Tudor Road

INTERCHANGE

Tudor Road Interchange

Interchange Planning Workshop

November 12, 2025

Project Team - Introductions

DOT&PF

Galen Jones PE, Project Manager

DOWL

Steve Noble PE, Project Manager

Sam Tyler PE, Project Engineer

Jovie Garcia, Public Involvement

Morgan McCammon, Public Involvement

Sunrise Transportation Strategies

Brian Ray, Interchange Planning

Lounsbury & Associates

Joseph Taylor PE, Project Engineer

Kinney Engineering

Jeanne Bowie, Regional Modeling

RRR

Rory Redick, Utility Coordination

Ryan Redick, Utility Coordination

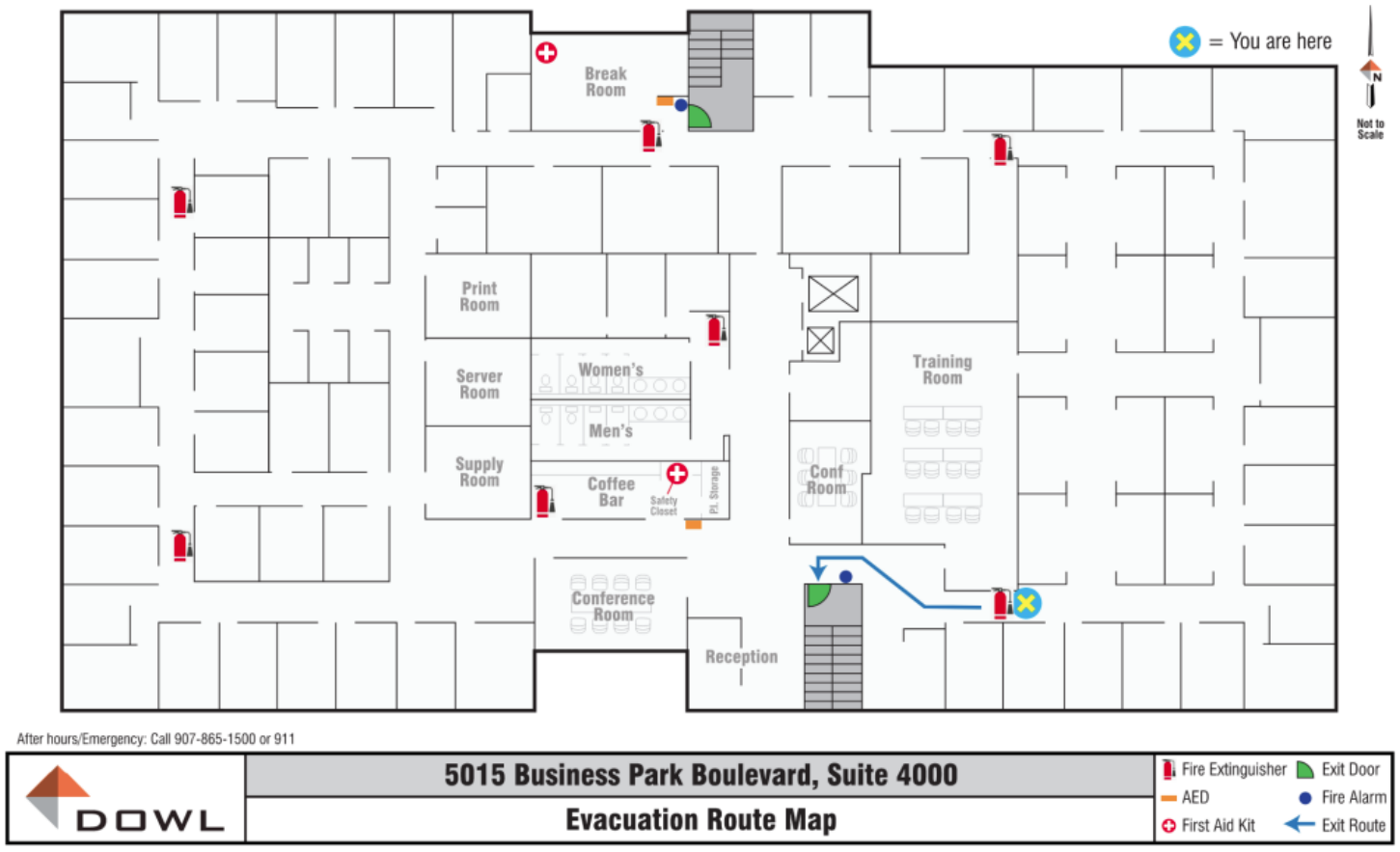
Tudor Road INTERCHANGE

Participant- Introductions

- Alaska Trucking Association
- Anchorage Chamber of Commerce
- Anchorage School District (ASD)
- Emergency Management
- Fire Department
- Police Department
- DOT&PF
- Municipality of Anchorage (MOA)
- Anchorage Metropolitan Area Transportation Solutions (AMATS)
- Midtown Community Council
- Tudor Area Community Council
- Campbell Park Community Council
- Assembly District 13
- Assembly District 14
- Alaska State Senate District G
- MOA Public Transportation
- Bike Anchorage

Tudor Road INTERCHANGE

SAFETY MINUTE



Tudor Road INTERCHANGE

Project Purpose and Need

Purpose

- Replace the Tudor Rd. overcrossing to meet current design standards
- Reduce crash risk and increase comfort for all users
- Improve operations and mobility for all users

Need

- Raise the Tudor Rd. bridge and maintain through access from the ramps
- Enhance active transportation facilities
- Reduce vehicle queueing and accommodate 36th Ave Interchange future access needs

Tudor Road INTERCHANGE

Project Area

Tudor Road INTERCHANGE

Funding & Schedule

Funding	
Design	$5M
ROW	$4M
Construction	$30M
Utilities	$2.5M
All funding is Federal, except $1M in State design funds, out of the National Highway Performance Program (NHPP), at 93.4% with a State match of 6.6%	

Project Schedule	
Task	**Date**
Public Involvement	Ongoing
Preliminary Design & Environmental	2025 - 2026
Final Design, Permitting, & ROW Acquisition (if required)	2027 - 2029
Construction	2030 – 2032 (dependent on available funding)

Tudor Road INTERCHANGE

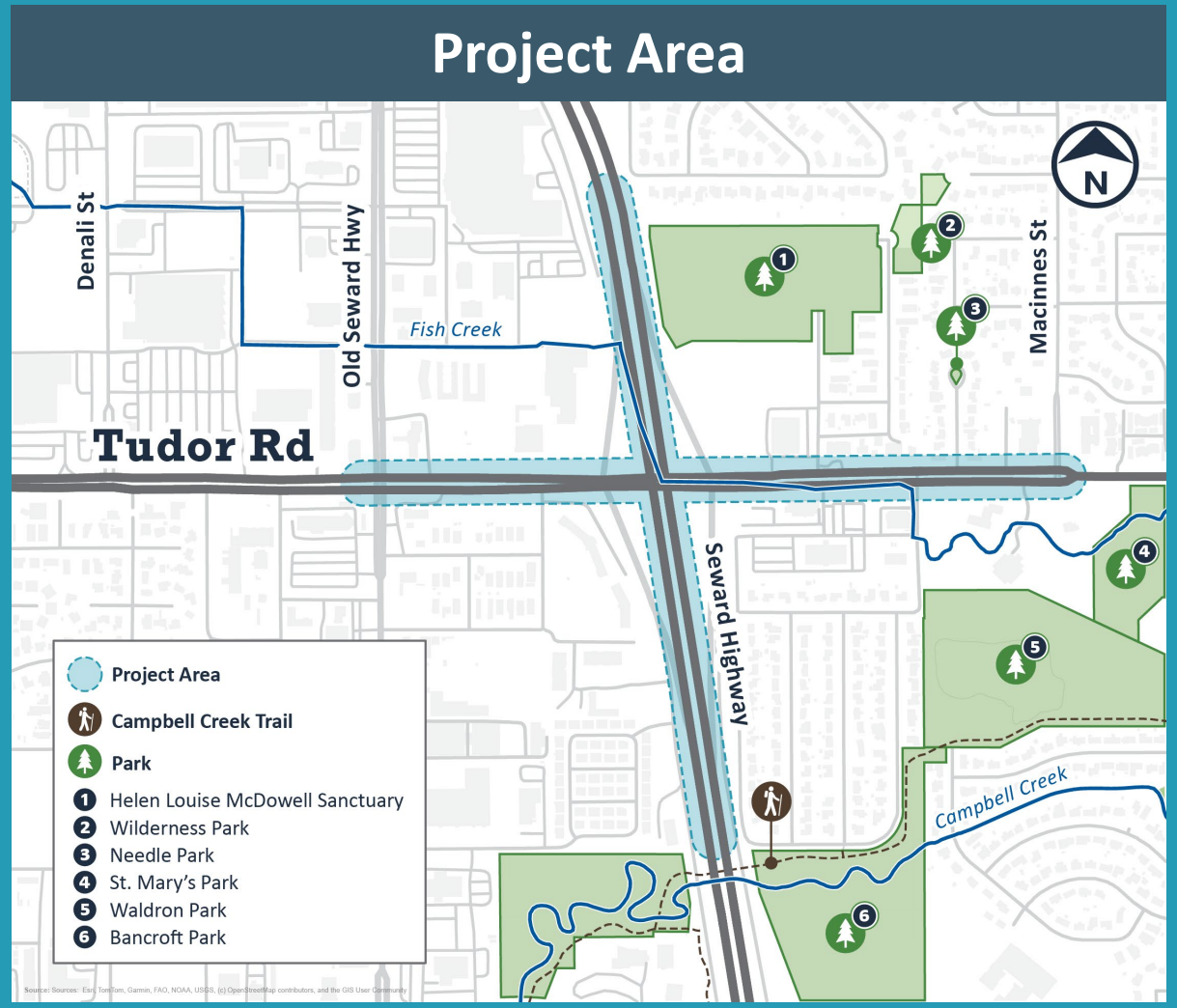
AGENDA

- Workshop Goals
- Interchange Background
- Existing Conditions
- ROW, Utilities, Environmental Compliance, and Emergency Response
- Interchange Brainstorming
- Next Steps

Tudor Road INTERCHANGE

WORKSHOP GOALS

- Understand project need
- Evaluate potential interchange configurations
- Understand constraints and implementation issues
- Obtain input to support decision making



Tudor Road INTERCHANGE

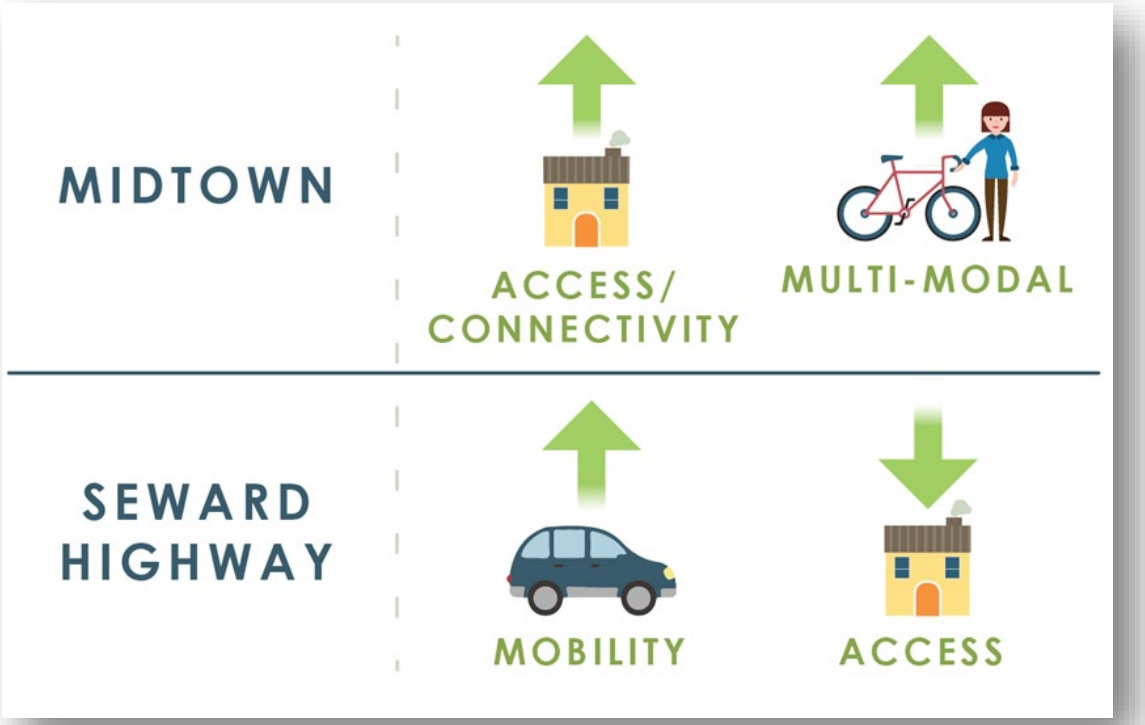
Integrating with the 36th Avenue Interchange

Midtown Congestion Relief (MCR)

- Planning and Environmental Linkage (PEL)
  - *April 2020*
- Project Limits: Seward Hwy. between Tudor Rd. and 20th Ave.

36th Avenue Interchange

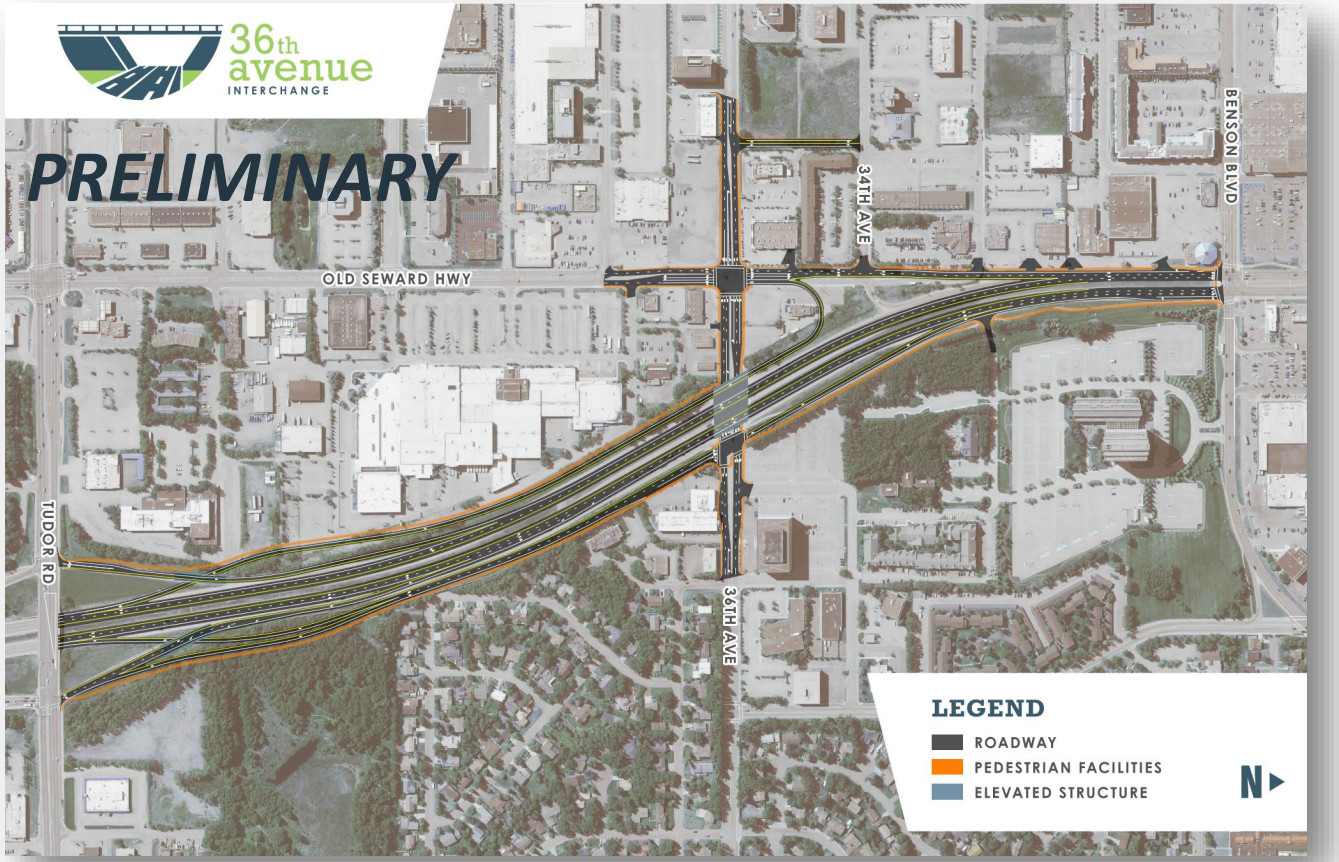
- Preliminary Engineering Report (PER)
  - April 2024
- Project Limits: Seward Hwy. between Tudor Rd. and Benson Blvd.



Tudor Road INTERCHANGE

Integrating with the 36th Avenue Interchange

- The future E. 36th Ave. interchange includes a northbound connection from Tudor Rd.
- The connection occurs in a constrained area east of the Seward Hwy.
- Some Tudor Rd. interchange forms:
  - Are more compatible with a desirable narrow footprint
  - Make it easier to connect to the 36th Ave. ramp connections



Tudor Road INTERCHANGE

Interchange Background

Interchange Background

Tudor Road

- Connecting Old Seward Hwy. and Lake Otis Pkwy.

Seward Highway

- Non-existent

Old Seward Highway

- Primary highway in Anchorage

Tudor Interchange

- Non-existent

City Population

- 82,833 (1960)
- 284,259 (2025) 343% increase

Project Area History: 1960

Tudor Road INTERCHANGE

Interchange Background

Tudor Road

- Significant arterial connecting Minnesota Dr., Seward Hwy., and Glenn Hwy.

Seward Highway

- Takes over as a primary N-S highway in Anchorage
- Homer Dr. and Brayton Dr. serve as parallel frontage roads

Old Seward Highway Intersection

- Influences traffic to/from Tudor interchange

Tudor Interchange

- Reflective of design approaches of the 1970s
- Compressed diamond with minimal pedestrian/bicyclist facilities

Project Area History: 1980

Interchange Background

Tudor Road

- Increased number of development and driveways

Seward Highway

- Dowling Rd. and 36th Ave. interchanges influence Tudor ramp designs

Old Seward Highway Intersection

- Development along corridor increases
- Continues to influence traffic to and from the Tudor interchange

Tudor Interchange

- Surrounded by dense, multi-use development
- Limited sidewalks and no bicycle lanes
- Vertical clearance of Tudor bridge does not meet current standards and has a history of strikes

Project Area History: Current

Tudor Road INTERCHANGE

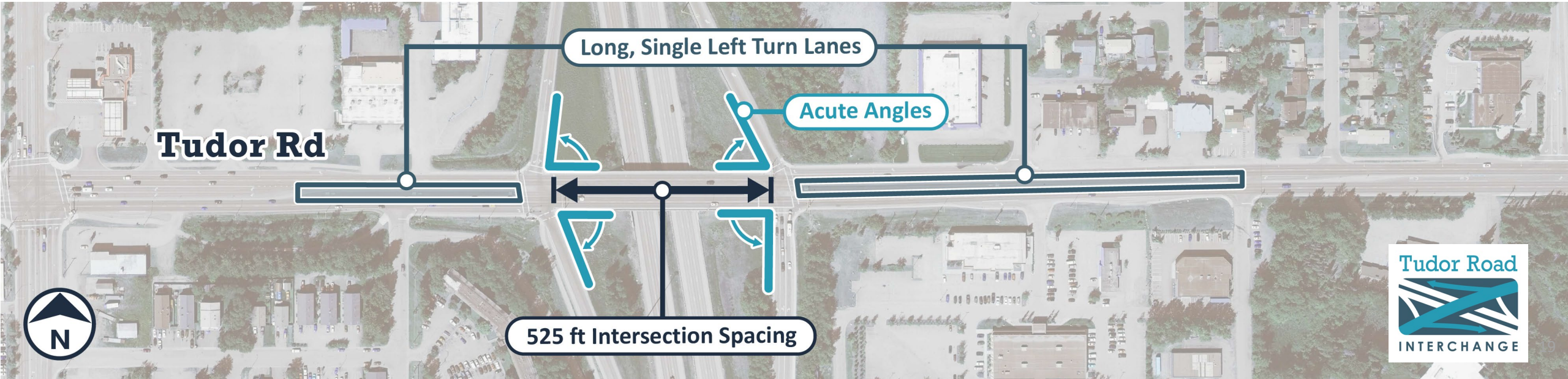
Current Interchange Issues

“Compressed” Diamond

- Intersections typically 500’-700’ apart
- Signalized (3-phase)
- Suburban Area 1950’s/60’s Design
- Medium Capacity

Issues:

- Difficult to coordinate signals
- Traffic platoons break down
- Queuing between ramp terminal intersections
- Acute ramp intersection angles degrade vehicular flow (especially trucks)



Existing Conditions

Existing Conditions Topics:

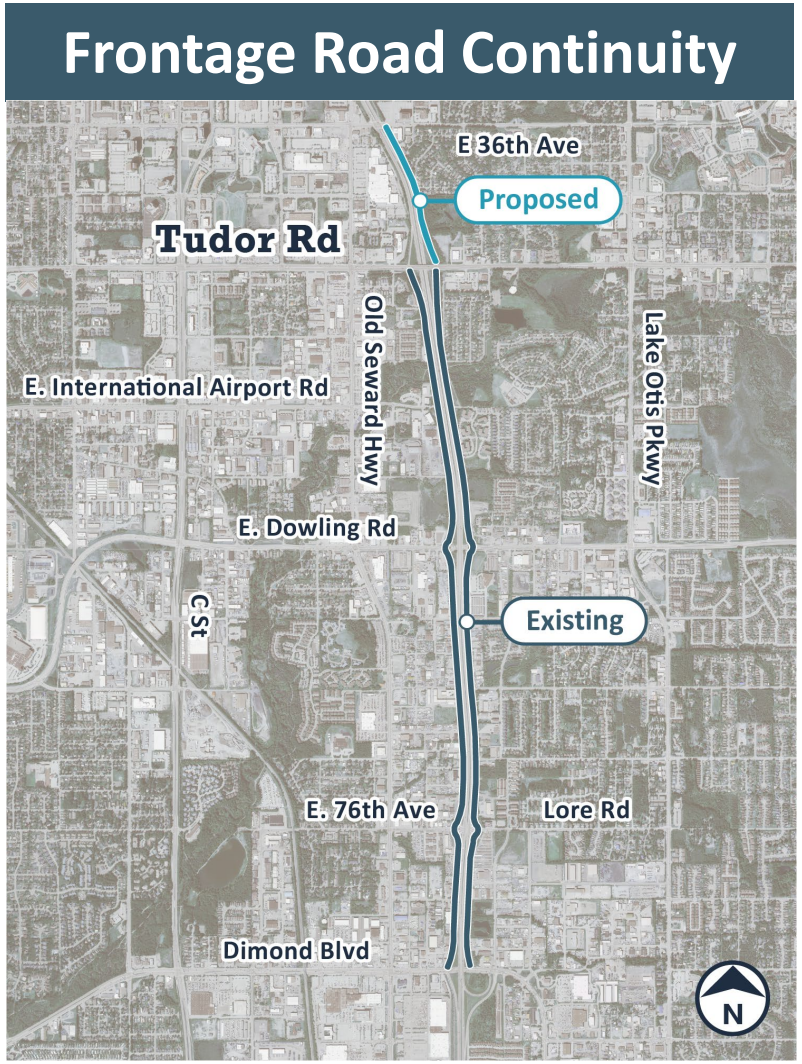
- Network Considerations
- Active Transportation
- Transit and Lighting
- Oversized Vehicles
- Safety Performance
- Traffic Operations

Network Considerations

Frontage Road Continuity

- Continuous frontage roads are provided from Dimond Blvd. to Tudor Rd. (2.5 miles)
- Connectivity will continue northbound to East 36th Ave. (3.0 miles total)

The Anchorage roadway network **benefits** from this resiliency and redundancy



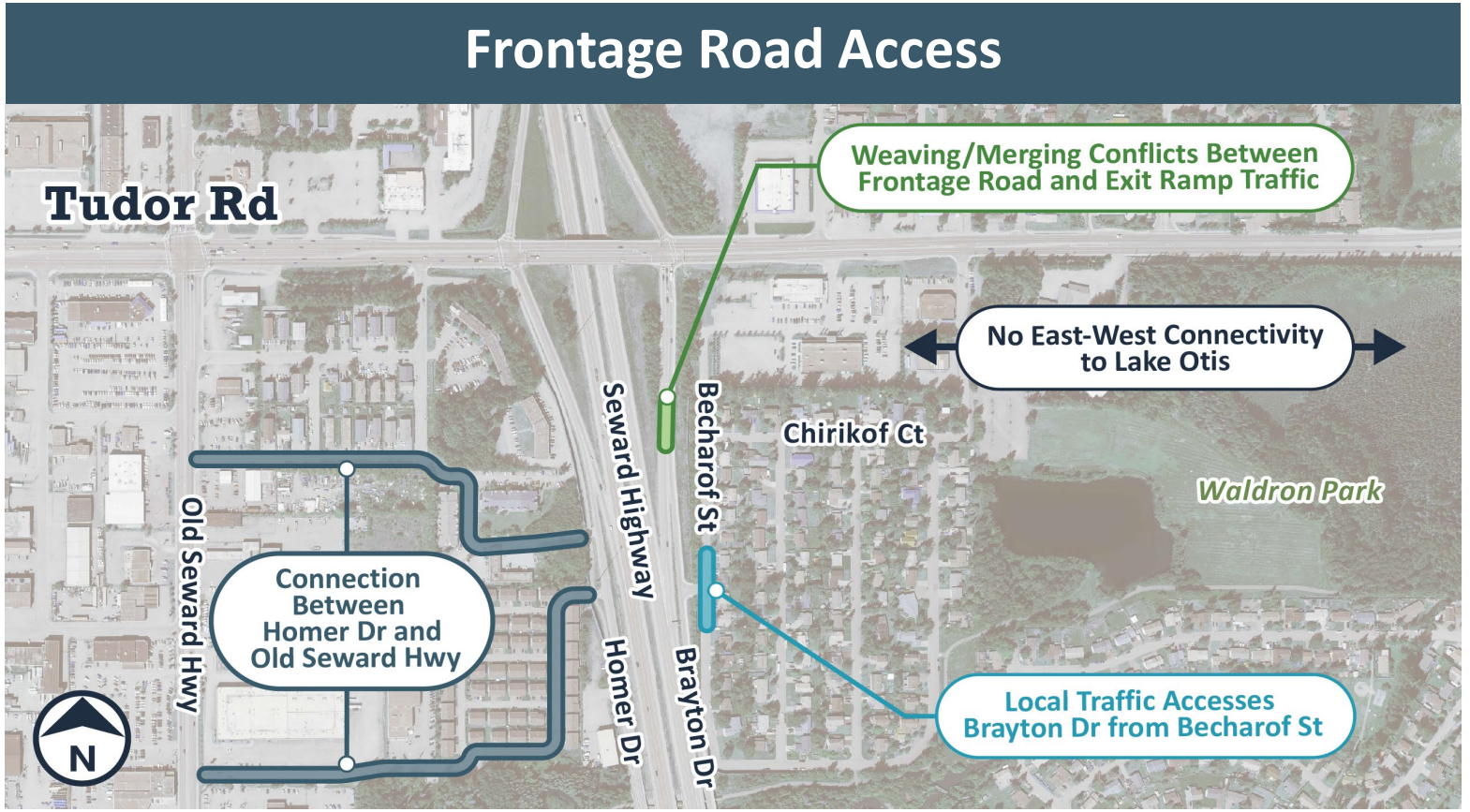
Tudor Road INTERCHANGE

Network Considerations

Frontage Road Access

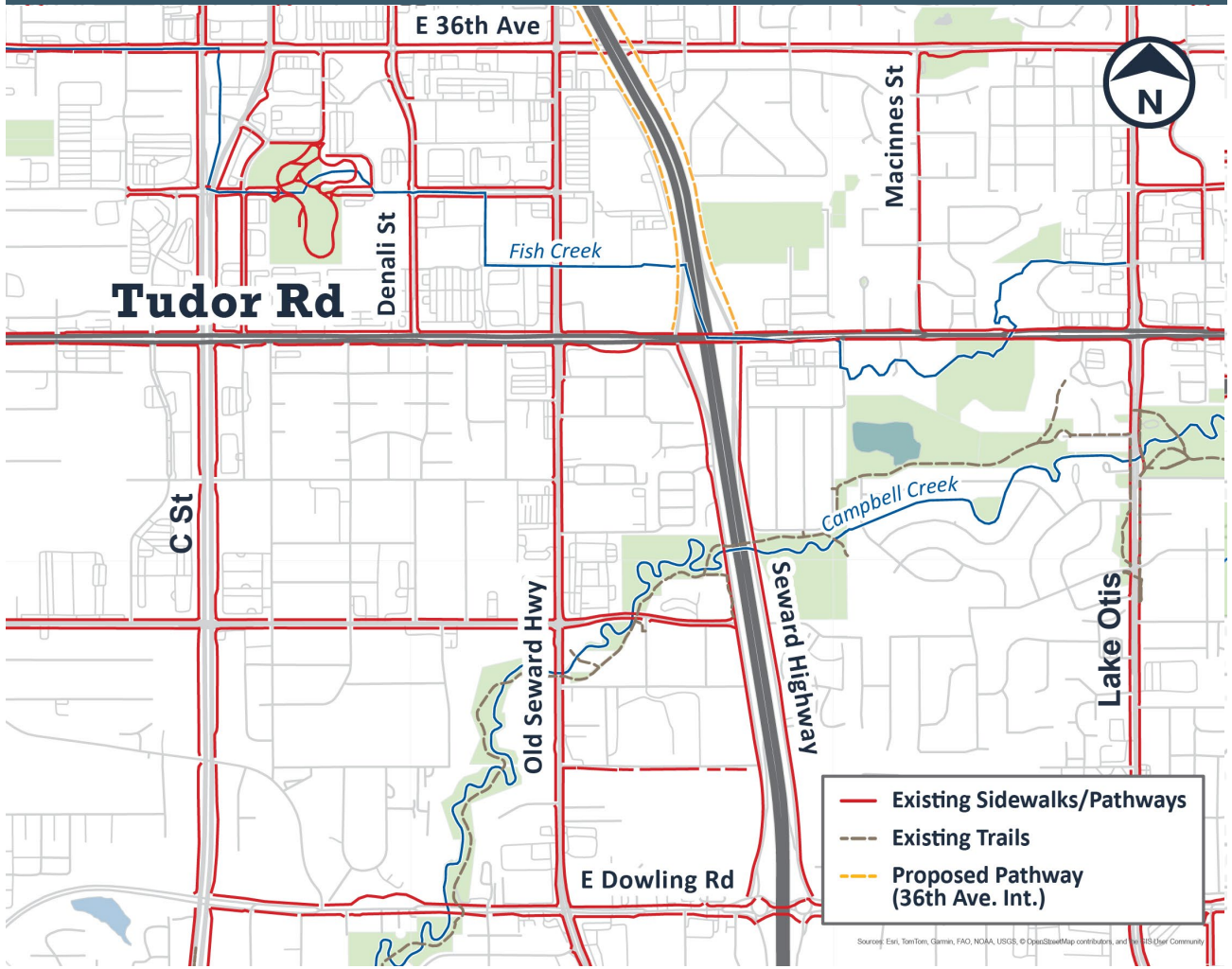
- East-West Access provided to SB frontage Homer Dr. from Old Seward Hwy.
- East-West connectivity on east side of highway is lacking, encourages drivers to access the NB exit ramp

Reducing local trip reliance on the frontage roads **maximizes the value** of reconstructing the interchange



Active Transportation Considerations

Active Transportation Facilities

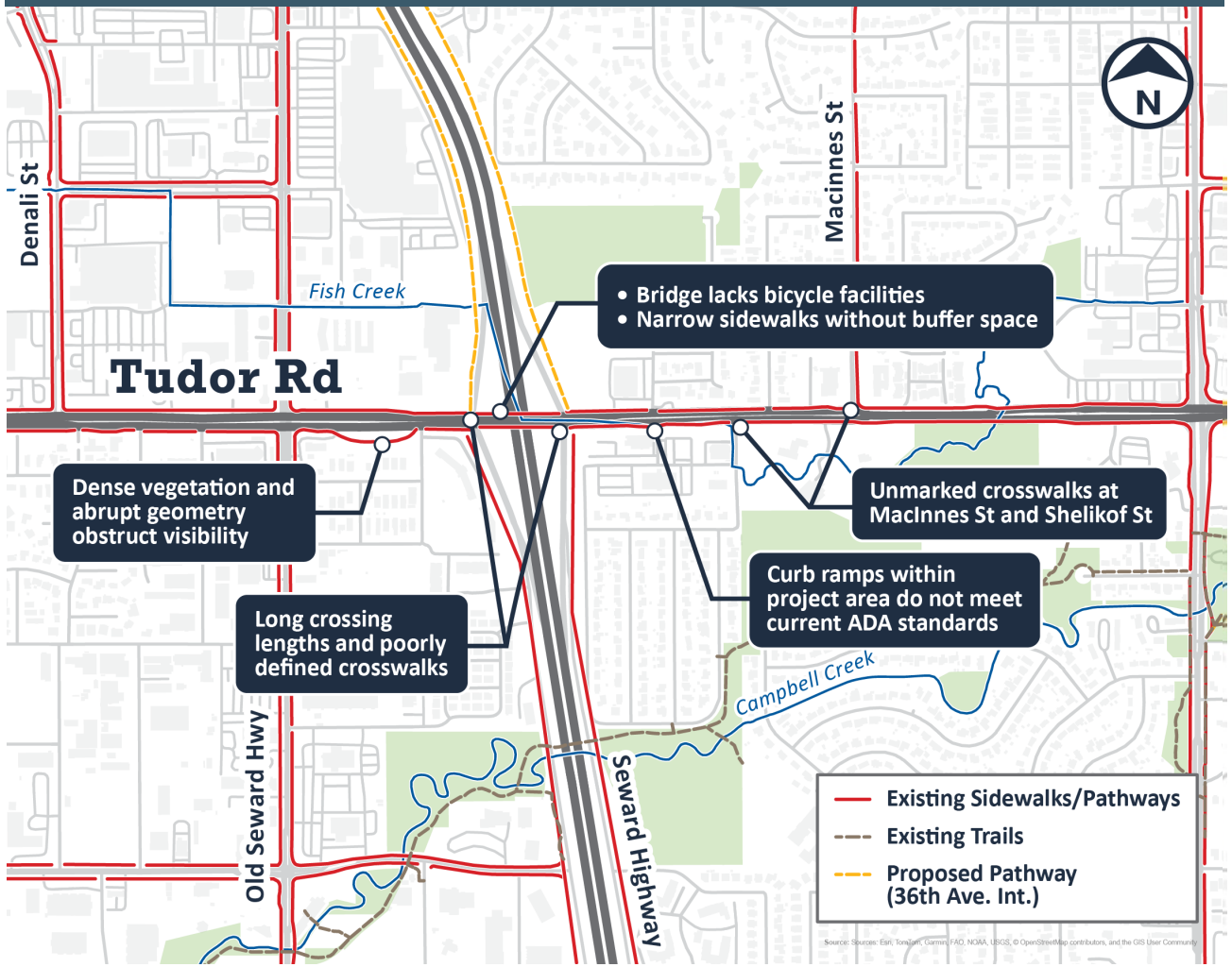


- Tudor Rd. serves as the main east-west connection for active travelers in this area
- Nearest Seward Hwy. Crossings
  - *E 36th Ave. ½ mile away*
  - *Campbell Creek Tr. ⅓ mile away*
  - *E Dowling Rd. 1 mile away*
- Tudor Rd. links many N-S paths
  - *The proposed pathway north of Tudor Rd. provides a connection to 36th Avenue and links Campbell Creek Trail and Chester Creek Trail*

Tudor Road INTERCHANGE

Active Transportation Considerations

Active Transportation Concerns



Tudor Road INTERCHANGE

Transit and Lighting Considerations

Transit Stops

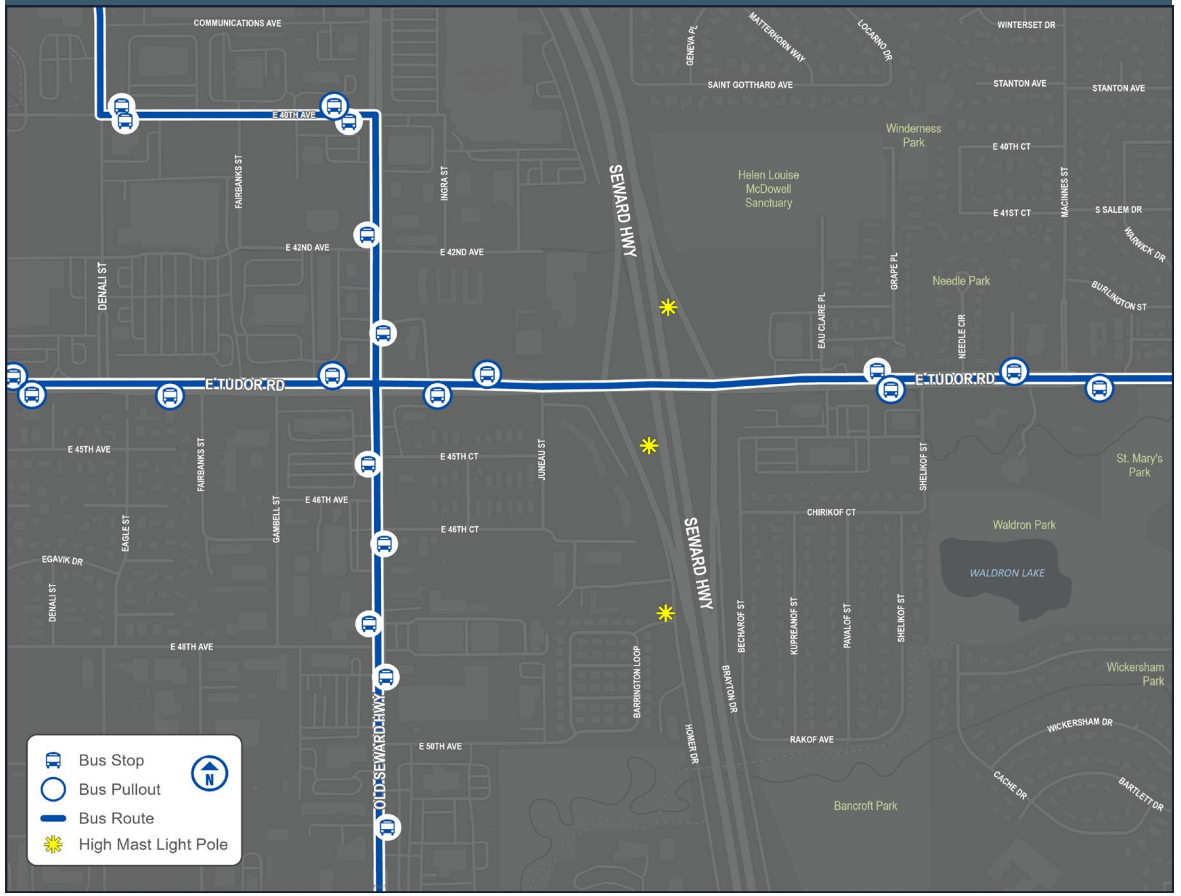
- EB and WB bus pull outs at Old Seward Hwy. and MacInnes St.
- EB bus pull outs at Shelikof St.

Tudor Lighting

- No pedestrian-oriented lighting
- High mast lighting in the Seward Hwy. interchange area

Interchange reconstruction should include features that improve the quality of service for active transportation users

Anchorage People Mover Routes



Tudor Road INTERCHANGE

Oversized Vehicles

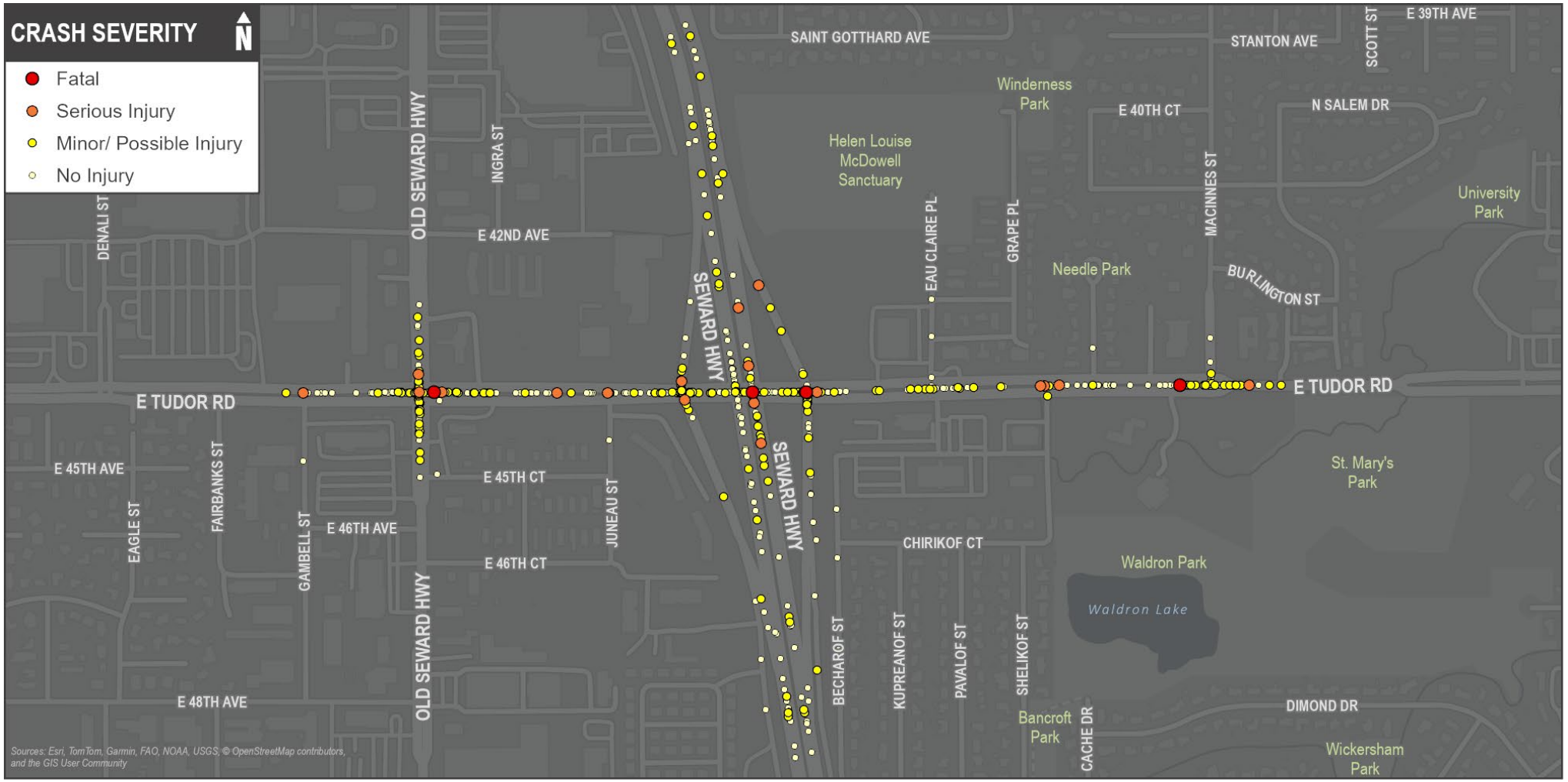
Oversized and Permitted Routes

- ~4,500 Overheight permits awarded per year for routes along the Seward Hwy.
- NB routes exit at Tudor Rd. and then proceed along Tudor Rd./Muldoon Rd. to the Glenn Hwy.
- Overweight routes travel from Tudor Rd. to the Glenn Hwy. since the Boniface Pkwy. overpass cannot accommodate heavy loads

Influence on Interchange Form

- Ramp-to-ramp connections are needed to serve Overheight/Overweight trucks
- Provide 18 ft vertical bridge clearance over Seward Hwy.
- Structure capable of handling heavy axle weights

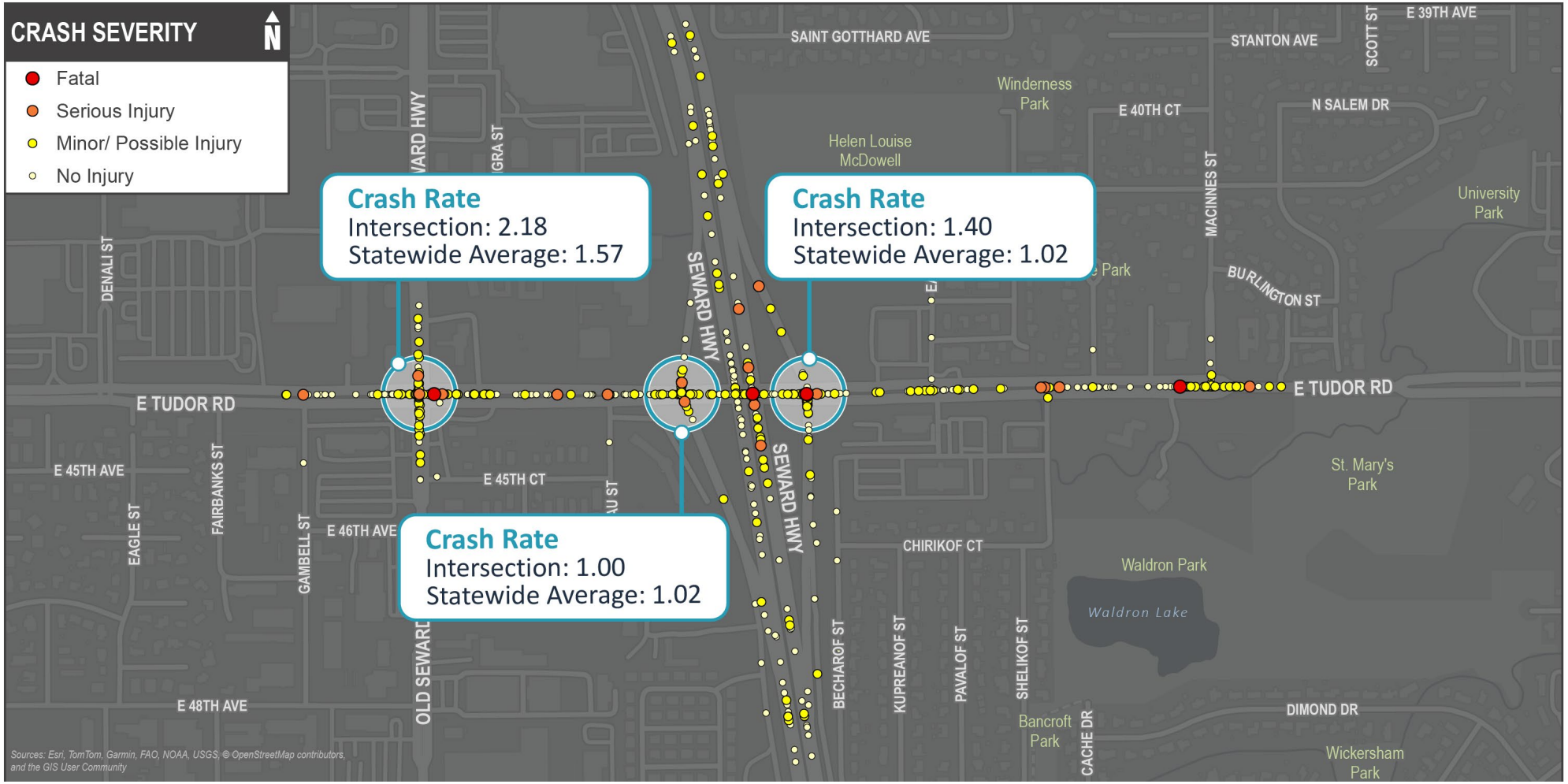
Safety Performance: All Crashes (2014-2023)



Tudor Road INTERCHANGE

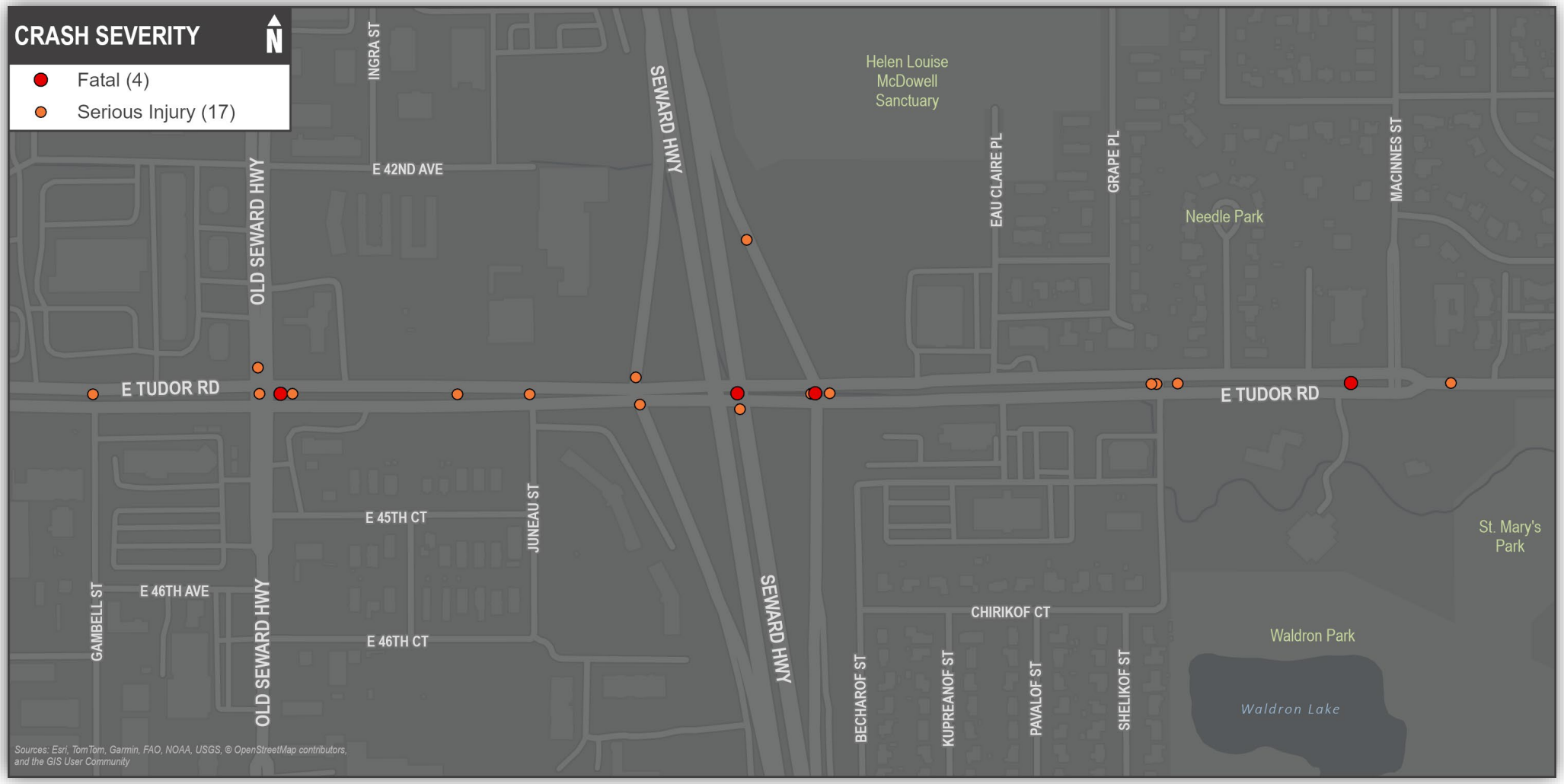
Safety Performance: All Crashes (2014-2023)

Intersection Crash Rates that are near or Exceed Statewide Averages



Tudor Road INTERCHANGE

Crashes with Serious and Fatal Injury (2014-2023)



Tudor Road INTERCHANGE

Non-Motorized Crashes (2014-2023)

Tudor Road INTERCHANGE

Traffic Operations: Overview

Project catalyst is replacing the bridge and improving safety

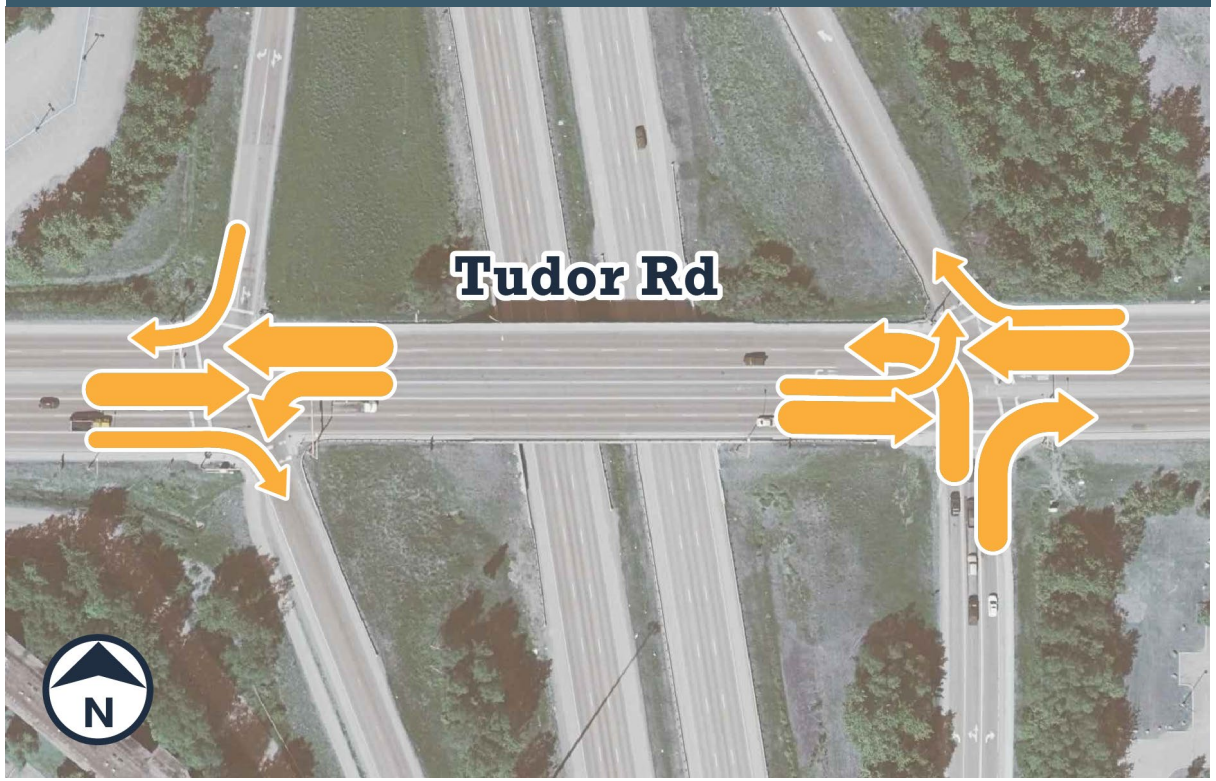
Opportunity to improve traffic flow to maintain Tudor Road and Seward Highway's network roles

Serving active transportation modes is a key outcome

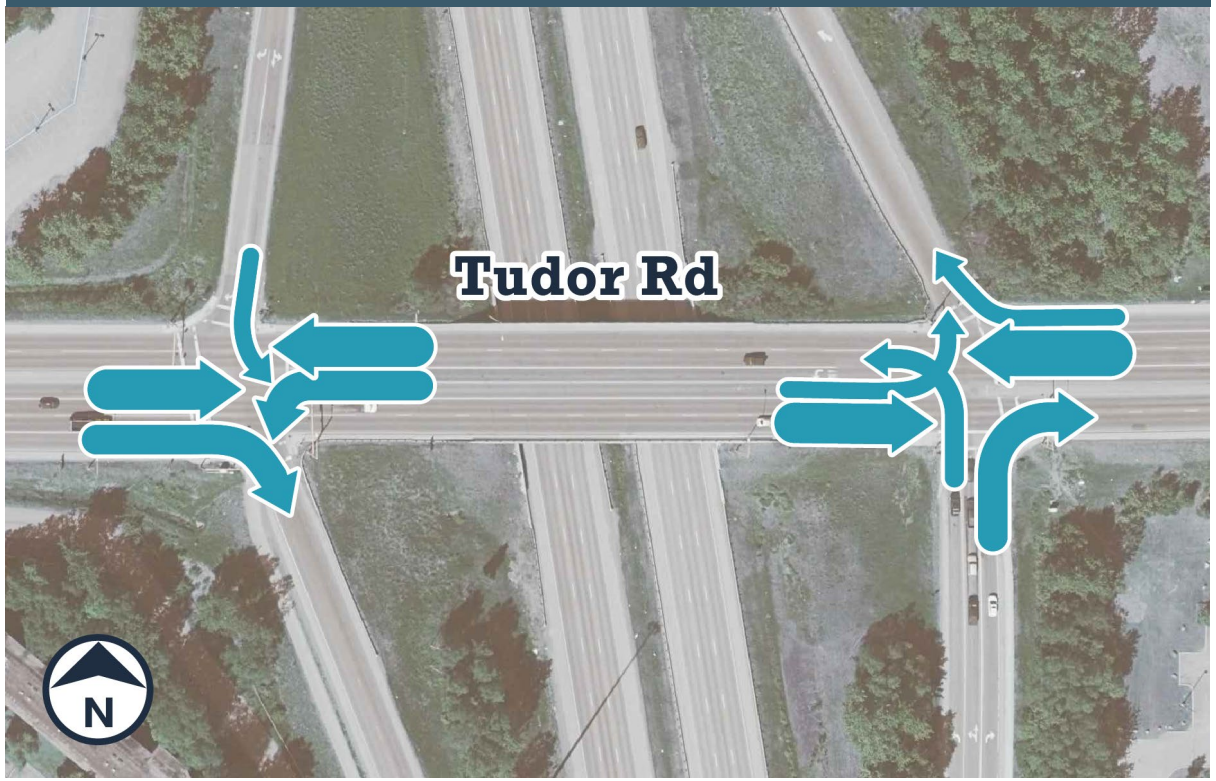
Tudor Road INTERCHANGE

Traffic Operations: Major Movements

AM Peak Hour (7:30 – 8:30 AM)



PM Peak Hour (4:30 – 5:30 PM)



Tudor Road INTERCHANGE

Traffic Operations: Performance Analysis

Level of Service (LOS) and Volume/Capacity Ratio Analysis

Tudor Road Interchange	AM Peak Hour (7:30 – 8:30 AM)					PM Peak Hour (4:30 – 5:30 PM)				
	Existing			Future 2050		Existing			Future 2050	
	v/c Ratio*	LOS		LOS		v/c Ratio*	LOS		LOS	
Signalized										
Old Seward Highway	0.49	C		D		0.67	D		D	
Seward SB Ramp	0.52	B		A		0.64	B		B	
Seward NB Ramp	0.73	C		C		0.67	C		C	
Lake Otis Parkway	0.64	D		D		0.72	E		D	
	v/c Ratio*	Delay	LOS	Delay	LOS	v/c Ratio*	Delay	LOS	Delay	LOS
Stop Controlled										
Shelikof Street	0.01	20.80	C	20.40	C	1.14	>300	F	>300	F
MacInnes Street	0.88	**146.40**	**F**	**156.0**	**F**	1.93	>300	F	>300	F

Bold and Red indicates a delay/LOS below the state threshold

All delay times shown in seconds
***Max movement v/c ratio used for stop-controlled intersections**

Tudor Road INTERCHANGE

Traffic Operations: Queueing

Tudor Road INTERCHANGE

Traffic Operations: Queueing

Traffic Operations: Queueing

Tudor Road INTERCHANGE

Traffic Operations: Traffic Control Strategies

- Once interchange form is established, we consider “traffic control strategies”
  - *Stop*
  - *Yield (roundabouts)*
  - *Signalized*
- Initial traffic operations evaluations at the ramp terminal intersections show **three-lane roundabouts are needed** to serve forecasted traffic.
- Roundabouts with three circulatory lanes would not provide the same level of safety and operational performance benefits as roundabouts with fewer lanes.
- Roundabouts would require enhanced ped/bike crossings (Rectangular Rapid Flashing Beacons (RRFB) or Pedestrian Hybrid Beacons (PHB), further degrading traffic operations.

Traffic Operations: Traffic Control Strategies

- Roundabouts are not a practical consideration at the ramp terminal intersections.
- Consider roundabouts and other control strategies at Shelikof St. and MacInnes St. to support U-turns and reduce delay
- Consider a signal at MacInnes to support emergency services:
  - Anchorage Fire Engine 4 is located at MacInnes St and a signal there allows pre-emption
  - Signalized U-turns could be allowed at MacInnes St.

Tudor Road INTERCHANGE

Right-of-Way, Utilities, Environmental Compliance, Emergency Response, and Access Management

Right-of-Way and Land Use

Tudor Road INTERCHANGE

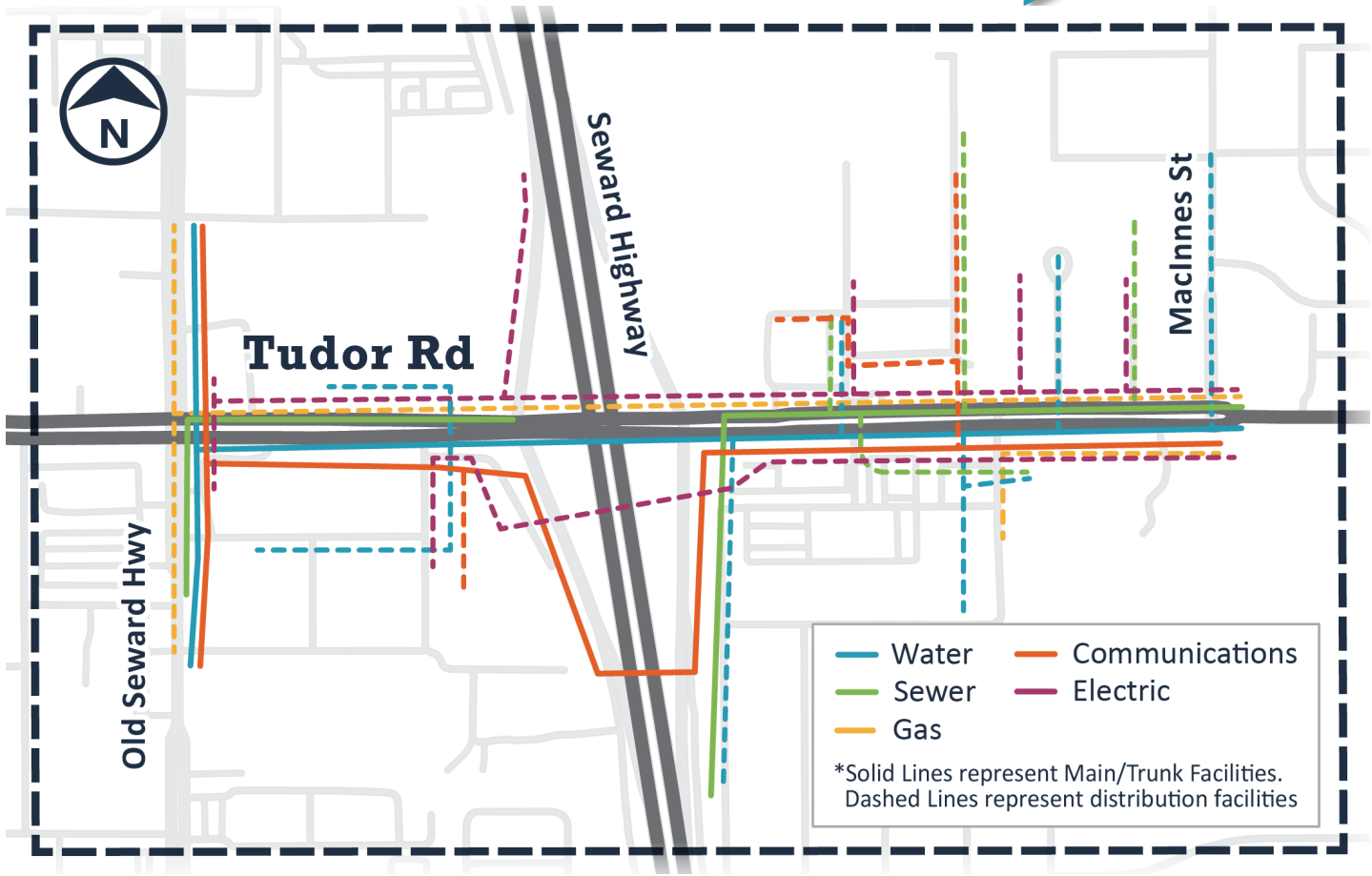
Utilities

Main Facilities

- AWWU
  - 20" Concrete Water Main
  - 16" AC Sewer Main
- ACS
  - Fiber and Copper

Distribution Facilities

- ACS
- AWWU
- CEA/ML&P
- ENSTAR
- GCI



Utility impacts are similar across alternatives

Tudor Road INTERCHANGE

Environmental Compliance

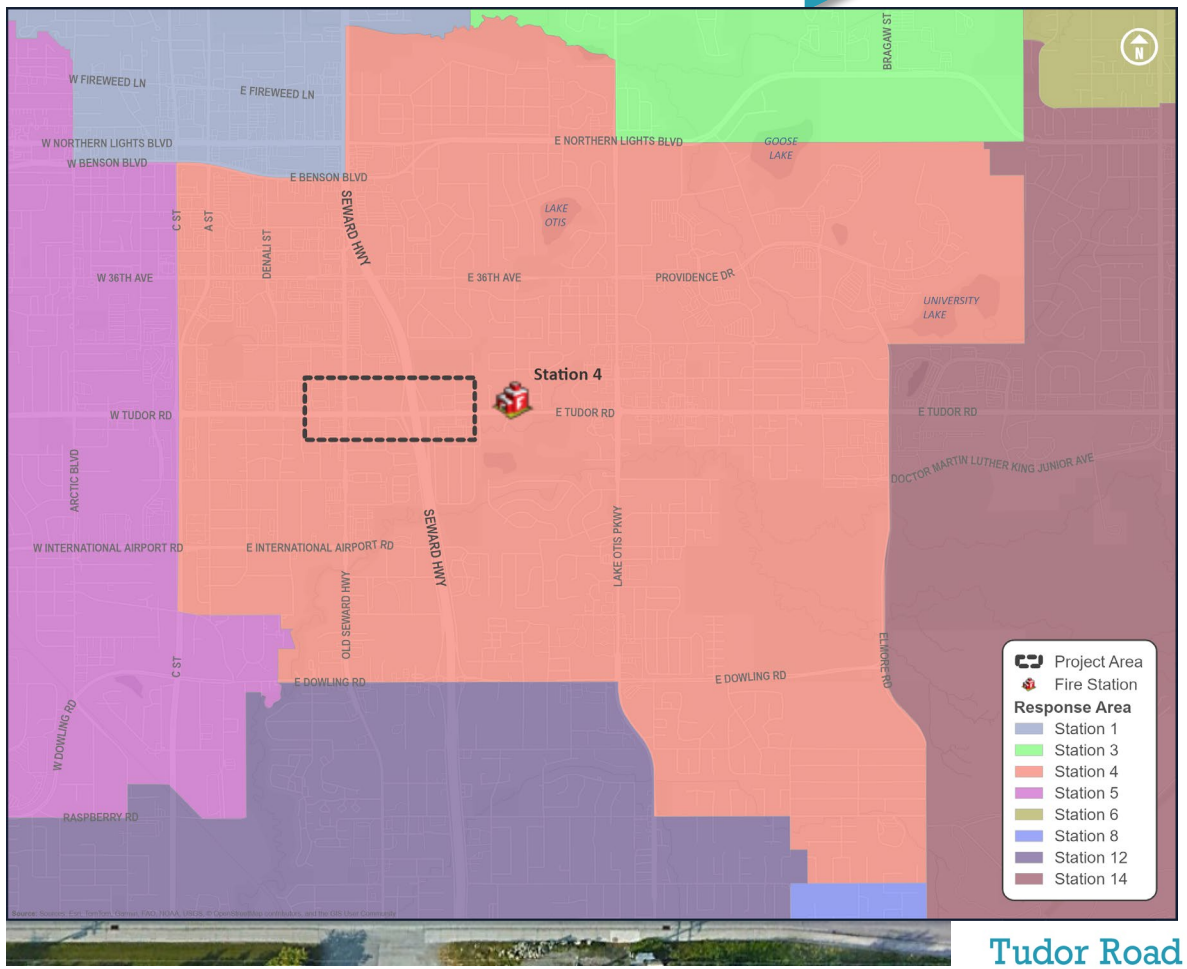
- Categorical Exclusion (Anticipated Summer 2026)
- Endangered Species Act Consultation: Not needed
- Section 106 Consultation (National Historic Preservation Act)
  - Fieldwork completed
  - Cultural Resources Report (anticipated February 2026)
- Noise Analysis: In Progress
- Hazardous Materials: None
- Wetland Delineation: Completed
  - Impacts will be minor
- Bald Eagle Nests: None
- Floodplain
  - Location Hydraulic Study (anticipated February 2026)

Environmental impacts are similar across alternatives

Tudor Road INTERCHANGE

Emergency Response

- Anchorage Fire Station 4 is located at MacInnes St. and Tudor Rd.
- Station 4 serves areas west of the Seward Hwy
- The reconstructed interchange will better serve east-west travel
- Intersection forms and control options at MacInnes St. must efficiently serve Fire Station emergency and non-emergency operations
- Signalized forms at MacInnes St. support signal pre-emption and mid-block non-motorized crossing
- Maintaining access during construction

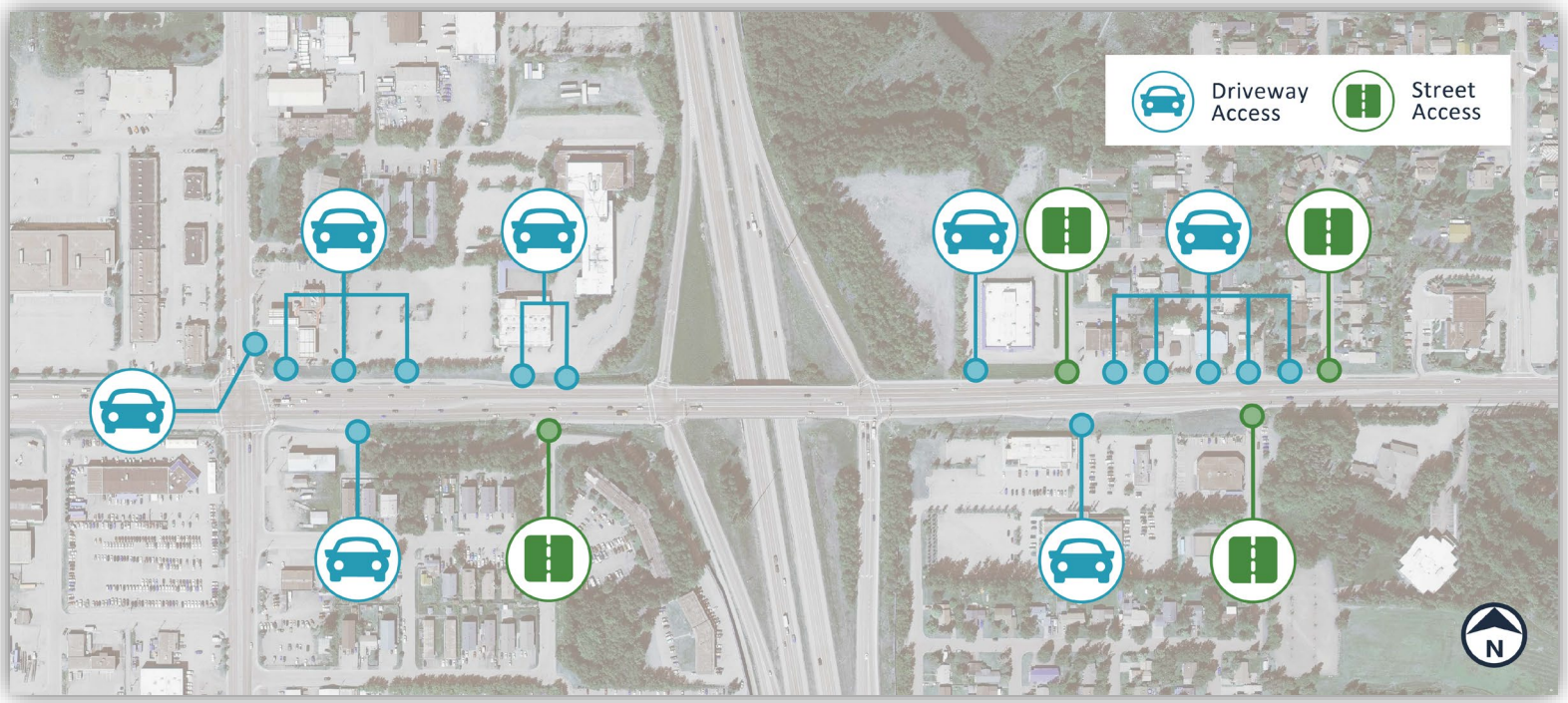


Tudor Road INTERCHANGE

Access Management and Circulation

- Numerous driveways increase crash risk for all users
- Driveways degrade traffic operations for Tudor Rd. traffic
- Some public and private access points must be modified as part of interchange reconstruction

The DOWL team will identify access management and traffic circulation opportunities **to maximize the value** of the interchange capital investments.



Tudor Road INTERCHANGE

Discussion

Break

Interchange Brainstorming

Interchange Brainstorming Topics:

- Interchange Types
- High-Capacity Diamonds
- Interchange Concepts
- Compatibility Assessment
- Screening Alternatives

Interchange Types

System interchanges:

- Freeway-to-freeway connections

Service interchanges:

- Highways to roads and arterials
- Applicable to project interchange

Interchange Selection:

- Tudor Rd. is a critical east-west arterial in the Anchorage network
- Right-of-way constraints preclude interchanges with loop ramps
- Focus will be **high-capacity diamond** forms

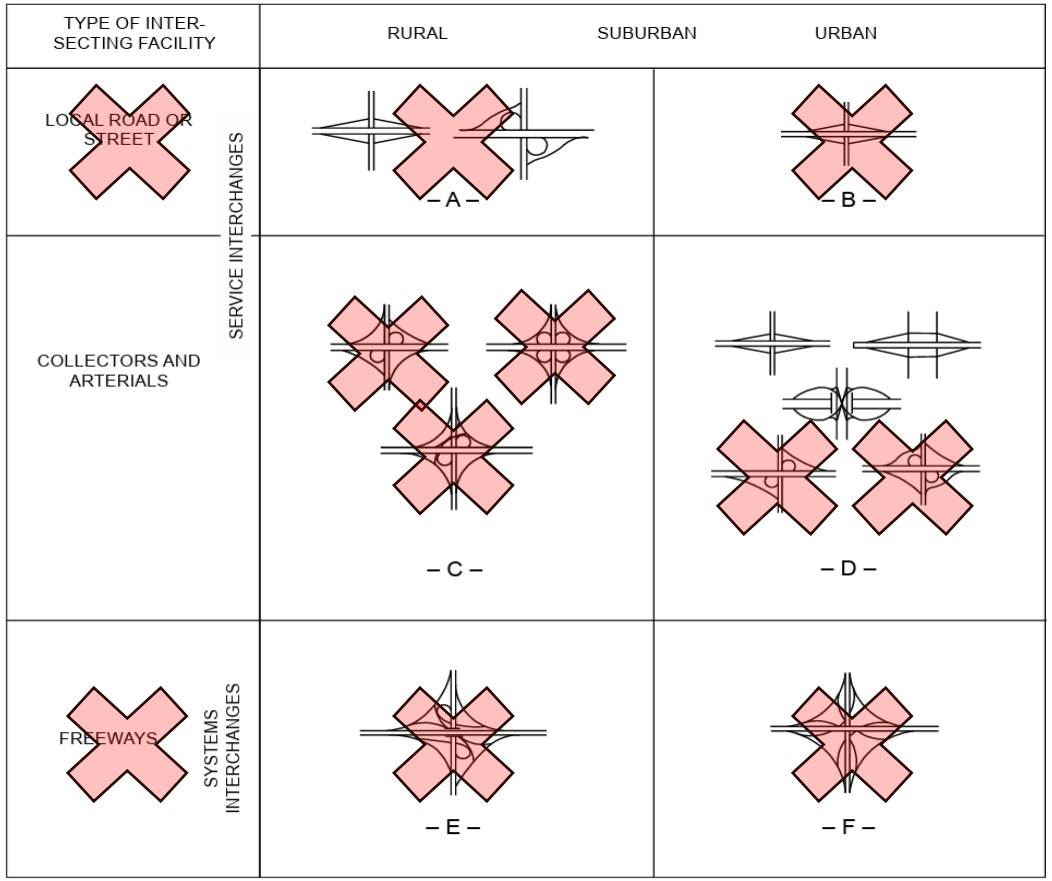


Figure 10-45. Adaptability of Interchanges on Freeways as Related to Types of Intersecting Facilities

Tudor Road INTERCHANGE

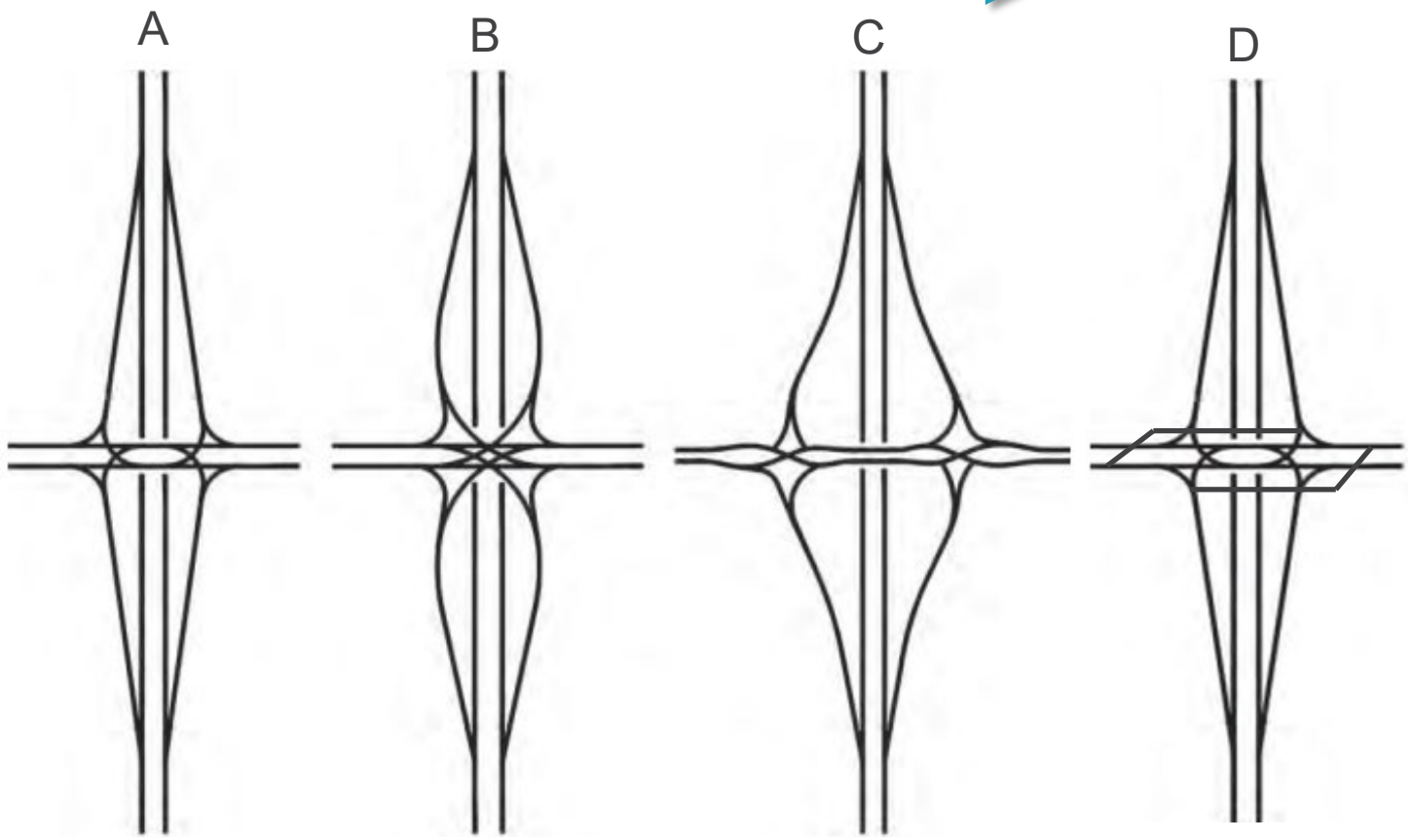
High-Capacity Diamonds

A. Tight Diamond
- Allows ramp-to-ramp connection
- Easy to construct and maintain
- Pedestrians/bicyclists: Low crash risk

B. Single Point Diamond
- Precludes ramp-to-ramp connection
- Difficult construction and expensive
- Pedestrians/bicyclists: High crash risks

C. Diverging Diamond (DDI)
- Largest footprint
- Precludes ramp-to-ramp connection when signalized
- Pedestrians/bicyclists: High crash risk

D. Displaced Left Turn (DLT)
- Similar footprint as DDI
- Allows ramp-to-ramp connection
- Pedestrians/bicyclists: High crash risk



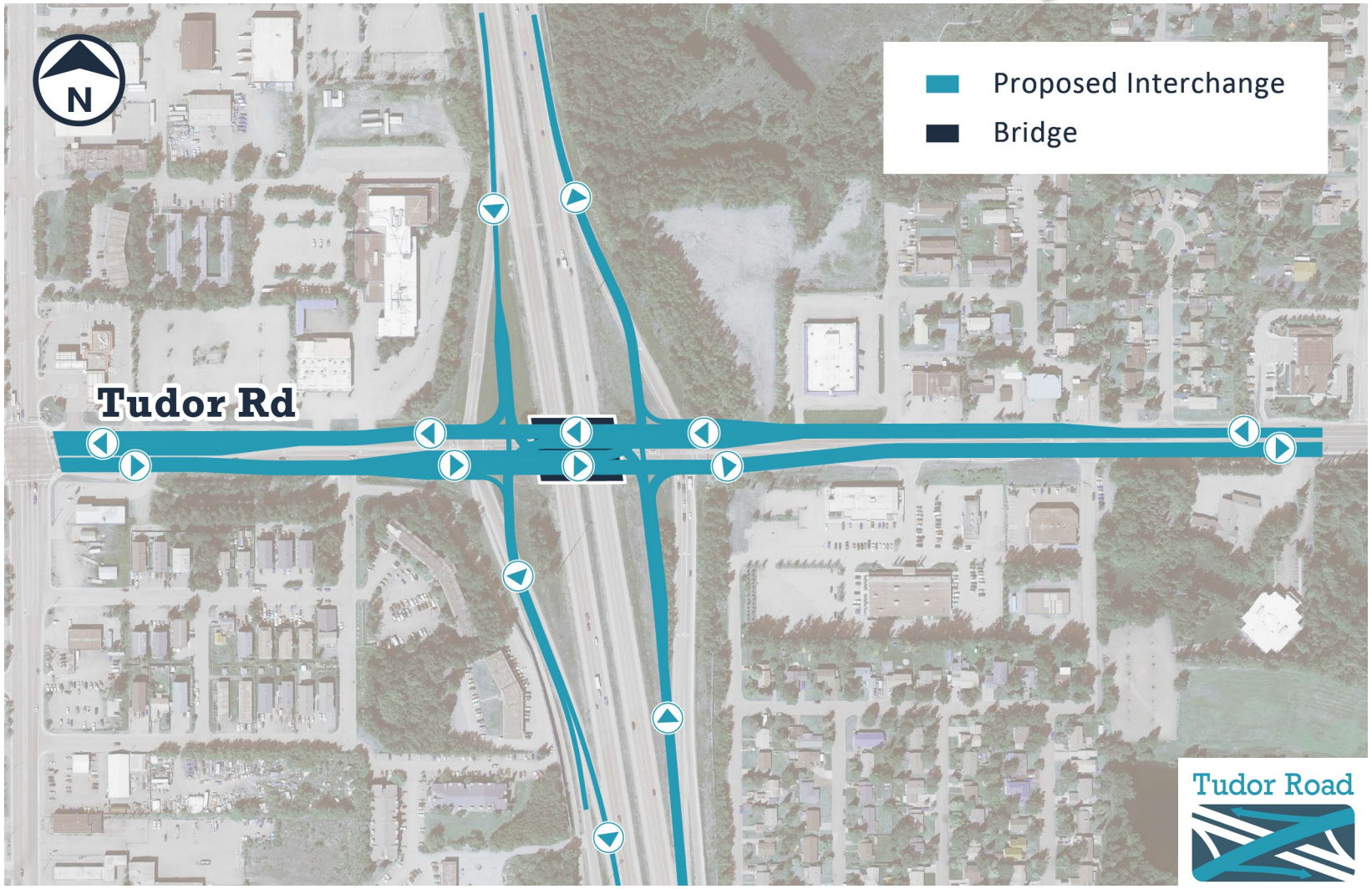
Tight Diamond | Single Point Diamond | Diverging Diamond | Displaced Left Turn

Tudor Road INTERCHANGE

Tight Diamond

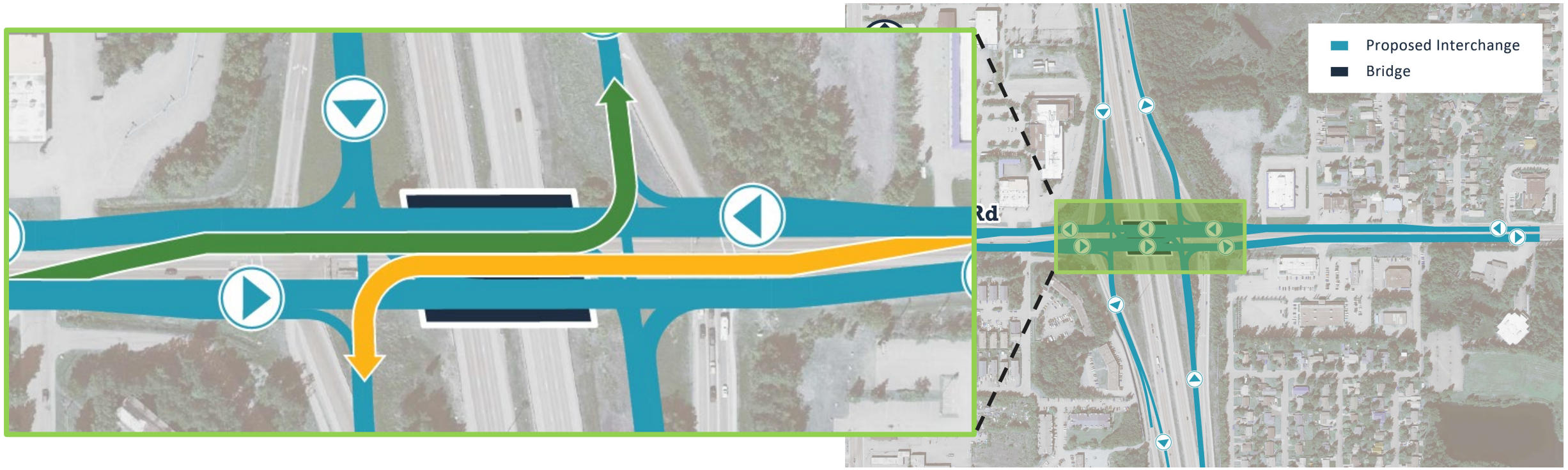
Considerations	
Capacity	●
Footprint	●
Active Transportation Suitability	●
Allows ramp-to-ramp Movements	●
Compatible with 36th Ave Interchange	●
Constructability	●

● Optimal ● Fair ● Poor



Tudor Road INTERCHANGE

Tight Diamond Variant – Contra Flow Left Turns



Tudor Road INTERCHANGE

Tight Diamond Variant – Contra Flow Left Turns

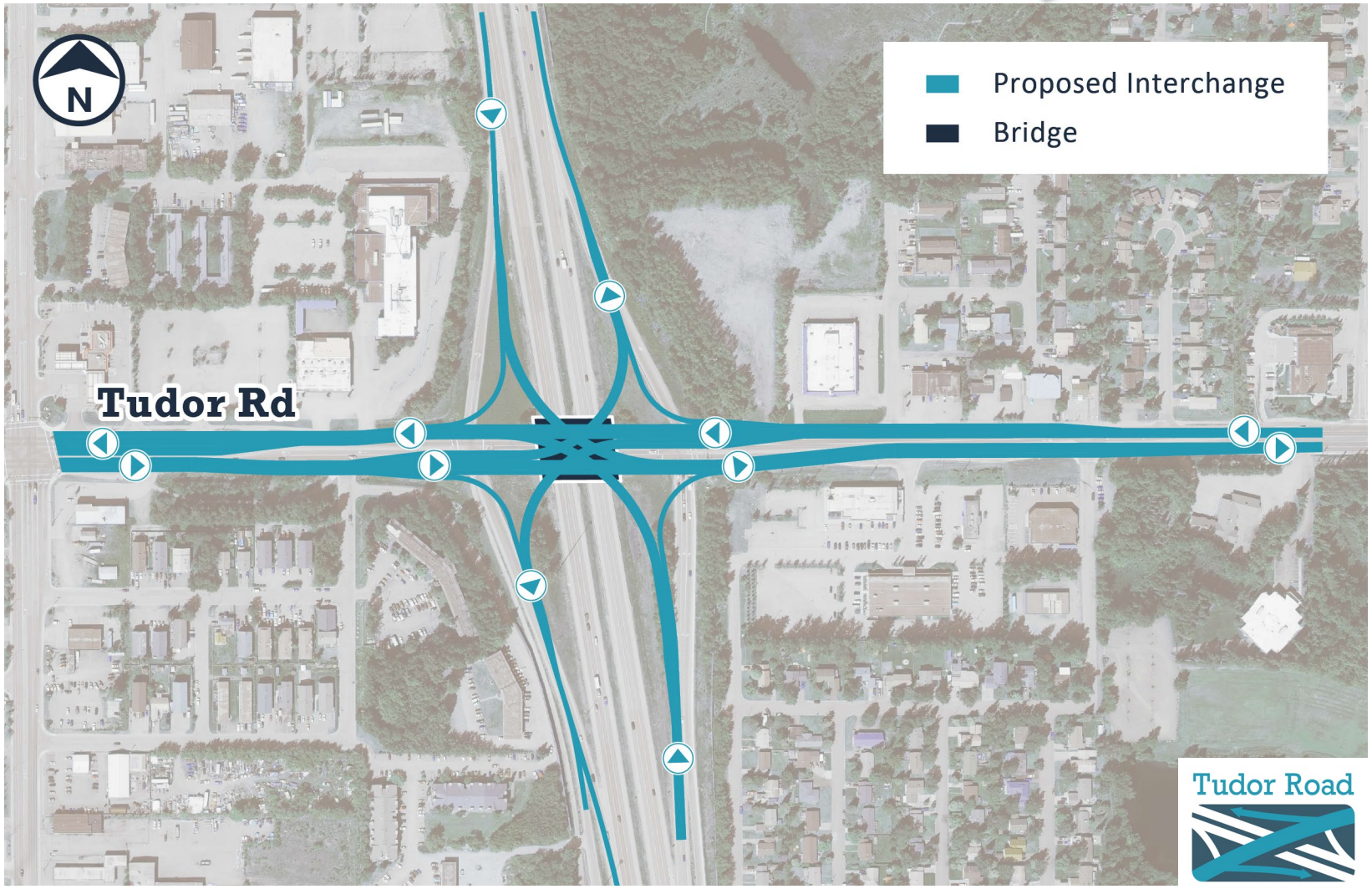
Example: Lyons Road/Sawgrass Expressway, Pompano Beach FL

Tudor Road INTERCHANGE

Single Point Diamond

Considerations	
Capacity	●
Footprint	●
Active Transportation Suitability	●
Allows ramp-to-ramp Movements	●
Compatible with 36th Ave Interchange	●
Constructability	●

● Optimal ● Fair ● Poor

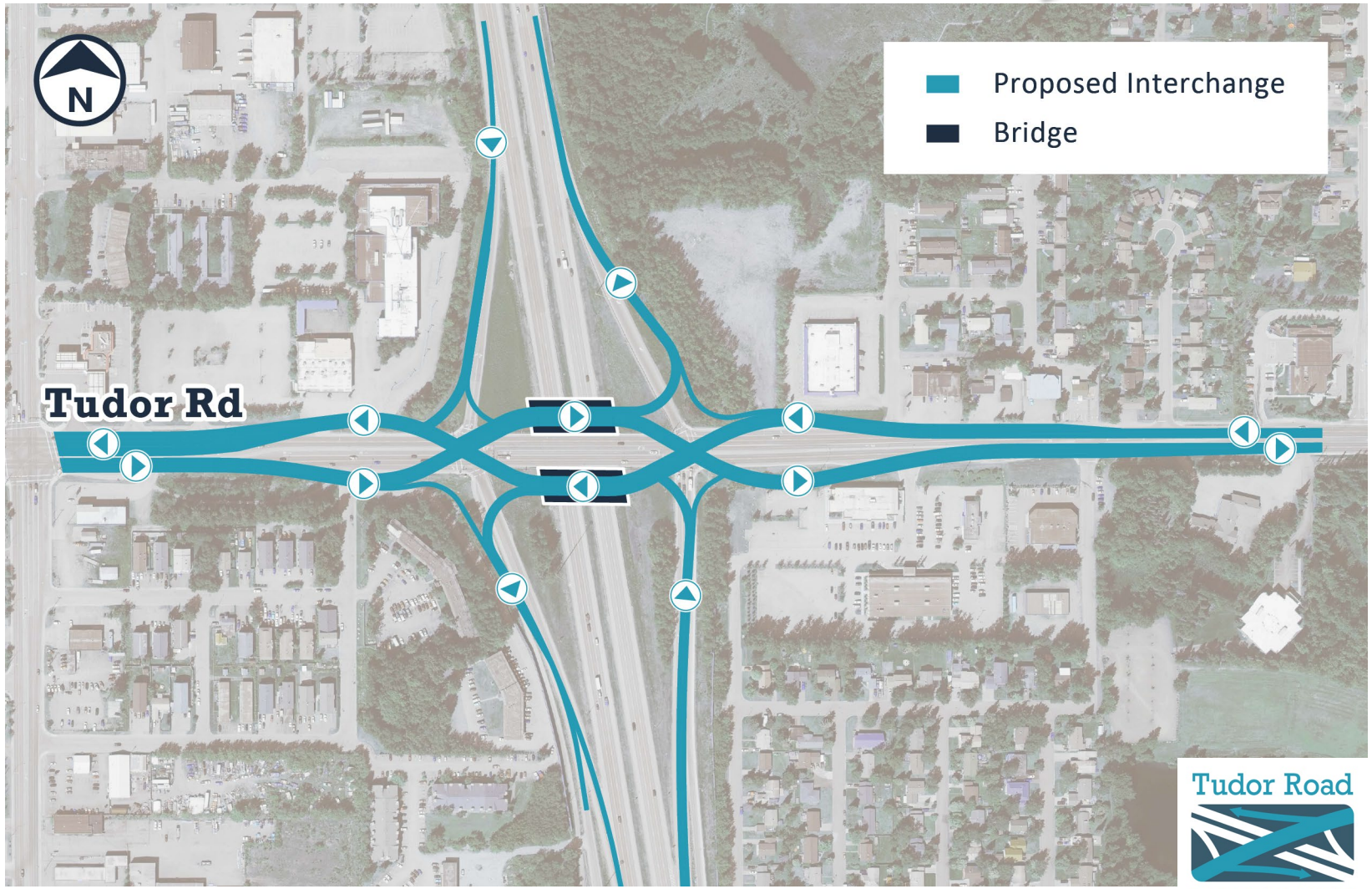


Tudor Road INTERCHANGE

Diverging Diamond

Considerations	
Capacity	●
Footprint	●
Active Transportation Suitability	●
Allows ramp-to-ramp Movements	●
Compatible with 36th Ave Interchange	●
Constructability	●

● Optimal ● Fair ● Poor

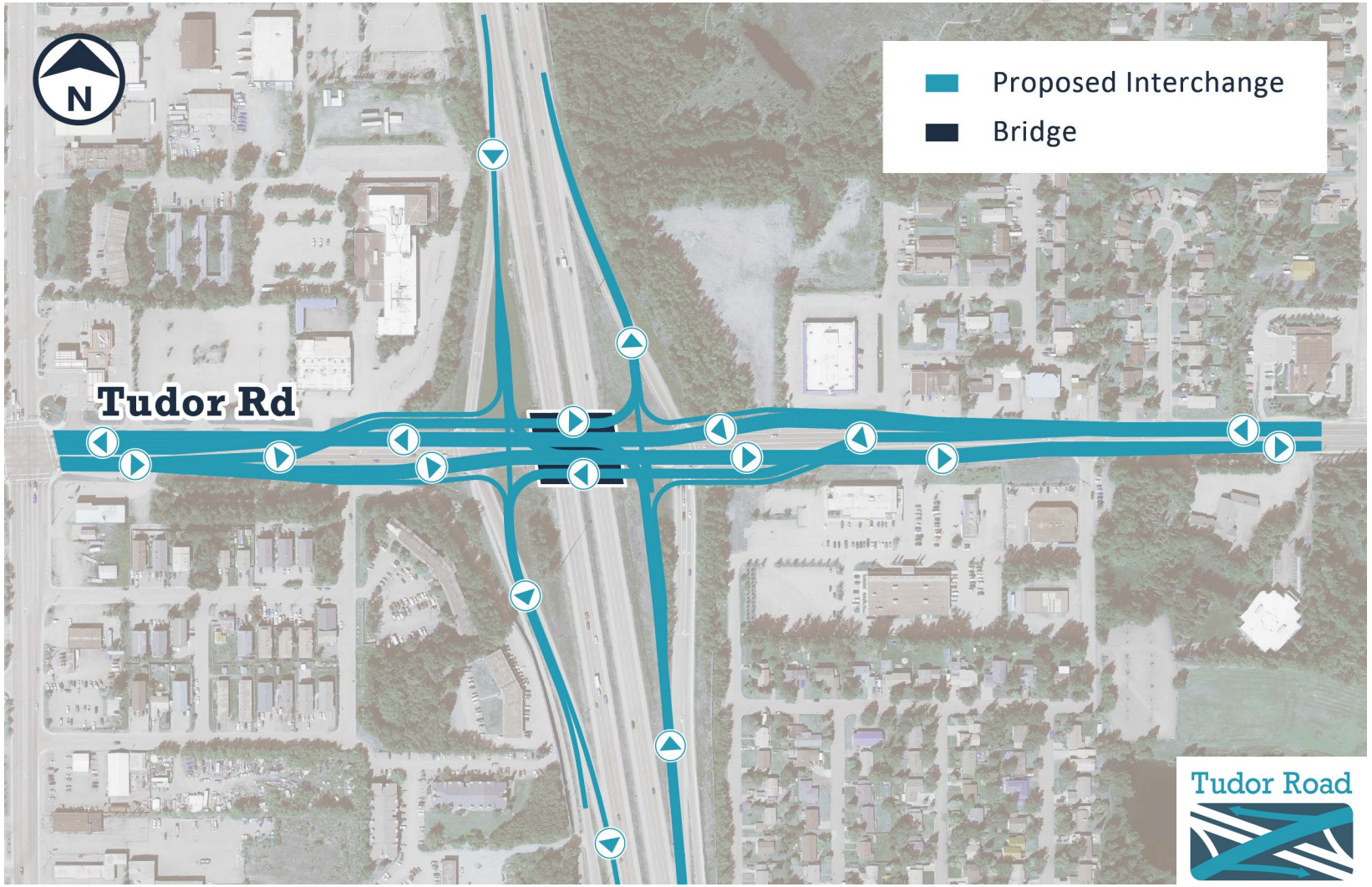


Tudor Road INTERCHANGE

Displaced Left Turns

Considerations	
Capacity	●
Footprint	●
Active Transportation Suitability	●
Allows ramp-to-ramp Movements	●
Compatible with 36th Ave Interchange	●
Constructability	●

● Optimal ● Fair ● Poor



Tudor Road INTERCHANGE

Compatibility Assessment

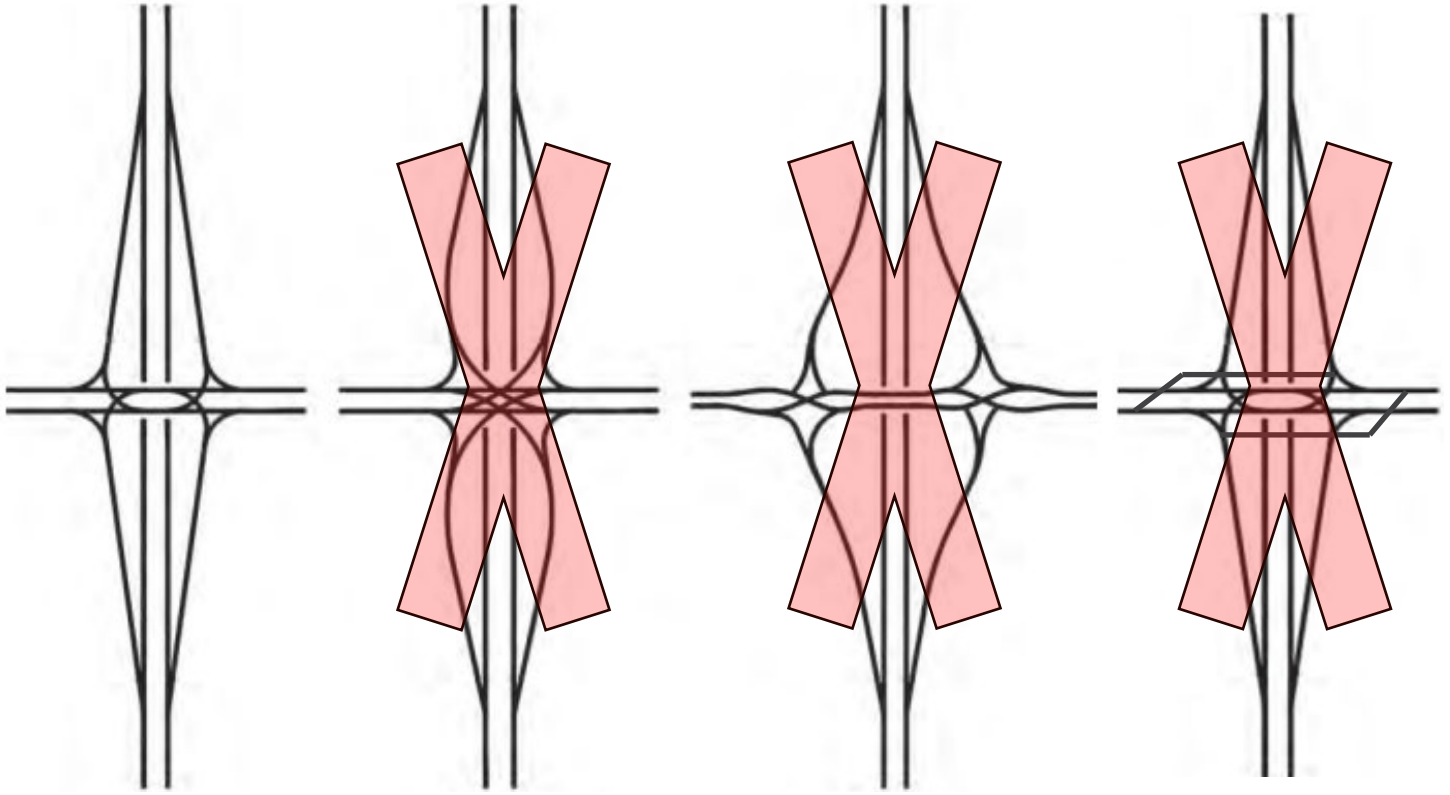
		Diamond Forms			
		Tight Diamond	Single Point	Diverging Diamond	Displaced Left
Considerations	Capacity	Optimal	Optimal	Optimal	Optimal
	Footprint	Optimal	Optimal	Poor	Poor
	Active Transportation Suitability	Optimal	Fair	Fair	Fair
	Allows ramp-to-ramp Movements	Optimal	Poor	Poor	Optimal
	Compatible with 36th Ave Interchange	Optimal	Poor	Poor	Optimal
	Constructability	Fair	Poor	Optimal	Fair

Optimal Fair Poor

Tudor Road INTERCHANGE

Screening Alternatives - Team recommendations

- Drop Single Point, Diverging, and Displaced Left turn Interchanges
- Advance the Tight Diamond form
- Assess value and impacts of the Contra flow left-turn treatment variant
- Assess intersection forms at Shelikof St. and MacInnes St.
- Identify safety treatments at Old Seward Hwy.
- Assess access management opportunities and emergency response needs



Tight Diamond | Single Point Diamond | Diverging Diamond | Displaced Left Turn

Tudor Road INTERCHANGE

Discussion

Next Steps

Next steps

- Incorporate participant feedback into interchange alternatives analysis
- Advance the Tight Diamond form
- Identify strategies at Old Seward Hwy for reducing crash risk
- Identify how to improve active transportation facilities
- Explore intersection control options at Shelikof and MacInnes Streets
- Consider and address access management opportunities and needs
- Document emergency response needs and connections
- Identify network connection opportunities

Tudor Road INTERCHANGE

Next steps

Project Schedule	
Task	**Date**
Public Involvement	Ongoing
Preliminary Design & Environmental	2025 - 2026
Final Design, Permitting, & ROW Acquisition (if required)	2027 - 2029
Construction	2030 – 2032 (dependent on available funding)

Upcoming Events	
Event	**Date**
Open House	December 10, 2025, 4:30 – 6:30 PM Loussac Library Atrium

Tudor Road INTERCHANGE

Thank you for your time today!

DOT&PF
Galen Jones PE, Project Manager

DOWL
Steve Noble PE, Project Manager
Jovie Garcia, Public Involvement

Sunrise Transportation Strategies
Brian Ray, Interchange Planning

Lounsbury & Associates
Joseph Taylor PE, Project Engineer

Kinney Engineering
Jeanne Bowie, Regional Modeling

RRR
Rory Redick, Utility Coordination
Ryan Redick, Utility Coordination

Project Email
TudorInterchange@dowl.com