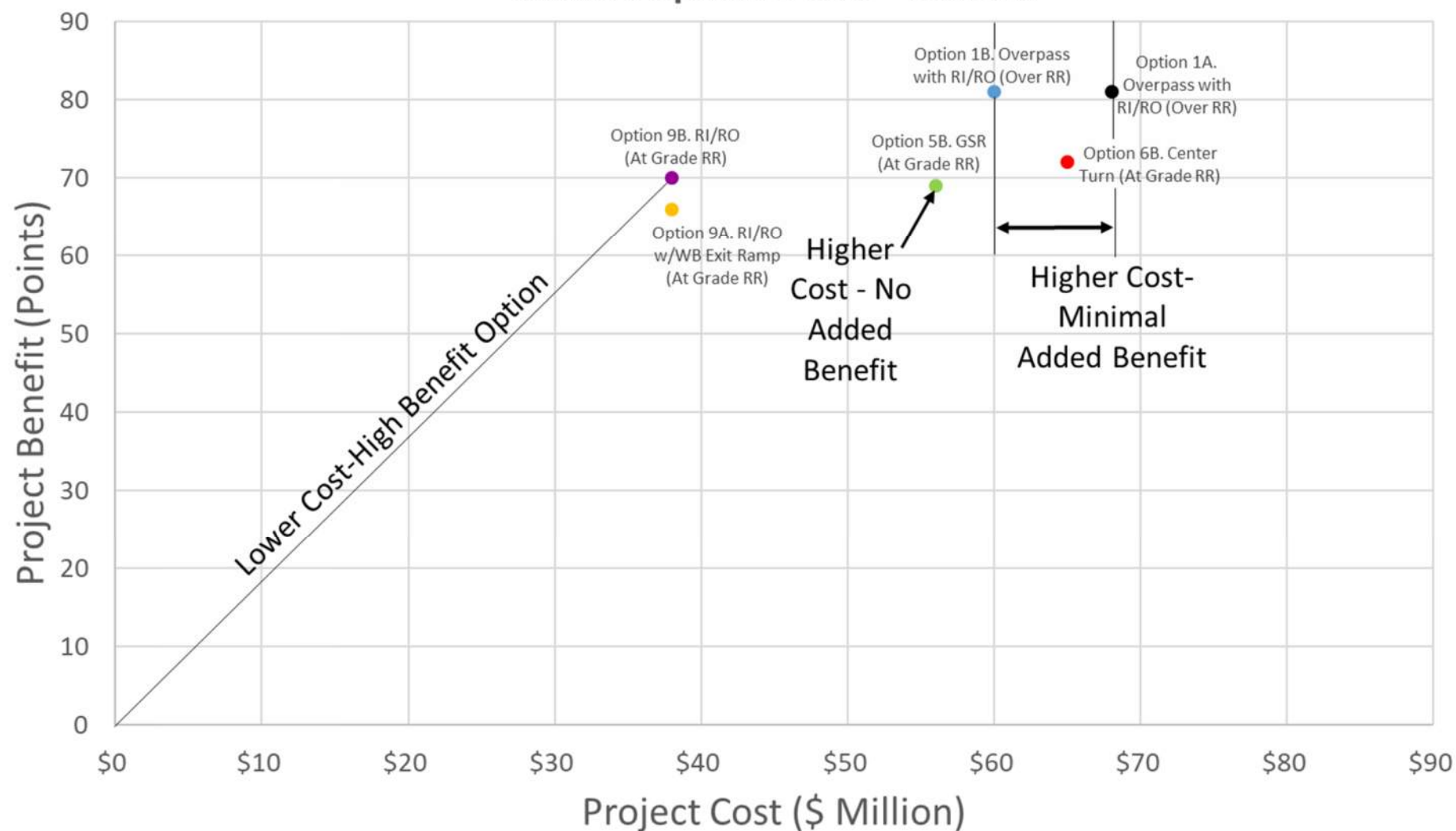
Sunfish Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Option 1A. Overpass with RIRO (Over RR)	\$41 - \$46 M	\$12 - \$13 M	\$8.3 - \$9.1 M	\$61 - \$68 M
Option 1B. Overpass with RIRO (Over RR)	\$35 - \$39M	\$12 - \$13 M	\$7.1 - \$7.8 M	\$54 - \$60 M
Option 5B. Grade Separated RAB (At Grade RR)	\$33 - \$36 M	\$12 - \$13 M	\$6.5 - \$7.2 M	\$51 - \$56 M
Option 6B. Center Turn Overpass (At Grade RR)	\$40 - \$44 M	\$11 - \$12 M	\$7.9 - \$8.8 M	\$59 - \$65 M
Option 9A. Overpass w/RIRO, Reduced Access (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.8 - \$4.2 M	\$34 - \$38 M
Option 9B. Overpass w/RIRO, Full Access (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.9 - \$4.3 M	\$34 - \$38 M





# Sunfish Lake Blvd Preliminary Costs

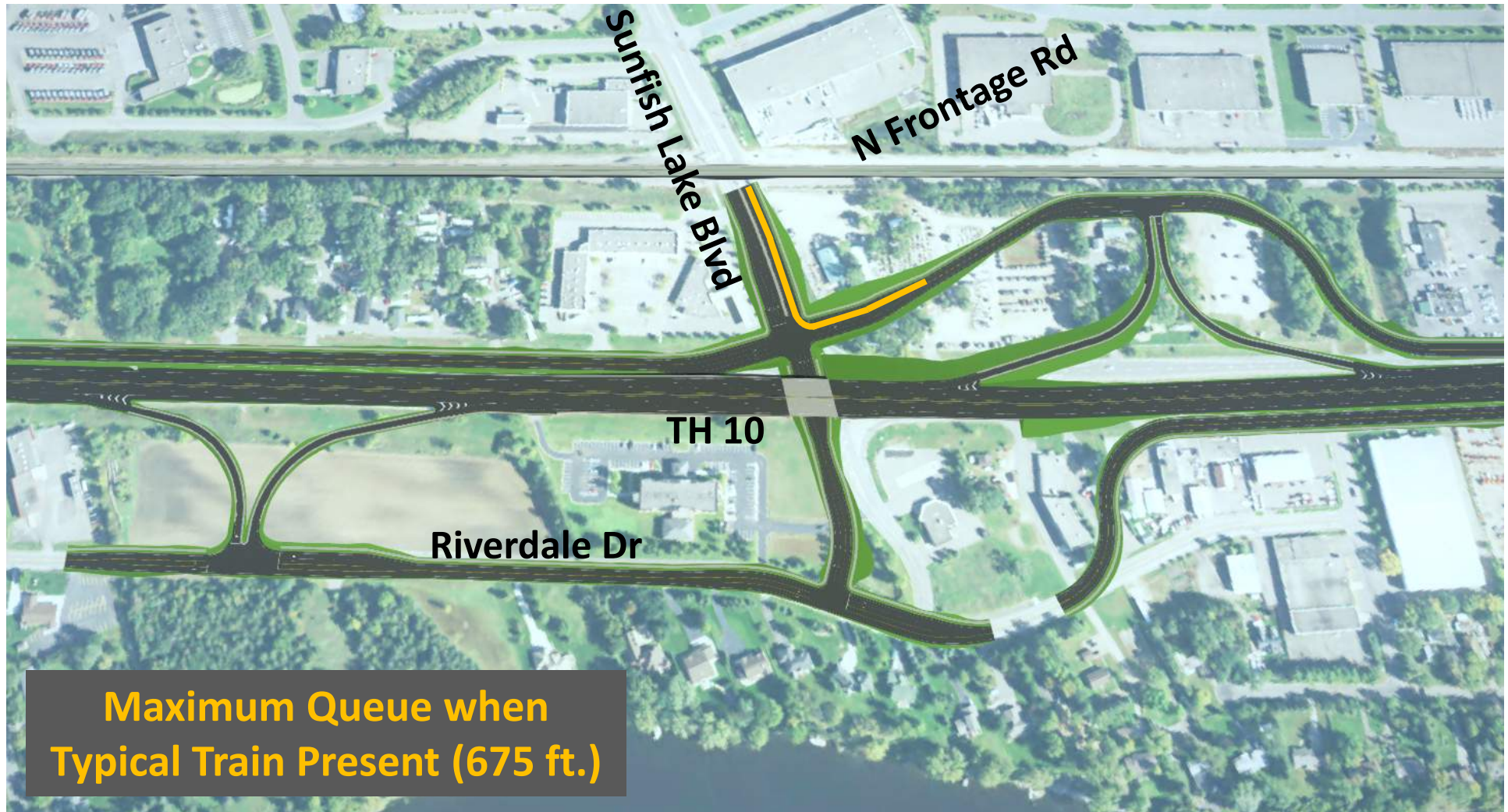
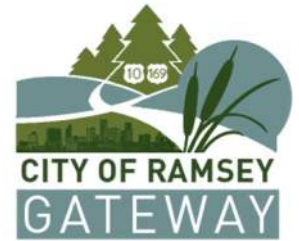
## Sunfish Options: Cost - Benefit



# Sunfish Lake Blvd Concepts

Right-In/Right-Out With RAB/Signal (Full Access)

At-Grade Rail



**Maximum Queue when  
Typical Train Present (675 ft.)**

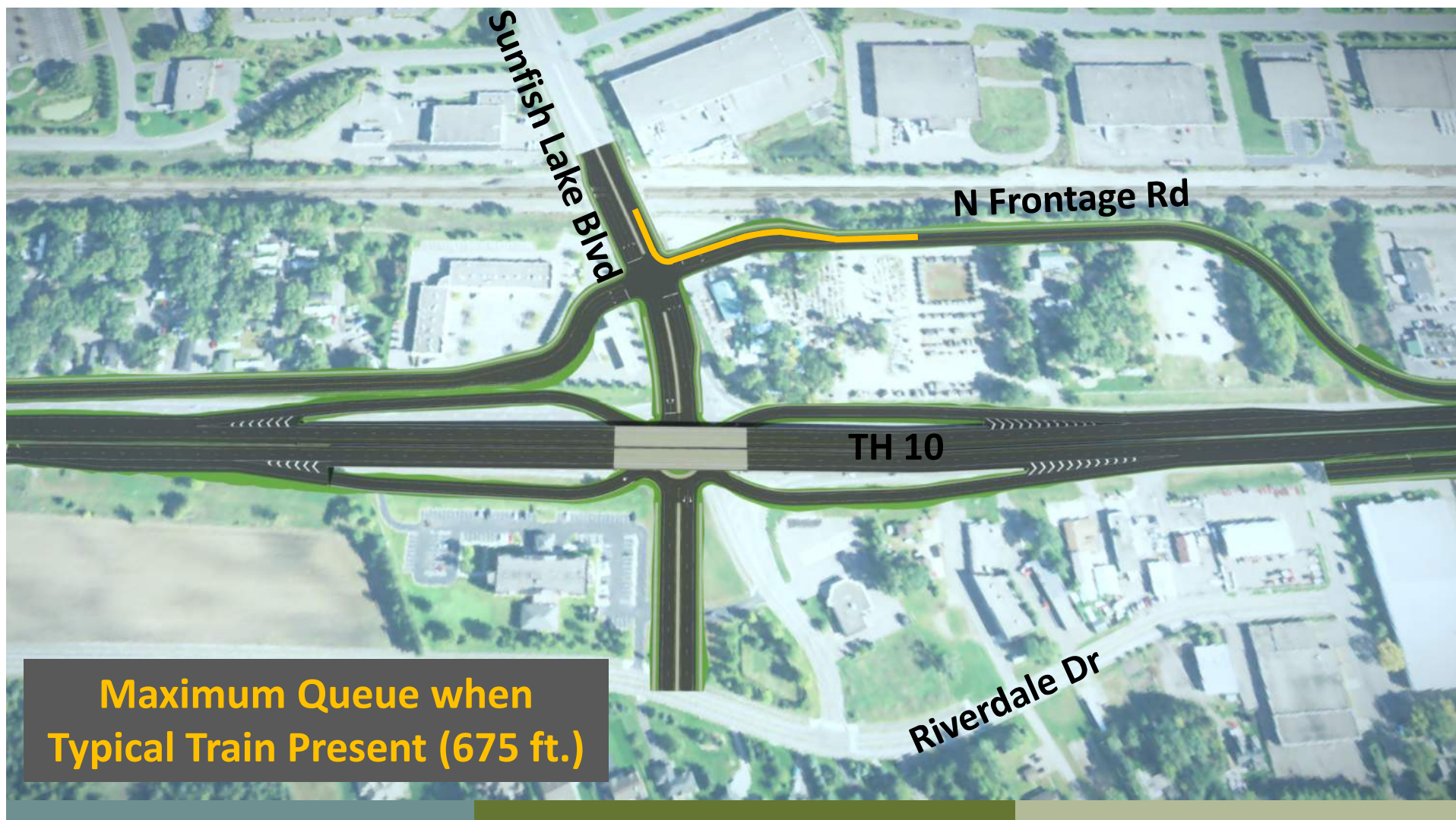




# Sunfish Lake Blvd Concepts

Grade Separated Roundabout

At-Grade Rail





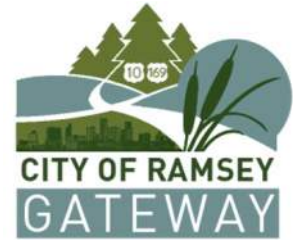
# Frontage Road between Ramsey & Sunfish



- Cost: \$12 - \$14 M



# Frontage Road Option



- **Total Cost: \$2.4 M**

# Range of Total Cost – East End

Inflated to 2025 dollars



## Both Grade Separated Rail

### TOTAL COST:

Ramsey Folded Tight Diamond \$52-\$58 M

Sunfish Overpass with RI/RO \$54-\$60 M

Frontage Rd (Ramsey-Sunfish) \$12-\$14 M

**\$118 - 132 M**

## One At-Grade Rail

### TOTAL COST:

Ramsey Folded Tight Diamond \$52-\$58 M

Sunfish RI/RO RAB (Full Access) \$34-\$38 M

Frontage Rd (Ramsey-Sunfish) \$12-\$14 M

**\$98 - 110 M**

### **Highway 10 Access Planning Study ~ \$98 - 110 M (2014 dollars).....\$150-170 M (2025)**

Sunfish Lake Blvd with/without Rail Grade Separation ~\$48 M/ \$36 M

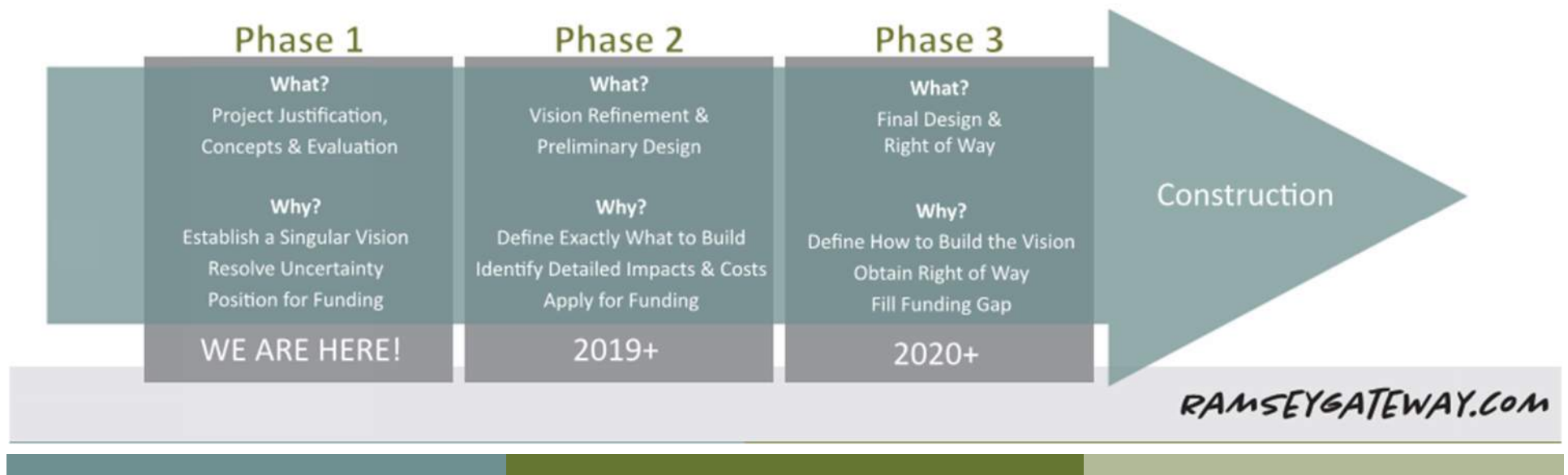
Ramsey Blvd with Rail Grade Separation ~\$50 M

Frontage Road (Ramsey-Sunfish) ~\$12 M



# Next Steps

- TAC Meeting – July 18
- Property Owner Follow Up Meetings – Ongoing
- Phase II – TBD
  - Interchange Review Committee
  - Implementation Plan
  - Funding Plan
  - Additional Design



Minnesota Department of Transportation  
(MnDOT)





## Conference Call Meeting Log

**Date:** November 19, 2018

**Recorder:** Angie Bersaw, Bolton & Menk

**Attendees:** Melissa Barnes, MnDOT  
Rick Dalton, MnDOT OES  
Bruce Westby, City of Ramsey  
Angie Bersaw, Bolton & Menk

**Subject:** Ramsey Highway 10 Gateway Project  
Purpose and Need Framework Comments  
BMI Project No.: T61.116411

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- Purpose of call – discuss Rick’s comments on the draft purpose and need framework and discuss need/timing of FHWA coordination.
- Angie reviewed the following:
  - 2014 Access Planning Study
    - Focus on Anoka and Ramsey
    - Mostly existing conditions, some forecasting
    - Public process – property owners, elected officials, 3 public open houses
    - Range of recommended alternatives
  - Ramsey Highway 10 Gateway Project
    - Planning study to identify a local preferred vision
    - Following PEL process: environmental screening, purpose and need framework, documentation of goals/objectives, evaluation process and concepts dismissed to get to a locally preferred vision
    - Concept (footprint) level work
    - No funding for improvements yet
  - Ramsey Highway 10 Gateway Project Phase II is intended to refine the locally preferred vision, conduct preliminary design, conduct detailed studies, develop an implementation plan and identify funding sources. This phase of work is not yet authorized or funded.
- Rick suggested BMI document the background and current study process into a memo for FHWA review.
- Melissa suggested BMI and MnDOT meet with FHWA first to determine what they may need since there is a lot of background information that could be packaged. All agreed this was a good approach.
- Rick noted FHWA will soon release new guidance on Purpose and Need.
- Melissa will identify dates for an FHWA meeting to discuss project status and next steps. Angie suggested a meeting in December would be best to keep the overall project on schedule.
- Melissa and Angie will include Bruce and Rick on the meeting invite.



## MnDOT Rest Area & Weigh Station Coordination Meeting Summary

**Date:** December 17, 2018

**Attendees:** Melissa Barnes, MnDOT North Area  
Patrick Osborn, MnDOT Weigh Station  
Trooper 1  
Trooper 2  
Rob Williams, MnDOT Rest Areas  
Doug Carter, MnDOT Geometrics  
Bruce Westby, City of Ramsey  
Angie Bersaw, Bolton & Menk  
Ross Tillman, Bolton & Menk

**Subject:** Ramsey Highway 10 Gateway Project  
Dayton Port Rest Area/Weigh Station Coordination  
BMI Project No.: T61.116411

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- The purpose of the meeting was to share progress on the Ramsey Gateway Highway 10 Project with the Dayton Port Rest Area and Weigh Station staff and to gather input on potential improvement concepts for consideration.
- Angie reviewed the purpose of the Ramsey Gateway Highway 10 Project and provided a recap of the work to-date including 2045 traffic forecasts and a summary of existing and projected safety and operational issues.
- Ross noted the traffic operations analysis has shown the need to consider improvement options that:
  - Reduce direct access to Highway 10 by adding/connecting frontage roads
  - Consider a signalized reduced conflict U-turn or a low-cost grade separation near the Jarvis Street/Alpine Drive area
  - Add acceleration/deceleration lanes to any remaining access points
- Weigh station staff noted the following issues with the Dayton Port station:
  - A bill was proposed approximately two years ago to close any center median weigh stations such as Dayton Port. The bill did not pass but MnDOT did complete an operational and safety analysis at that time. No operational or safety performance issues were found.
  - Staff noted the weigh station has very short acceleration/deceleration lanes. For this reason, weigh station staff do not operate the station during peak traffic periods such as Fridays in the summer or per their judgement due to safety concerns with trucks accelerating into heavy traffic flow or trucks backing up the deceleration lane into traffic.
  - Weigh station is typically open Monday-Friday 8-10 hours a day.
  - Trucks are often observed avoiding the weigh station using roads like 165<sup>th</sup> Street and Alpine Drive to divert around it. City staff has had complaints from neighborhoods along these routes.
  - There are no current plans to change existing operations at the weigh station. The Ramsey Gateway Highway 10 Project should assume the weigh station will remain in



place but plan for additional length to acceleration/deceleration lanes with a future Highway 10 project.

- Rest area staff noted the following issues with the rest area:
  - Entrance and exit points are confusing for travelers.
  - Staff noted this site is unique and challenging due to being surrounded by residential properties and lacking in truck parking.
  - Staff said they have looked at moving this rest area in the past but there is no current plan or funding in place to do that.
  - City of Ramsey staff has had complaints regarding crime issues at the rest area in the past.
  - Staff was open to the Ramsey Gateway Highway 10 Project considering the following scenarios: rest area remains as is, rest area is expanded to provide a westbound location, and the rest area is moved out of the study area completely.

# **Ramsey Highway 10 Corridor Improvements**

## **MnDOT Update**

July 9, 2019



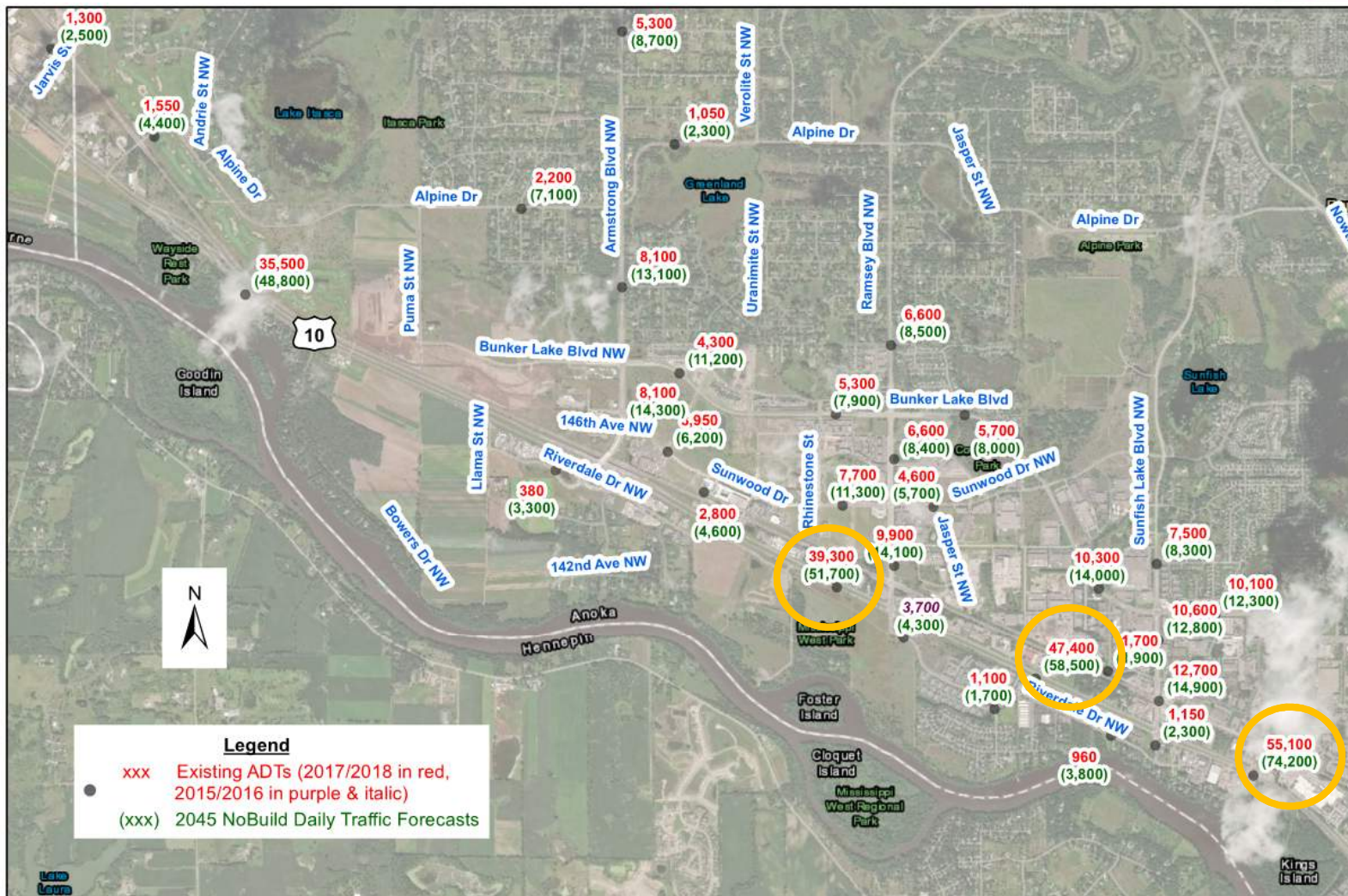
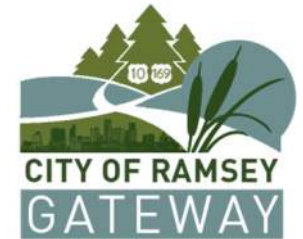


# Ramsey Highway 10 Gateway Project



- Picked up from 2014 Study
  - \$300M+ freeway vision not realistic with available funding
  - Identified multiple options \$98-\$110M vision
    - 2014 dollars, construction & ROW only, no engineering
    - Railroad grade separation was not reviewed in detail
- Current Work
  - Looked at existing, 2025 & 2045 conditions
  - Developed purpose & need framework
  - Identified goals & objectives
  - Dismissed concepts not consistent with above

# 2045 Traffic Forecasts







# Initial Screening

Dismissed Concepts	Conflicting Goals	Reason Dismissed*
<b>East End</b>		
<b>1. Highway 10 Expansion to 6-lane (At-grade)</b>	<i>1, 2, 3, and 4</i>	<i>a)</i> Does not provide adequate traffic operations for the long-term. <i>b)</i> High cost. <i>c)</i> High likelihood of property acquisitions. <i>d)</i> Not consistent with Anoka and Elk River Hwy 10/169 improvement plans.
<b>2. At-grade full movement intersections at Ramsey and Sunfish Lake Blvd</b>	<i>1 and 2</i>	<i>a)</i> Does not provide adequate traffic operations. <i>b)</i> Safety concern with signalized intersection control.
<b>3. Partial movement grade separation at Ramsey Blvd</b>	<i>2 and 4</i>	<i>a)</i> Full movement at Ramsey Blvd desired by City of Ramsey to serve businesses from Highway 10. <i>b)</i> Full movement at Ramsey Blvd desired by City of Ramsey for community connectivity to, from and across Highway 10.
<b>4. Railroad Underpass at Sunfish Lake Blvd</b>	<i>3, 4, and 5</i>	<i>a)</i> Shoofly railroad track construction needed which would require acquisition of 4 businesses, relocation of powerlines relocation, and mitigation of significant ground water issues. These impacts result in substantial cost. <i>b)</i> Underpass could be considered a future opportunity but due to impacts and cost it was not determined feasible within this study's planning horizon.

\* Details supporting the traffic and safety analyses are documented in the Existing and No-Build Traffic Conditions Tech Memo.



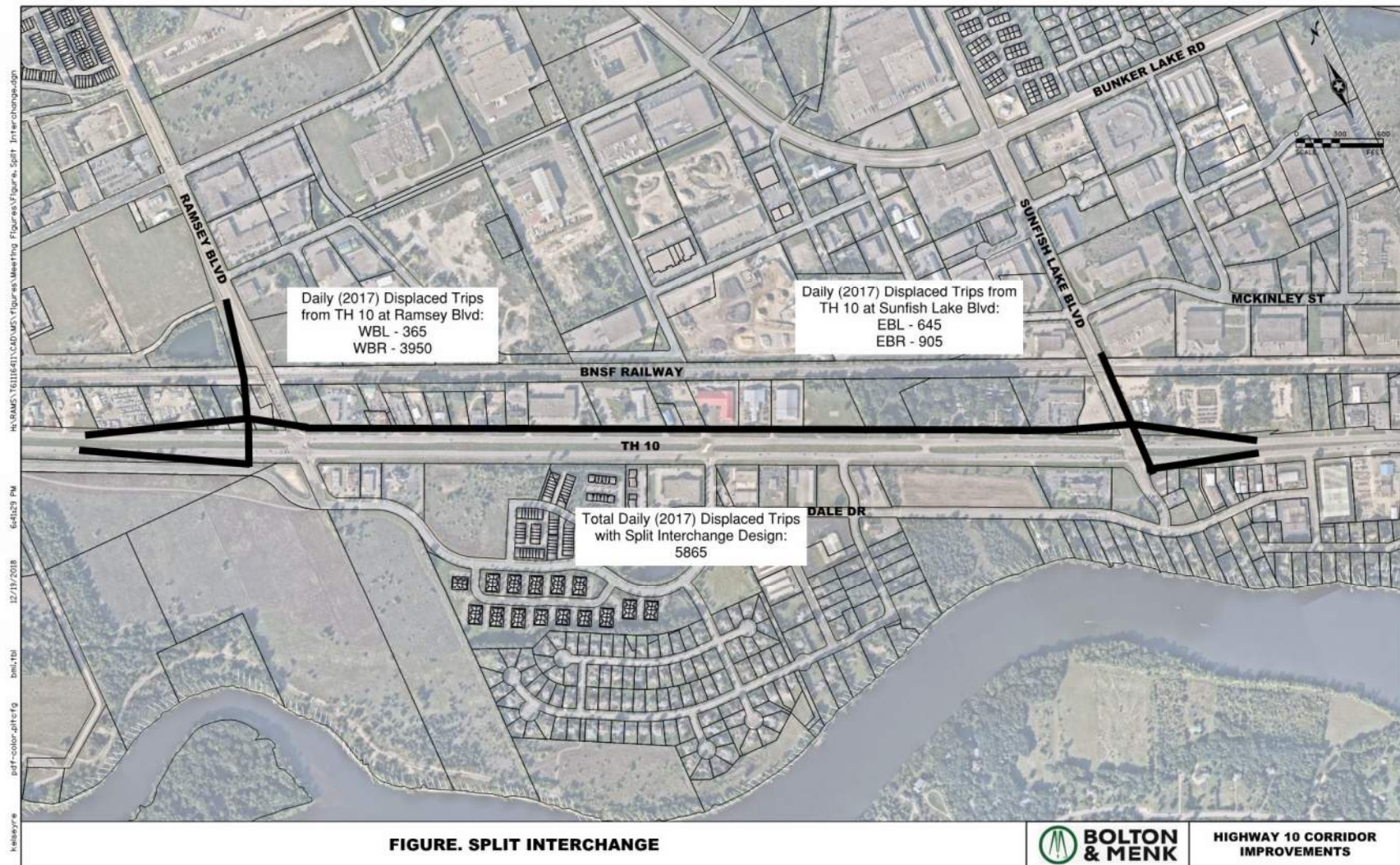
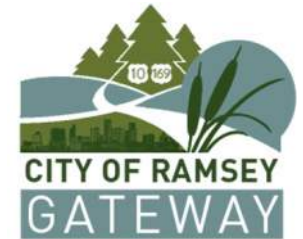
# Range of Improvement Concepts

- Ramsey Blvd
  - Rail grade separation
  - Overpass with RI/RO
  - Traditional interchange designs
    - Standard Diamond
    - Tight Diamond
    - Folded Diamond
    - SPUI
    - Grade Separated Roundabout
- Sunfish Lake Blvd
  - Rail grade separation
  - At-grade rail
  - Overpass with RI/RO
  - High-T
  - Overpass only (flyover)
  - Traditional interchange designs
    - Grade Separated Roundabout
    - Center Turn Overpass
- Other
  - Collector-Distributor System
  - Split Diamond





# Split Diamond



# Concept Evaluation – Ramsey Blvd



## RAMSEY BOULEVARD EVALUATION

Measures	No Build	RAMSEY BLVD OVER RAILROAD CONCEPTS										RAMSEY BLVD UNDER RAILROAD CONCEPTS								Notes
		1	2	3	4	5	6	7A	7B	8	9	1	2	3	4	5	6	7	8	
		Standard Diamond	Tight Diamond	Folded EB On Tight Diamond	Folded WB Off Tight Diamond	Folded EB On & WB Off Tight Diamond	Folded EB On & Semi-Folded WB Off Tight Diamond	Overpass with Right-In/Right-Out	Overpass with Right-In/Right-Out (West)	Single Point Urban Interchange (SPUI)	Tight Diamond with West Frontage Road	Standard Diamond	Tight Diamond	Folded EB On Tight Diamond	Folded WB Off Tight Diamond	Folded EB On & WB Off Tight Diamond	Folded EB On & Semi-Folded WB Off Tight Diamond	Overpass with Right-In/Right-Out	Single Point Urban Interchange (SPUI)	
Pedestrian-Vehicle Conflict Points	13	23	23	43	25	47	47	17	23	23	24	23	23	43	27	47	47	27	23	Conflict points were counted where crosswalks and sidewalk connections will be provided.
Perceived Pedestrian Comfort																				
Total Interchange Delay (seconds/vehicle)	7045 AM	364			17			3	12		6	Dismissed prior to operational analysis.								
	7045 PM	36			20			3	15		4									
Ease of Business Access - Retail	From DR TH 50	Baseline	Option eliminates Holiday Gas Station									Option eliminates Holiday Gas Station								Assume traveling to Holiday Gas Station. Green - adds <60 seconds Yellow - adds 60-120 seconds Red - adds 120+ seconds
	From WB TH 50	Baseline																		
Ease of Business Access - Industrial	From DR TH 50	Baseline																		Assume traveling to 143rd Ave at Elmore St. Green - adds <60 seconds Yellow - adds 60-120 seconds Red - adds 120+ seconds
	From WB TH 50	Baseline																		
Potential Property Impacts*	0	12 full 8 partial	9 full 4 partial	9 full 6 partial	9 full 3 partial	9 full 4 partial	9 full 4 partial	11 full 2 partial	9 full 4 partial	9 full 5 partial	6 full 4 partial	12 full 8 partial	9 full 5 partial	9 full 6 partial	9 full 3 partial	9 full 4 partial	9 full 4 partial	9 full 4 partial	9 full 5 partial	
Impact to Regional Park	0 Acres	21 Acres	4 Acres	21 Acres	4 Acres	21 Acres	21 Acres	7 Acres	7 Acres	4 Acres	4 Acres	21 Acres	4 Acres	21 Acres	4 Acres	21 Acres	21 Acres	4 Acres	4 Acres	Any impact is a concern because the park is already smaller than the average regional park.
Impact to Public Works Campus																				Underpass options require a shoofly which impacts the existing Public Works Campus.
Cost	\$0 M	Dismissed prior to cost estimation	\$58 - 64 M	Dismissed prior to cost estimation	\$52 - 58 M	Dismissed prior to cost estimation	Dismissed prior to cost estimation	\$46 - 51 M	\$49 - 54 M	Dismissed prior to cost estimation	\$61 - 67 M	Dismissed prior to cost estimation								
Constructability/Long Term Maintenance																				Underpass options require a shoofly which influences the construction schedule and requires extra measures for drainage. Additionally TH 10 grade change is more impactful to traffic than Ramsey grade change.
Likelihood of Railroad Approval																				Discussions with BNSF Railroad indicate strong preference for an overpass.
Agency Support to Carry Concept Forward	No Support	No Support	Supported Concept	No Support	Supported Concept	No Support	No Support	Supported Concept	Supported Concept	No Support	Supported Concept	No Support	No Support	No Support	No Support	No Support	No Support	No Support	No Support	

\* Assessment based on planning-level concepts and will require further review to verify actual impacts.



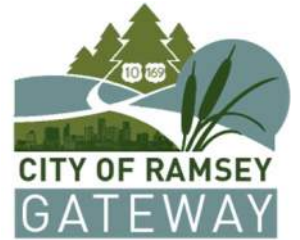
# Concept Evaluation – Sunfish Lake Blvd



## Sunfish Lake Blvd Evaluation **DRAFT** Tier 2 Evaluation Summary

Measures		No Build	SUNFISH LAKE BLVD CONCEPTS															Notes
			GRADE SEPARATED RAILROAD CROSSING							AT GRADE RAILROAD CROSSING								
			1A	1B	2	3	4A	5A	6A	4B	5B	6B	7A	7B	8	9A	9B	
			Sunfish Overpass with RI/RO	Sunfish Overpass with RI/RO	Standard Diamond	Tight Diamond	Single Point Urban Interchange (SPUI)	Grade Separated Roundabout	Center Turn Overpass	Single Point Urban Interchange (SPUI)	Grade Separated Roundabout	Center Turn Overpass	High-T (Ped Overpass)	High-T (Ped Underpass)	Flyover	TH 10 Overpass with RI/RO & WB Exit	TH 10 Overpass with RI/RO	
Pedestrian-Vehicle Conflict Points		7	26	17	30	30	30	30	30	30	30	30	20	20	16	17	16	Conflict points were counted where crosswalks and sidewalk connections will be provided
Perceived Pedestrian Comfort													Assumes separate ped bridge	Assumes separate ped underpass				
Total Interchange Delay (seconds/vehicle)	2045 AM	86	5	5			14	8	16	14	8	16	7	7	**	7	7	
	2045 PM	130	9	9			15	10	11	15	10	11	8	8	**	10	10	
Requires a Separate Pedestrian Bridge		N/A	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	
Community Connectivity - Provides all movements																		
Ease of Business Access - Retail	From EB TH 10	N/A																Assume traveling to Do It All Printing Green - adds <60 seconds Yellow - adds 60-120 seconds Red - adds 120+ seconds
	From WB TH 10	N/A																
Ease of Business Access - Industrial	From EB TH 10	N/A																Assume traveling to McKinley St at Unity St Green - adds <60 seconds Yellow - adds 60-120 seconds Red - adds 120+ seconds
	From WB TH 10	N/A																
Access to Business Park		N/A																
Potential Property Impacts*		0	5 full 15 partial	5 full 14 partial	9 full 16 partial	9 full 13 partial	5 full 17 partial	5 full 17 partial	5 full 14 partial	5 full 15 partial	5 full 12 partial	5 full 12 partial	5 full 12 partial	4 full 12 partial	4 full 10 partial	5 full 11 partial	5 full 11 partial	
Provides Railroad Grade Separation																		
Cost			\$65 - 71 M	\$57 - 64 M			\$133 - 148 M	\$90 - 99 M	\$93- 103 M	\$67 - 74 M	\$54 - 59 M	\$62 - 68 M	\$55 - 60 M	\$45 - 50 M	\$35 - 38 M	\$37 - 41 M	\$37 - 41 M	
Constructability/Long Term Maintenance		N/A																TH 10 grade change is more impactful to traffic than Sunfish Lake grade change.
Agency Support to Carry Concept Forward		N/A			No Support	No Support	No Support	No Support	No Support	No Support			No Support	No Support	No Support			

\*Assessment based on planning level concepts and will require further review to verify actual impacts.



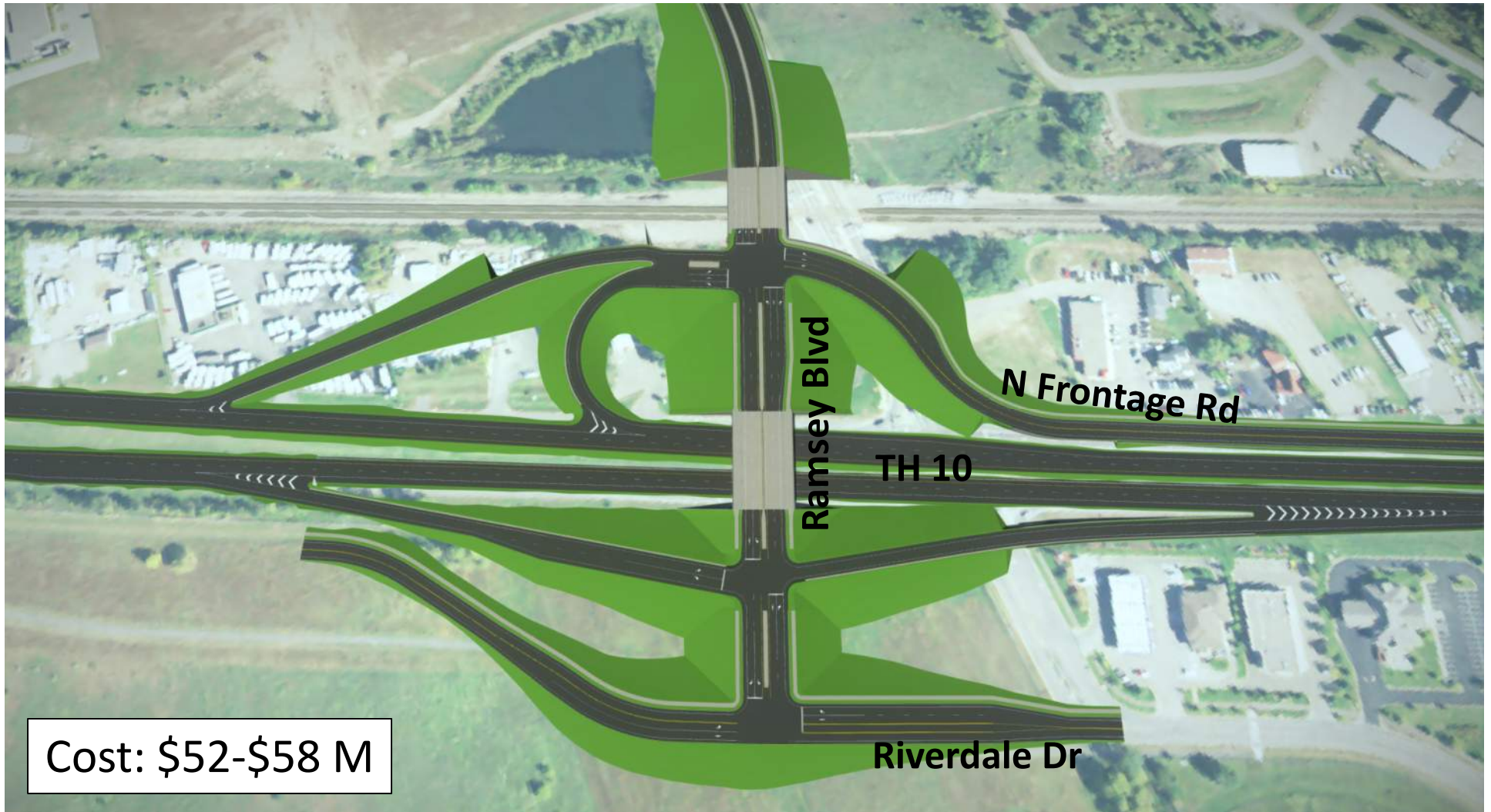
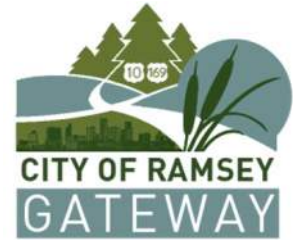
# Ramsey Blvd Concepts

- Railroad Grade Separation on All Concepts
- Entrance/Exit Ramp Options:
  - Tight Diamond
  - Folded WB Off Tight Diamond
  - Overpass with Right-In/Right-Out
  - Tight Diamond with W Frontage Rd





# TAC Recommended Ramsey Blvd Folded Tight Diamond



Cost: \$52-\$58 M





# Lowest Cost

## Ramsey Blvd Overpass with Right-In/Right-Out





# Ramsey Blvd Preliminary Costs



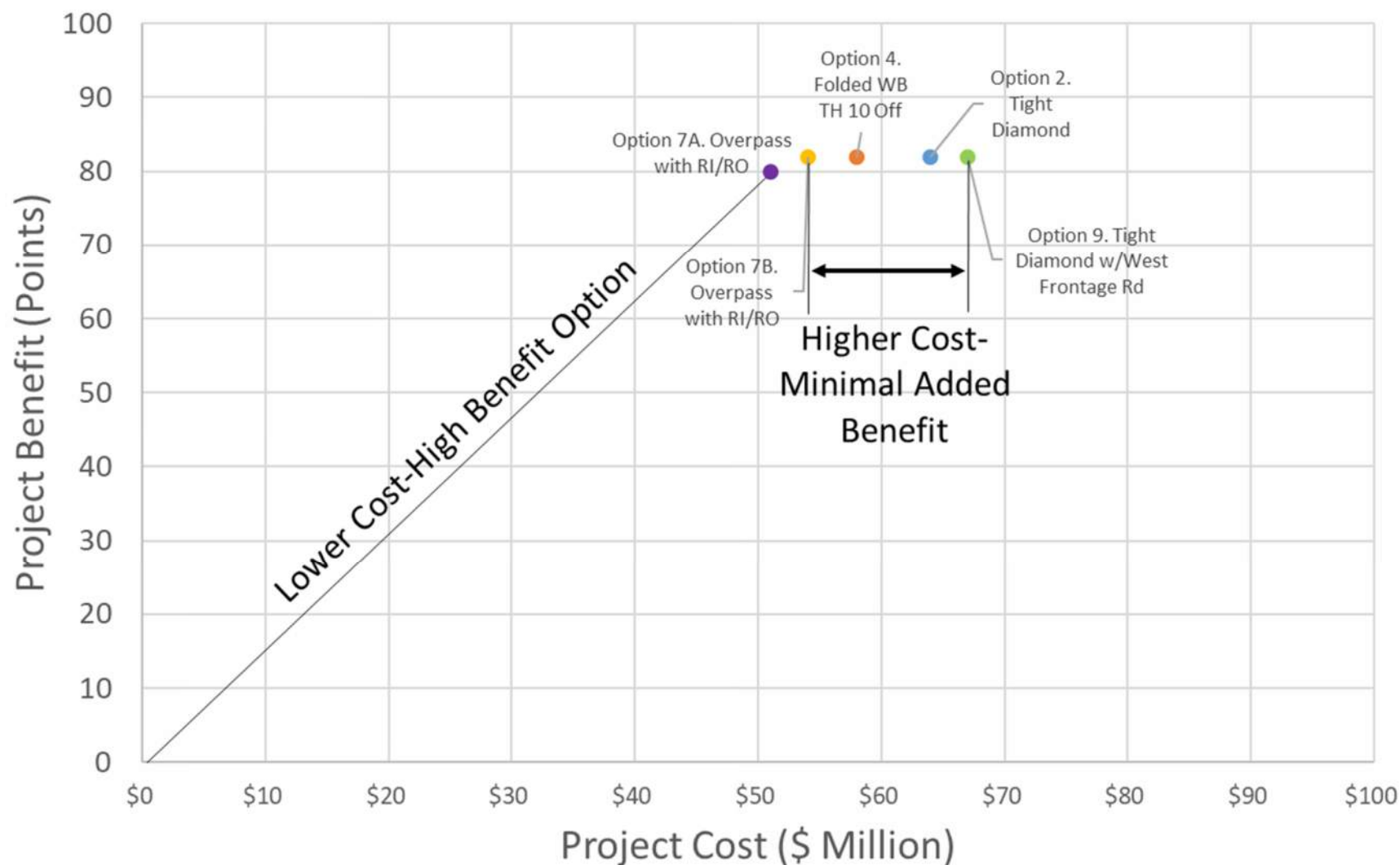
Ramsey Over Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Tight Diamond	\$34 - \$38 M	\$16 - \$18 M	\$6.8 - \$7.6 M	<b>\$58 - \$64 M</b>
Folded WB TH 10 Off	\$30 - \$34 M	\$16 - \$18 M	\$6.1 - \$6.7 M	<b>\$52 - \$58 M</b>
Overpass with RIRO	\$23 - \$25 M	\$18 - \$20 M	\$4.6 - \$5.0 M	<b>\$46 - \$51 M</b>
Overpass with RIRO	\$27 - \$30 M	\$16 - \$18 M	\$5.5 - \$6.0 M	<b>\$49 - \$54 M</b>
Tight Diamond with Frontage Rd	\$41 - \$45 M	\$12 - \$13 M	\$8.2 - \$9.0 M	<b>\$61 - \$67 M</b>





# Ramsey Blvd Preliminary Costs

## Ramsey Options: Cost - Benefit







# Sunfish Lake Boulevard Concepts

## Railroad Grade Separation:

- Overpass with Right-In/Right-Out

## At-Grade Rail Options:

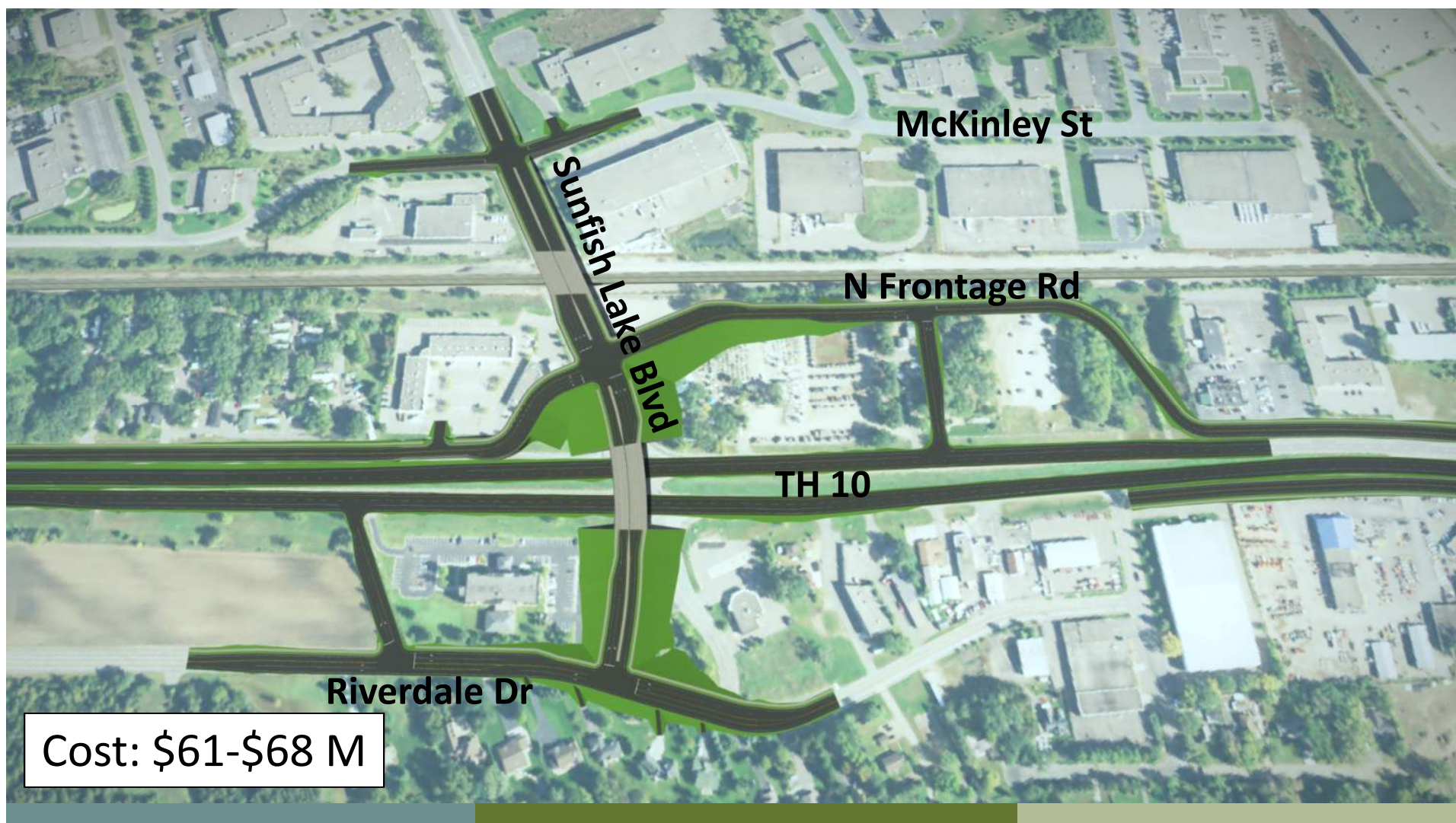
- Grade-Separated Roundabout
- Center Turn Overpass
- Overpass with Right-In/Right-Out
  - Full Access
  - Reduced Access (No WB on ramp)
- New Loop Ramp Concepts
  - Modified Overpass with RI/RO & loop
  - Modified RI/RO Roundabout & loop





# Sunfish Lake Blvd Concepts

Overpass with Right-In/Right-Out – Option A  
Rail Grade Separation

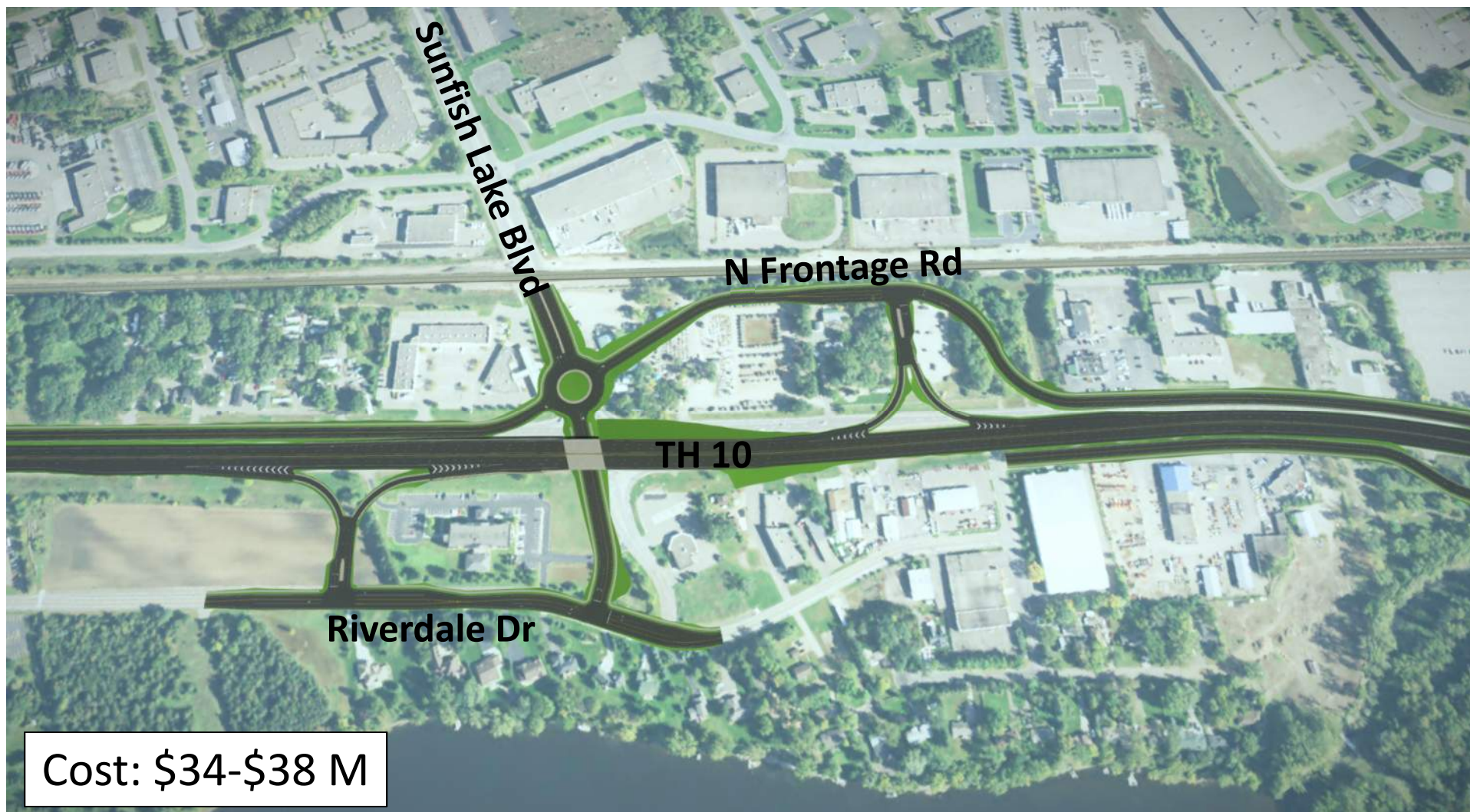




# Sunfish Lake Blvd Concepts

Right-In/Right-Out With Roundabout (Full Access)

At-Grade Rail



Cost: \$34-\$38 M



# Sunfish Lake Blvd Preliminary Costs

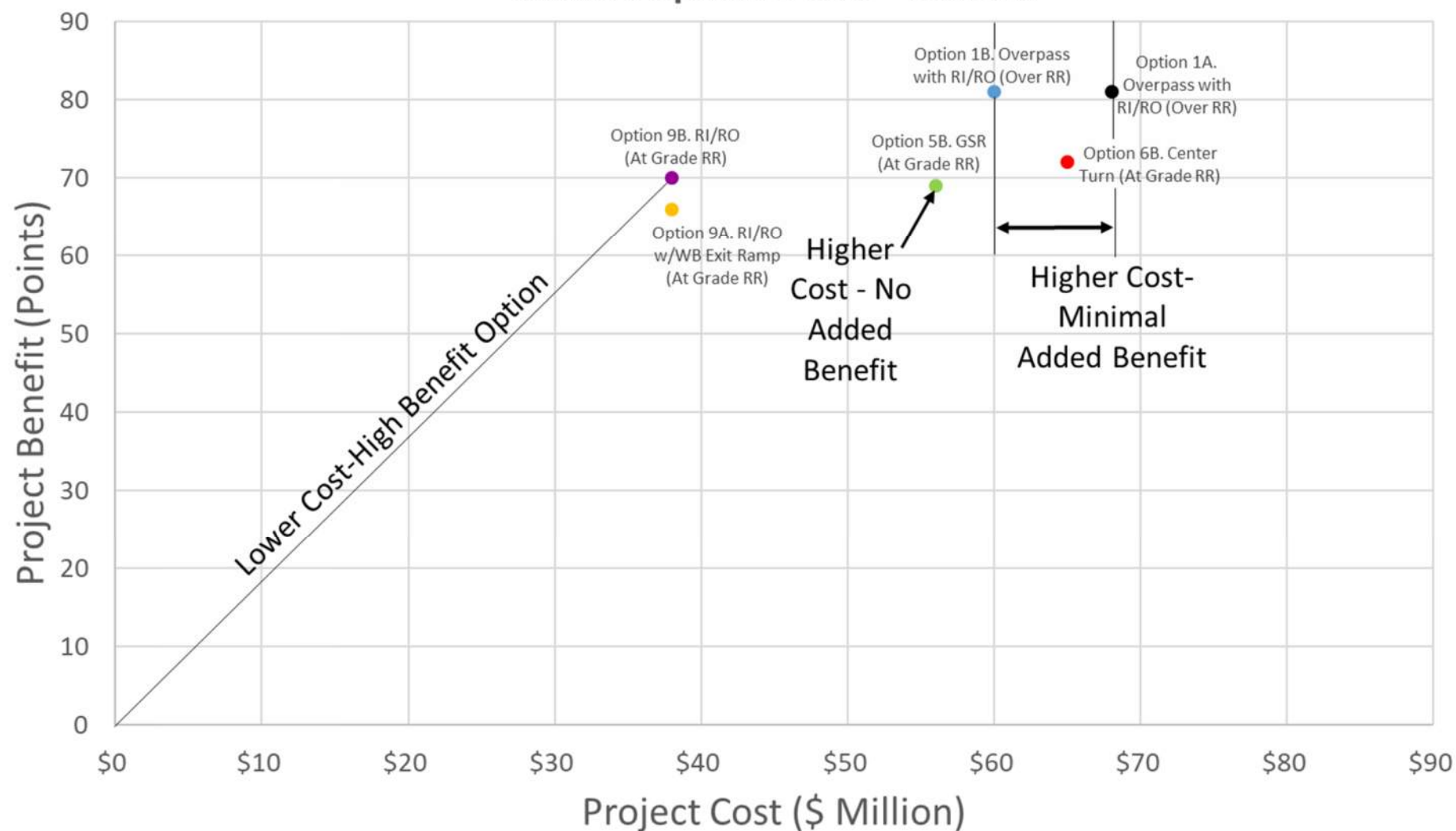
Sunfish Cost Estimates	Construction	Right-of-Way	Engineering	TOTAL
Overpass with RIRO (Over RR)	\$41 - \$46 M	\$12 - \$13 M	\$8.3 - \$9.1 M	\$61 - \$68 M
Overpass with RIRO (Over RR)	\$35 - \$39M	\$12 - \$13 M	\$7.1 - \$7.8 M	\$54 - \$60 M
Grade Separated RAB (At Grade RR)	\$33 - \$36 M	\$12 - \$13 M	\$6.5 - \$7.2 M	\$51 - \$56 M
Center Turn Overpass (At Grade RR)	\$40 - \$44 M	\$11 - \$12 M	\$7.9 - \$8.8 M	\$59 - \$65 M
Overpass w/RIRO, Reduced Access (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.8 - \$4.2 M	\$34 - \$38 M
Overpass w/RIRO, Full Access (At Grade RR)	\$19 - \$21 M	\$11 - \$12 M	\$3.9 - \$4.3 M	\$34 - \$38 M



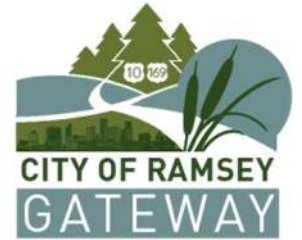


# Sunfish Lake Blvd Preliminary Costs

## Sunfish Options: Cost - Benefit

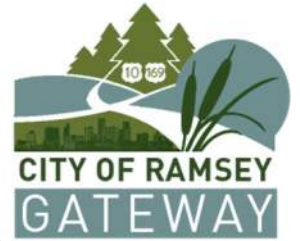


# Frontage Road Option



- **Total Cost: \$2.4 M**





# Frontage Road between Ramsey & Sunfish



- Cost: \$12 - \$14 M



# Range of Total Cost – East End

Inflated to 2025 dollars



## Both Grade Separated Rail

### TOTAL COST:

Ramsey Folded Tight Diamond \$52-\$58 M

Sunfish Overpass with RI/RO \$54-\$60 M

Frontage Rd (Ramsey-Sunfish) \$12-\$14 M

**\$118 - 132 M**

## One At-Grade Rail

### TOTAL COST:

Ramsey Folded Tight Diamond \$52-\$58 M

Sunfish RI/RO RAB (Full Access) \$34-\$38 M

Frontage Rd (Ramsey-Sunfish) \$12-\$14 M

**\$98 - 110 M**

**Highway 10 Access Planning Study ~ \$98 - 110 M (2014 dollars).....\$150-170 M (2025)**

Sunfish Lake Blvd with/without Rail Grade Separation ~\$48 M/ \$36 M

Ramsey Blvd with Rail Grade Separation ~\$50 M

Frontage Road (Ramsey-Sunfish) ~\$12 M



# Ramsey Highway 10 Corridor Improvements

City of Ramsey  
MnDOT Update

August 5, 2019





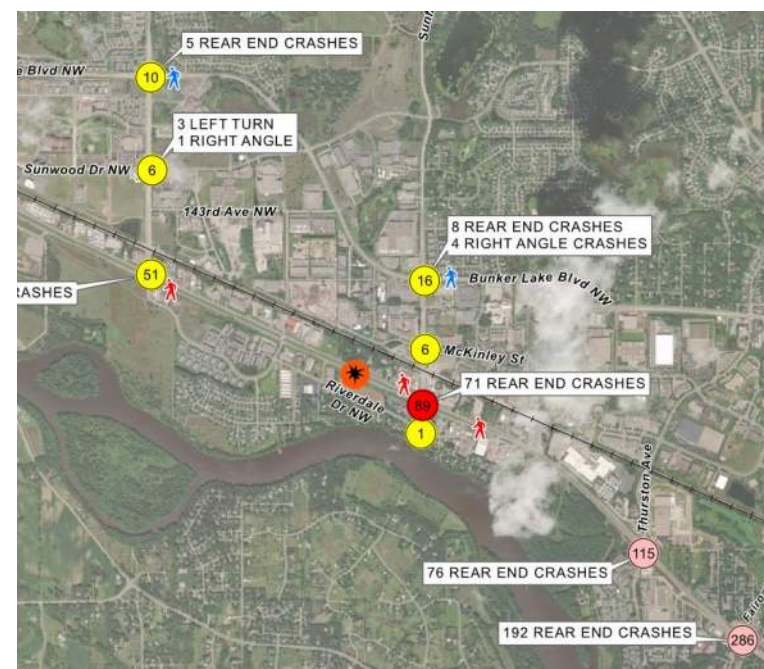




Sunfish Lake Blvd will be the first traffic signal encountered for westbound traffic after the Anoka Project is complete in 2023.

## Safety

- Numerous access points
  - 73 access points
- High number of crashes
  - 90 crashes per year
  - 60% rear end
  - Sunfish Lake Blvd Critical Index=1.41
  - 5 fatal crashes in 10 yrs





# Multimodal

- Hwy 10 serves vehicular, freight, transit and trains
  - 58 freight trains/day (79 mph)
  - 2.6 miles average train length
  - 12 Northstar trains
  - 2 Amtrak trains
  - Gate arms down approx. 2-3 hours/day
- Challenging corridor for pedestrians and bicyclists





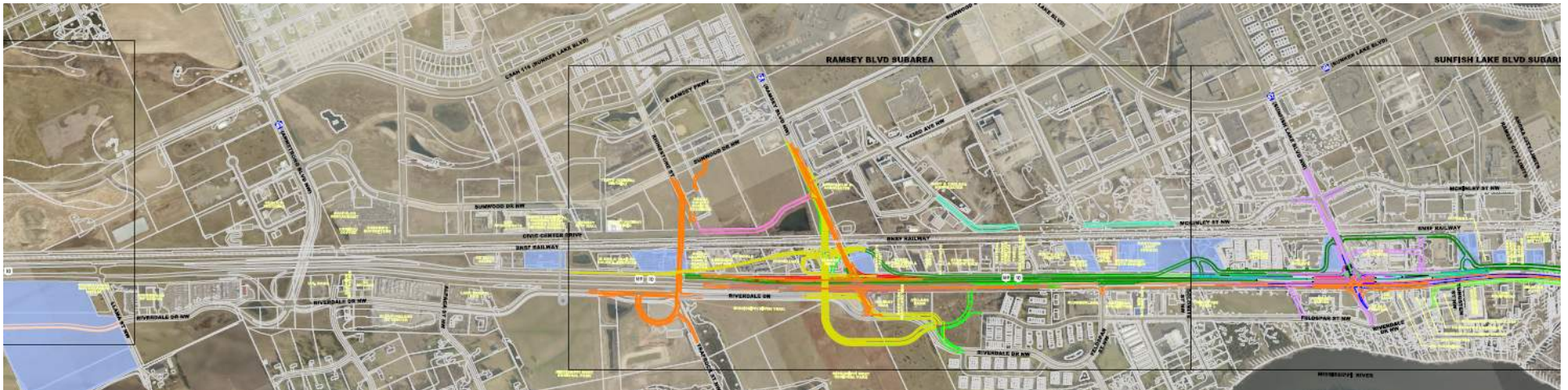


# Economic Development

- Strategic growth will align land uses with the transportation network
- 50% of properties along Hwy 10 are City owned

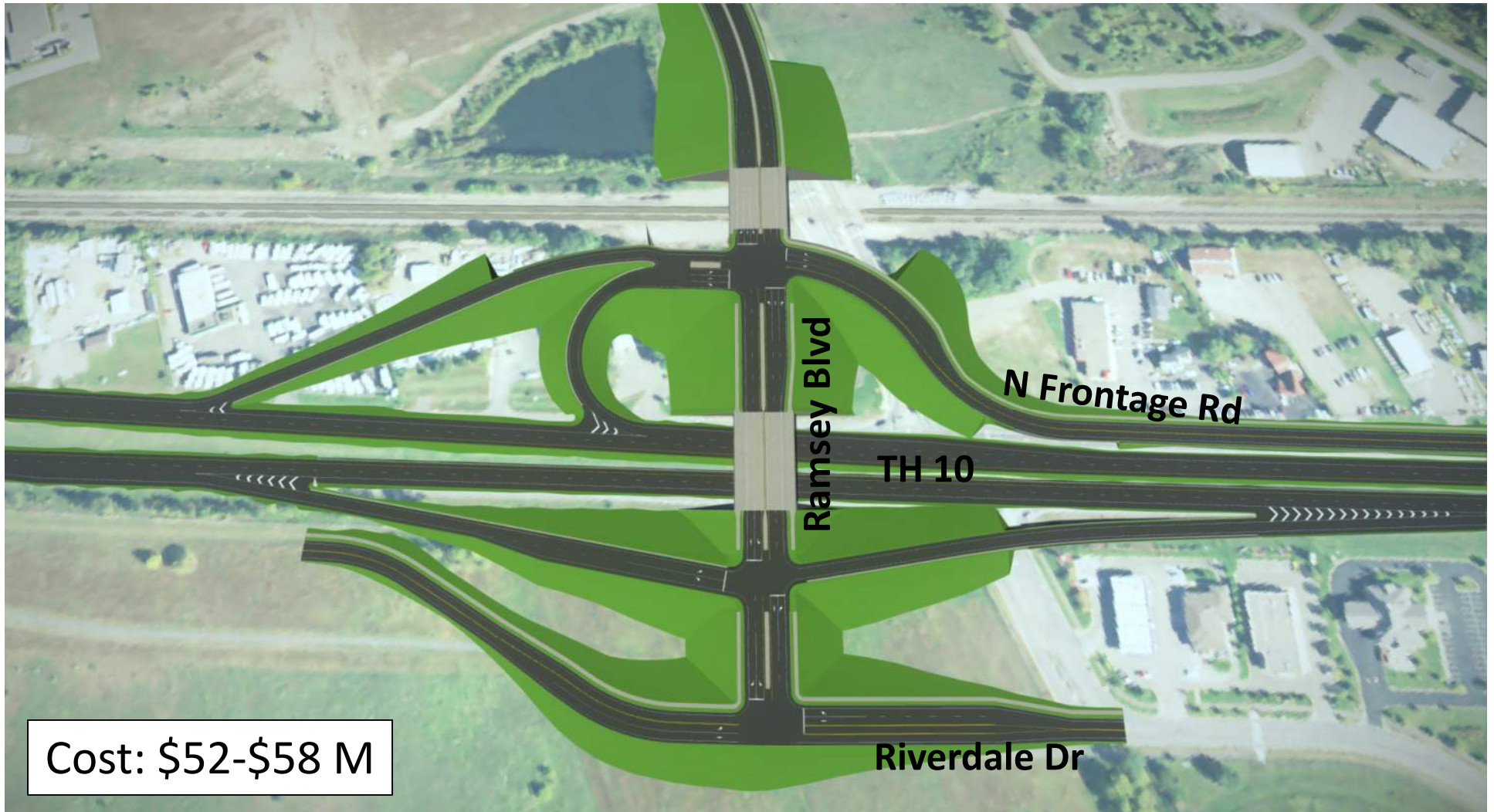
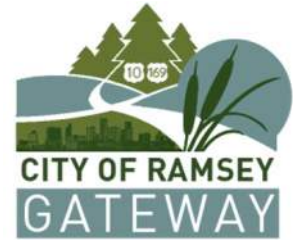
	2016	2020	2030	2040 Forecast	2040 Request
Population	26,251	27,550	33,350	34,700	39,150
Households	8,973	9,500	11,500	13,000	13,500
Employment	6,334	6,900	7,800	7,600	8,400

**RALF PROPERTIES**



# TAC Recommendation

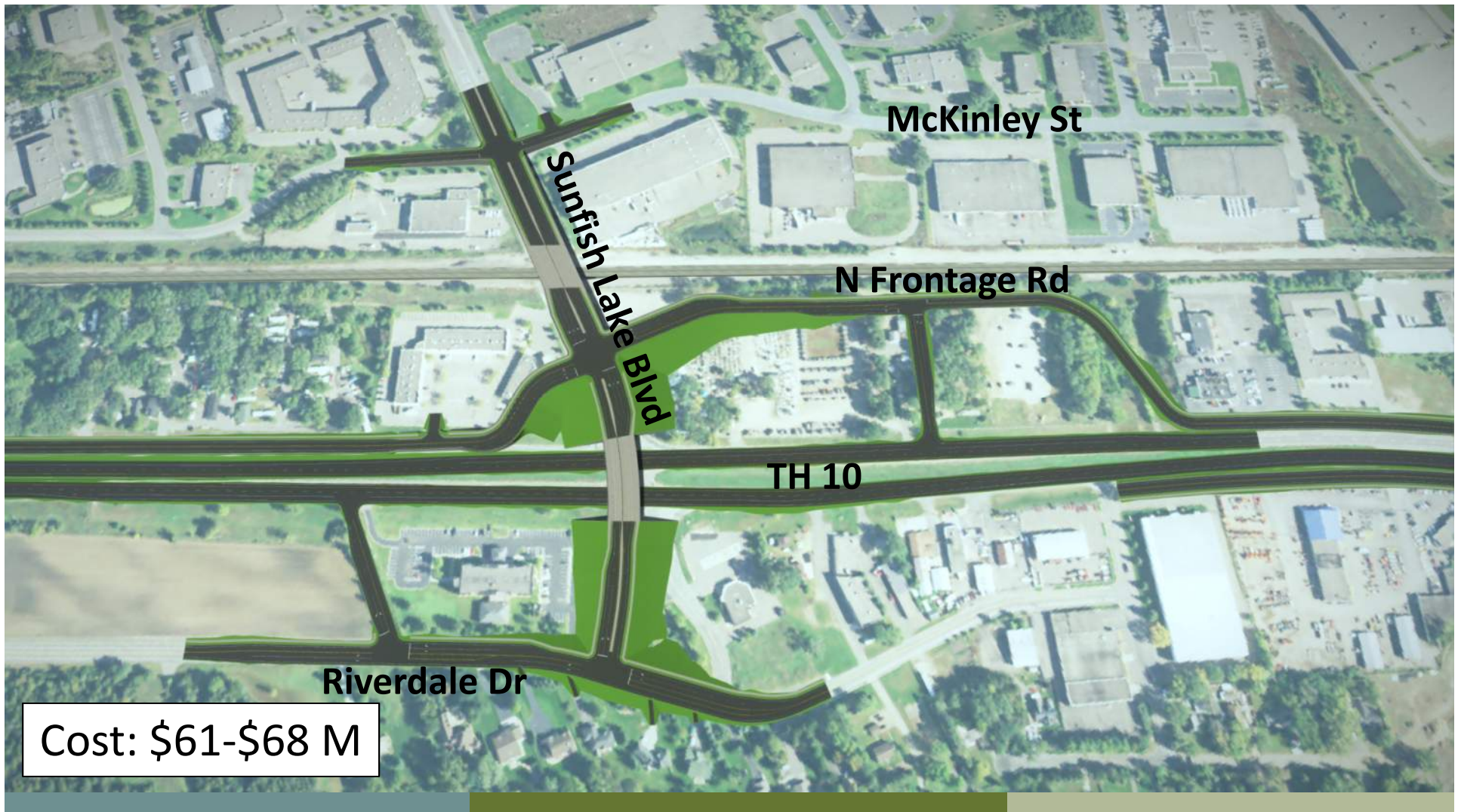
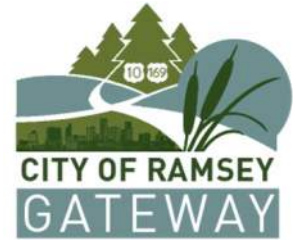
## Ramsey Blvd Folded Tight Diamond





# Sunfish Lake Blvd Option

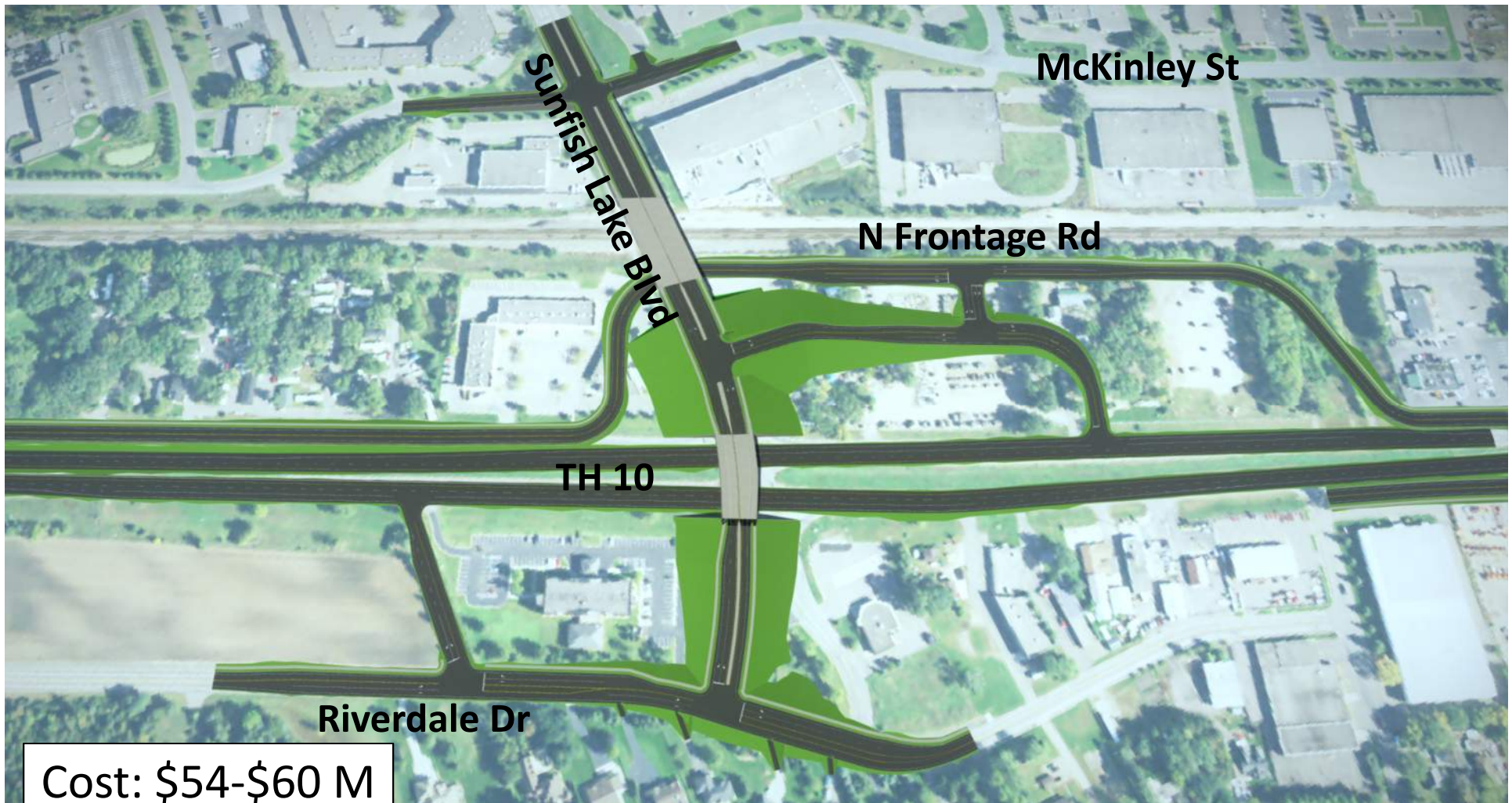
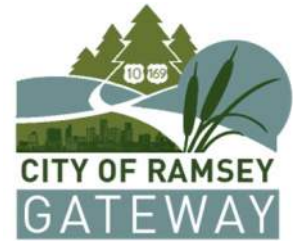
Overpass with Right-In/Right-Out – Option A  
Rail Grade Separation





# Sunfish Lake Blvd Option

Overpass with Right-In/Right-Out – Option B  
Rail Grade Separation



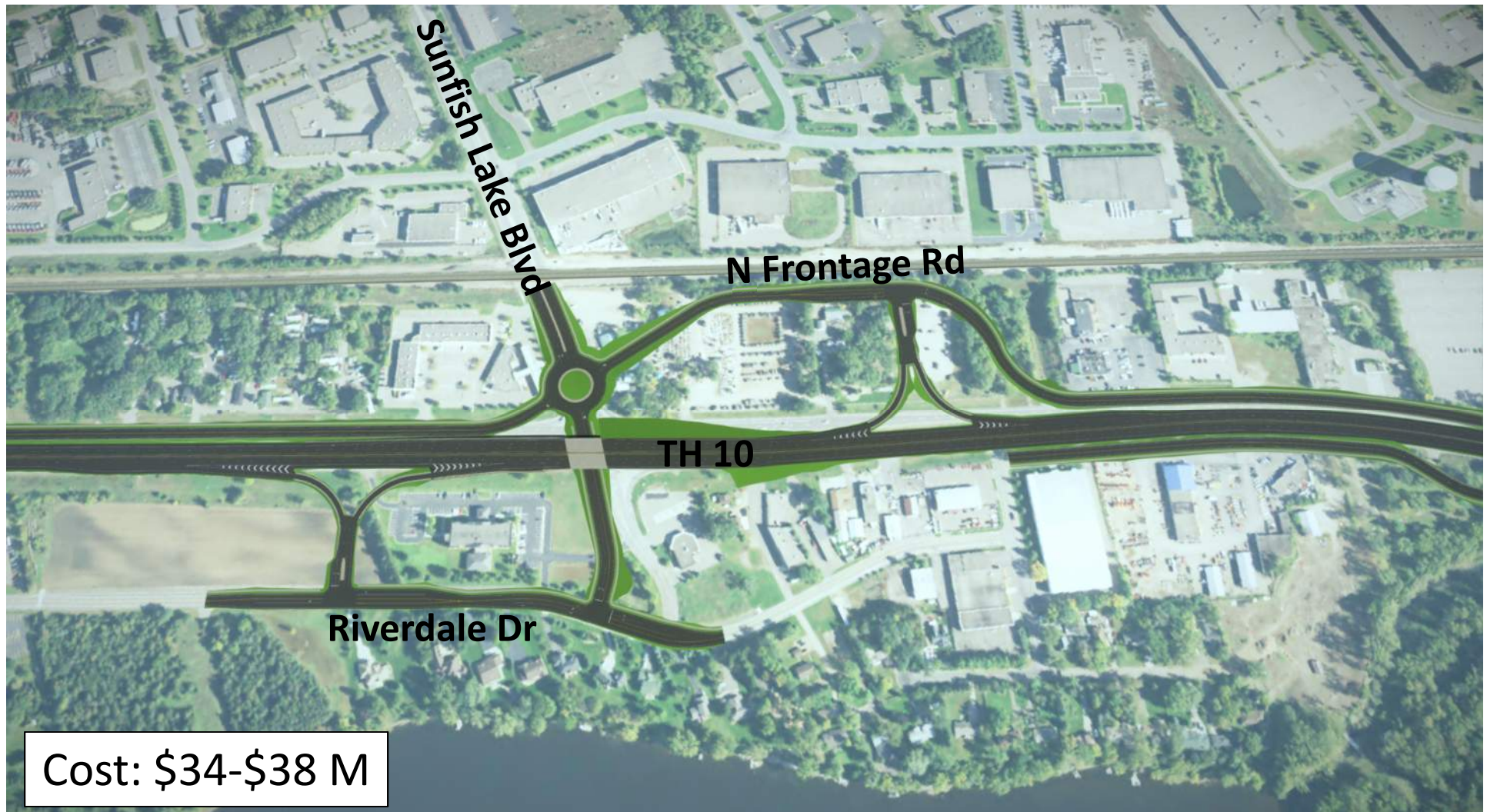
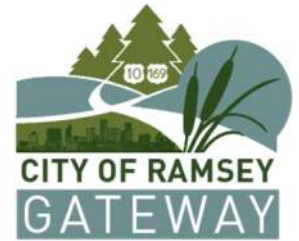
Cost: \$54-\$60 M



# Sunfish Lake Blvd Concepts

Right-In/Right-Out With Roundabout (Full Access)

At-Grade Rail



Cost: \$34-\$38 M



# Frontage Road between Ramsey & Sunfish



- Cost: \$12 - \$14 M





# Frontage Road Option



- **Total Cost: \$2.4 M**

# Range of Total Cost – East End

Inflated to 2025 dollars



## Both Grade Separated Rail

### TOTAL COST:

Ramsey Folded Tight Diamond \$52-\$58 M

Sunfish Overpass with RI/RO \$54-\$60 M

Frontage Rd (Ramsey-Sunfish) \$12-\$14 M

**\$118 - 132 M**

## One At-Grade Rail

### TOTAL COST:

Ramsey Folded Tight Diamond \$52-\$58 M

Sunfish RI/RO RAB (Full Access) \$34-\$38 M

Frontage Rd (Ramsey-Sunfish) \$12-\$14 M

**\$98 - 110 M**

**Highway 10 Access Planning Study ~ \$98 - 110 M (2014 dollars).....\$150-170 M (2025)**

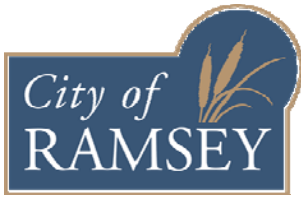
Sunfish Lake Blvd with/without Rail Grade Separation ~\$48 M/ \$36 M

Ramsey Blvd with Rail Grade Separation ~\$50 M

Frontage Road (Ramsey-Sunfish) ~\$12 M



BNSF Railway



# Ramsey Highway 10 Corridor Improvements BNSF Railroad Coordination Meeting

**August 16, 2018**

Ramsey City Hall

2:00 pm – 3:00 pm

## Meeting Notes

### 1. Introductions

**Attendees:** Bruce Westby, Eric Johnson, Nick Spitzer, Rich Scott

### 2. Project Overview

Eric reviewed the overall project and ideas to the group, most notably:

- a. The areas of concern are at Sunfish and Ramsey Crossings
- b. Concepts are just beginning to be evaluated at each intersection

### 3. Open Discussion / Ideas

#### a. Future needs for BNSF Railroad Corridor

##### i. Siding?

- There is a high possibility of adding a siding in the future
- Project must accommodate a 3<sup>rd</sup> track / siding and access road for any structure at these locations – span the RR right-of-way

##### ii. Any cost share or crossing improvement monies that can be used for this project?

- The crossings in the corridor were just redone by BNSF, so those won't need to be re-constructed for a long time.
- BNSF typically pays for 5% of the structure for grade separation
- Potentially a higher BNSF cost participation if consolidating crossings

#### b. Railroad Design needed for Roadway Over / Under

##### i. Lower track?

- BNSF not interested in lowering the railroad profile

##### ii. Problem if adding a bridge to the BNSF network? Maintenance? Paid for by BNSF or looking for City / County for money?

- The cost of maintaining the structure would be on the agency for the road project (City, County, DOT, etc.). In this instance it's Anoka County.

##### iii. Shoofly Cost?

- Shoofly designed for 10% over the operational speed (79 mph) of the mainline. So rail design speed is 87 mph
- Shoofly would need to be a minimum of 25' from centerline of track to any building structure

#### c. Design criteria if a shoofly is needed

- The minimum distance from the shoring to an active rail line is 12'.



Real People. Real Solutions.

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**d. Construction**

**i. Placing Beams over active railroad, or are their windows to complete beam placement?**

- There would be small windows to place the beams, looking at 1-2 hour window max
- There would be flaggers from the railroad to watch and verify times of trains

**ii. Any other construction issues or suggestions?**

- Moorhead has a job that would be similar to what is being proposed in Ramsey, look at this job as an example
- Hanson Blvd would be another sample to look at
- Consider grant opportunities from FRA
- Consider discussing the project with the Great Northern Corridor Coalition who has much influence and can provide letters of support when going after funding
- Review times for reviewing bridges are 4 – 6 weeks
  - i. BNSF reviews overpass in house in Kansas City
  - ii. BNSF has a third party review underpass structures, which they would look to get reimbursed for cost (\$100,000) by the applicant

**4. Next Steps**

- Rich will send off information for BNSF railroad track design (received 8/23)
  - [https://bnsfrailway-my.sharepoint.com/personal/richard\\_scott2\\_bnsf\\_com/Documents/Forms/All.aspx?slid=03e48b9e-40f4-7000-54cf-c0c97edafb14&RootFolder=%2Fpersonal%2Frichard\\_scott2\\_bnsf\\_com%2FDocuments%2FDocuments%2FBNSF%20Design%20Standards&FolderCTID=0x012000A9916CB535402C4EA31360FD4AE86983](https://bnsfrailway-my.sharepoint.com/personal/richard_scott2_bnsf_com/Documents/Forms/All.aspx?slid=03e48b9e-40f4-7000-54cf-c0c97edafb14&RootFolder=%2Fpersonal%2Frichard_scott2_bnsf_com%2FDocuments%2FDocuments%2FBNSF%20Design%20Standards&FolderCTID=0x012000A9916CB535402C4EA31360FD4AE86983)
- Eric will keep Rich in the loop for future meetings

Federal Highway Administration  
(FHWA)





## **FHWA Coordination Meeting Summary**

**Date:** December 12, 2018

**Attendees:** Melissa Barnes, MnDOT  
Joe Campbell, FHWA  
Bruce Westby, City of Ramsey  
Angie Bersaw, Bolton & Menk  
Ross Tillman, Bolton & Menk

**Subject:** Ramsey Highway 10 Gateway Project  
FHWA Coordination  
BMI Project No.: T61.116411

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- Purpose of meeting – General coordination to bring FHWA up to speed on study purpose, progress and to identify any concerns or needs with the process.
- Angie reviewed the following:
  - 2014 Access Planning Study
    - Focus on Anoka and Ramsey
    - Mostly existing conditions, some forecasting
    - Public process – property owners, elected officials, 3 public open houses
    - Range of recommended alternatives
  - Ramsey Highway 10 Gateway Project
    - Planning study to identify a locally preferred vision
    - Following an informal PEL process: environmental screening, purpose and need framework, documentation of goals/objectives, evaluation process and concepts dismissed to get to a locally preferred vision
    - Concept (footprint) level work
    - No funding for improvements yet
  - Ramsey Highway 10 Gateway Project Phase II is intended to refine the locally preferred vision, conduct preliminary design, conduct detailed studies, develop an implementation plan and identify funding sources. This phase of work is not yet authorized or funded.
- Joe said the study process as outlined seemed appropriate and he had no major concerns. Joe did offer the following advice:
  - Good documentation is important especially through a study phase to document alternatives considered and dismissed.
  - The term locally preferred vision or alternative is appropriate as the outcome since this is not a formal NEPA process.
  - Be clear with public the NEPA process will require looking at multiple alternatives. This step can be seen as going backwards to the public but with good documentation it is less cumbersome.
  - Show all feasible and prudent alternatives to the public.
  - Focus on needs not solutions.
  - It may be possible in the future to complete a NEPA document for the entire project even though it may be built in phases.

- Joe said additional FHWA coordination meetings are not required during the study process but may be beneficial as a courtesy. The attendees agreed to meet again with Joe to review the range of alternatives and evaluation before holding the first open house.



## Angie Bersaw

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**From:** Angie Bersaw  
**Sent:** Thursday, May 23, 2019 4:40 PM  
**To:** 'Barnes, Melissa (DOT)'  
**Cc:** 'Tim Gladhill'; Bruce Westby; 'Campbell, Joseph (FHWA)'  
**Subject:** Ramsey Highway 10 Study - June 4 Open House Materials

Hi Melissa-

As discussed, below are links to the draft materials for the June 4<sup>th</sup> open house. I'm sharing these with you and copying Joe Campbell in lieu of a meeting to provide a project update. The purpose of the open house is to gather public input on the range of improvement options under consideration during this study phase.

Please let me know if you have any questions or want to discuss anything further.

### Transferred Files

NAME	TYPE	DATE	TIME	SIZE
<a href="#"><u>0 - Welcome and Understanding Boards 5-17-19.pdf</u></a>	PDF File	5/23/2019	4:17 PM	16,992 KB
<a href="#"><u>1- Goals Eval Adjacent Projects.pdf</u></a>	PDF File	5/23/2019	4:33 PM	2,083 KB
<a href="#"><u>2 - Sunfish Lake Blvd Concept Boards 5-7-19.pdf</u></a>	PDF File	5/16/2019	3:27 PM	12,260 KB
<a href="#"><u>3 - Ramsey Blvd Concept Boards 5-7-19.pdf</u></a>	PDF File	5/16/2019	3:26 PM	13,011 KB
<a href="#"><u>4 - West End &amp; Other Relevant Project Boards.pdf</u></a>	PDF File	5/16/2019	9:19 AM	1,334 KB

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Thank you,  
Angie

**Angie Bersaw AICP**  
Principal Transportation Planner  
**Bolton & Menk, Inc.**  
1960 Premier Drive  
Mankato, MN 56001-5900  
Phone: 507-625-4171 ext. 2880  
Mobile: 507-380-8515  
[Bolton-Menk.com](http://Bolton-Menk.com)

# Design Workshop



**Ramsey Gateway Highway 10  
Design Workshop  
March 8, 2019  
9:00 am – 12:00 pm  
Alexander Ramsey Conference Room – Ramsey City Hall**

**Attendees: (16)**

MnDOT – Melissa Barnes, Derek Lehrke, Tim Donovan, Jamal Love

Anoka County – Joe MacPherson, Nicholas Dobda

City of Ramsey – Tim Gladhill, Bruce Westby, Kurt Ulrich, Sean Sullivan, Mark Riverblood, Elwyn Tinklenberg

Bolton & Menk – Angie Bersaw, Ross Tillman, Scott McBride, Derek Arens

**Meeting Outline:**

**1. Introduction and Background**

Angie reviewed the attached presentation providing an overview of the study background, purpose and need framework, and alternatives dismissed early in the study process. She said the goal of the design workshop is to bring agency partners and additional agency staff together to review and potentially expand the range of potential improvement concepts at Sunfish Lake Blvd.

**2. Small Group Break-Outs**

Workshop attendees were split into two equal small groups to facilitate design option ideas. The following discussion parameters were reviewed prior to beginning the small group sessions:

- a. Do not necessarily need railroad grade separation at both Ramsey and Sunfish
- b. Both full movement and limited movement options available
- c. Possibility of phasing improvements
- d. Project sequencing – ideally Sunfish first
- e. How to best utilize property already acquired or planned to be acquired
- f. Anticipate frontage road connection on north side of TH 10 between Ramsey and Sunfish (shifted WB lanes south, frontage on existing WB TH 10)
- g. Anticipate frontage road in SE quadrant of Sunfish to remove direct access to TH 10

**3. Large Group/Report Back**

The following summarizes the primary findings from the small-group sessions that were reported back to the entire group:

- If Sunfish Lake Blvd is grade-separated at the BNSF railroad, it must also go over Highway 10.
- If Sunfish Lake Blvd remains at-grade at the BNSF railroad, additional flexibility in options is provided by having Highway 10 go over Sunfish Lake Blvd.
- New variations of the overpass with RIRO emerged including:
  - Additional full movement access configurations with right-in/right-out locations and frontage road access
  - Limited movement option – no southbound Sunfish Lake Blvd to westbound Highway 10 access
- A collector-distributor road idea was explored between Ramsey Blvd and Sunfish Lake Blvd but found to not be feasible due to constrained right-of-way.

#### 4. Next Steps

Angie reviewed the study's next steps which include drawing some of the improvement ideas discussed today for TAC consideration. She also noted a public open house and property/business owner meetings were being planned for late spring/early summer to gather public input on the range of concepts under consideration and the evaluation of each.