

GARLAND THOROUGHFARE PLAN

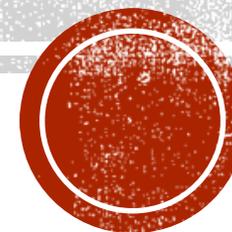
Town Hall Meeting

March 30, 2015



GARLAND

TRANSPORTATION



THOROUGHFARE PLAN FRAMEWORK

- Comprehensive Approach
- Incorporation of Envision Garland
- Public Involvement
- Technical Analysis
- Policy Document





GARLAND THOROUGHFARE PLAN

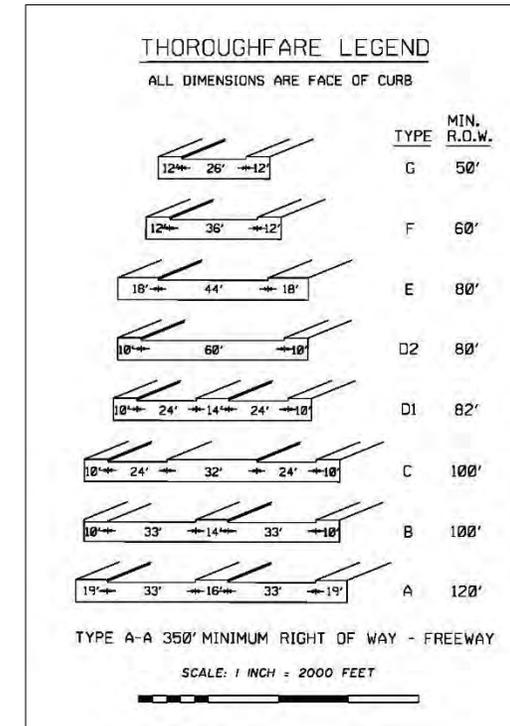
GARLAND THOROUGHFARE PLAN

Existing Thoroughfare Plan Map



Existing Classifications

- Current thoroughfare plan includes 9 functional classifications
- Defines right-of-way needed



GARLAND THOROUGHFARE PLAN

Thoroughfare Plan Amendments

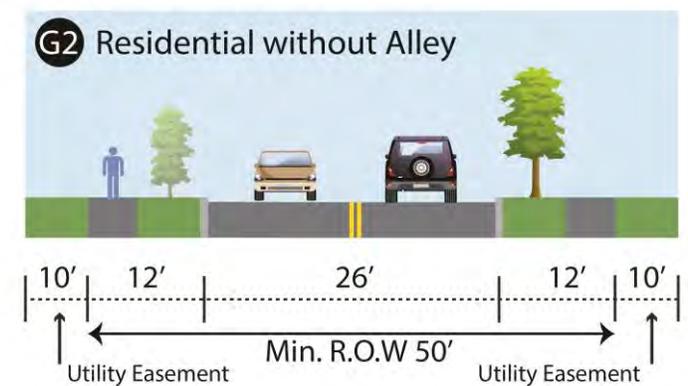
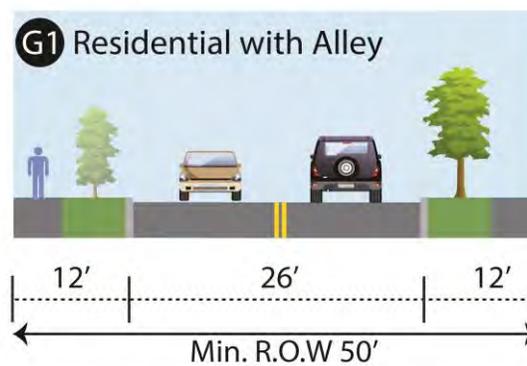
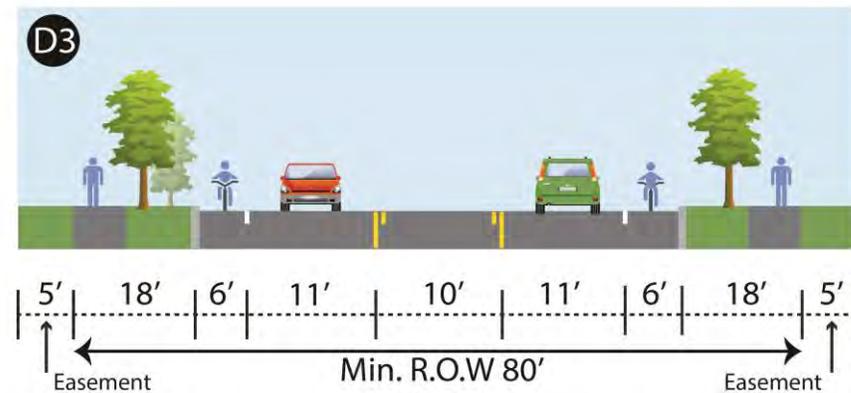
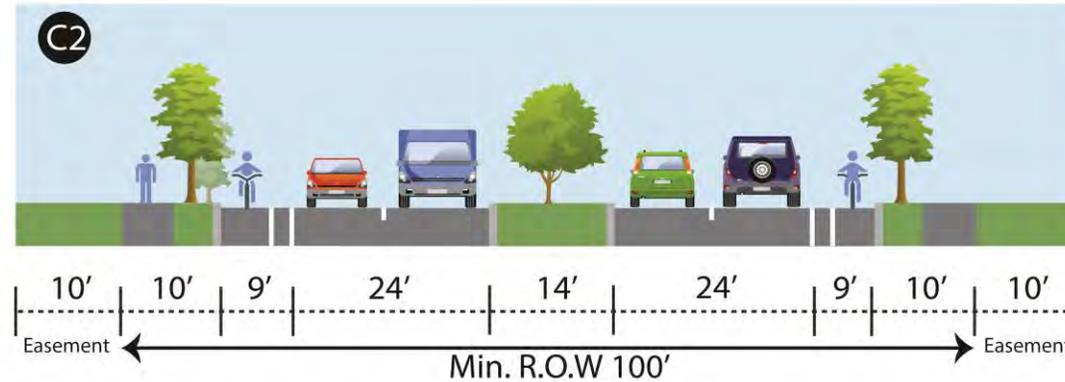
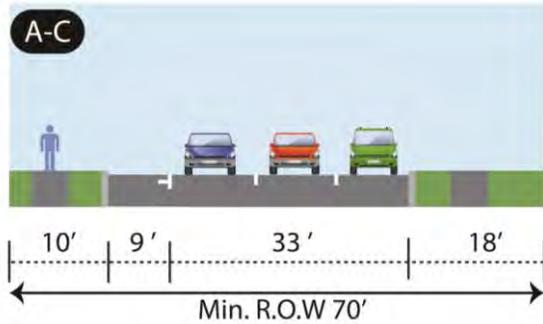
- New classification proposed for thoroughfare plan
- 7 new roadway types
 - A-C
 - C1/C2
 - D3
 - S
 - G1/G2
 - A-F
 - A-R

Functional Class	ROW	Travel Lanes	Median	Easement
A	120'	6	Raised	1' on both sides
A-C	70'	3	No	No
B	100'	6	Raised	10' on both sides
C1	100'	4	Raised	10' on both sides
C2	100'	4	Raised	10' on both sides
D1	82'	4	Raised	5' on both sides
D2	80'	4	Center Turn Lane	5' on both sides
D3	80'	2	Center Turn Lane	5' on both sides
E	80'	4	No	No
F	60'	2	No	No
S	Varies	Varies	Varies	Varies
G1	50'	2	No	No
G2	50'	2	No	10' on both sides
A-A	Varies	Varies	No	Varies
A-F	Varies	Varies	No	Varies
A-R	Varies	Varies	No	Varies

GARLAND THOROUGHFARE PLAN

Thoroughfare Plan Amendments

■ New Thoroughfare Cross Sections



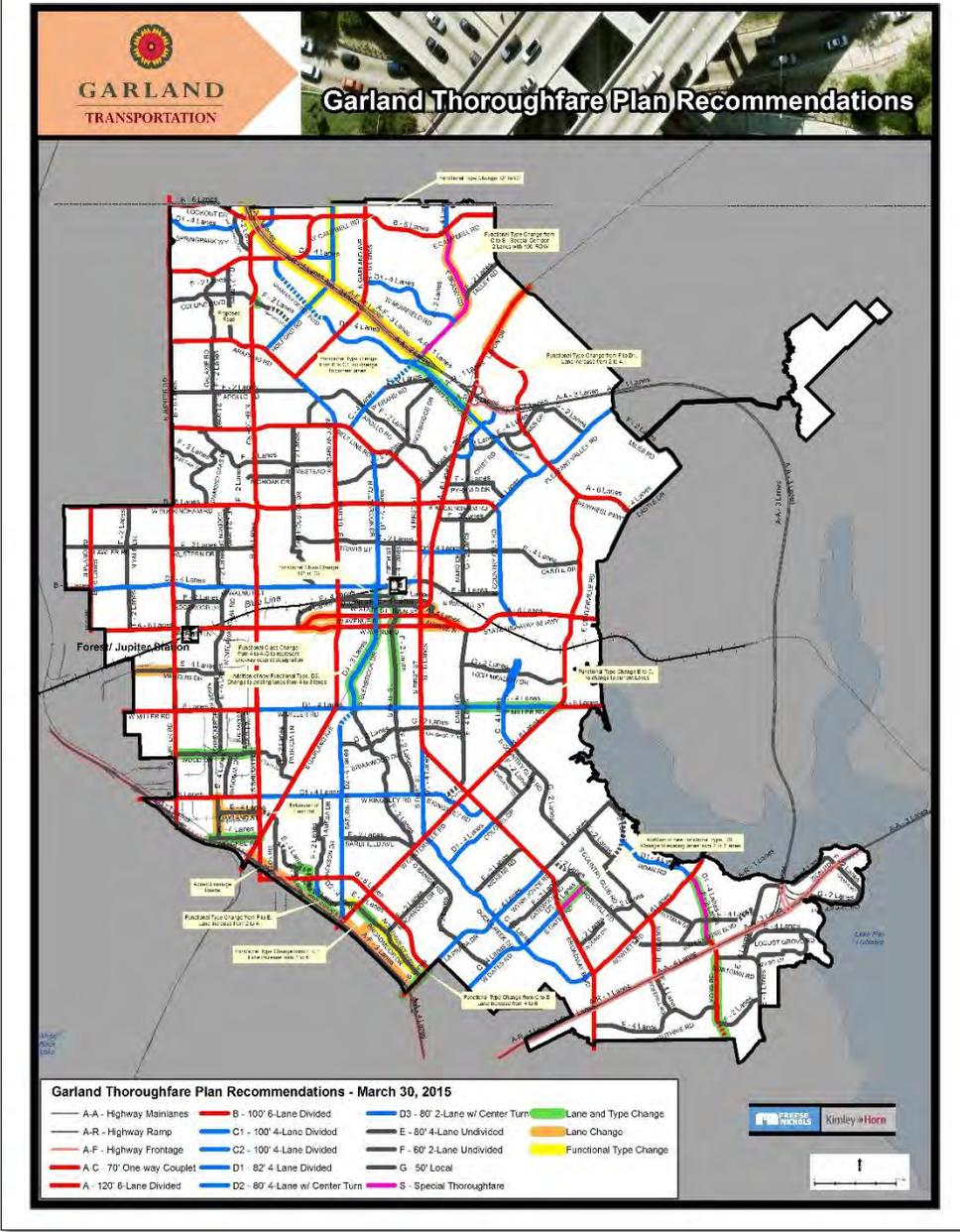
GARLAND THOROUGHFARE PLAN

Thoroughfare Plan Amendments

Address the Current Network Demands within Garland

- Improved Roadway Capacity
- Improved Network Connectivity
- Functional Class Changes
- New Roadways
- Roadway Extensions





REVISED THOROUGHFARE MAP

GARLAND THOROUGHFARE PLAN

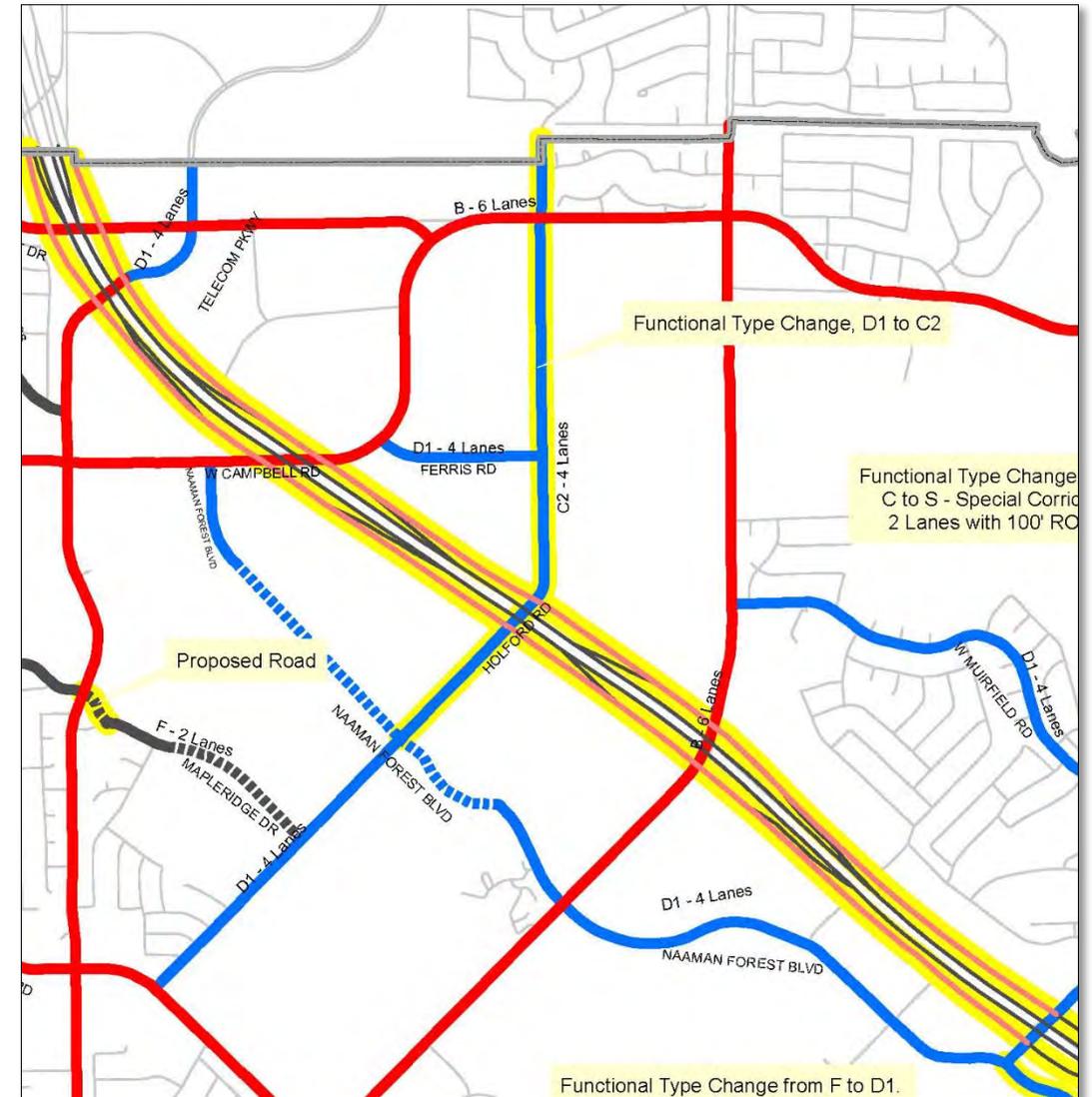
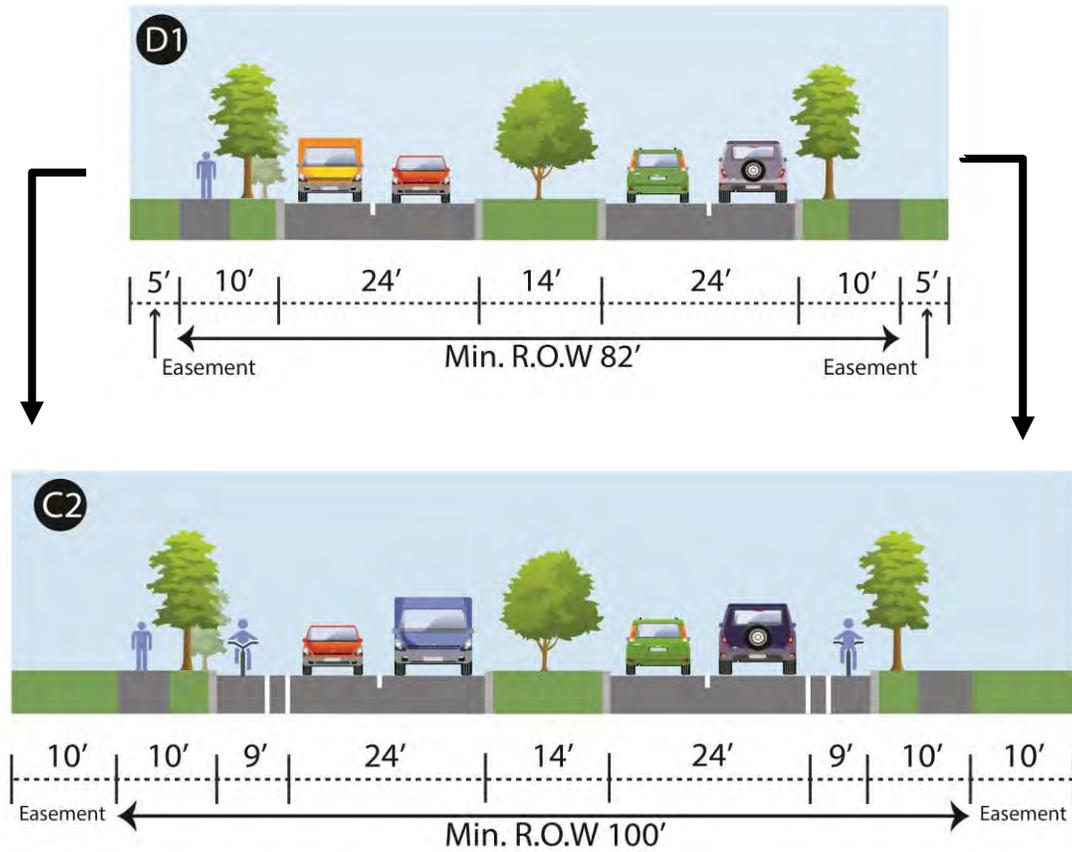
Thoroughfare Plan Amendments

	Street Name	From	To	
1	Holford Rd	Naaman Forest	North city limit	D1 to C2
2	Brand Rd	Muirfield Rd	Campbell Rd	C to S
3	Mapleridge Dr	at Shiloh Rd		Realignment
4	Naaman School Rd	Brand Rd	Lavon Dr	F to D1
5	Glenbrook Dr	Walnut St	Miller Rd	D2 to D3
6	Avenue B/Avenue D	One-way pairs		A to A-C
7	Miller Rd	Dairy Rd	Centerville Rd	B to C1
8	Leon Rd	Garland Ave	Shiloh Rd	Extension
9	Marketplace Dr	Through Centerville Marketplace catalyst area		Extension
10	IH 635	On both sides within Garland		New Roadway
11	Oates Rd	Broadway Blvd	Rosehill Rd	D1 to S
12	La Prada Dr	Northwest Hwy	IH 635	C1 to B
13	Roan Rd	Rowlett Rd	Bobtown Rd	B to C2
14	IH 30 Frontage	At Lake Ray Hubbard		New Roadway
15	Garland Ave	Belt Line Rd	Arapaho Rd	B to C1

GARLAND THOROUGHFARE PLAN

Holford Rd

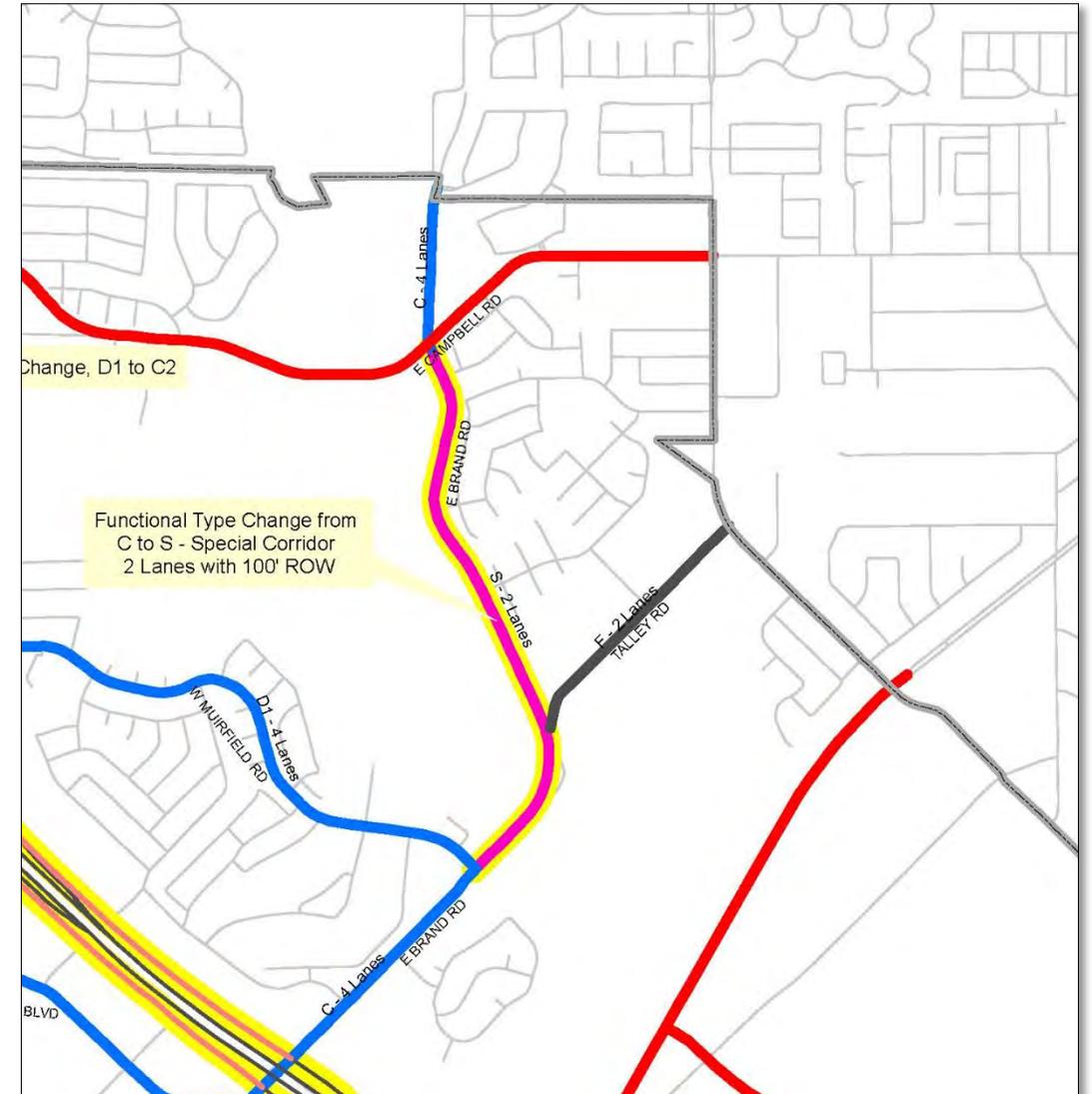
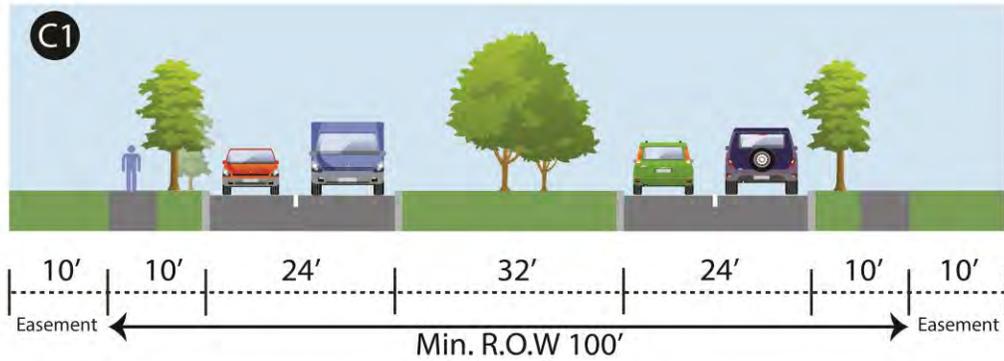
- Change from D1 to C2



GARLAND THOROUGHFARE PLAN

Brand Rd

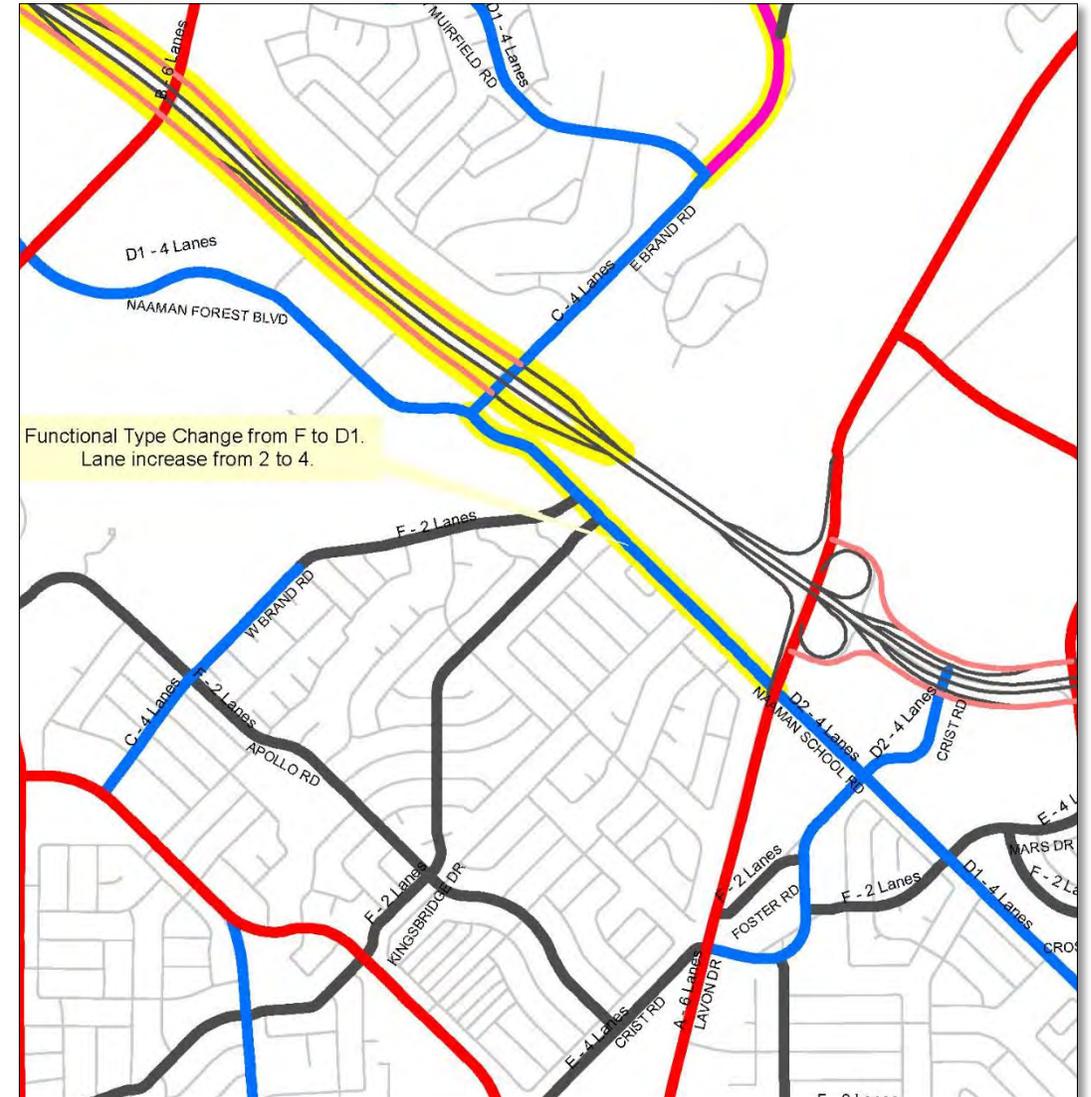
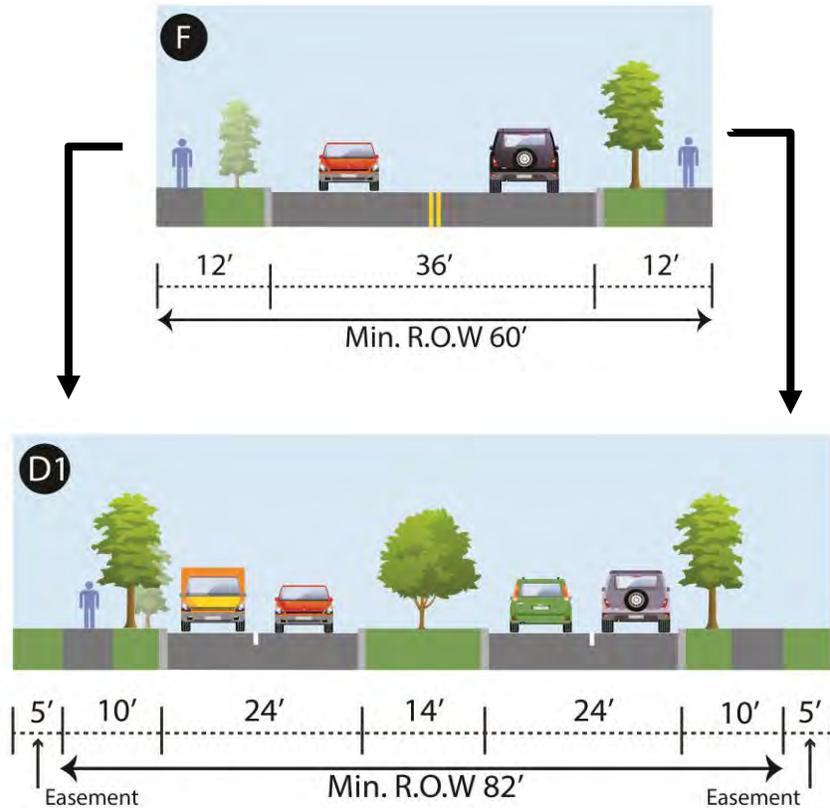
- Change from C to S



GARLAND THOROUGHFARE PLAN

Naaman School Rd

- Change from F to D1

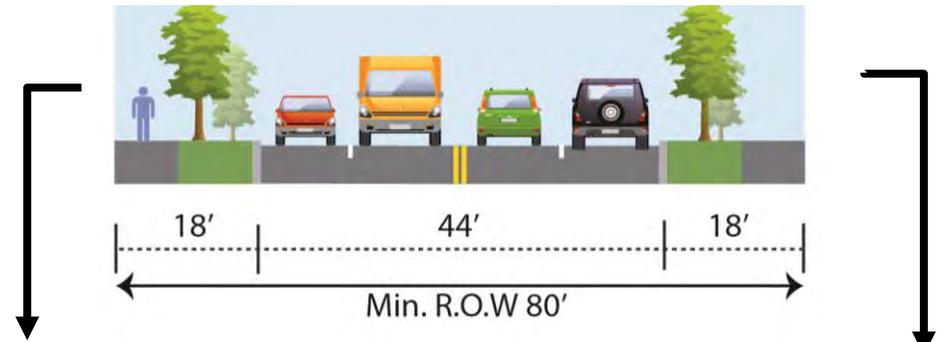


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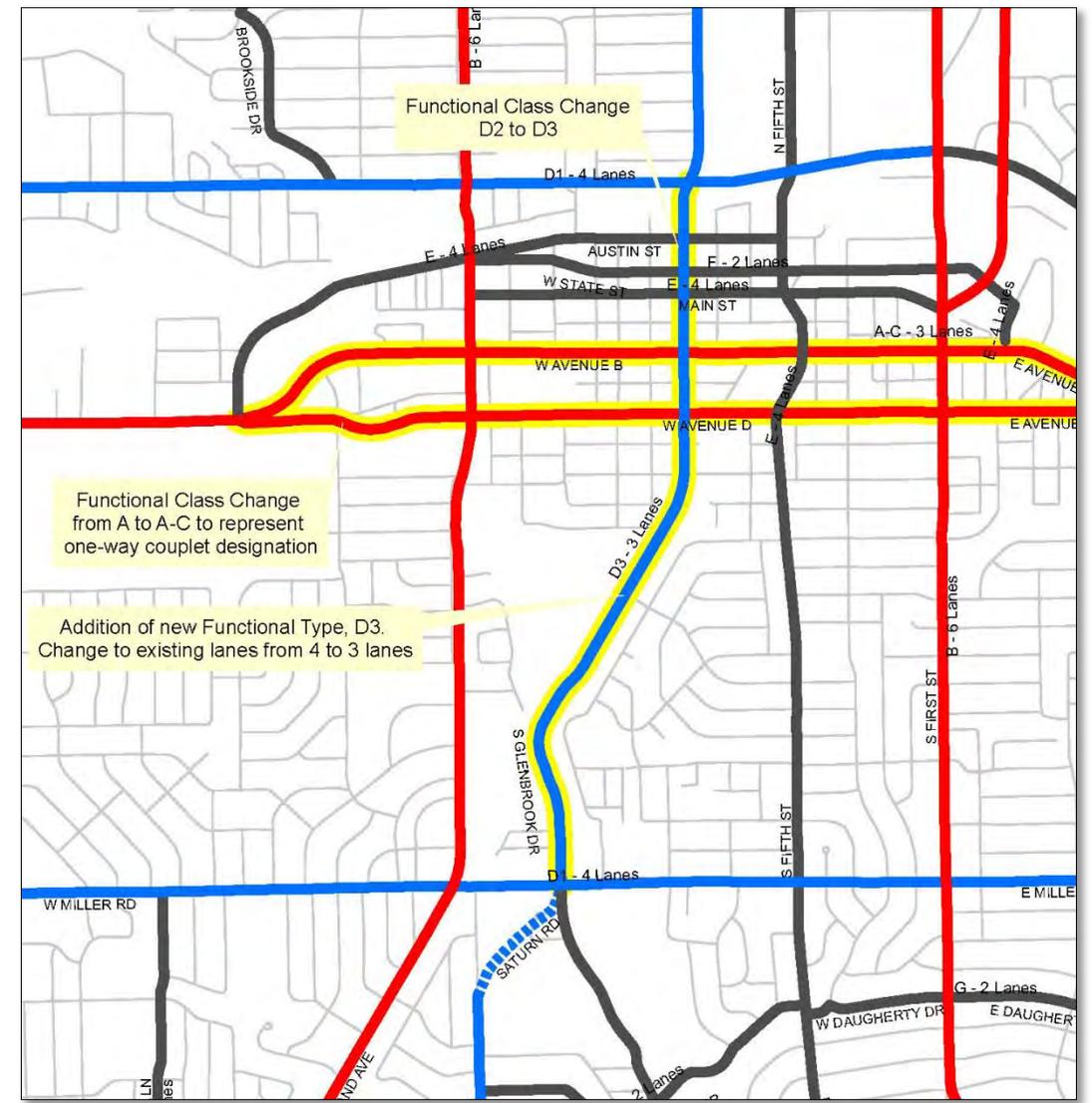
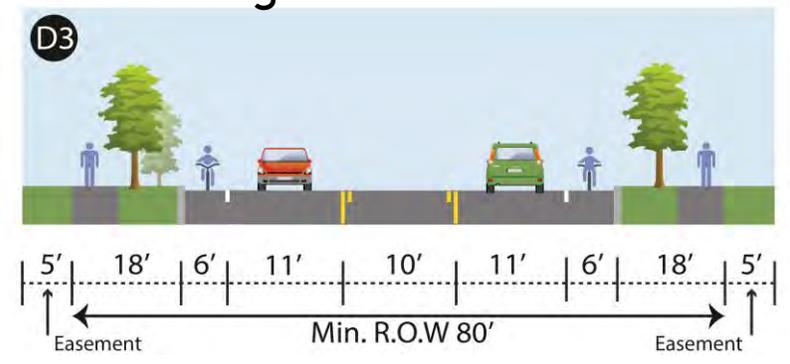
Glenbrook Dr

- Change Designation to D3

Previous Cross-Section



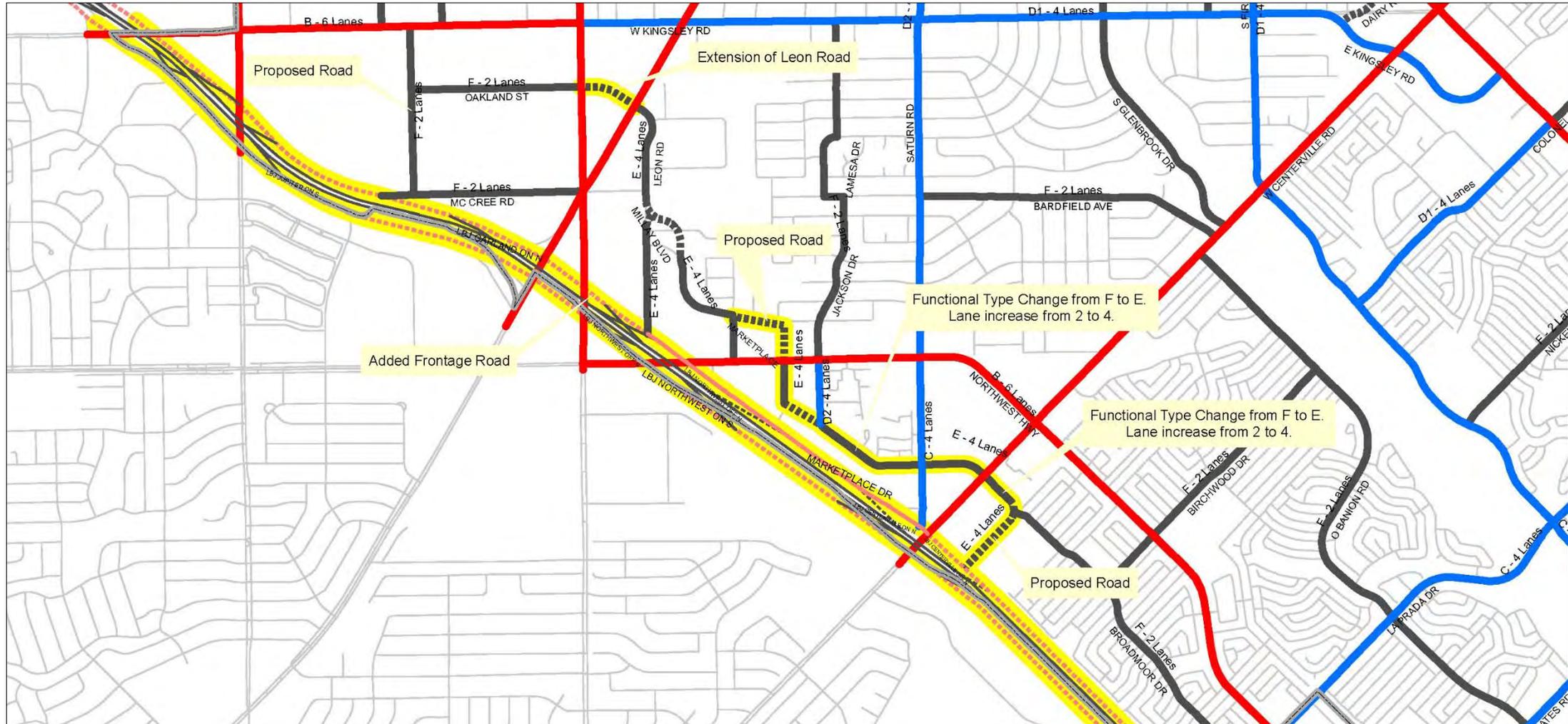
Current Designation*



* Represents Current Street Section

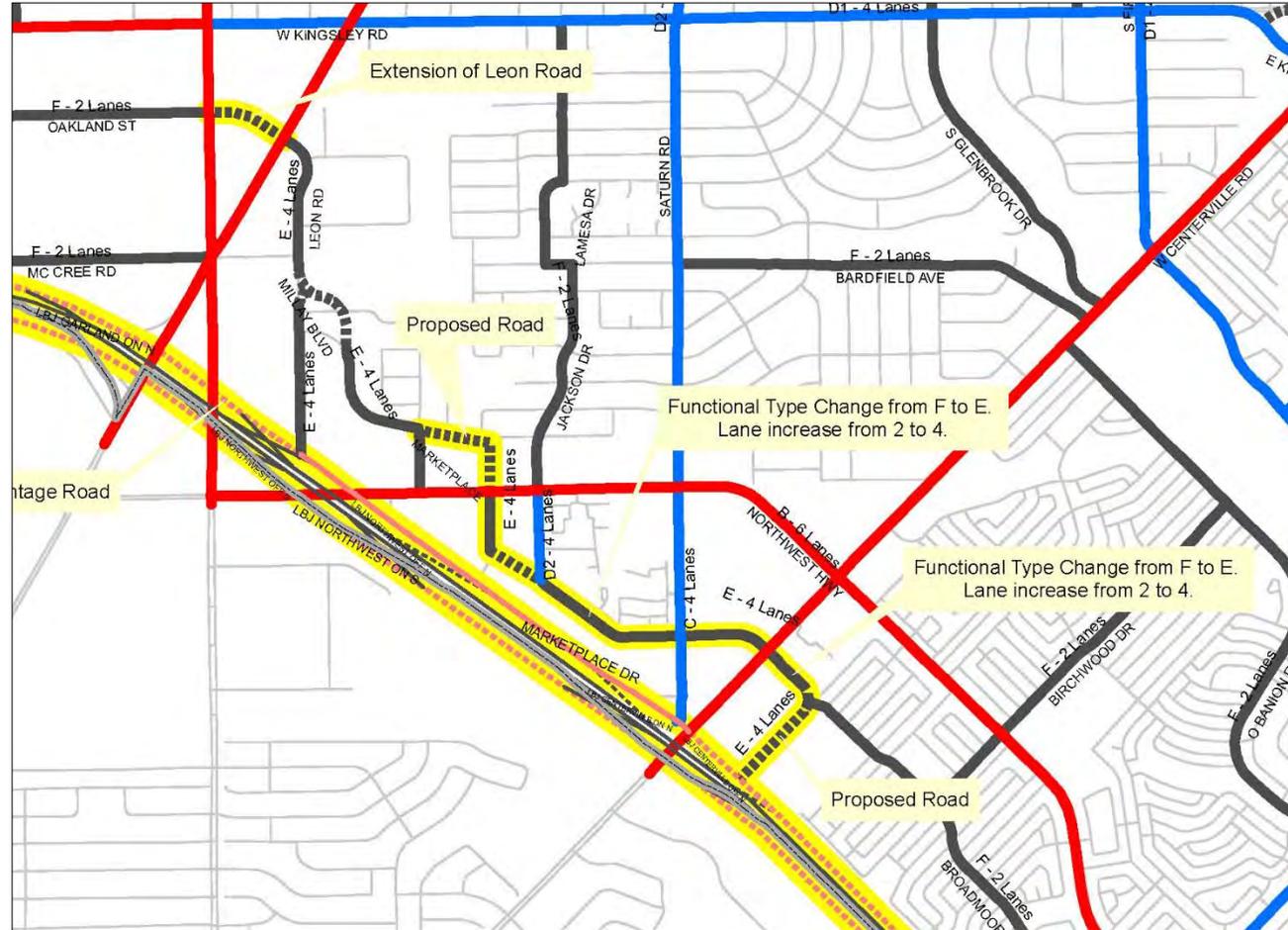
GARLAND THOROUGHFARE PLAN

IH 635 Frontage Roads



GARLAND THOROUGHFARE PLAN

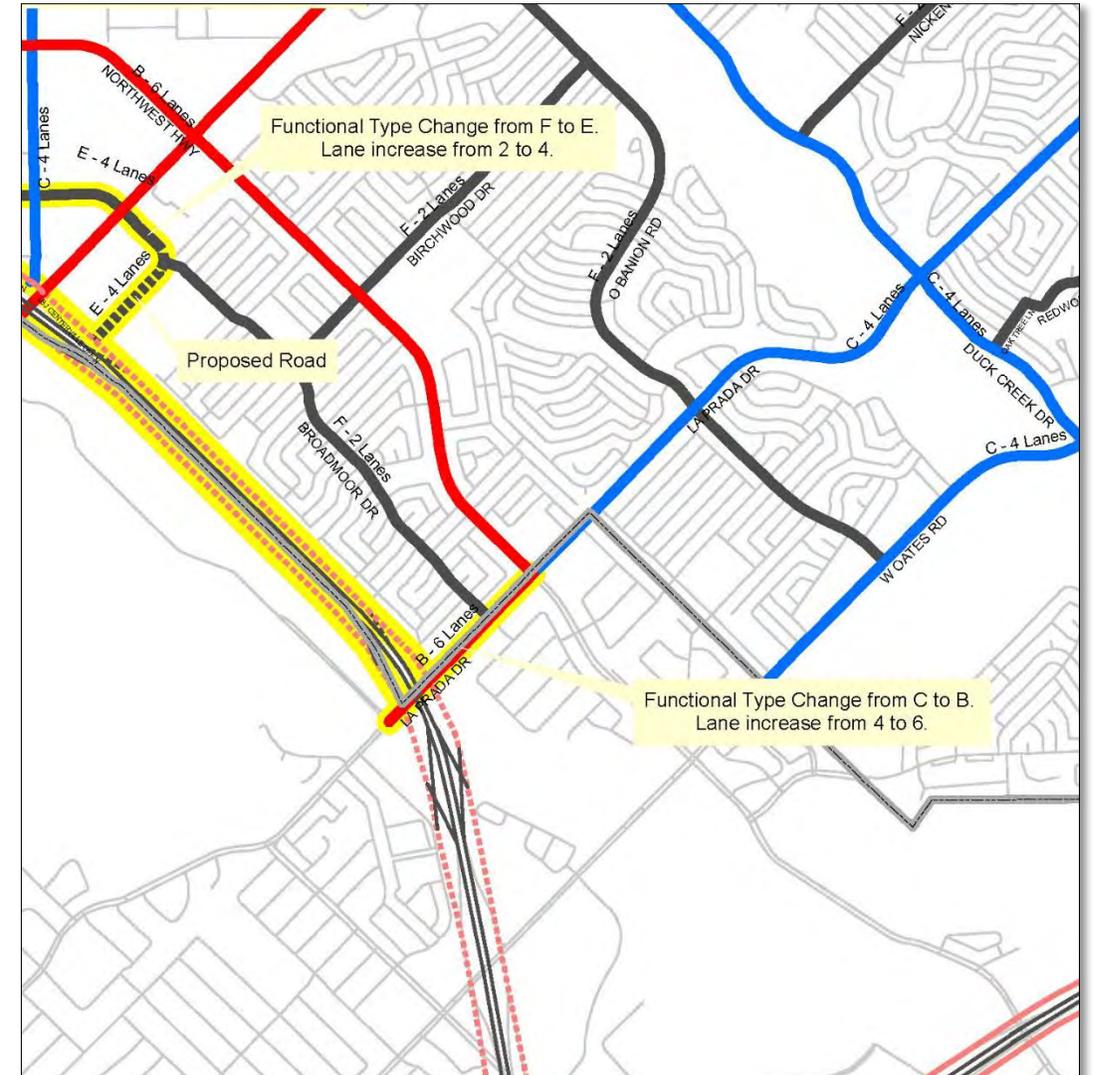
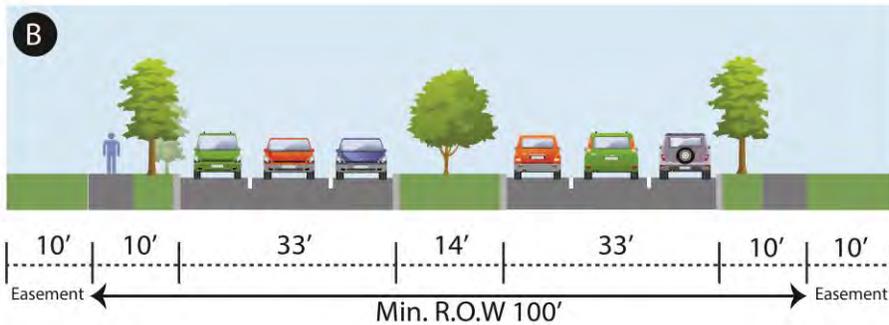
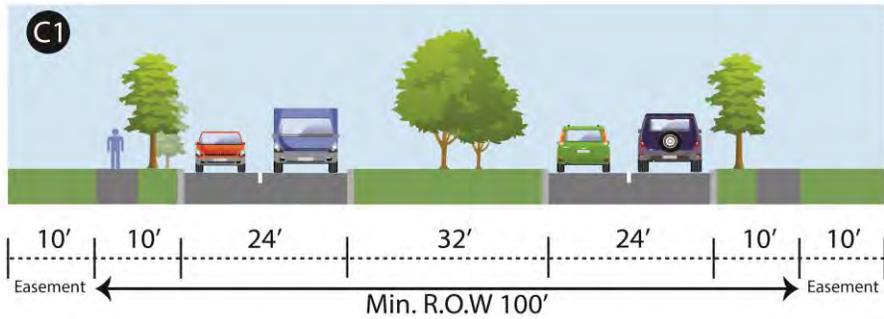
Leon Rd & Marketplace Rd Extensions



GARLAND THOROUGHFARE PLAN

La Prada Rd

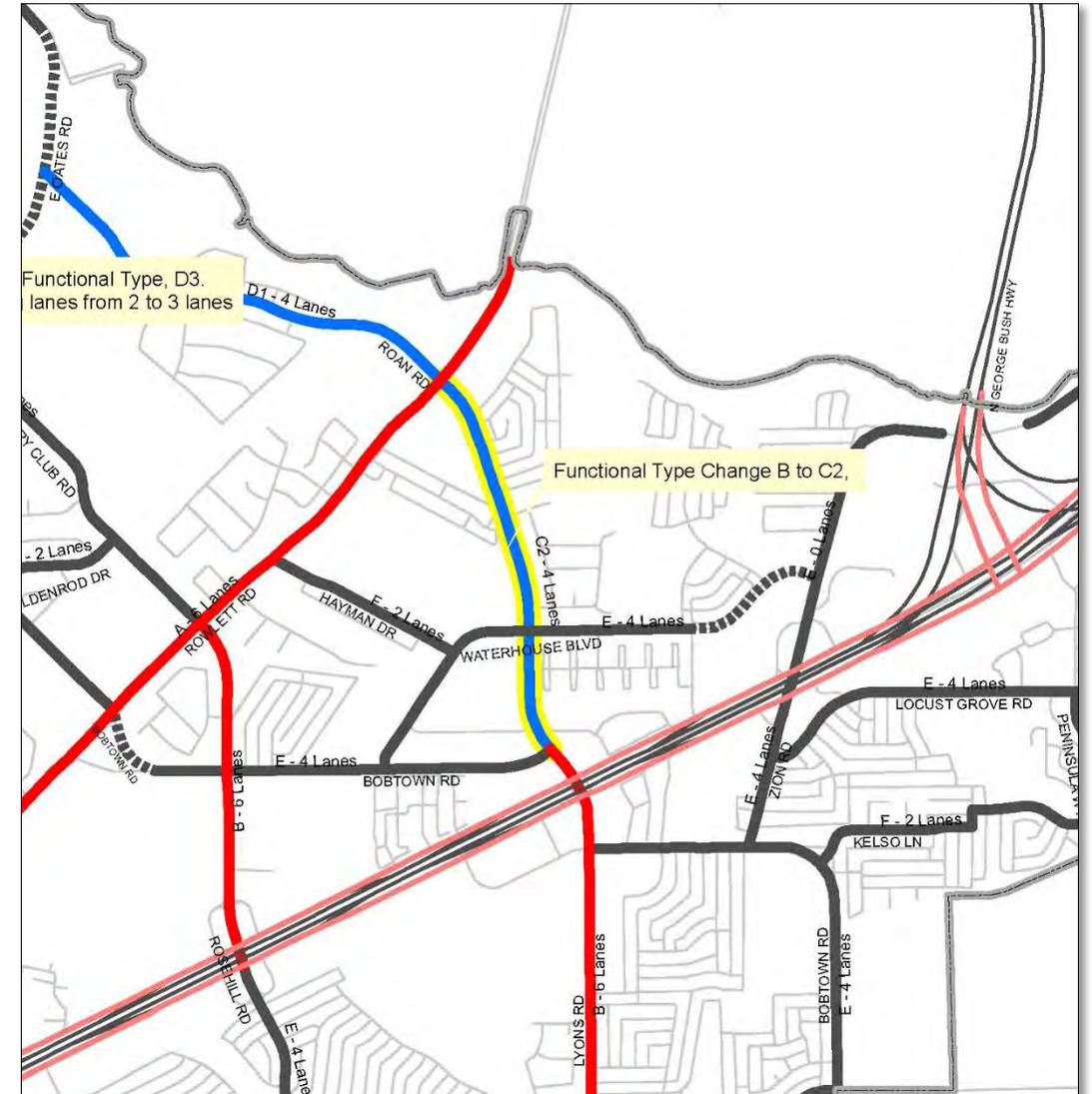
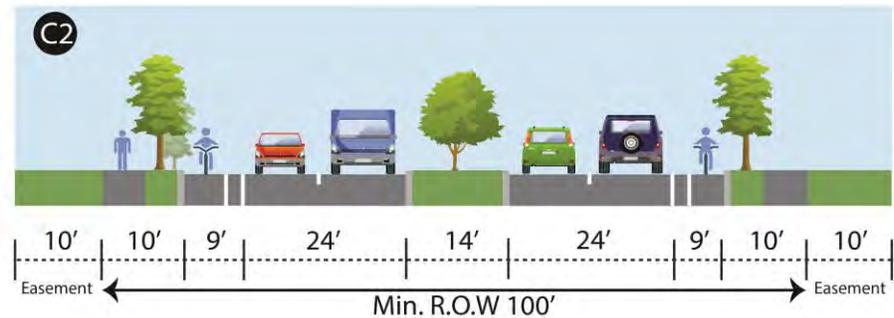
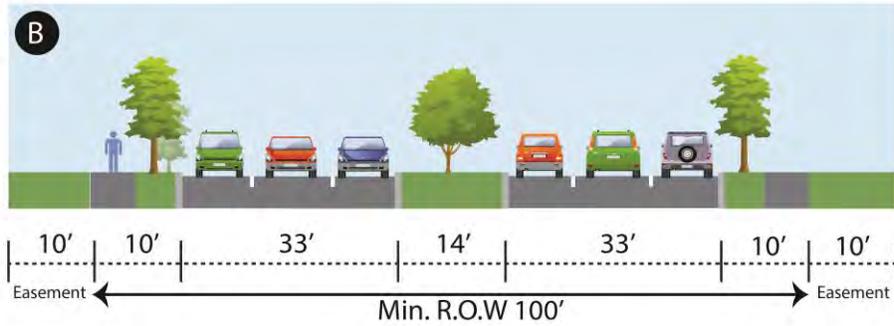
- Change from C to B



GARLAND THOROUGHFARE PLAN

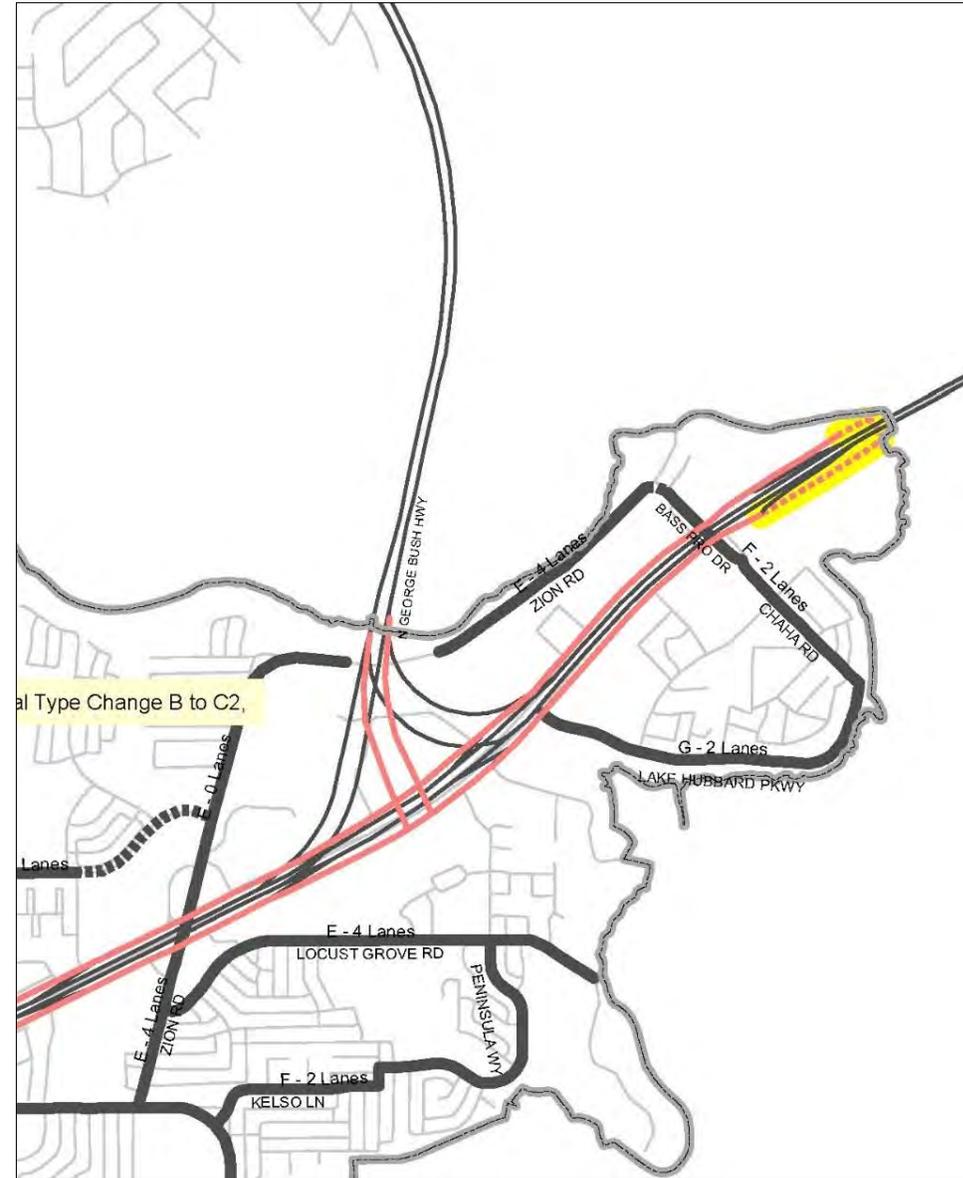
Roan Rd

- Change from B to C2



GARLAND THOROUGHFARE PLAN

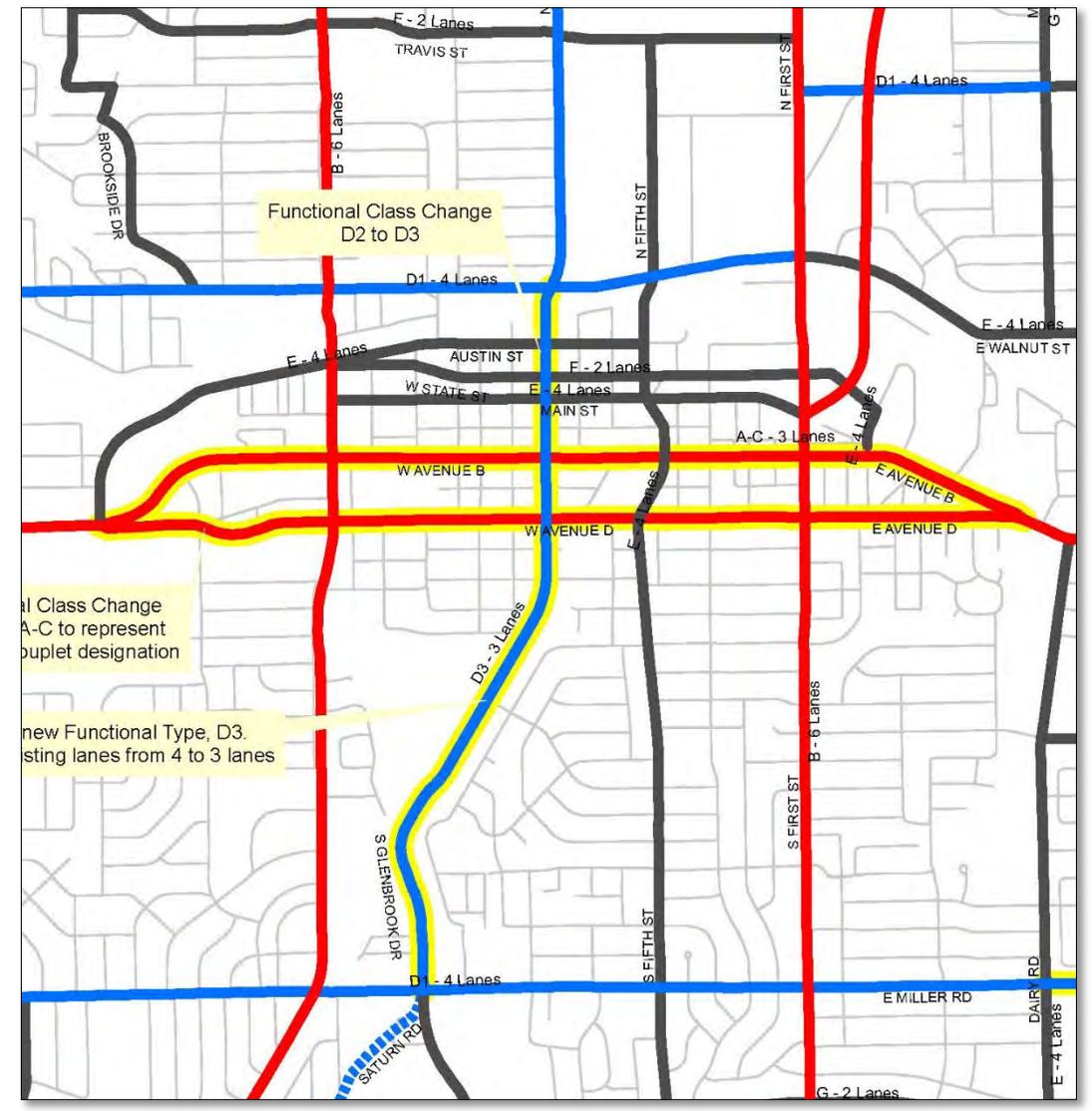
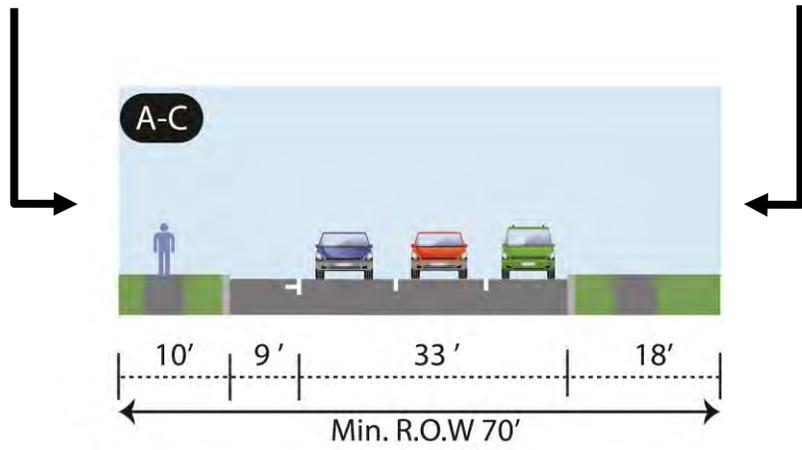
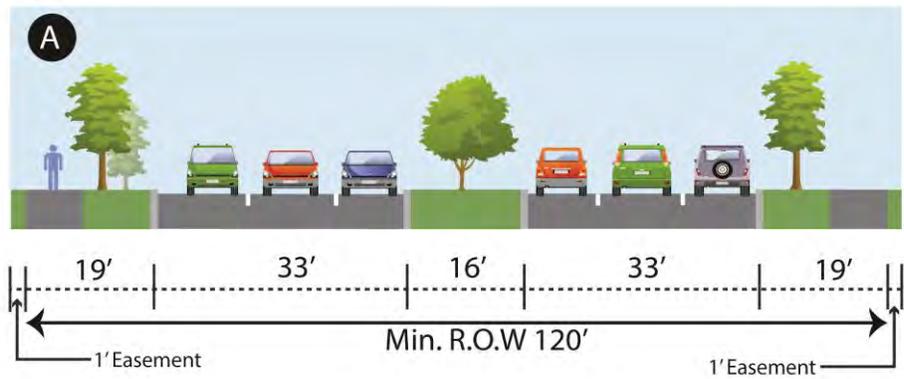
IH 30 Frontage & U-turn



GARLAND THOROUGHFARE PLAN

Avenue B/Avenue D

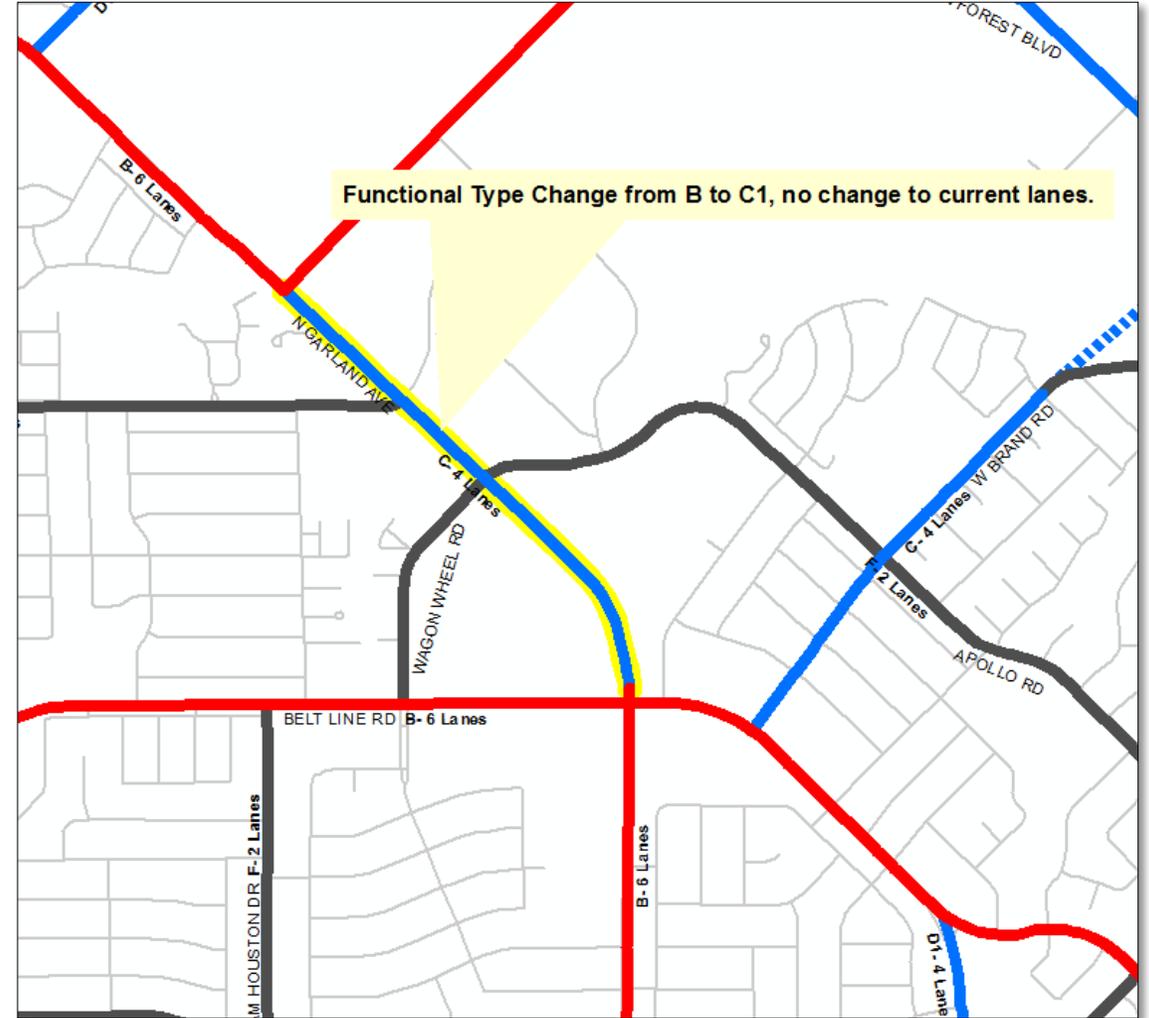
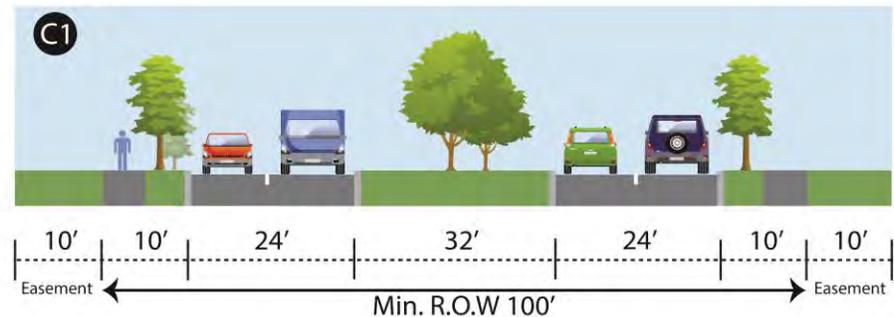
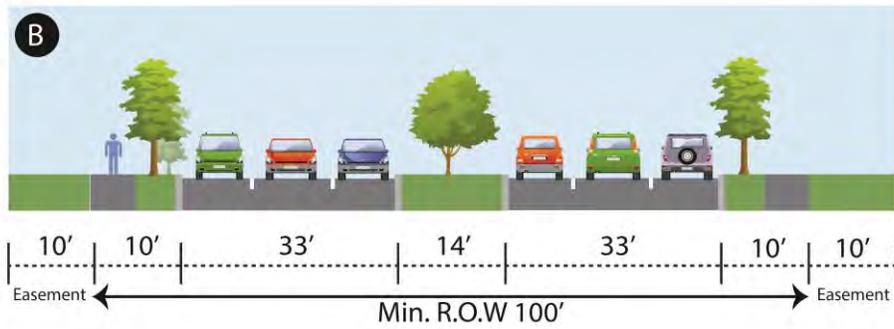
- Change from A to A-C



GARLAND THOROUGHFARE PLAN

Garland Ave

- Change from B to C1



GARLAND THOROUGHFARE PLAN

Consideration: Avenues B and D as Two-Way Streets

Converting one-way couplets to two-way streets with enhancements:

- **Projected Traffic Volumes:**
 - Avenue B: 5,000 per day
 - Avenue D: 40,000 per day
- **Additional lane capacity needed on Avenue D**
 - ROW needs for 6-Lane facility (30 – 50 ft. additional pavement)

One-way Couplet vs Two-way Street

	Pros	Cons
One-Way Couplet	<ul style="list-style-type: none">• Potential Lane Reduction• Corridor Enhancements	<ul style="list-style-type: none">• Excess Capacity• Barrier for Downtown Expansion
Two-Way Street	<ul style="list-style-type: none">• Opens Ave B for Development• Lane Reductions for Ave B• Simple Traffic Circulation• Expanded Downtown to Ave D	<ul style="list-style-type: none">• Overloads Ave B• Lane Additions to Ave D• Additional ROW Needed

Recommendation: One-Way Couplet

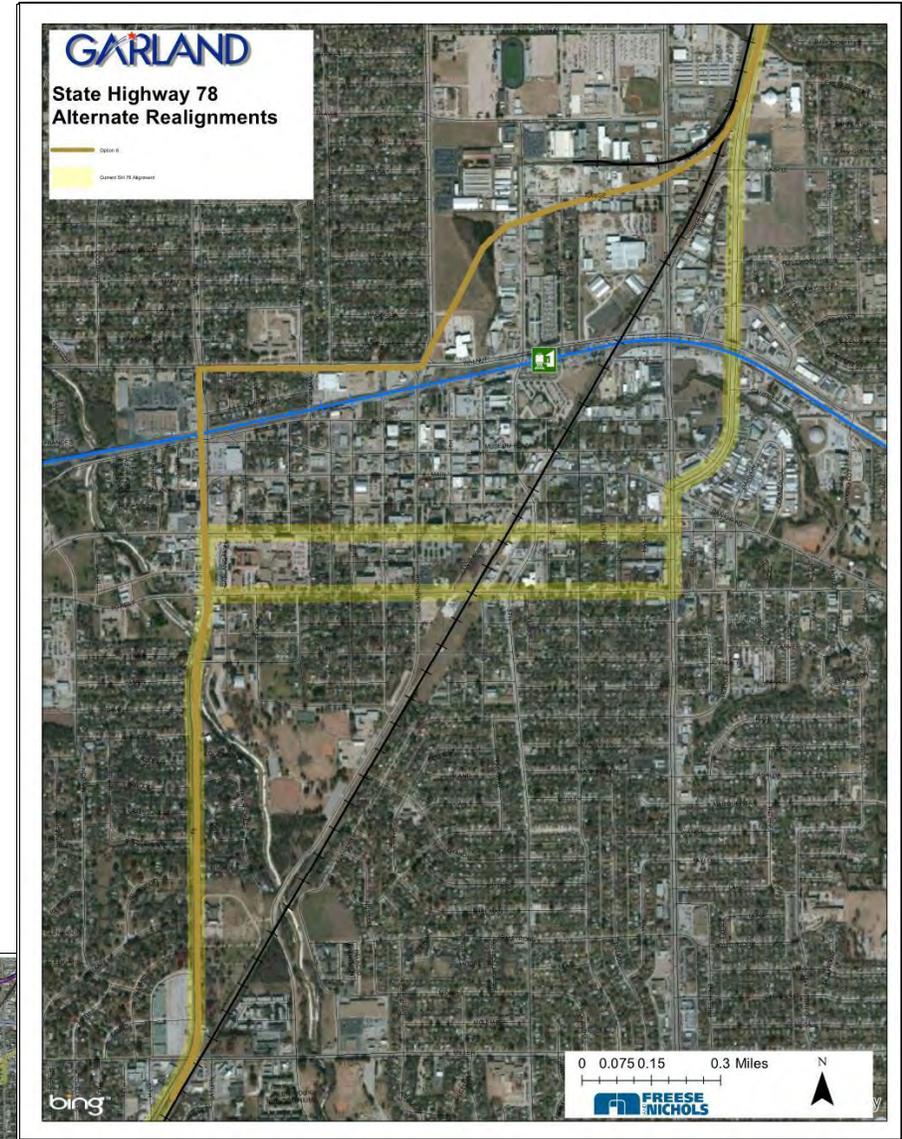


STATE HIGHWAY 78 ALTERNATIVES

STATE HIGHWAY 78 ALTERNATIVES

Alignment Alternatives

- Pros and Cons for Six (6) Alternative Alignments Presented to City Staff
- Preferred Alternative Derived by City Staff
- Select Link Analysis on Preferred Alternative



Alternative 1



Alternative 2



Alternative 3



Alternative 4



Alternative 5



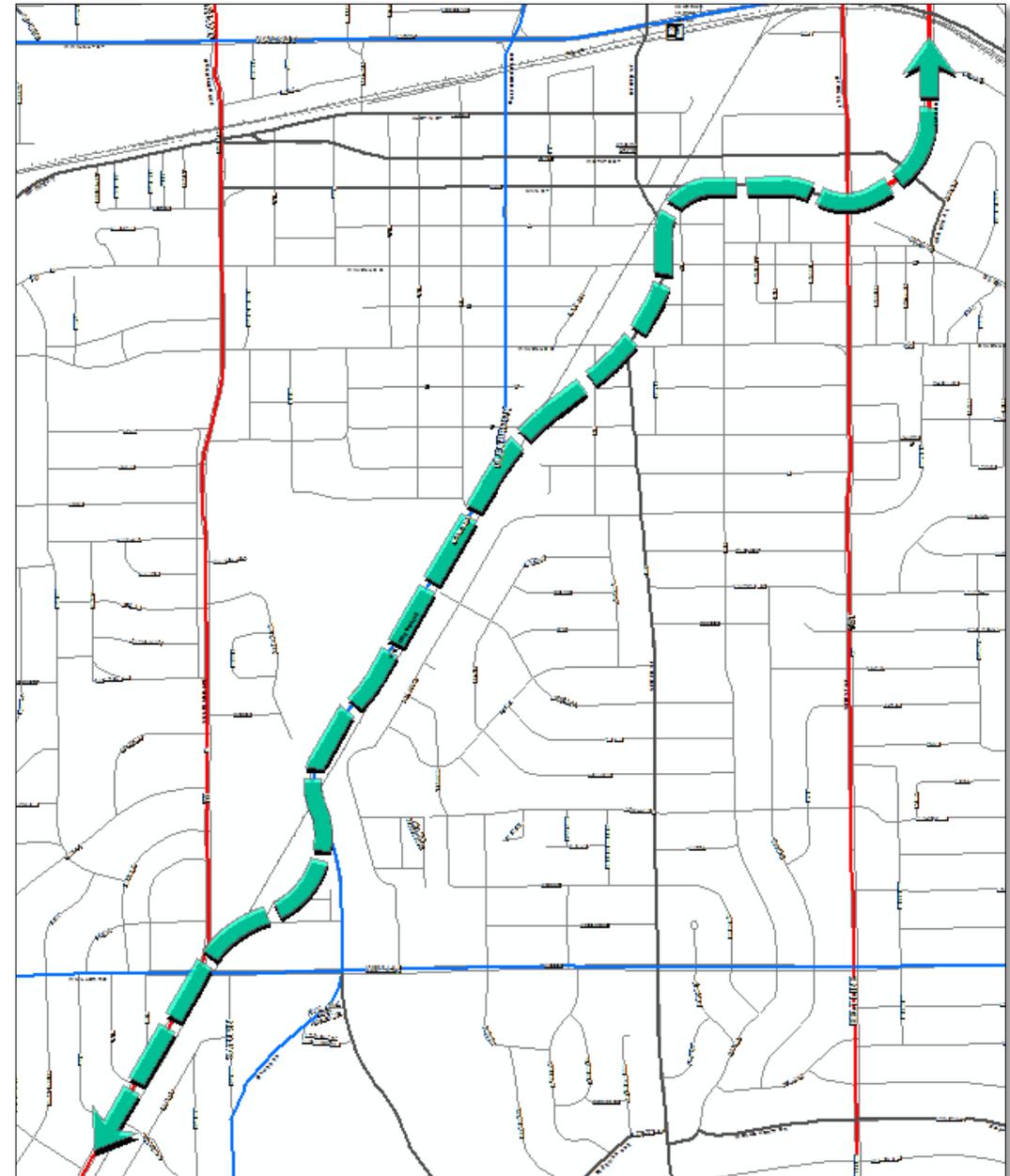
Alternative 6

STATE HIGHWAY 78 ALTERNATIVES

Selected Alternative for Conceptual Analysis

Pros

- Provides a direct route within Garland
- Expands Potential for Downtown Garland
- Creates a New Front Door for Downtown
- May Alter Traffic Demands for Downtown Area
- Grand Boulevard as Identified in Envision Garland



STATE HIGHWAY 78 ALTERNATIVES

Preferred Alignment

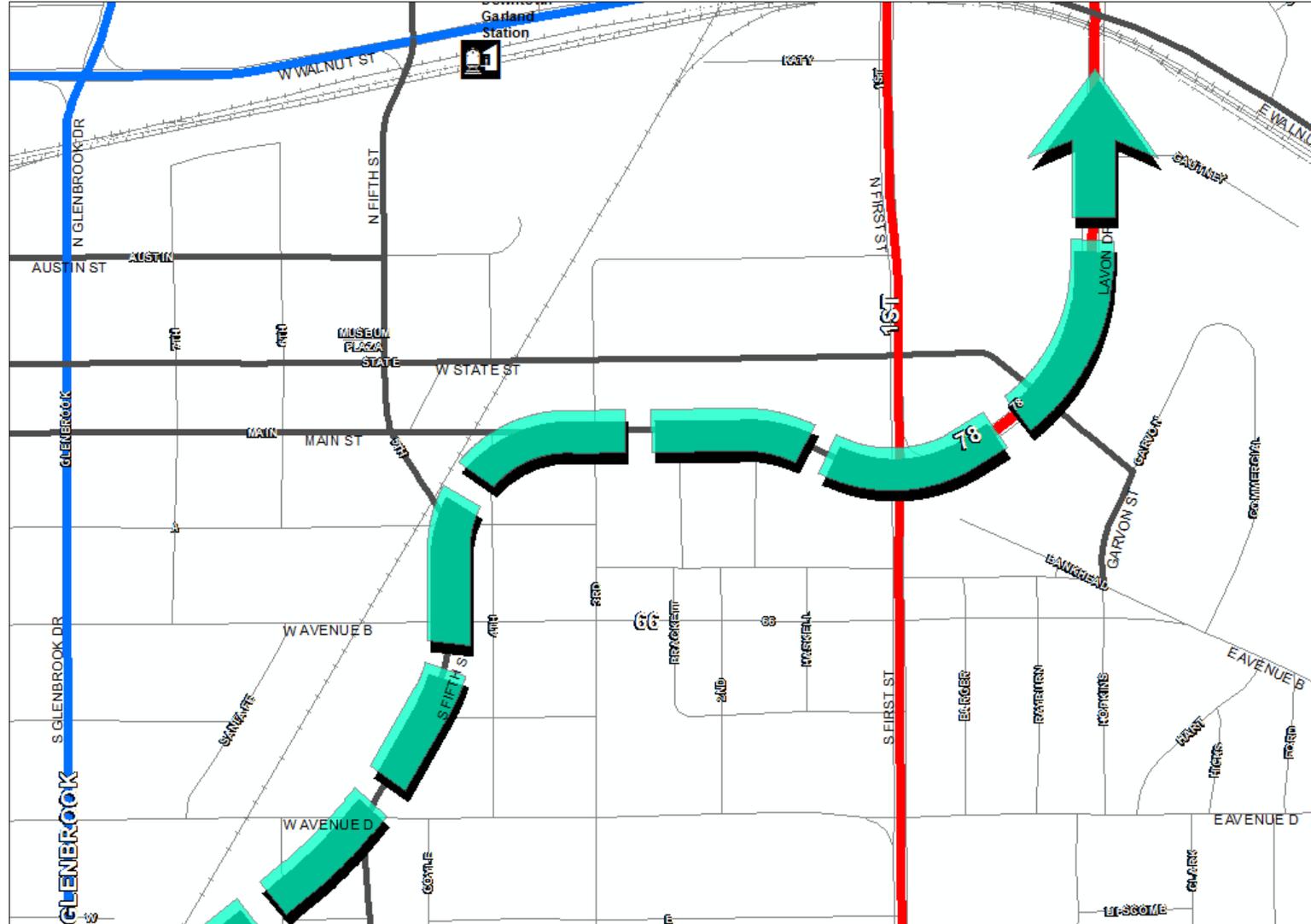
Cons

- Property Impacts
 - Commercial
 - Residential
- Rail Road Coordination
- Major Utility Corridor
- Mobility vs Local Access
- Quality of Life
- Expensive



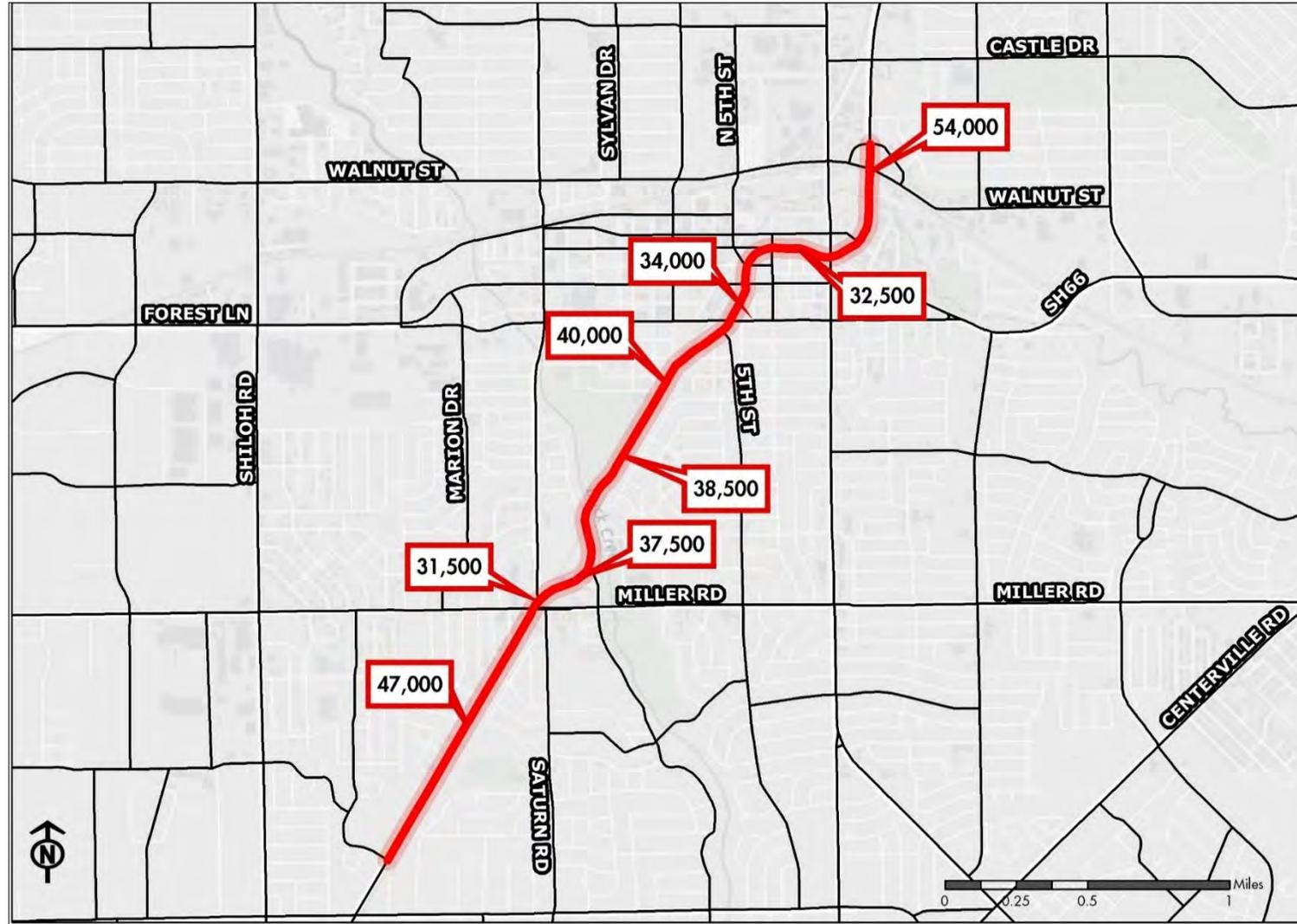
STATE HIGHWAY 78 ALTERNATIVES

Main, First & Lavon Street Connections



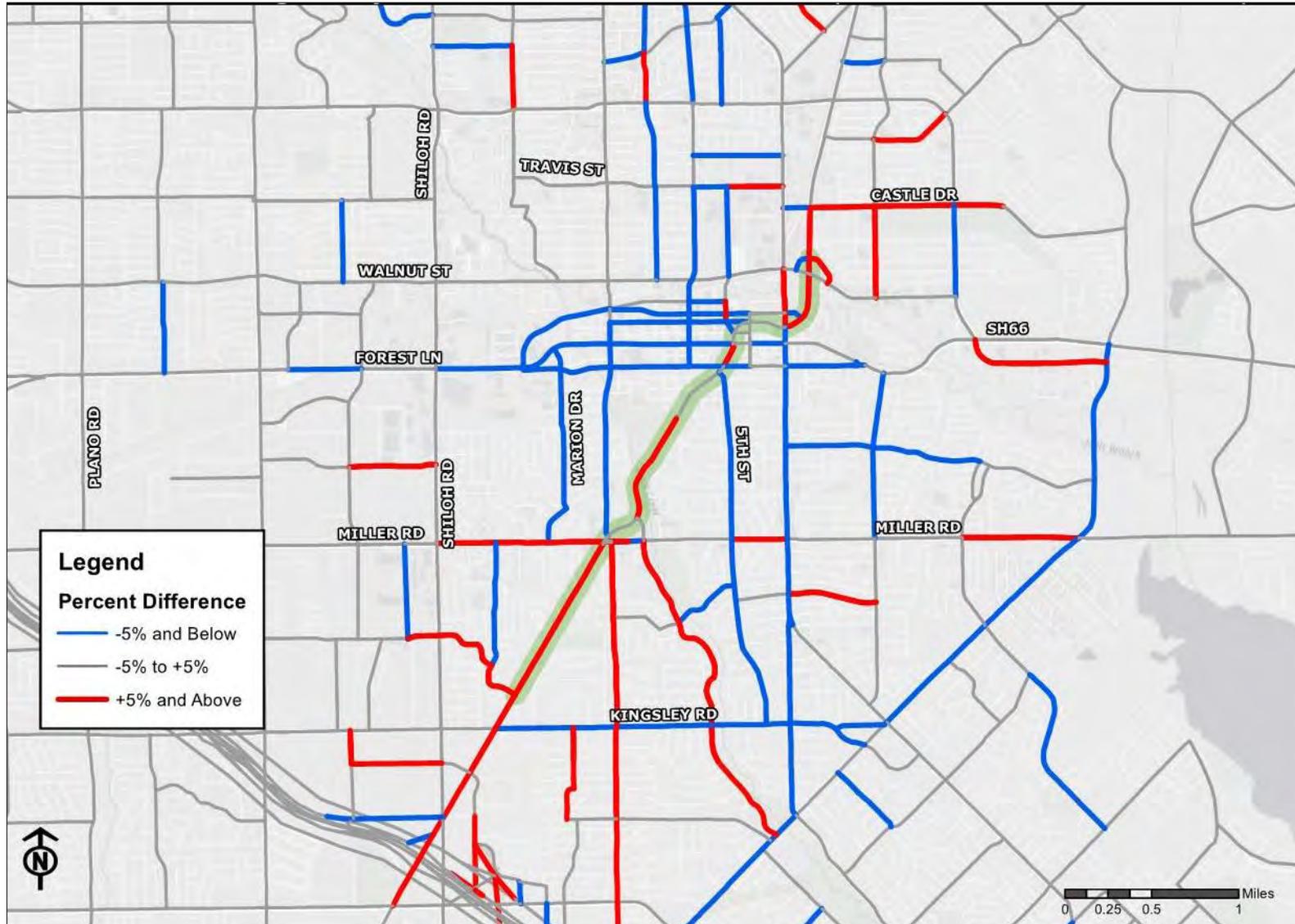
STATE HIGHWAY 78 ALTERNATIVES

2035 Forecasted Daily Volumes



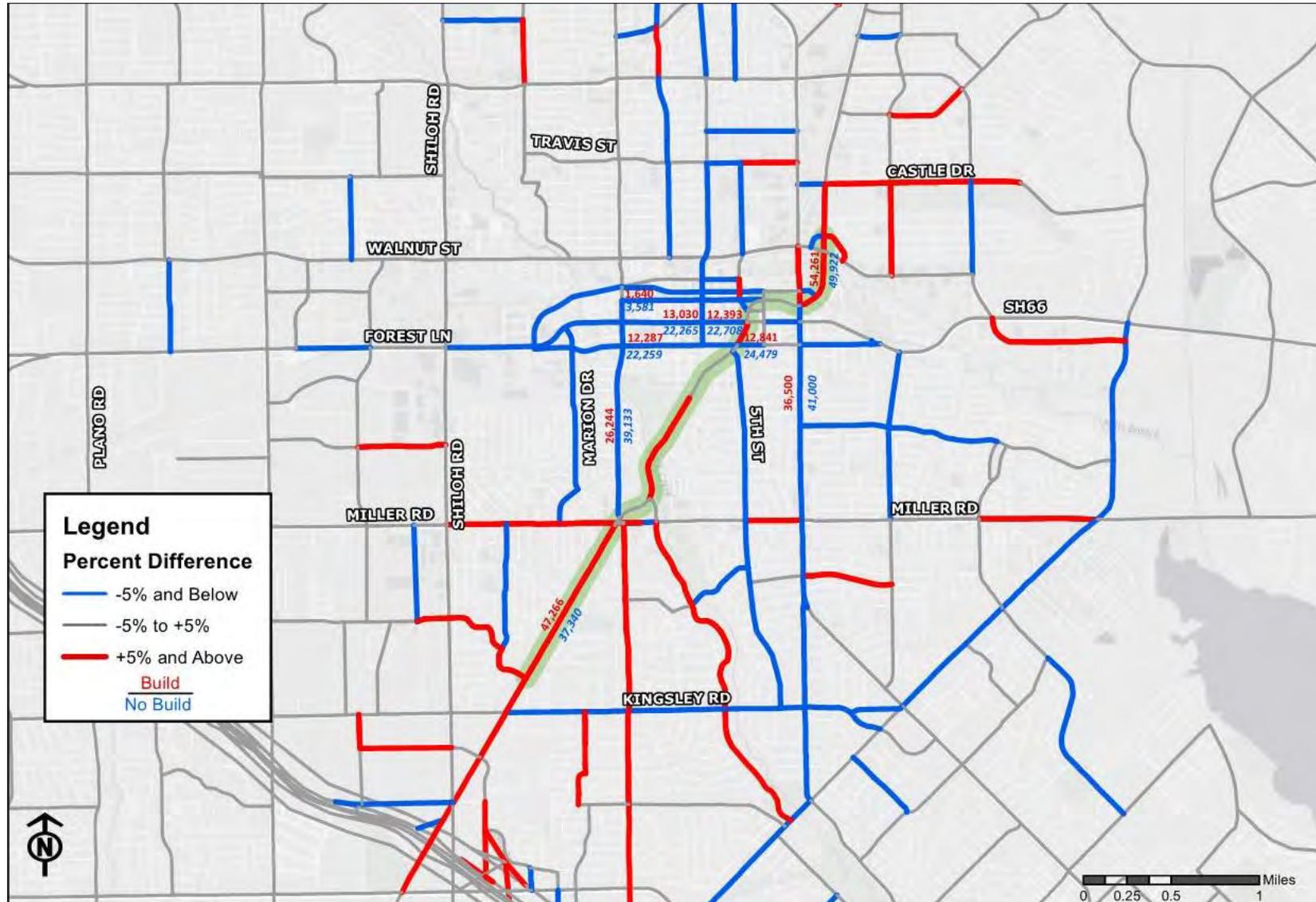
STATE HIGHWAY 78 ALTERNATIVES

Volume Difference Build Versus No Build



STATE HIGHWAY 78 ALTERNATIVES

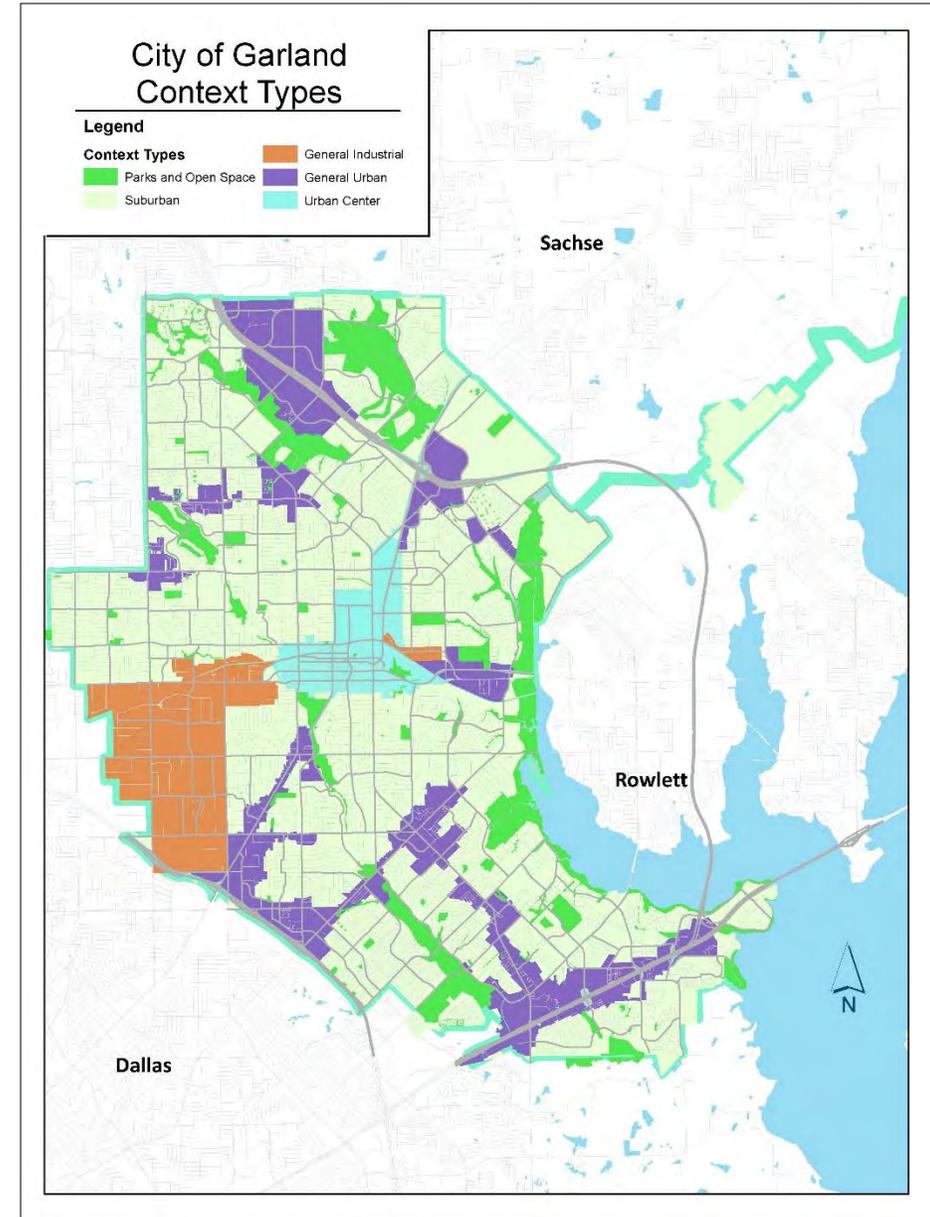
Volume Difference Build Versus No Build



GARLAND THOROUGHFARE PLAN

Complete Streets

- New approach to thoroughfare design
- Design element determine by context
 - Parks and Open Space
 - Suburban
 - General Industrial
 - General Urban Centers
 - Targeted Corridors

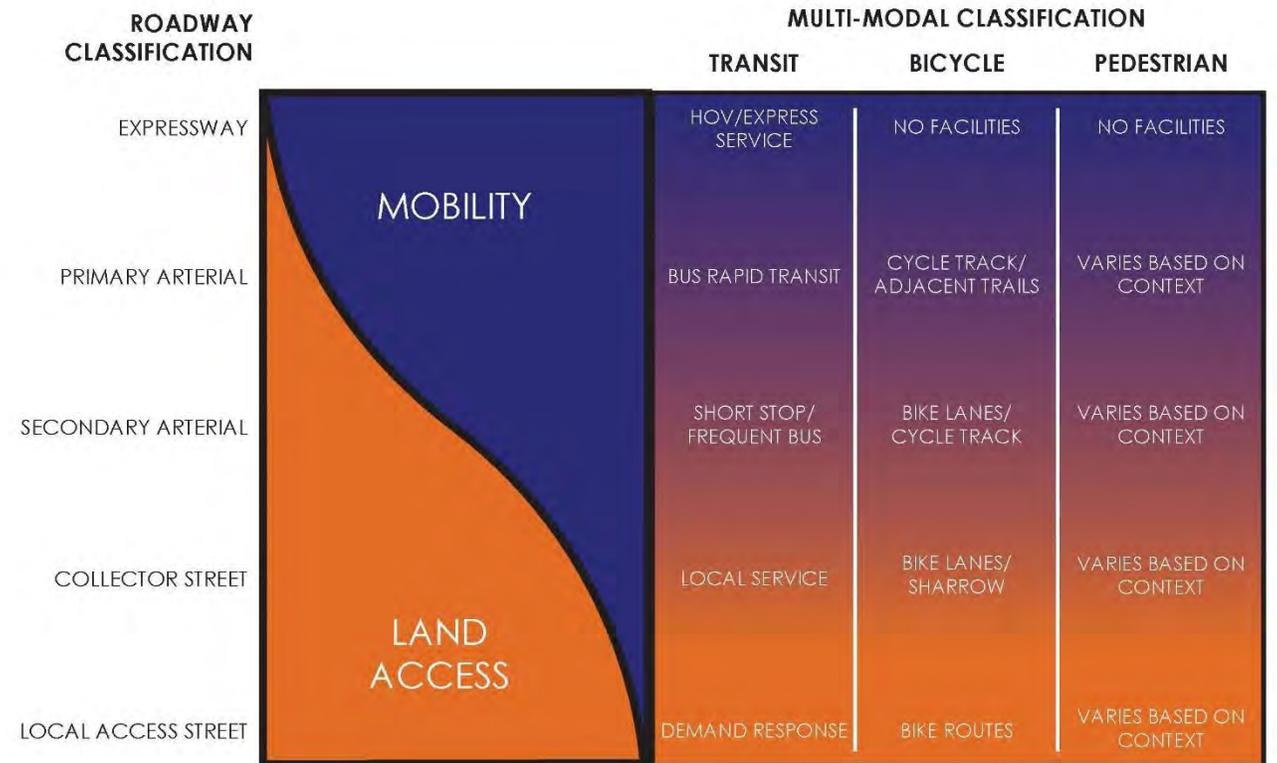


GARLAND THOROUGHFARE PLAN

Complete Streets

- Complete streets design elements
 - Travel Way
 - Travel Lane Considerations
 - Streetside
 - Pedestrian Accommodations
 - Bicycle Facilities
 - Parking
 - Transit
 - Medians

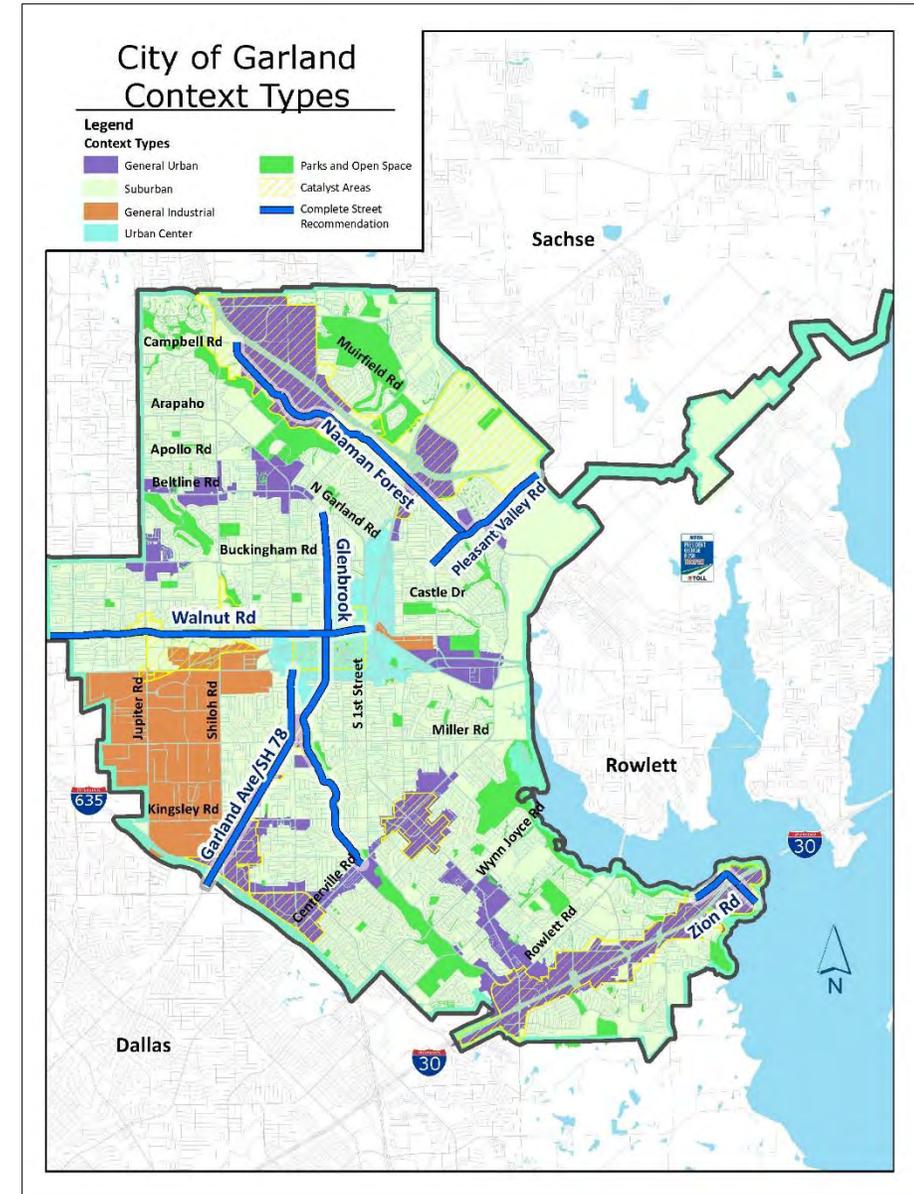
- Handout of Design Standards



GARLAND THOROUGHFARE PLAN

Strategy Corridors

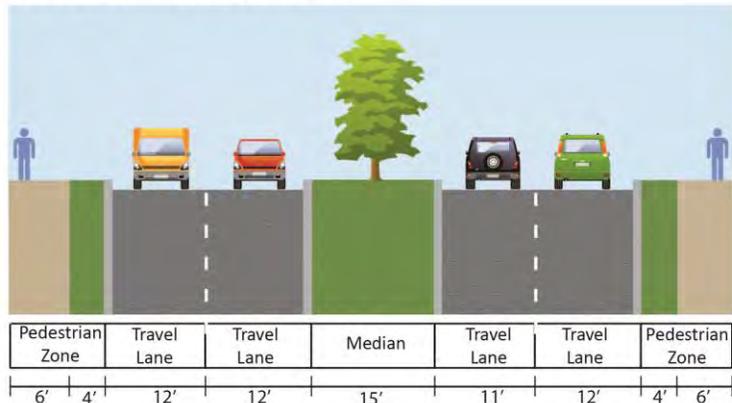
- Strategy corridors introduced to incorporate complete street design elements
 - Walnut Street
 - Garland Avenue
 - Glenbrook Drive
 - Naaman Forest Boulevard
 - Pleasant Valley Road
 - Zion Road
 - Oats



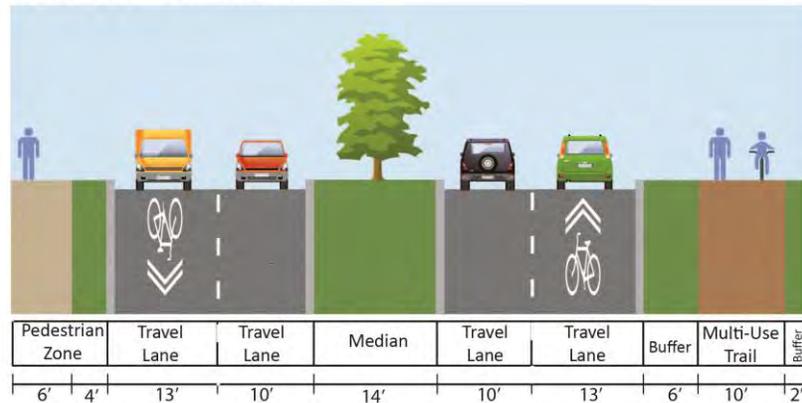
GARLAND THOROUGHFARE PLAN

Walnut Road

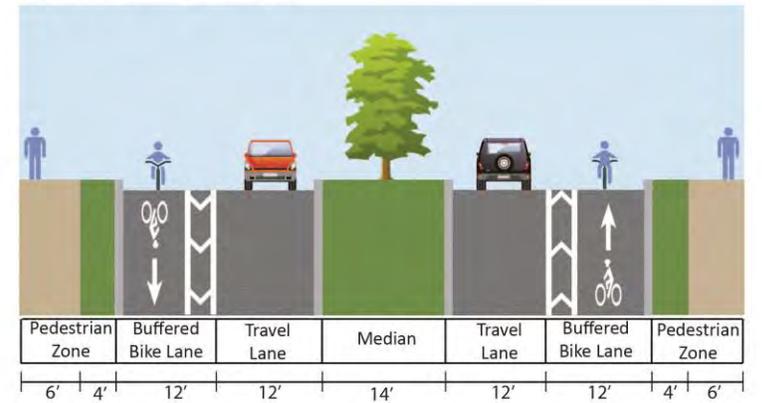
WALNUT - Existing Cross-Section



WALNUT - Alternative 1



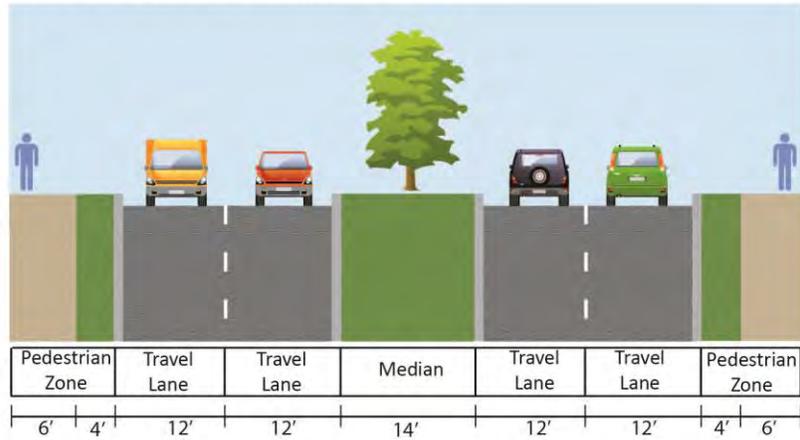
WALNUT - Alternative 2



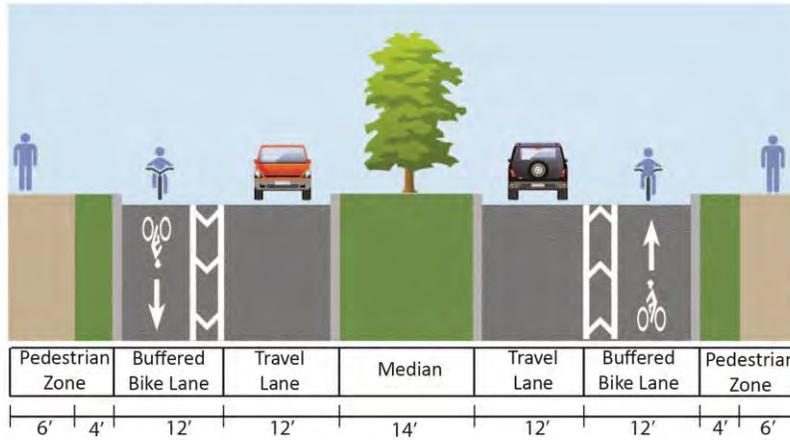
GARLAND THOROUGHFARE PLAN

N. Glenbrook Drive

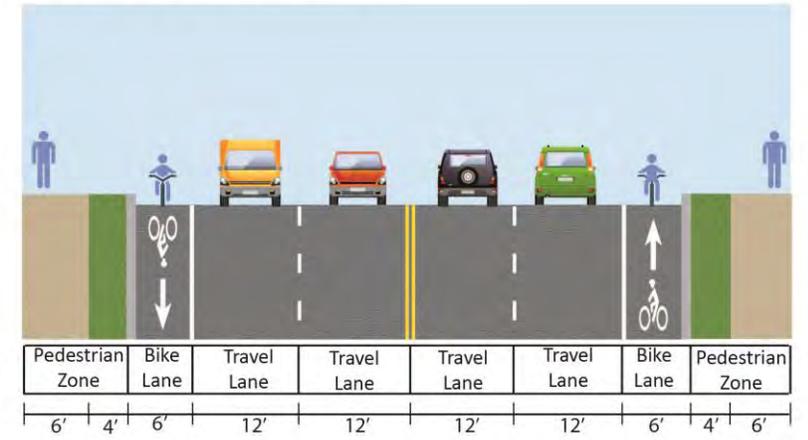
GLENBROOK - Existing Cross-Section



GLENBROOK - Alternative 1



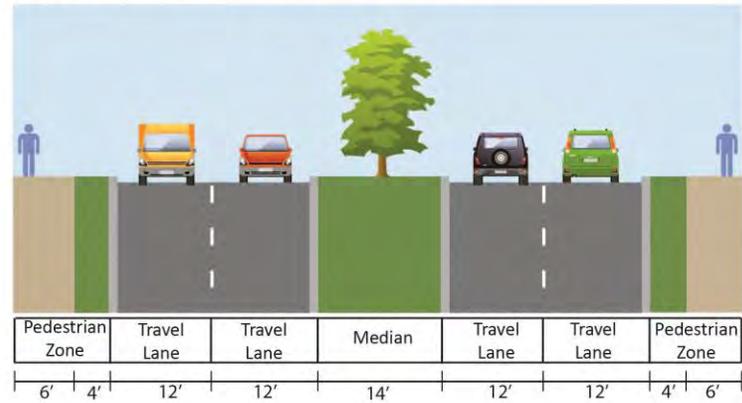
GLENBROOK - Alternative 2



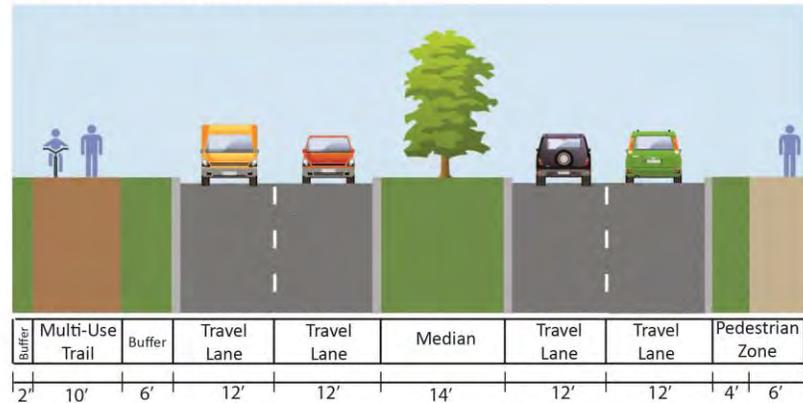
GARLAND THOROUGHFARE PLAN

Naaman Forest Boulevard

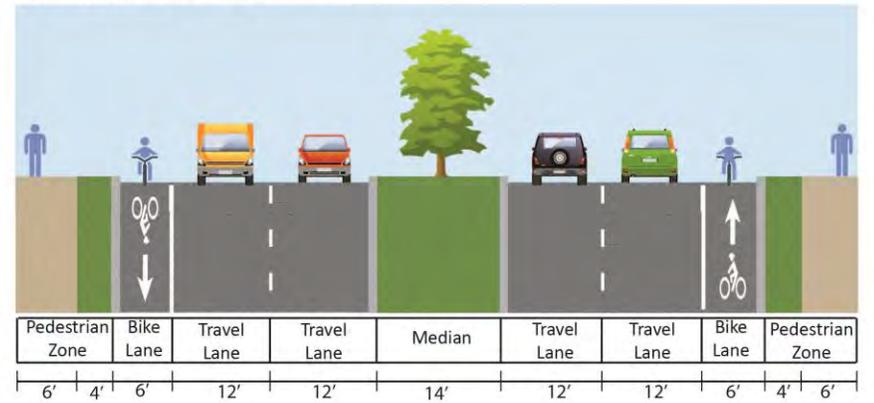
NAAMAN FOREST - Existing Cross-Section



NAAMAN FOREST - Alternative 1



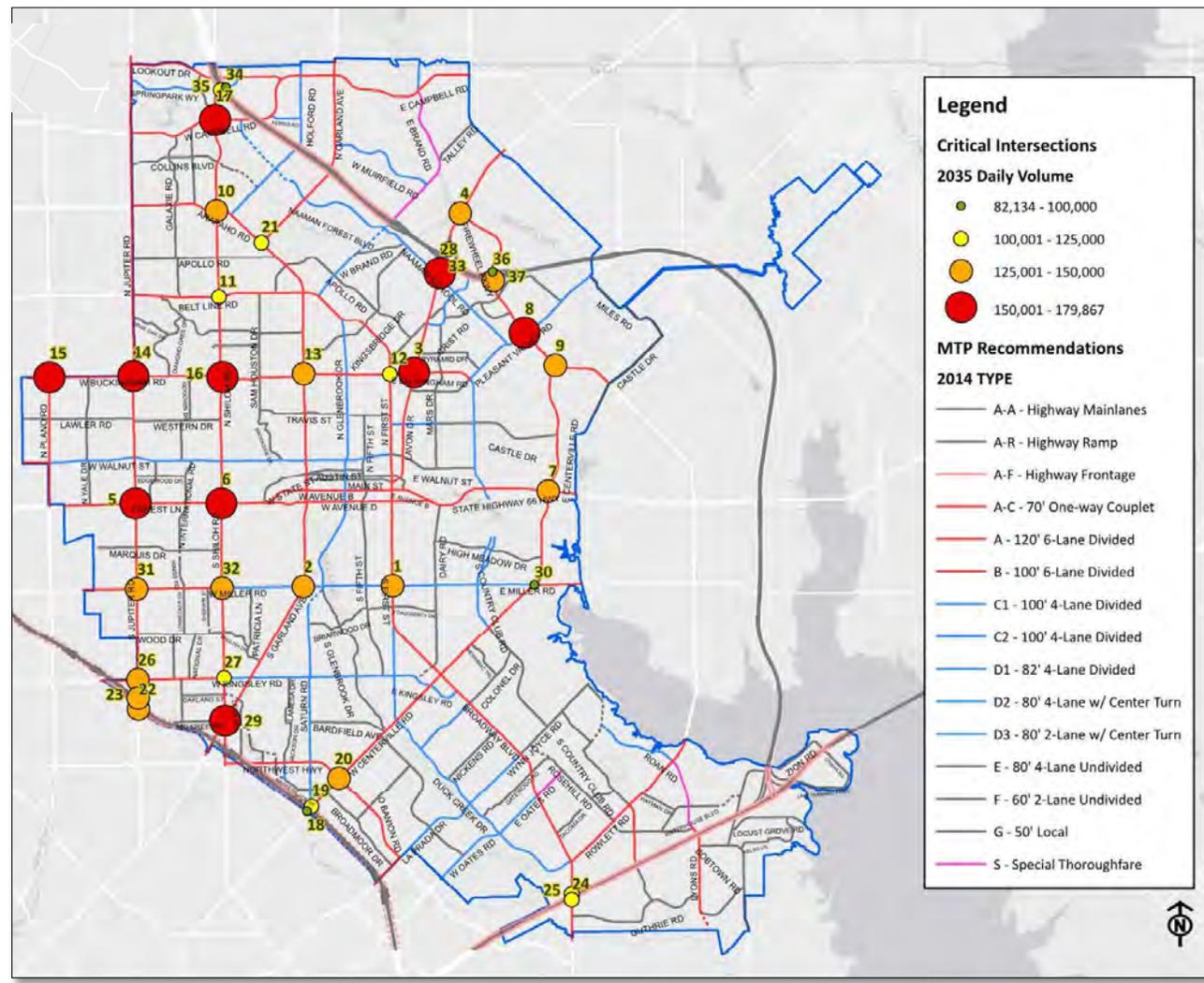
NAAMAN FOREST - Alternative 2



GARLAND THOROUGHFARE PLAN

Critical Intersections

- 2035 Scenario Analysis
- Analyzed over 37 intersections
- Optimized for Projected Conditions performance
- Recommended mitigation efforts to address intersection performance
- Potential location for consideration of roundabout location





NON-MOTORIZED CONNECTIVITY

NON-MOTORIZED CONNECTIVITY

Bike Route Criteria

Evaluating Planned Facilities

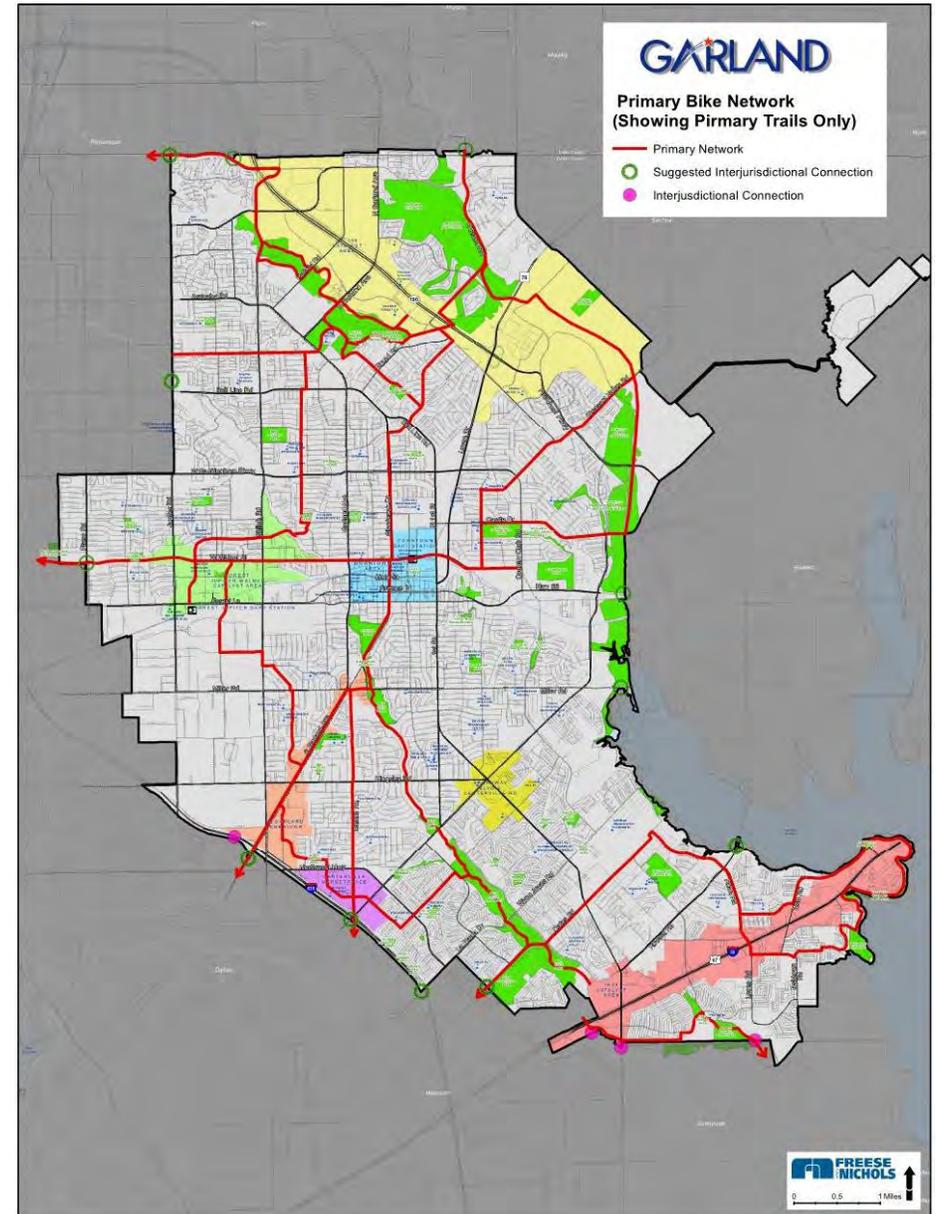
- Primary and Secondary Route Identification
- Projected Low Roadway Level-of-Service
- Available Right-of-Way
- Posted Speed Limit
- Adjacent Destinations
- Inter-Jurisdictional Connections



NON-MOTORIZED CONNECTIVITY

Primary Bike Routes

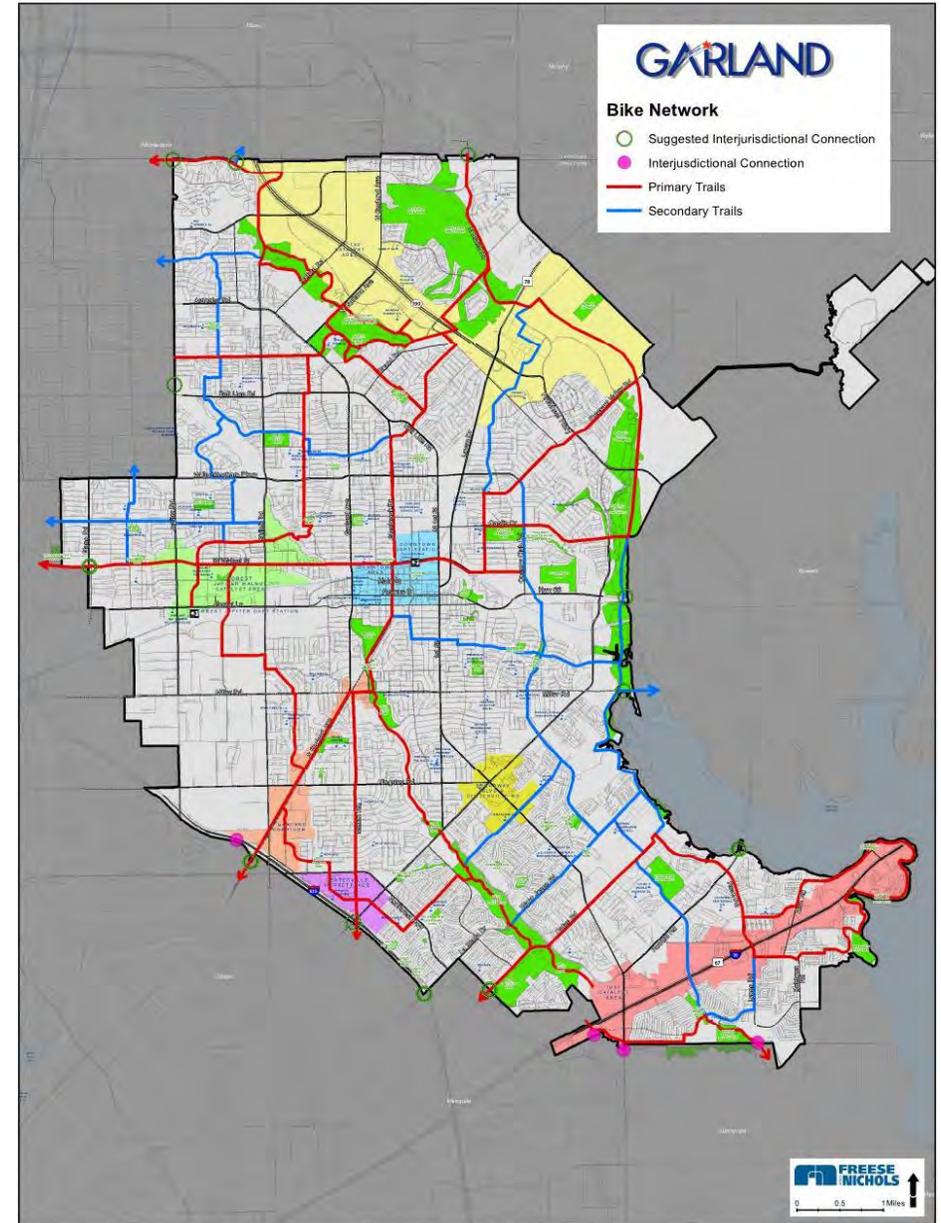
- Provides Contiguous Connectivity
- Connects Key Destinations/ Catalyst Areas
- Connections with Other Regional Trails
- Principal Alignment: North South Bikeway
- Highest Priority for Trail Funding
- Route Applications:
 - Striped On-Street Lanes
 - Off-Street Trails
 - Sharrows
 - Signed Routes



NON-MOTORIZED CONNECTIVITY

Secondary Routes

- Supplements Primary Routes
- Provides connections through key areas/ neighborhood areas
- Route Applications:
 - Striped On-Street Lanes
 - Off-Street Trails
 - Sharrows
 - Signed Routes





TRANSIT CONNECTIVITY

TRANSIT CONNECTIVITY

Transit Circulation

- Currently Four (4) Transit Stations in Garland
 - Downtown Garland Station
 - Forest- Jupiter Station
 - Lake Ray Hubbard Transit Center
 - South Garland Transit Center



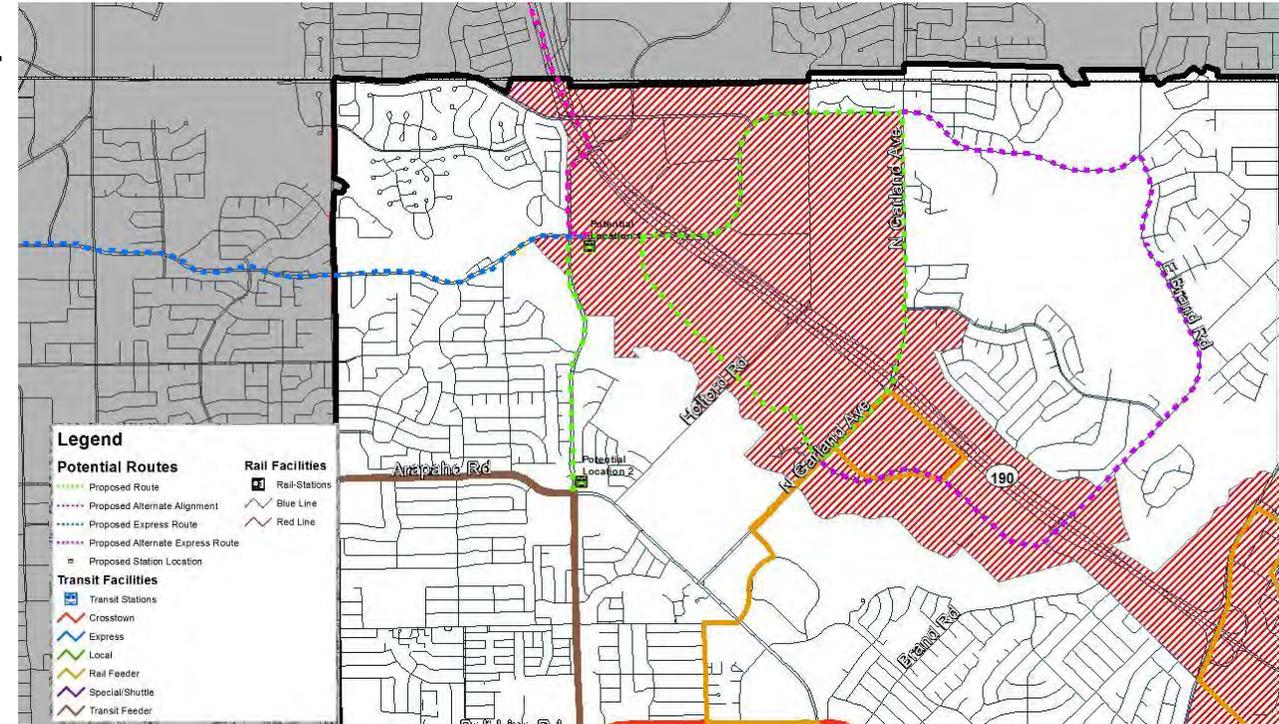
TRANSIT CONNECTIVITY

Recommended Transit Station and Route Considerations

- No Transit Service North of the Toll Road
- Employment Centers in the Northern Sector of the City
- Public Input from June 5, 2014 Town Hall Meeting

Recommendations:

- Extend existing routes north of PGBT
- DART Station along PGBT with park and ride lot and express service to Dallas



NEXT STEPS

- Collect Comments/ Input
- Refine Draft Document
- Public Hearing Process
 - Plan Commission
 - Parks Board
 - City Council





GARLAND
TEXAS MADE HERE



GARLAND THOROUGHFARE PLAN

Garland Town Hall Meeting

March 30, 2015



GARLAND

TRANSPORTATION

