



COLORADO
Department of Transportation

24873 I- 70 Exit 203 Town of Frisco Council Update



Agenda

- Introductions
- Feasibility Study Review
- Exit 203 Project Overview
& Schedule
- Next Steps



Feasibility Study Goals & Critical Success Factors

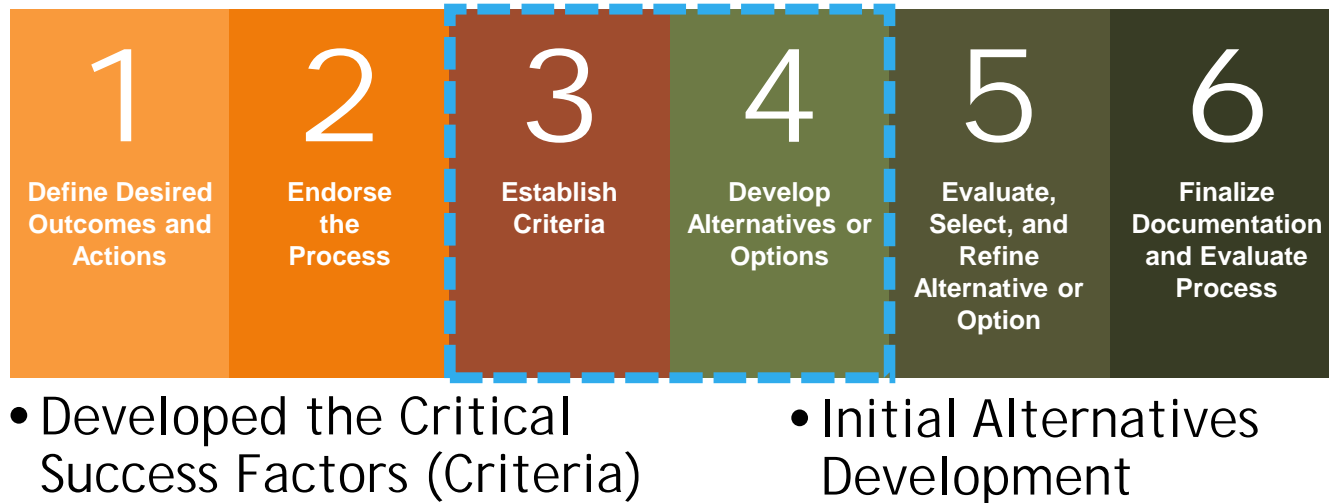
- Address Safety and Capacity of I-70 Corridor
- Improve I-70 Corridor and EXIT 203 Operations
- Address the I-70 lane balance at EXIT 205
- Comply with the PEIS
- Consider Local Planning Efforts
- Evaluate SH 9 / Dillon Dam Road Intersection



<https://www.codot.gov/projects/i70-exit203-interchange-frisco/about>



Where Feasibility Study is in CSS Process?





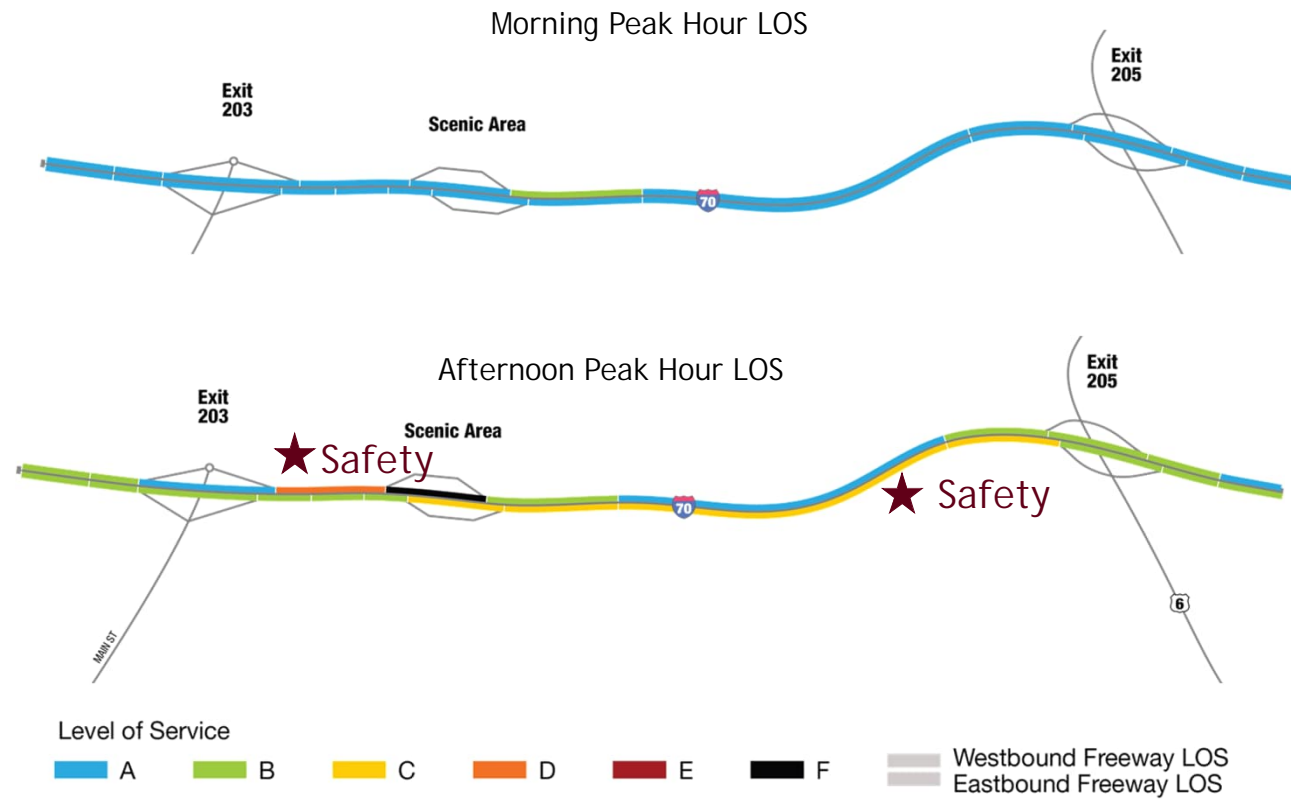
Work Completed

- Environmental Overview
- Traffic Forecasting
- Traffic Operations
- Alternative Development / Conceptual Design
- Public and Stakeholder Engagement





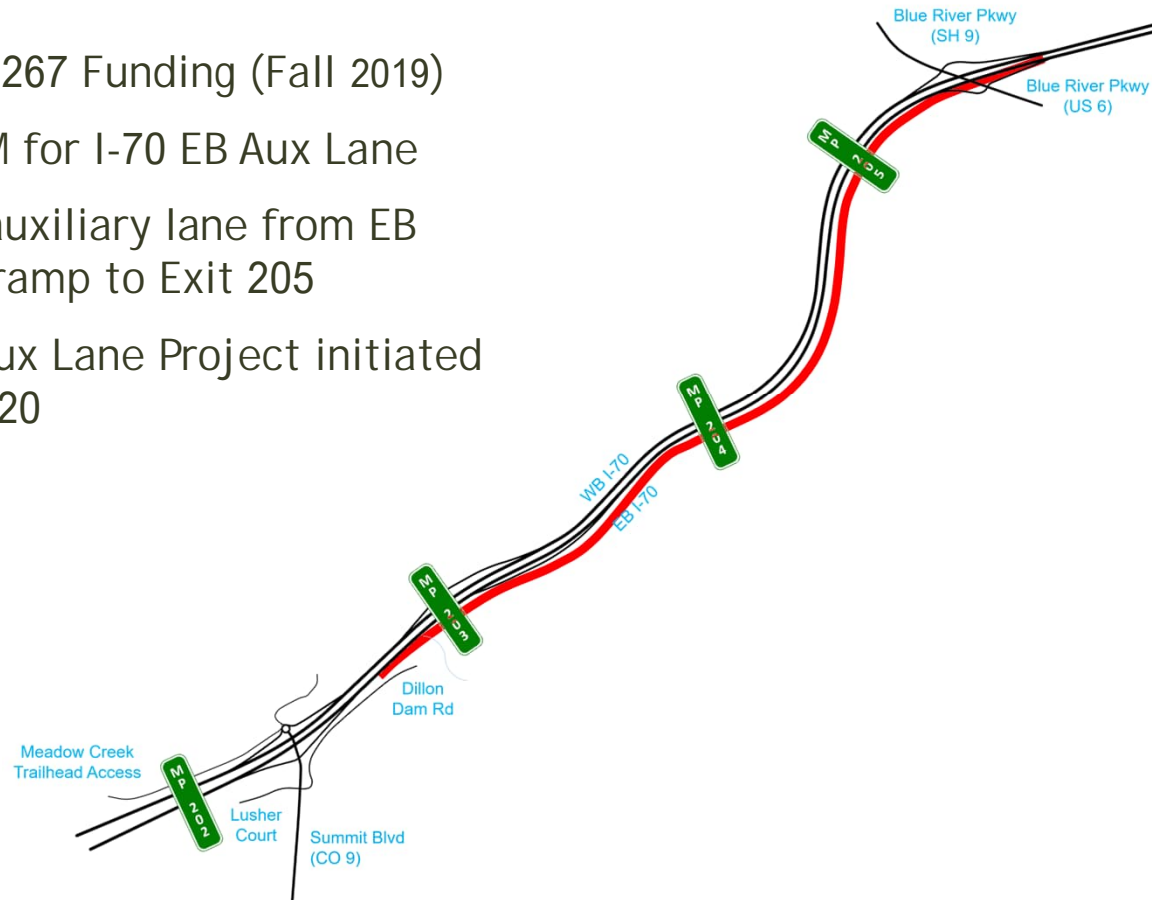
EXISTING CONDITIONS





I-70 Eastbound Auxiliary Lane

- CDOT SB 267 Funding (Fall 2019)
 - \$24 M for I-70 EB Aux Lane
- New EB auxiliary lane from EB Exit 203 ramp to Exit 205
- I-70 EB Aux Lane Project initiated March 2020

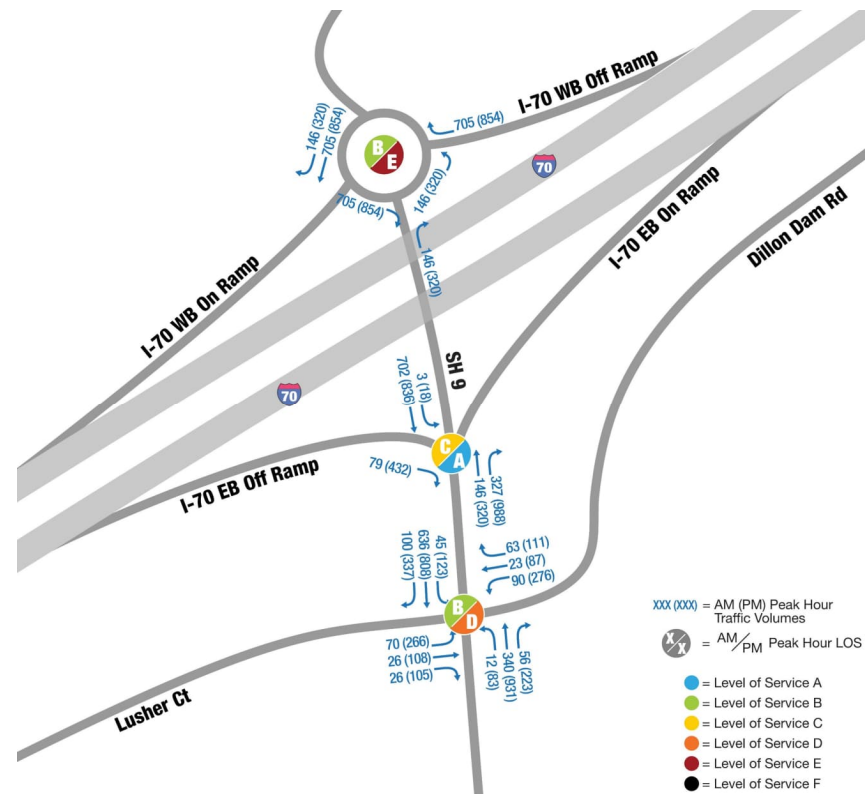




EXISTING CONDITIONS

- I-70 EB / WB Operations
- EXIT203 Interchange
- SH 9 & Lusher Ct/ Dillon Dam Rd

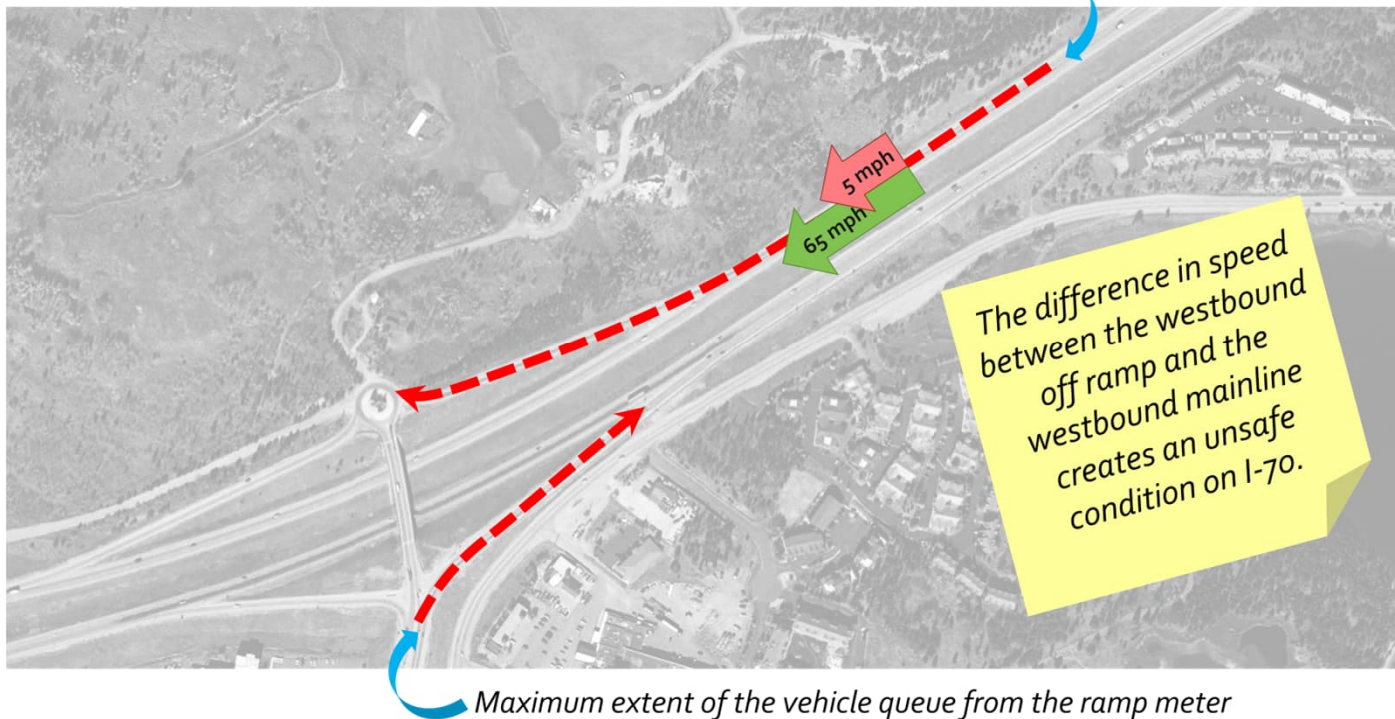
Existing Intersection Levels of Service (LOS)
(Saturday, December 30, 2017)





EXISTING CONDITIONS

Maximum extent of the vehicle queue from the roundabout at Exit 203



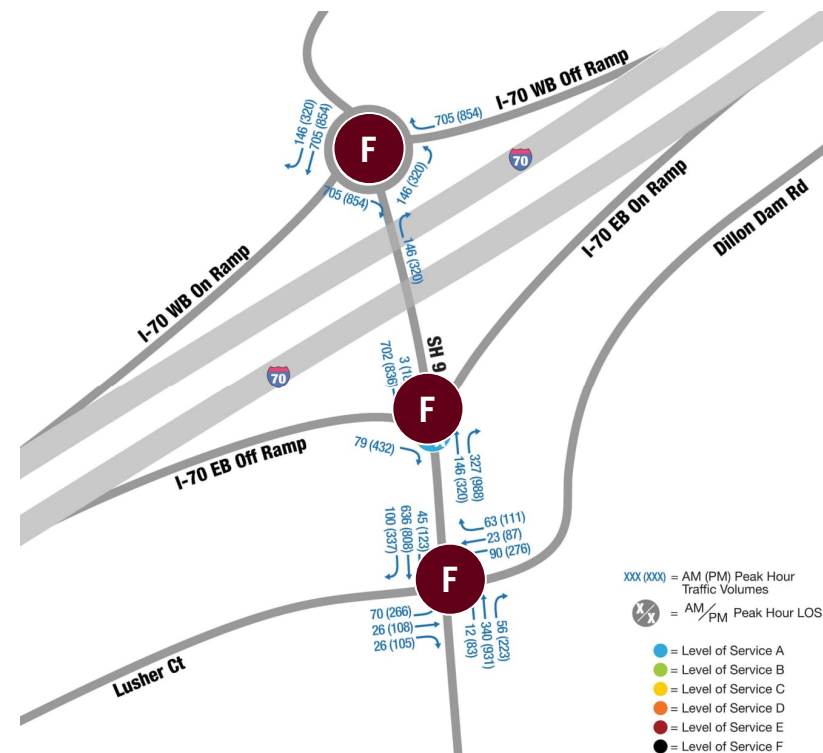
Maximum extent of the vehicle queue from the ramp meter



FUTURE (2045) CONDITIONS

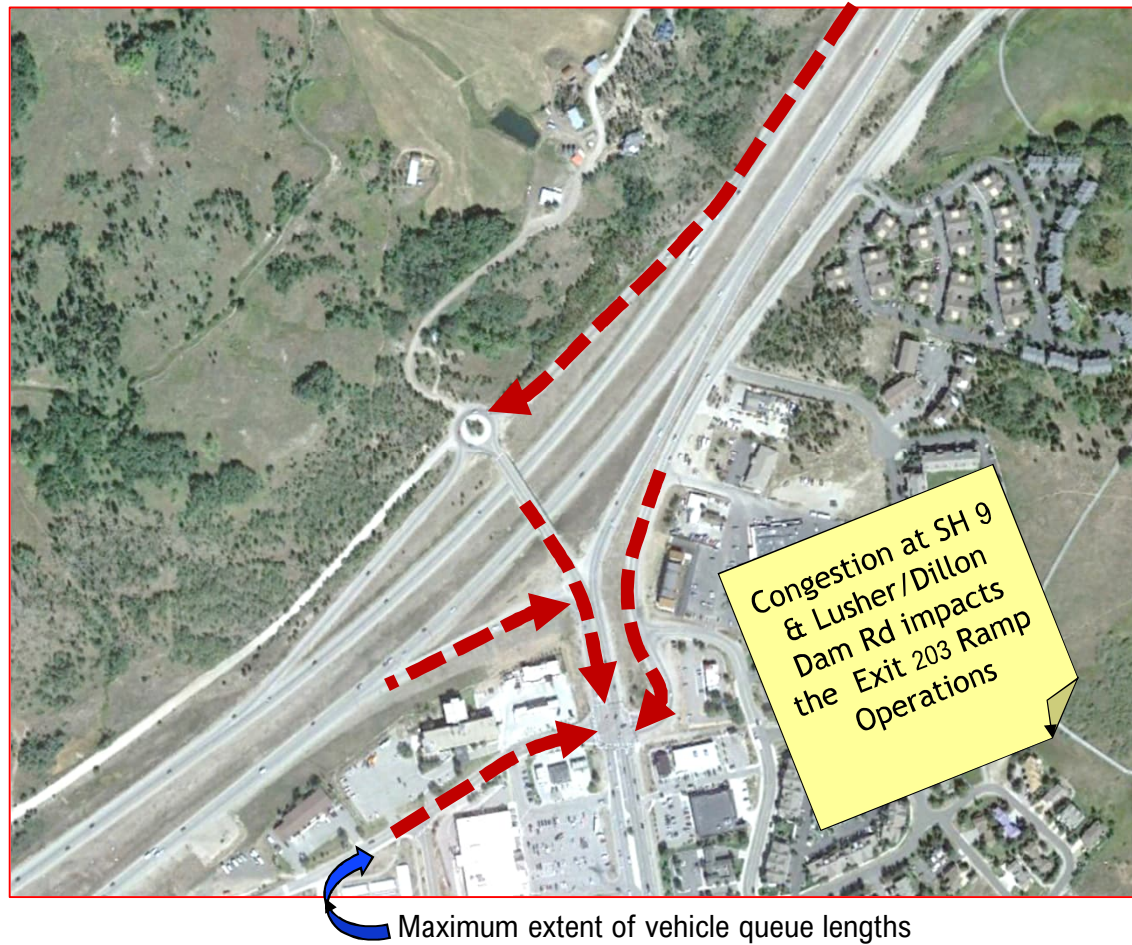
- Future Conditions
 - Year 2045
 - Design Hour is Saturday PM during Peak Winter Season

Future Intersection Levels of Service (LOS)
(Saturday PM Winter 2045)





FUTURE (2045) CONDITIONS





Exit 203 Interchange Alternatives

1. Exit 203 - Two Lane Roundabout and EB Signalized Intersection Alternative

Description:

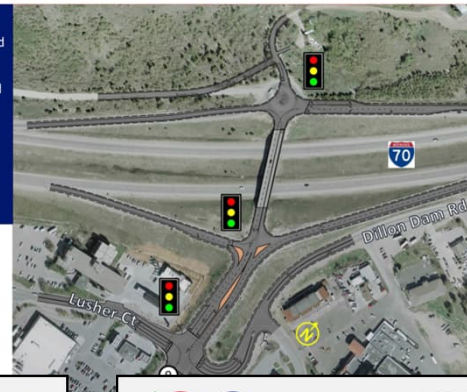
- WB Ramp - Improved Two Lane Roundabout
- EB Ramp - New Signalized Intersection
- Lusher/DDR - Improved Signalized Intersection



2. Exit 203 - Signalized Intersections Alternative

Description:

- WB Ramp - New Signalized Intersection
- Existing Bridge
- EB Ramps - New Signalized Intersection
- Lusher/DDR - Improved Signalized Intersection



3. Exit 203 - Diverging Diamond Interchange Alternative

Description:

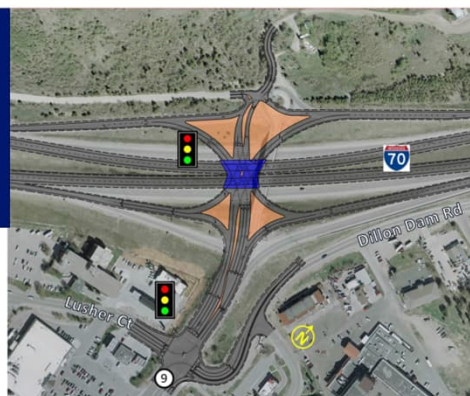
- WB Ramp - Stop Controlled Intersection
- Traffic between ramps travels on opposite sides of road (NB on west side, SB on east side)
- EB Ramps - New Signalized Intersection where NB and SB traffic Crossover



4. Exit 203 - Single Point Urban Interchange (SPUI) Alternative

Description:

- Single intersection for EB and WB ramps over I-70
- Realign I-70 through interchange
- Lusher/DDR - Improved Signalized Intersection
- Provides more spacing between Ramps and Lusher/DDR



5. Exit 203 - Tight Urban Diamond Interchange (TUDI) Alternative

Description:

- Reconstructed interchange with signalized ramp intersections
- New Frontage Road bypass under CO 9
- Removes through (east-west) traffic at Lusher/DDR





Revised Exit 203 Interchange and CO 9 & Lusher/DDR Concept

Description:

- WB Ramp - Two Lane Roundabout
- EB Ramps - New Signalized Intersection
- Widen existing bridge for snow storage and bike/peds
- New Frontage Road bypass under CO 9 connecting DDR and Lusher Court
- Lusher/DDR - Access Control to Right-In/Right-Out (w/ NB to WB free left turn)



Benefits:

- Improved traffic operations along CO 9
- Improved traffic operations crossing CO 9, Allows local DDR traffic to cross CO 9 on new road
- Transit service through right turn movements
- Opportunity for grade separated pedestrian crossing of CO 9 along the new frontage road
- Can be implemented in Phases



Feasibility Study Virtual Public Engagement

CDOT provided a Virtual Public Engagement In June/July 2020

- Included a recorded presentation and the presentation slides, Exit 203 Revised Concept exhibit and final feasibility study on the project website.
- Total of 33 comments were received.

Common Comments:

General support for Exit 203 Revised Concept what is the schedule?

- Many supportive comments, hoping construction will start soon.
- CDOT will begin preliminary design once funding is available.

Where other alternatives considered?

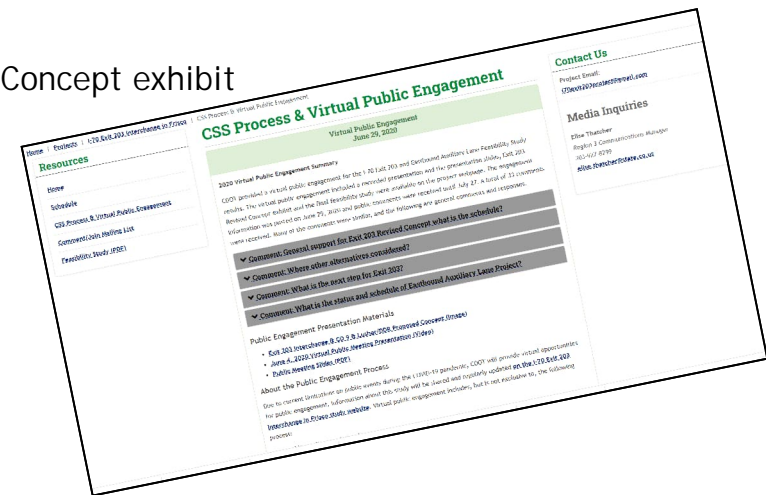
- Five interchange concepts for Exit 203 were analyzed.
- During future phases of project development, the Revised Concept will be confirmed as the proposed action for implementation.

What is the next step for Exit 203?

- Next steps are to advance the design and traffic operations and advance concept design to preliminary engineering to confirm the configuration and complete environmental clearance phase.

What is the status and schedule of Eastbound Auxiliary Lane Project?

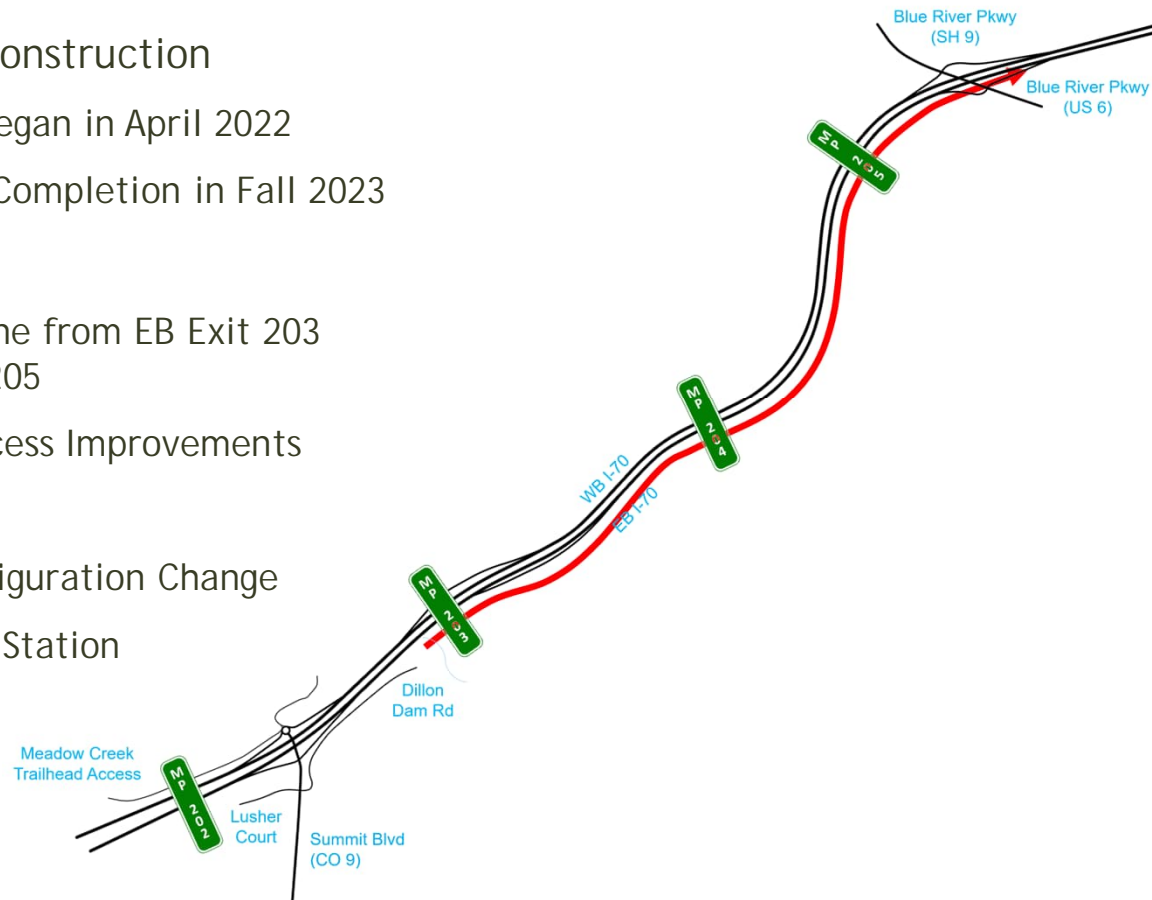
- CDOT is advancing the I-70 EB Auxiliary lane project between Exit 203 and Exit 205
- The project design will be complete in 2021 and construction is tentatively scheduled for 2022 but is dependent on available funding.





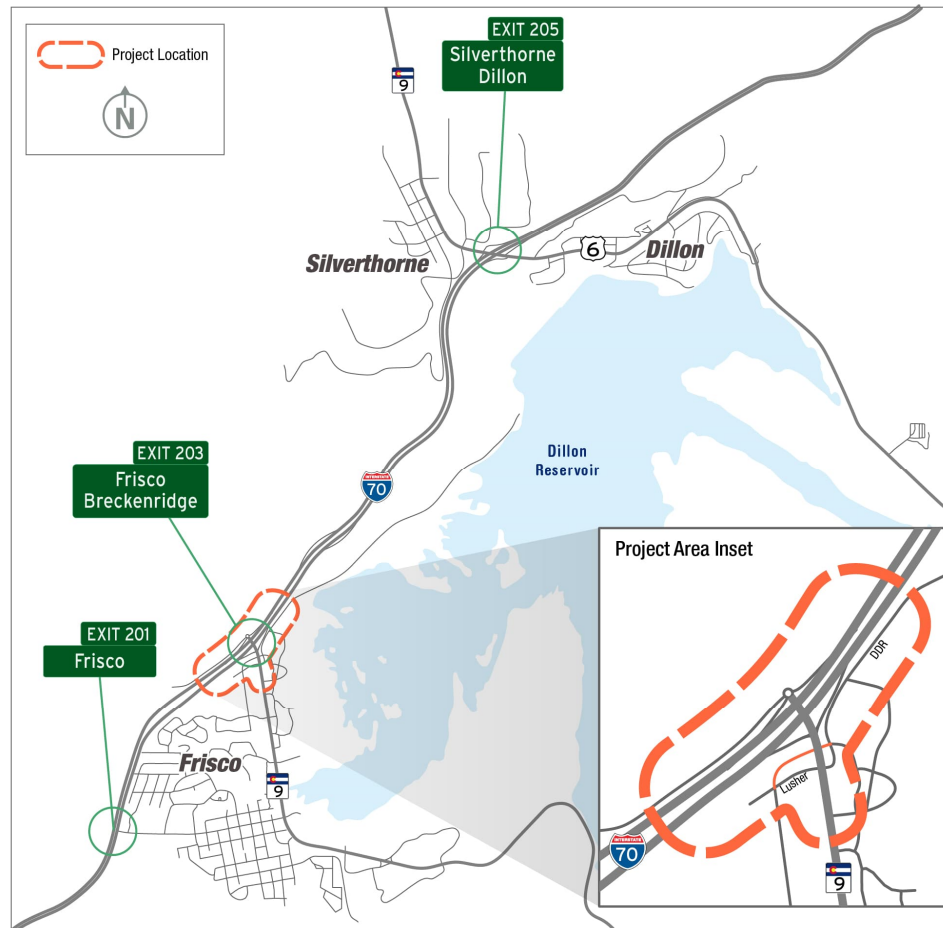
Eastbound Auxiliary Lane

- CDOT SB 267 Funded
 - Currently under construction
 - Construction began in April 2022
 - Scheduled for Completion in Fall 2023
- Major Elements:
 - New EB auxiliary lane from EB Exit 203 ramp through Exit 205
 - Scenic Overlook Access Improvements
 - Widen Bridges
 - Exit 205 Ramp Configuration Change
 - No Impact to Chain Station
 - Wildlife Fencing





Exit 203 Project Limits





Exit 203 Concept Design Advancement since Feasibility Study

- CDOT Metering Test at Existing Roundabout
- Phaseability Determination
- CDOT Ten Year Plan Update
 - \$25 M in FY 23-26
 - \$19 M in FY 27+
- Expanded Traffic Modeling & Analysis
- Conceptual Design



Traffic Analysis Goals:

- Expanded Traffic Modeling & Study Area
- Confirm Exit 203 Ramp Terminal Configuration
- Analyze Frontage Road Bypass and Surrounding Intersections
- Identify Mitigation Elements to Address Operation Issues
- I-70 Westbound and Eastbound Signalized Intersections Confirmed

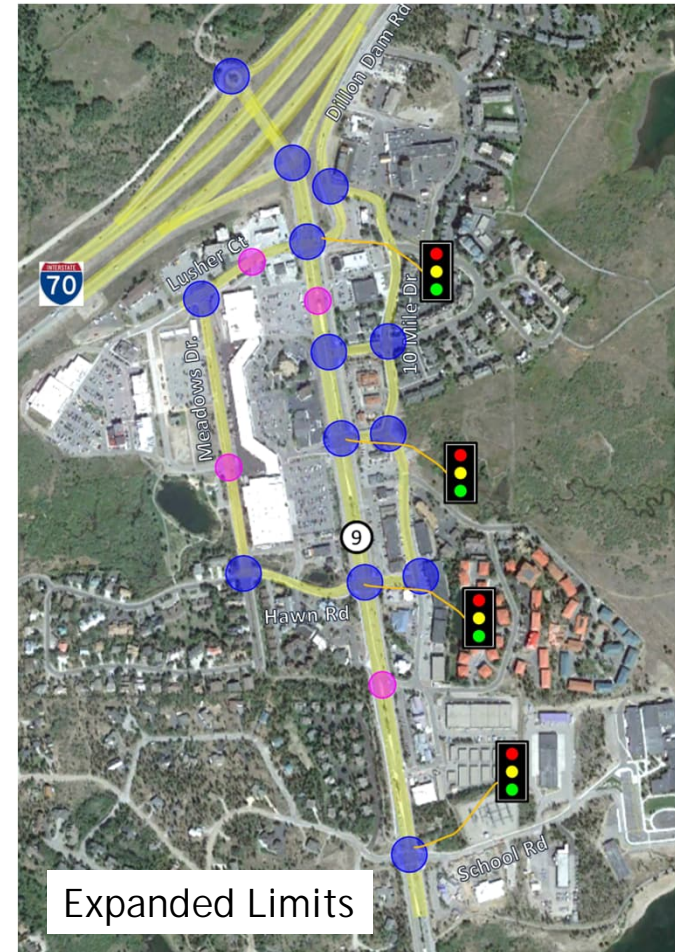


Expanded Exit 203 Traffic Study Area



Legend

- Major Intersection
- Minor Intersection



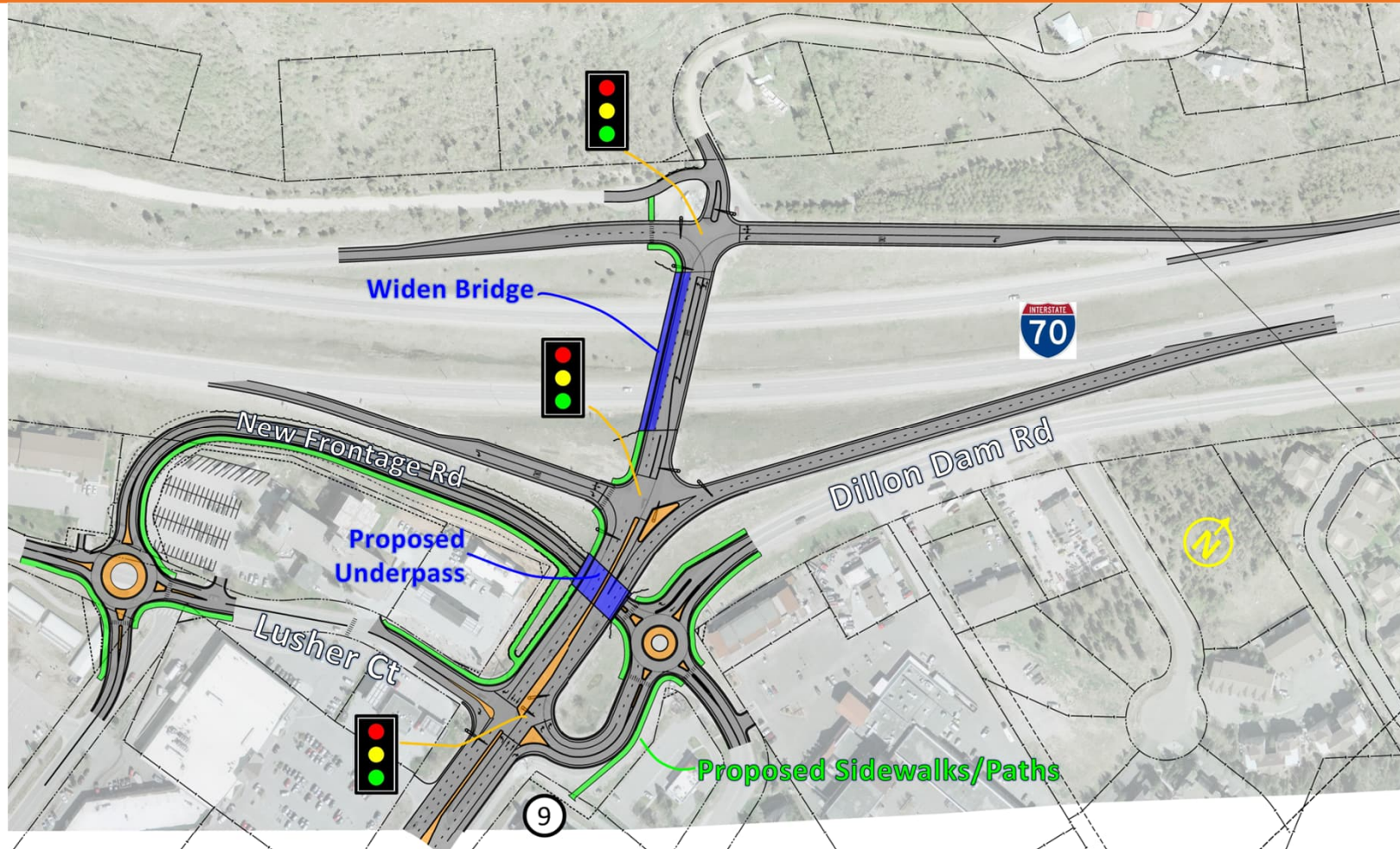


Concept Design Goals

- Identify Design Constraints Affecting Design
 - Utilities
 - Drainage
- Confirm Feasibility of Frontage Road Bypass
- Advance Design of Interchange
- Design Frontage Road Roundabout

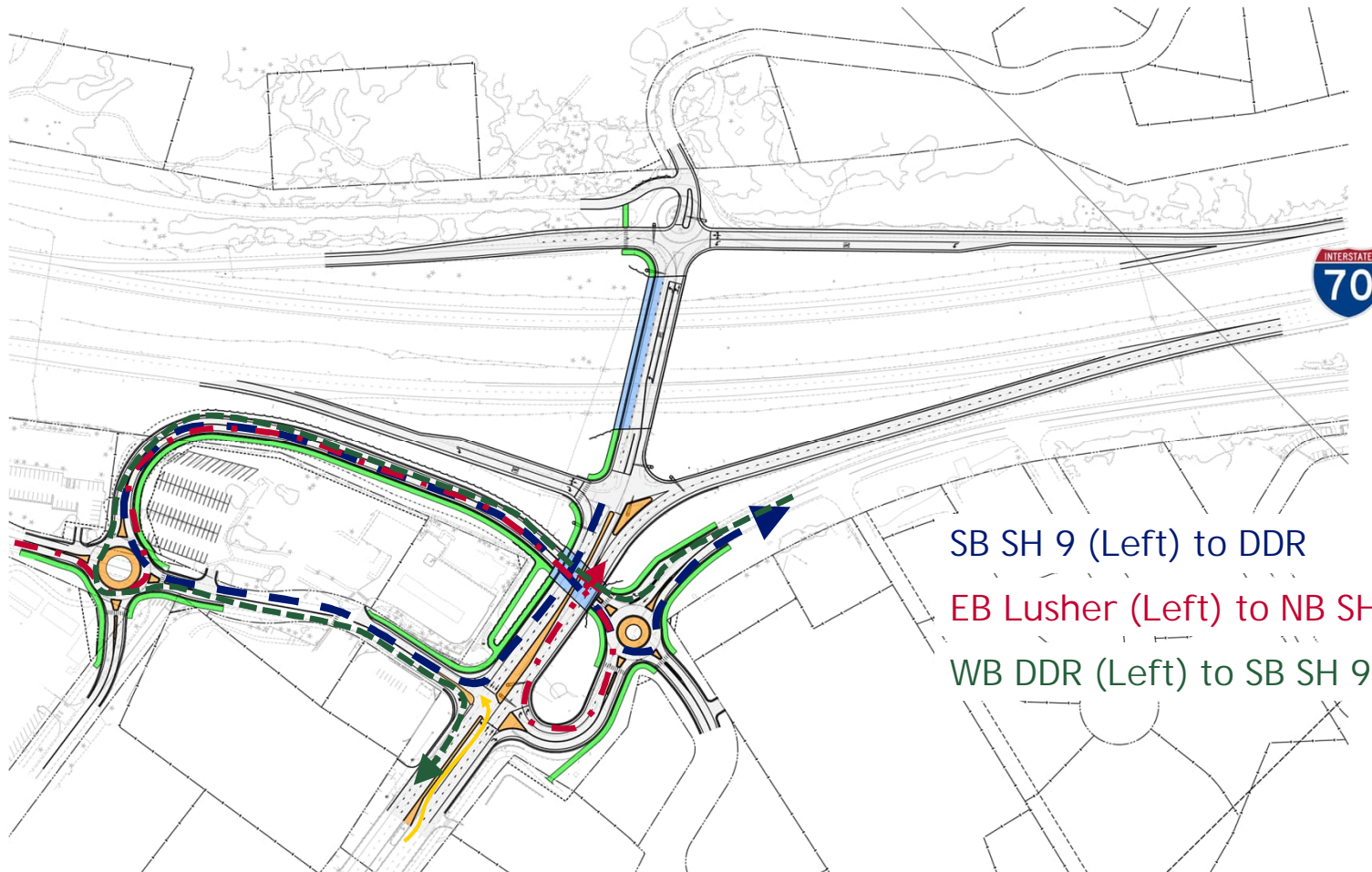


Exit 203 Concept Design





Exit 203 Design Travel Movements



SB SH 9 (Left) to DDR

EB Lusher (Left) to NB SH 9/I-70

WB DDR (Left) to SB SH 9

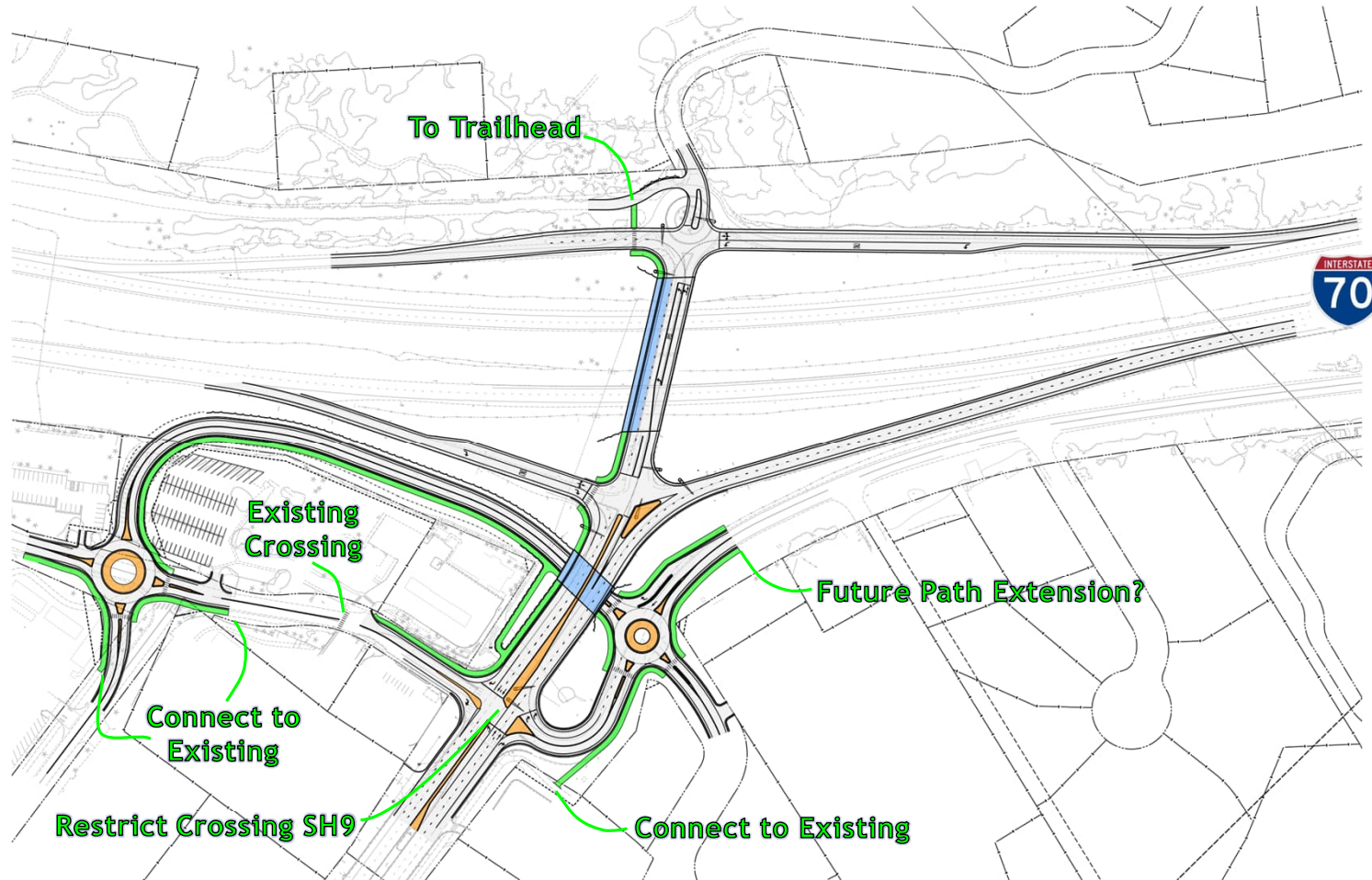


Exit 203 Design
Travel Movement Simulation

SimTraffic Simulation Video

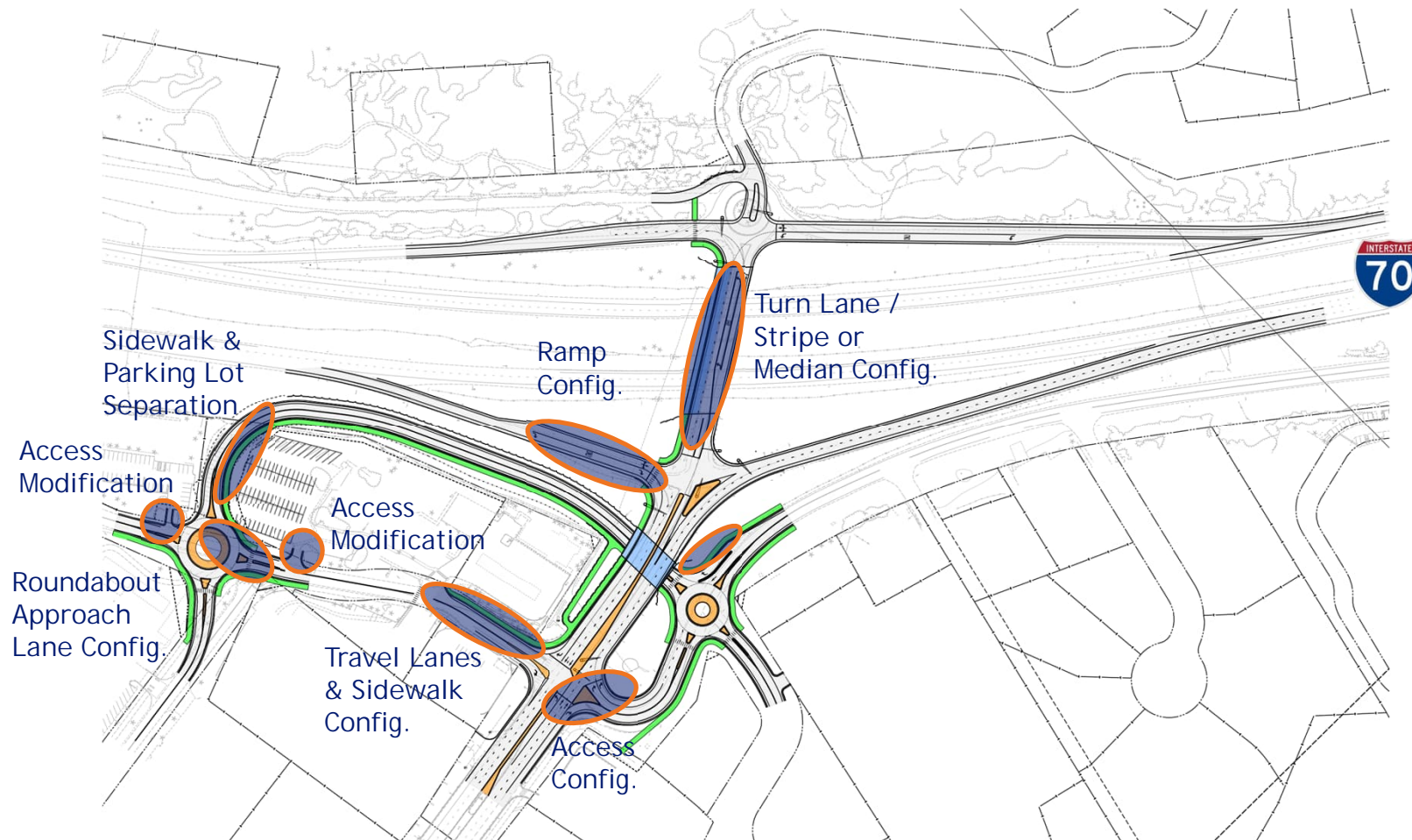


Sidewalks and Paths



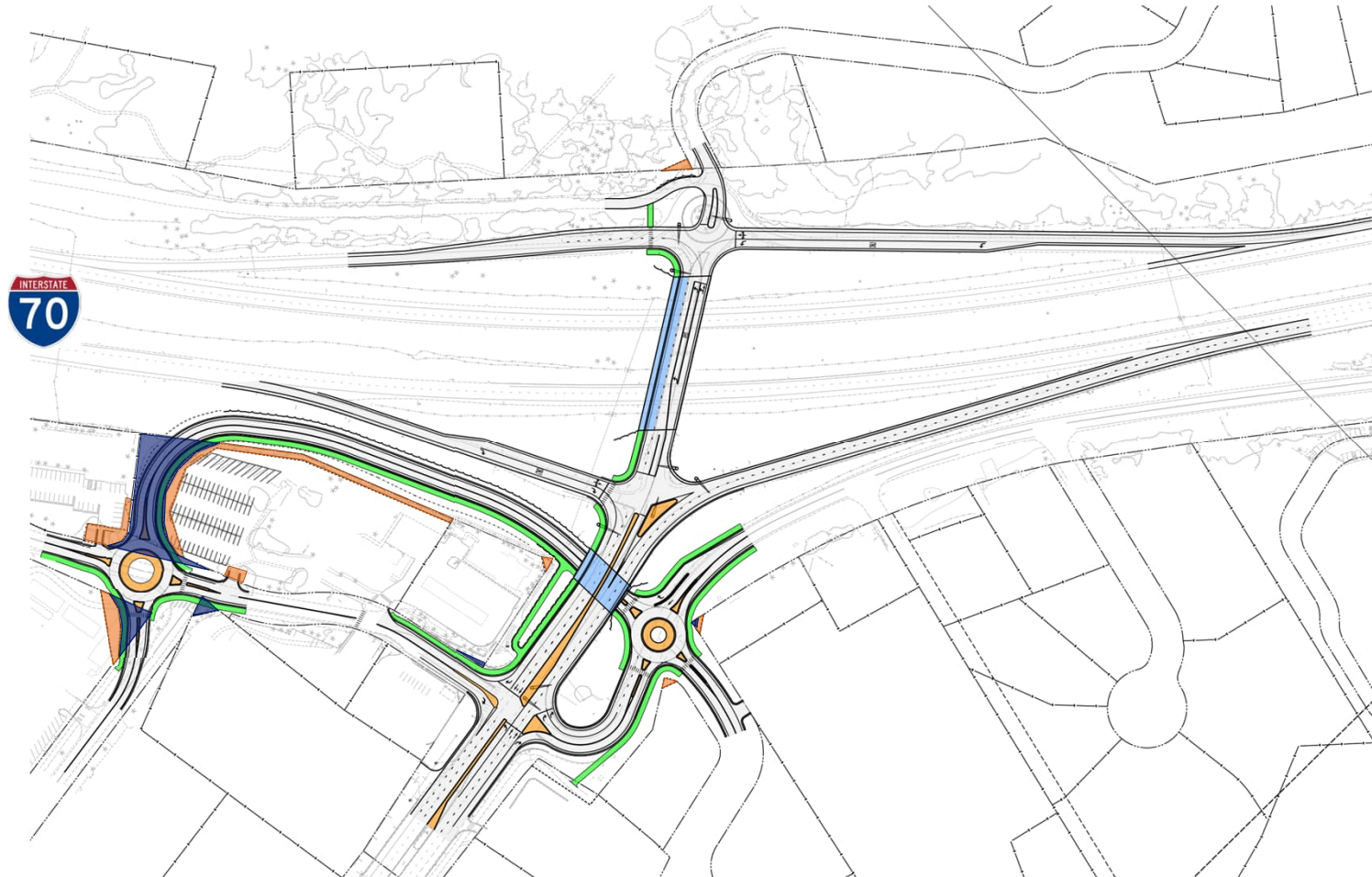


Exit 203 Design Focus Areas as Design Progresses





Exit 203 Design Right-of-Way Needs



Legend

- Permanent ROW
- Construction Easement



Exit 203 Project Schedule

- Scoping (15% Design) Meeting: May 2023
- FIR (30% Design) Meeting: Oct 2023
- ROWPR: Jan 2024
- FOR (90% Design) Meeting: April 2024
- Advertisement: Fall 2024/Winter 2025 (Right-of-Way Dependent)





Where Exit 203 Design fits in CSS Process?



- Evaluate, Select, and Refine Alternative

- Finalize Documentation and Evaluate Process



Future Meetings

- Future meetings to coincide with Design Meetings
 - ITF/Business meetings Summer 2023
 - PLT #2 October 2023
 - ITF meetings October 2023
 - Public Open House Late Fall 2023
 - PLT #3 April 2024
 - ITF meetings April 2024
 - PLT #4 July 2024
- Monthly update emails for PLT (first week of the month)



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Questions?

