Davis General Plan Preliminary Land Use and Mobility Concept

February 3, 2026

Agenda

01 Purpose

02 Land Use Concept Plan

03 Mobility Concept Plan

04 Off-site Road Conditions

05 Estimated Cost Range

Questions for Council to Consider following presentation

- Are there any key considerations that are omitted from the preliminary study that could help refine the land use and mobility concept plan?
- Are there any additional implications of the land use and mobility concept plan that should be further studied in the General Plan Update?

SECTION 01

Purpose

Preliminary Land Use and Mobility Concept Plan

- ❑ High-level assessment of a land use and mobility land concept
- ❑ Aimed at meeting future housing and jobs needs for GP horizon
- ❑ Potential new growth area northeast of City Limits and SOI
- ❑ Preliminary transportation network concept
- ❑ Purpose is to understand:
  - ➢ Potential transportation implications
  - ➢ Effects on vehicle travel and road capacity
  - ➢ Transportation improvements and cost

SECTION 02

Land Use Concept Plan

Land Use Concept Plan

- ❑ Identified for planning purposes
- ❑ May be explored further in GPU pending direction from Council
- ❑ Undeveloped Areas Surrounding City were Screened
- ❑ Avoid Flood Plains, Ag and Open Space Reserves
- ❑ Focus on Land That Could More Easily be Connected to the Existing Transportation Network

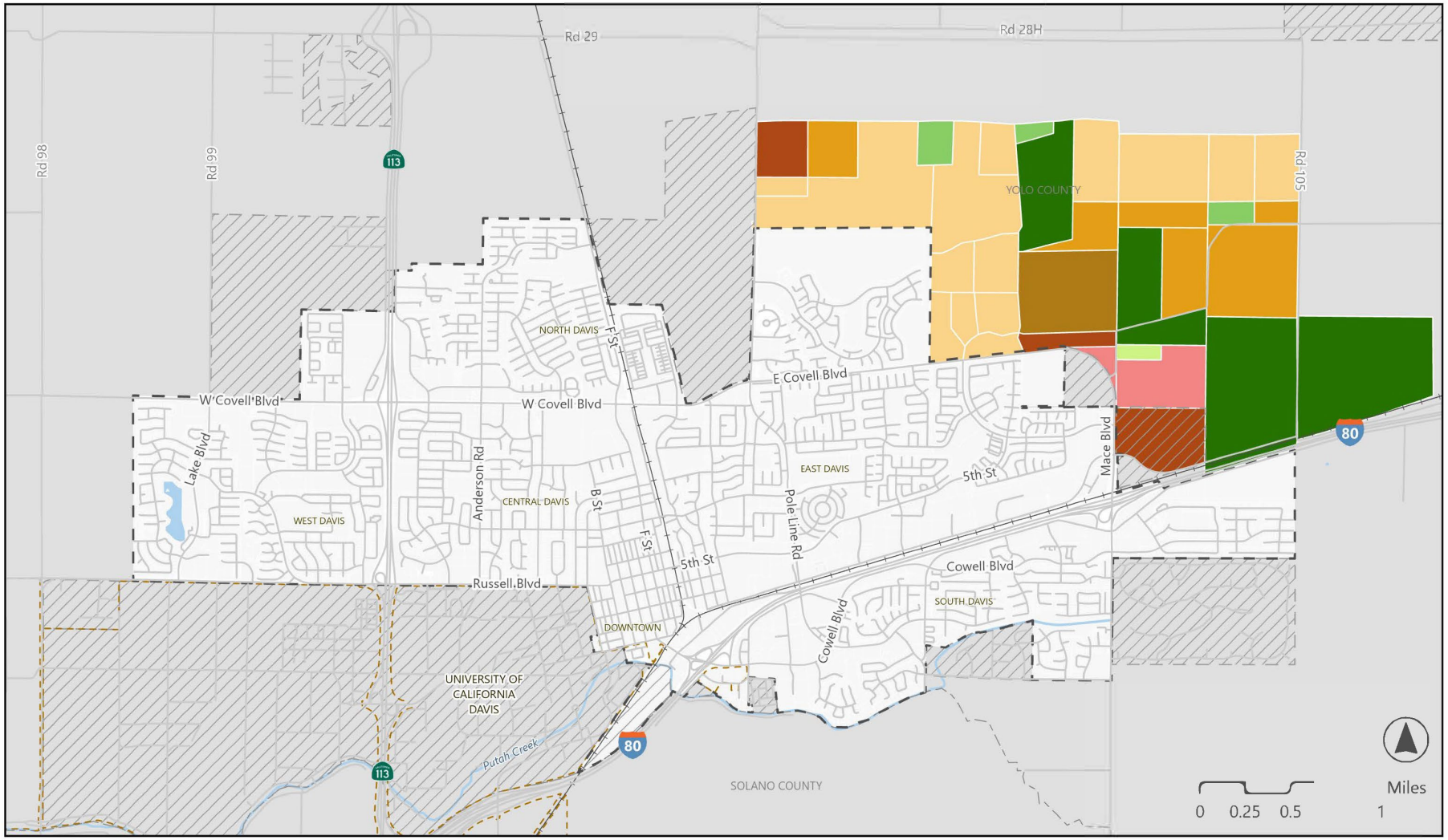


Figure 1

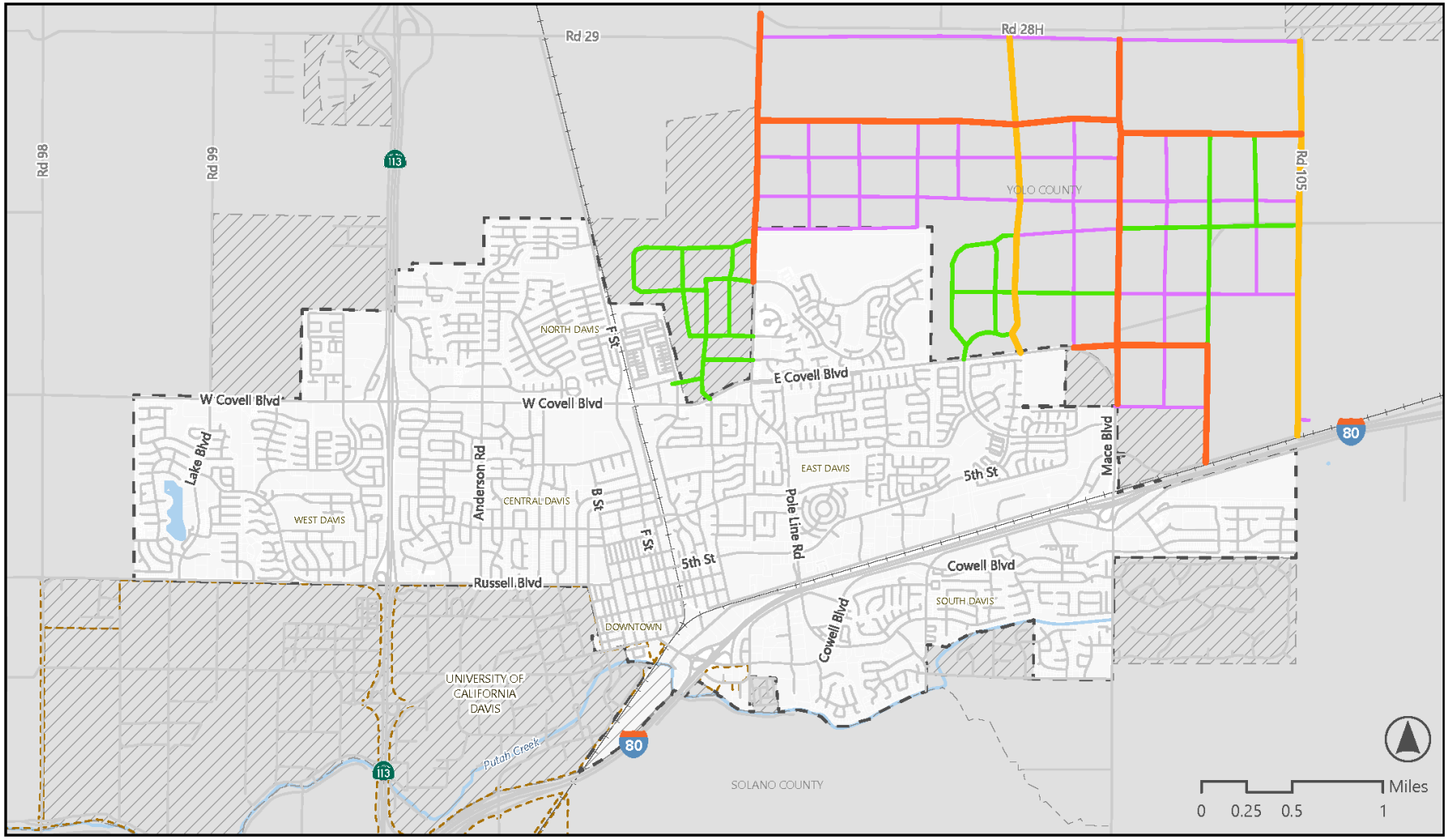
Illustrative Land Use Program

Potential Land Use Program Growth Levels

- ❑ 4,918 single family homes
- ❑ 3,711 multi-family units
- ❑ 7,543 employees
- ❑ 150 room hotel

SECTION 03

Mobility Concept Plan



Highways
Major Roads
Local Roads
Rail Lines
Rivers/Creeks

City of Davis
Sphere of Influence
UC Davis Campus
County Boundary
Lakes

Potential Road Network Concept
- Road Classification

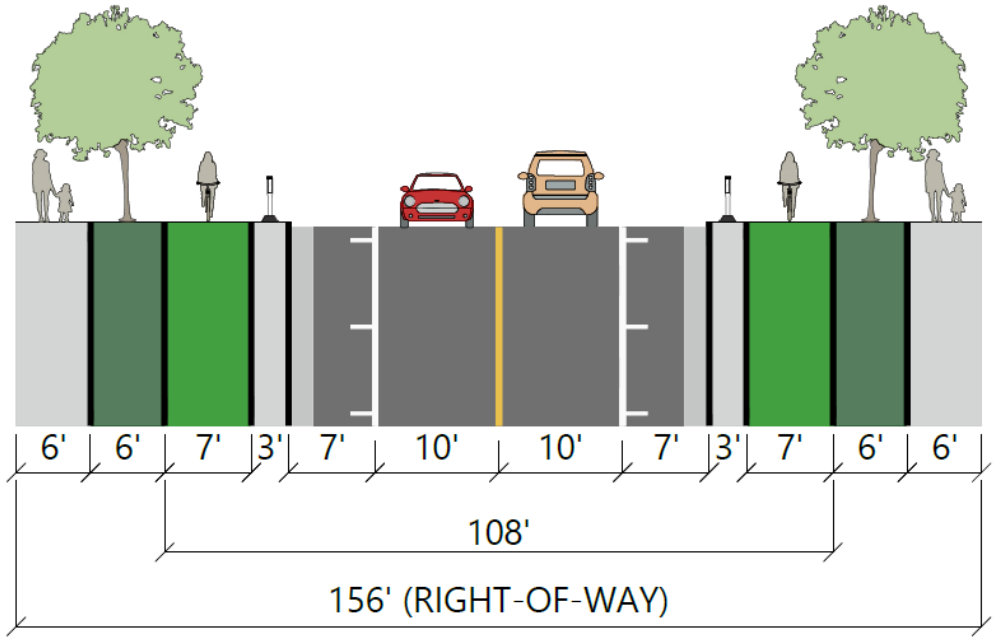
Major Arterial
Minor Arterial
Collector
Local

Figure 2
Potential Road Network Concept

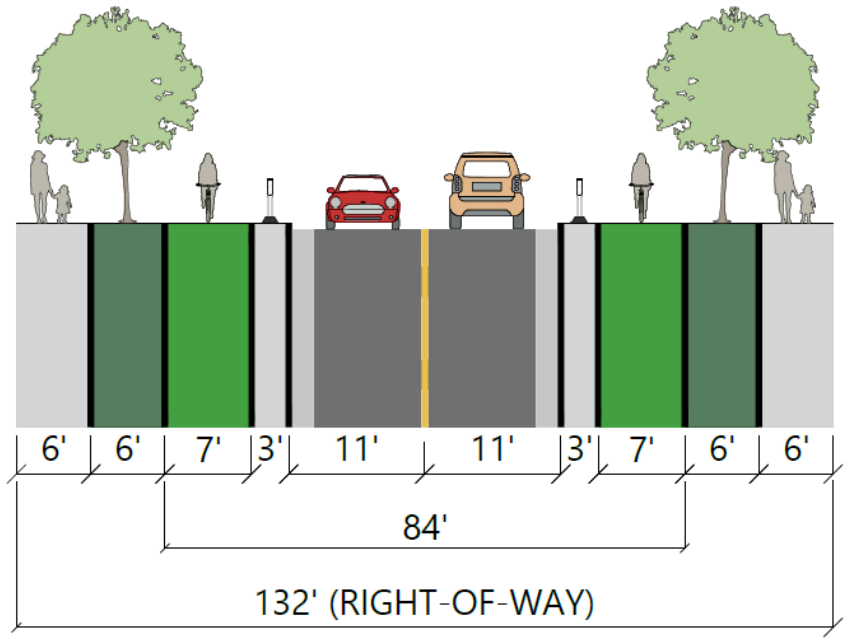
Backbone Road Network

- About 30 miles of new arterial and collector streets
  - 16.2 miles of 2-lane collector streets
  - 6.7 miles of 3-lane arterial streets
  - 7.5 miles of 4-lane arterial streets

- Intersection Traffic Control
  - 16 Traffic Signals or Roundabouts



SEPARATED BIKEWAY WITH ON-STREET PARKING (COLLECTOR)



SEPARATED BIKEWAY (COLLECTOR)

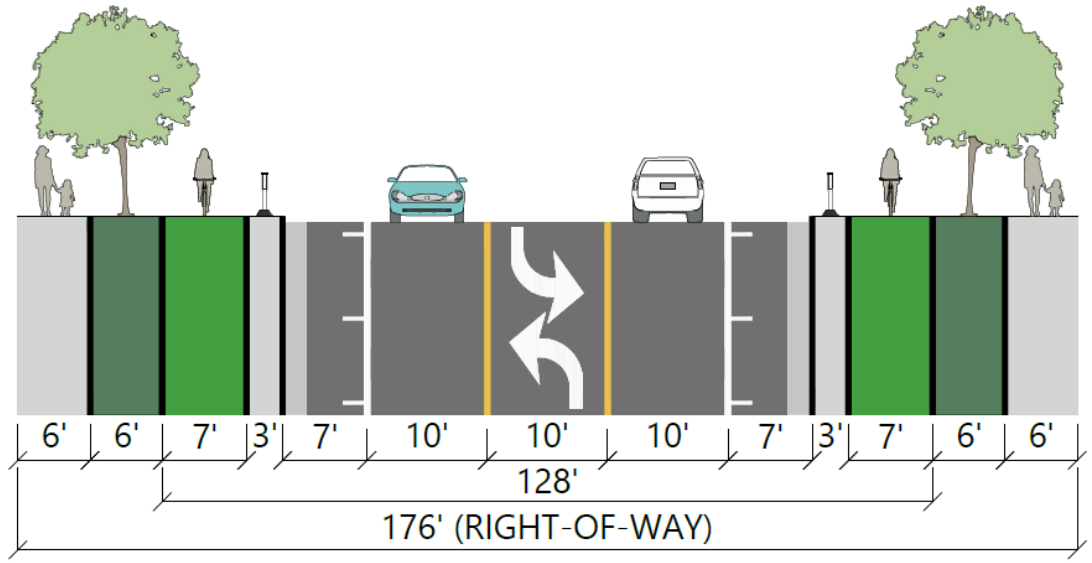
NOTES TO REVIEWERS:

THE COLLECTOR CONCEPTS ABOVE EXCEED THE DAVIS 2016 STREET STANDARDS RIGHT-OF-WAY WIDTHS FOR THOSE TYPES OF STREETS.

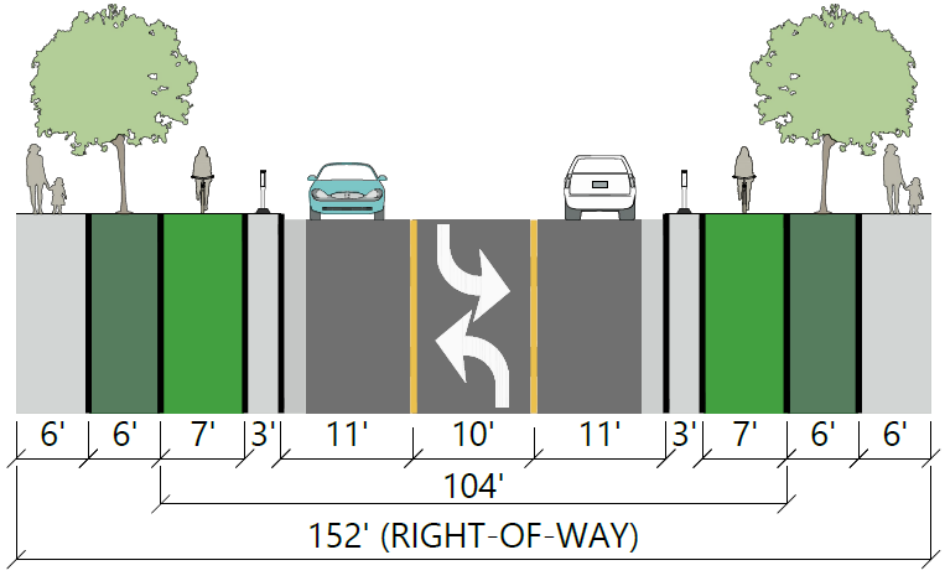
Figure 3A
DAVIS GENERAL PLAN UPDATE
TYPICAL MID-BLOCK CROSS-SECTION CONCEPTS - COLLECTOR

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

SEPARATED BIKEWAY WITH ON-STREET PARKING (MINOR ARTERIAL)



SEPARATED BIKEWAY (MINOR ARTERIAL)

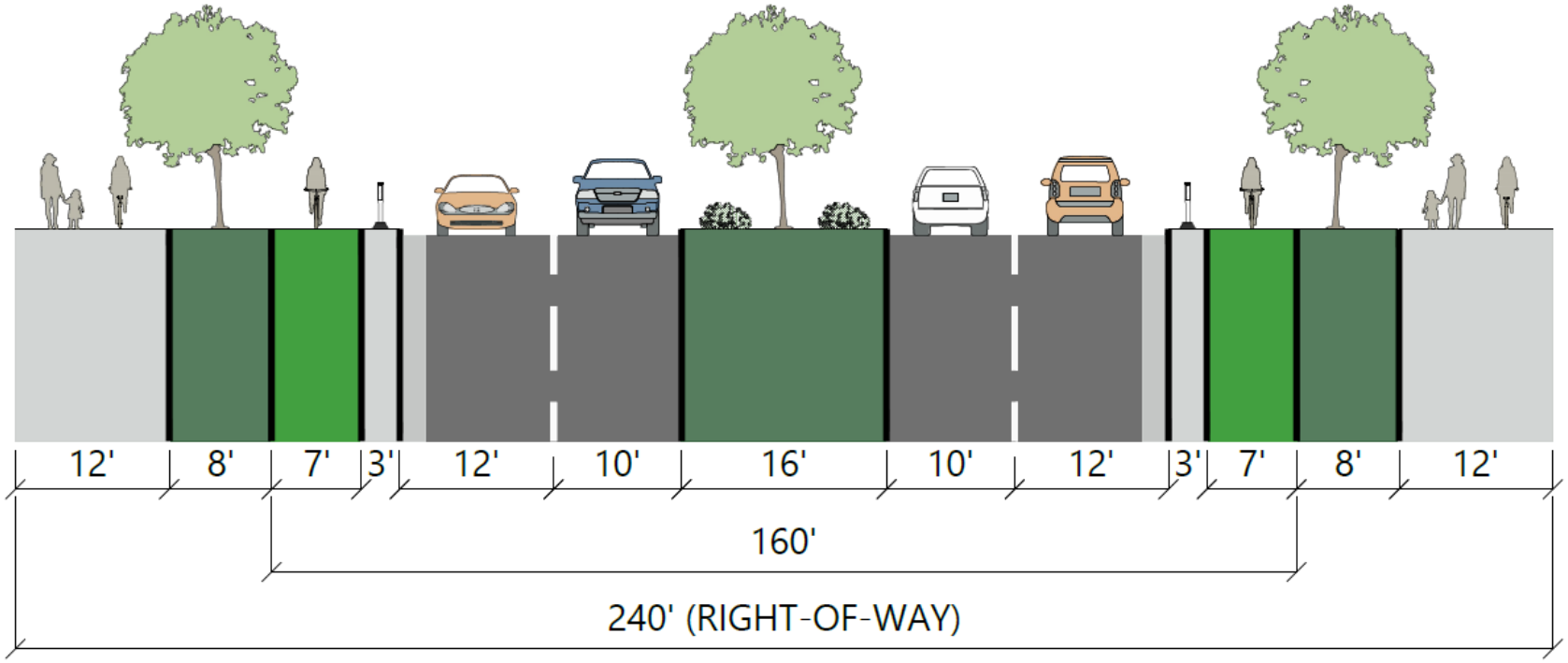


NOTES TO REVIEWERS:

MINOR ARTERIAL CONCEPT WITH ON-STREET PARKING EXCEEDS THE DAVIS 2016 STREET STANDARDS RIGHT-OF-WAY WIDTHS FOR THOSE TYPES OF STREETS.

Figure 3B
DAVIS GENERAL PLAN UPDATE
TYPICAL MID-BLOCK CROSS-SECTION CONCEPTS - MINOR ARTERIAL

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.



SEPARATED BIKEWAY
(MAJOR ARTERIAL)

NOTES TO REVIEWERS:

OUTER THROUGH-LANES IN THE MAJOR ARTERIAL CONCEPT ARE LARGER THAN THEIR RESPECTIVE COUNTERPARTS IN THE DAVIS 2016 STREET STANDARDS TO ACCOMMODATE TRANSIT.

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

Figure 3C
DAVIS GENERAL PLAN UPDATE
TYPICAL MID-BLOCK CROSS-SECTION CONCEPTS MAJOR ARTERIAL

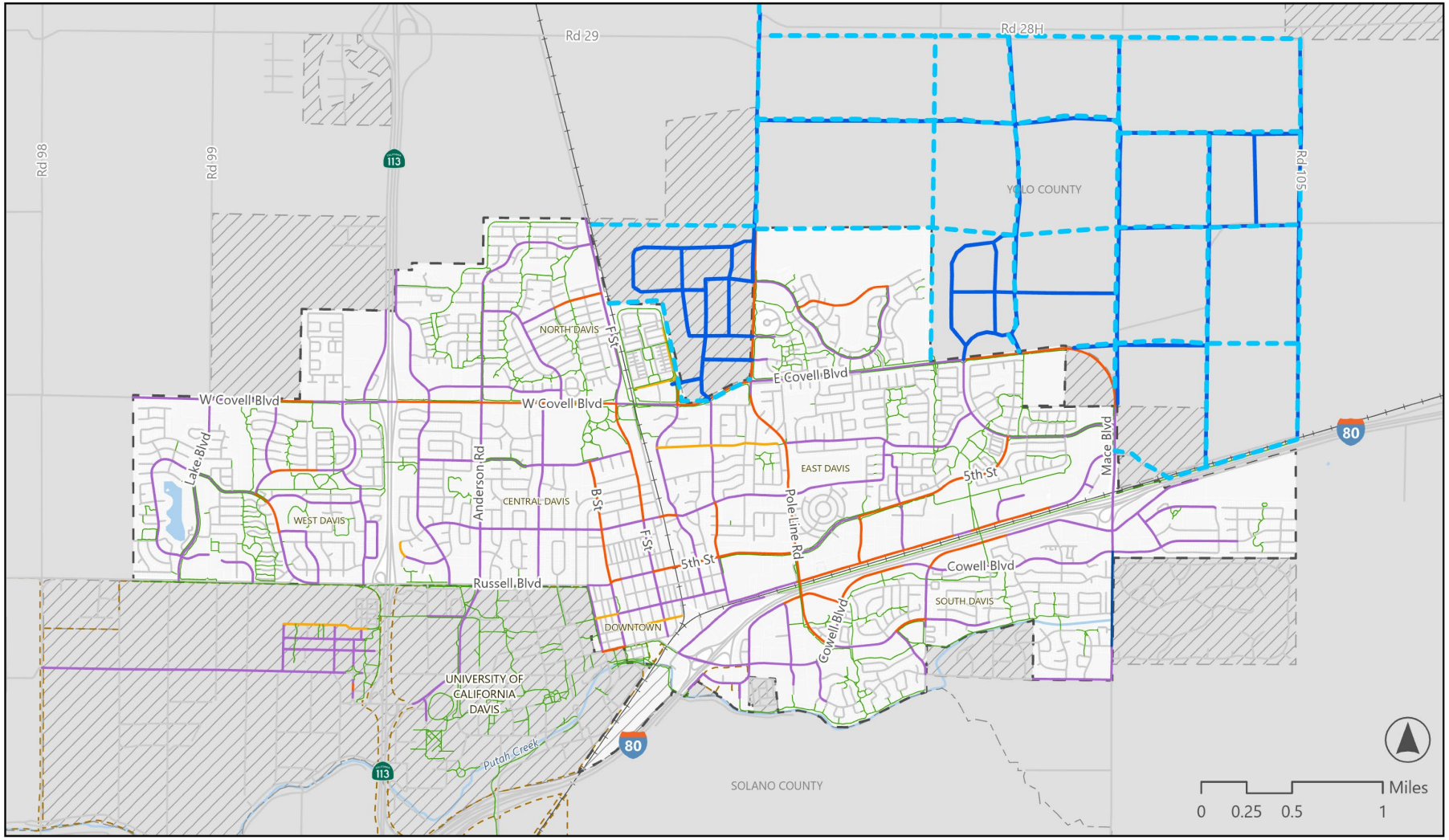


Figure 4
Backbone Bike Network Concept

Backbone Bike Network

- ❑ 50+ miles of new bike facilities
  - ❑ 23 miles of off-street bike paths
  - ❑ 30 miles of on-street separated bike lanes on all arterial and collector streets

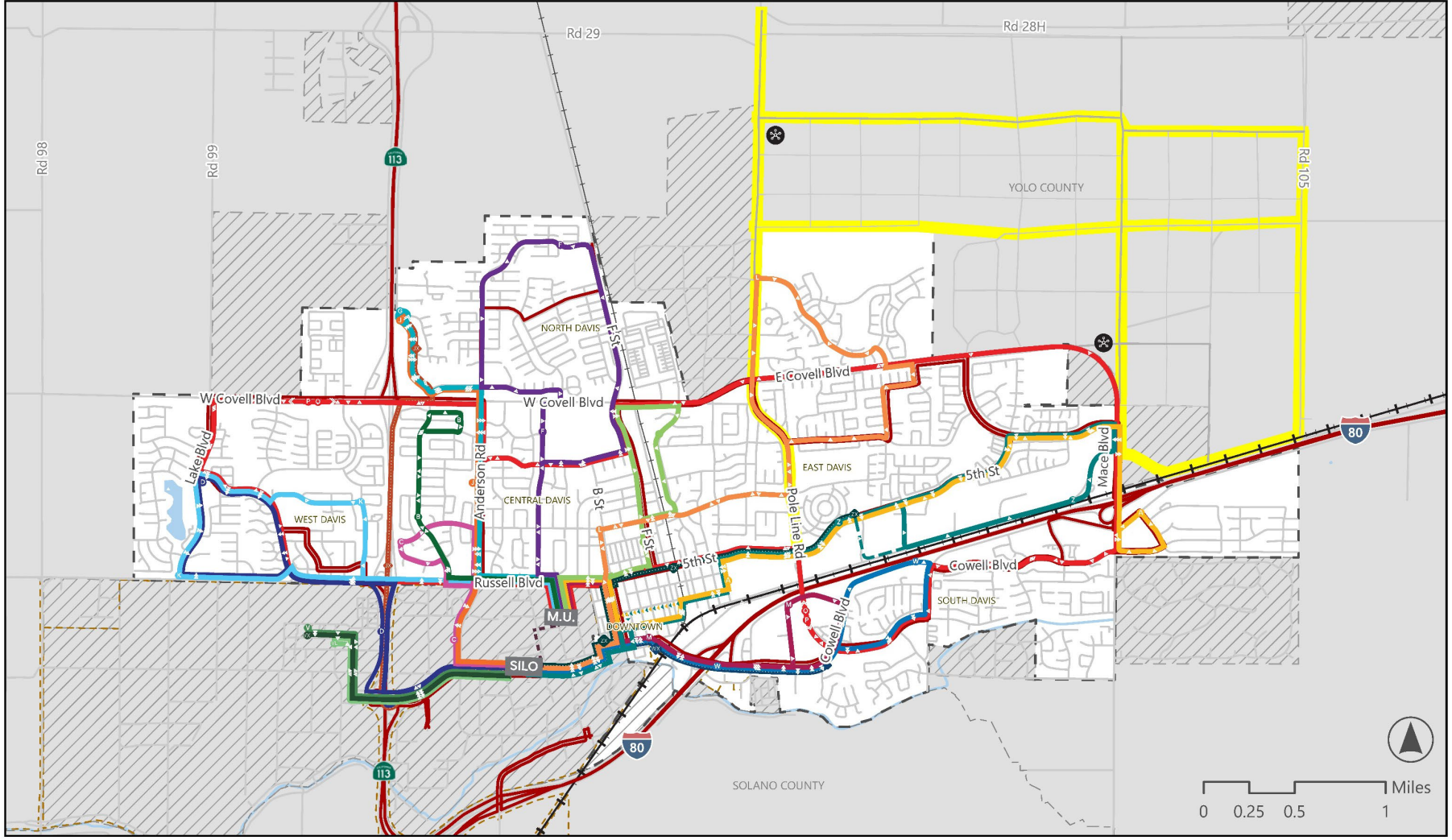


Figure 5
Backbone Transit Network Improvements

Davis CALIFORNIA

Backbone Transit Network Improvements

- ❑ Possible New Routes
  - ❑ Radial route from UC Davis & Downtown Davis
  - ❑ East-west route along E. Covell Blvd

- ❑ Facility Improvements on New Routes
  - ❑ Transit signal priority
  - ❑ Queue jump lanes
  - ❑ Bus stop improvements
  - ❑ Elimination of free right turn lanes

- ❑ Internal Plan Area Transit Improvements
  - ❑ Two Mobility Hubs
  - ❑ Internal fixed-route shuttle or microtransit route
  - ❑ Floating bus stop islands

Characteristics of High-Quality Transit

- ❑ High frequency (headways of 10-minutes or less)
- ❑ Fast travel between stops
- ❑ Reliable travel times
- ❑ Long service hours (e.g., early morning to late night)
- ❑ Safe travel while on transit and accessing it
- ❑ Easy to understand and use routes and transfers
- ❑ Integrated with the regional transit network

Potential for High-Quality Transit Service Expansion

- Providing high-quality transit service to new growth area would be challenging
  - Low to moderate development densities
  - Distance from downtown and campus
  - Anticipated household income levels
  - Ability to extend Unitrans routes limited by run times

E. Covell Transit Only Lane Concepts and Trade-offs

- **Take a Lane, Existing Footprint** – 2 lanes for autos, 2 for buses
  - Preserve bike lanes, median, and left turn pockets
- **Add a Lane, Existing Footprint** – 4 lanes for autos, 2 for buses
  - Remove bike lanes, median, and left turn pockets
  - Shift bicyclists to adjacent shared use path and Denison Dr
- **Add a Lane, Widen Road** – 4 lanes for autos, 2 for buses
  - Preserve bike lanes, median, and left turn pockets
  - Road widening required, likely need for property acquisition
  - Impacts to landscape median, utilities, and path

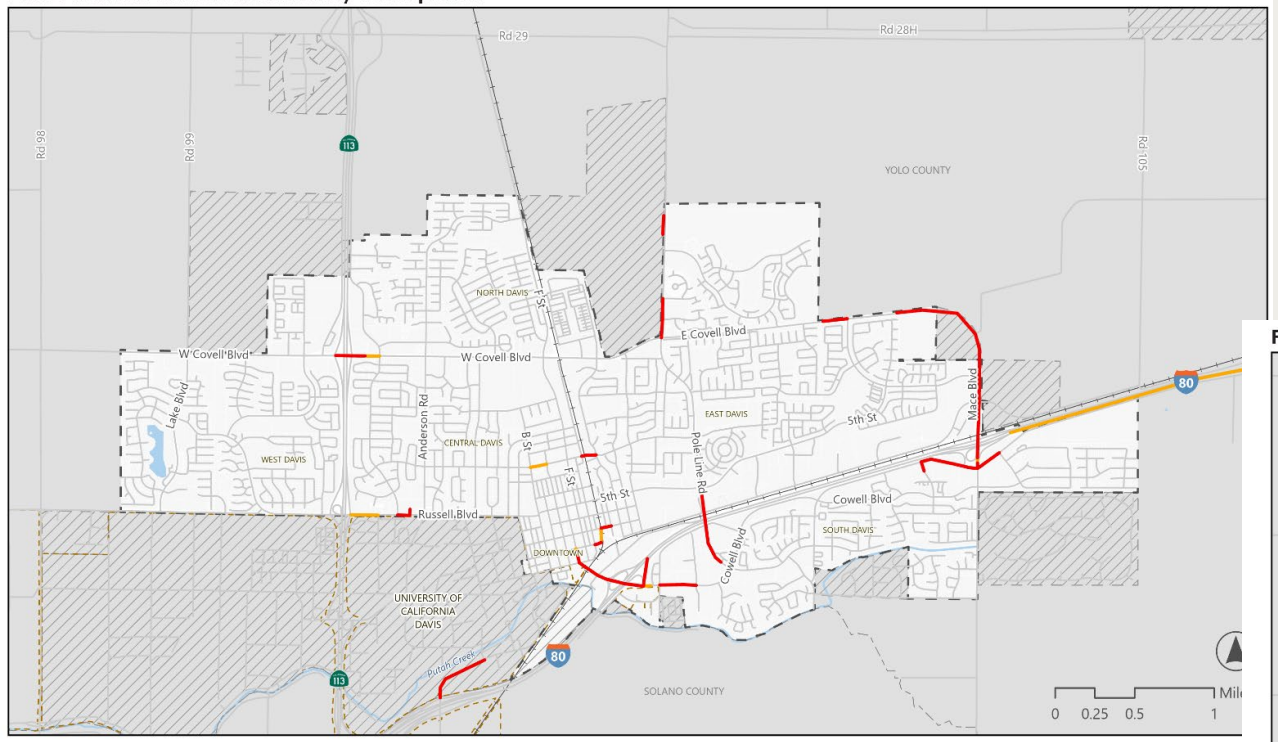
Potential for Transit Only Lanes

- Minimum # of Hourly Buses:
  - 30-40 bus trips for curb bus lanes
  - 60-90 bus trips for median bus lanes
- Current # of Hourly Buses:
  - 2 on E. Covell Blvd and Pole Line Rd
  - 9 on Mace Blvd north of I-80
- Hypothetical new 4-mile transit only lane would result in travel time savings ranging from 0.5 to 6 minutes per trip

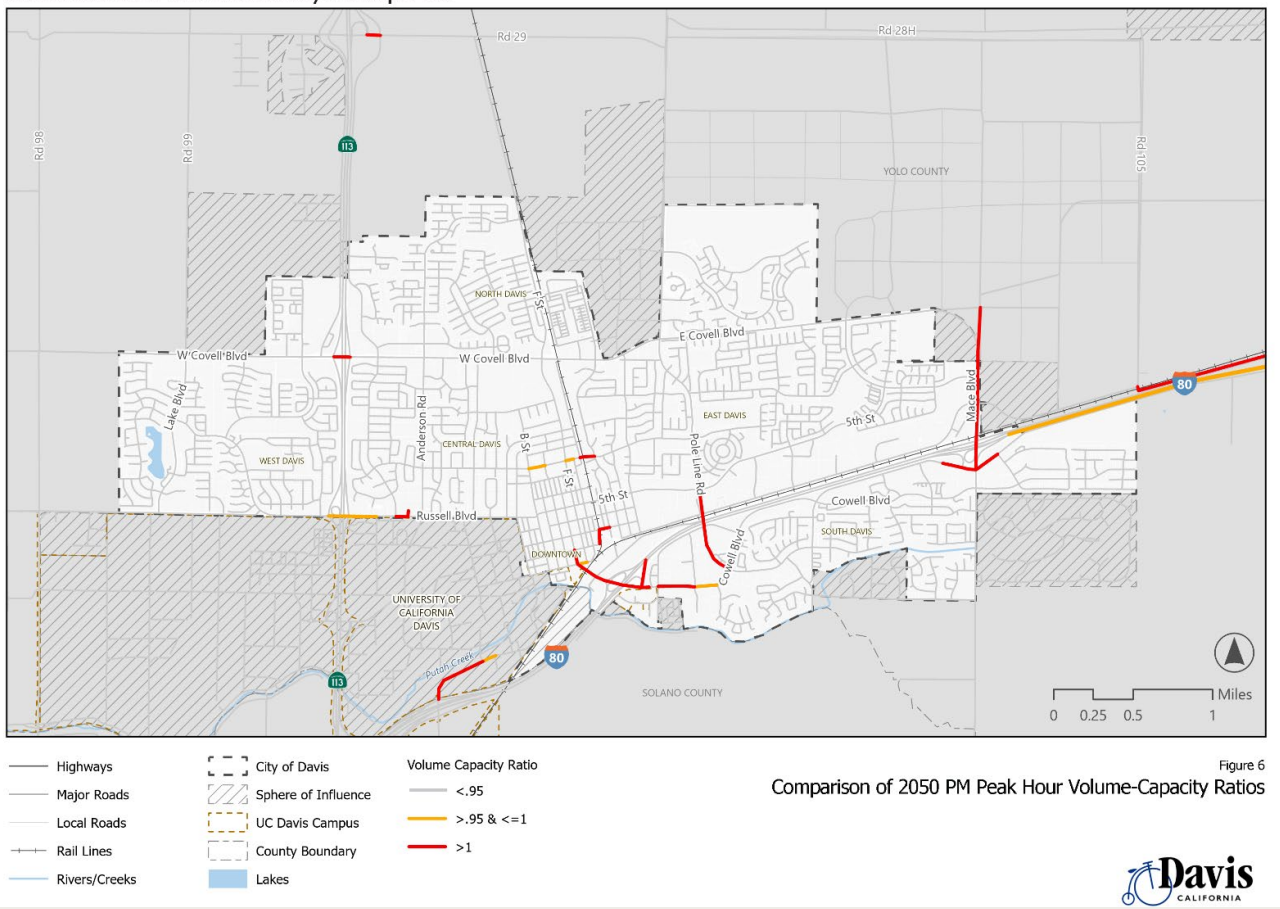
SECTION 04

Off-site Road Conditions

Future without Land Use and Mobility Concept Plan



Future with Land Use and Mobility Concept Plan



Highways
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City of Davis
Sphere of Influence
UC Davis Campus
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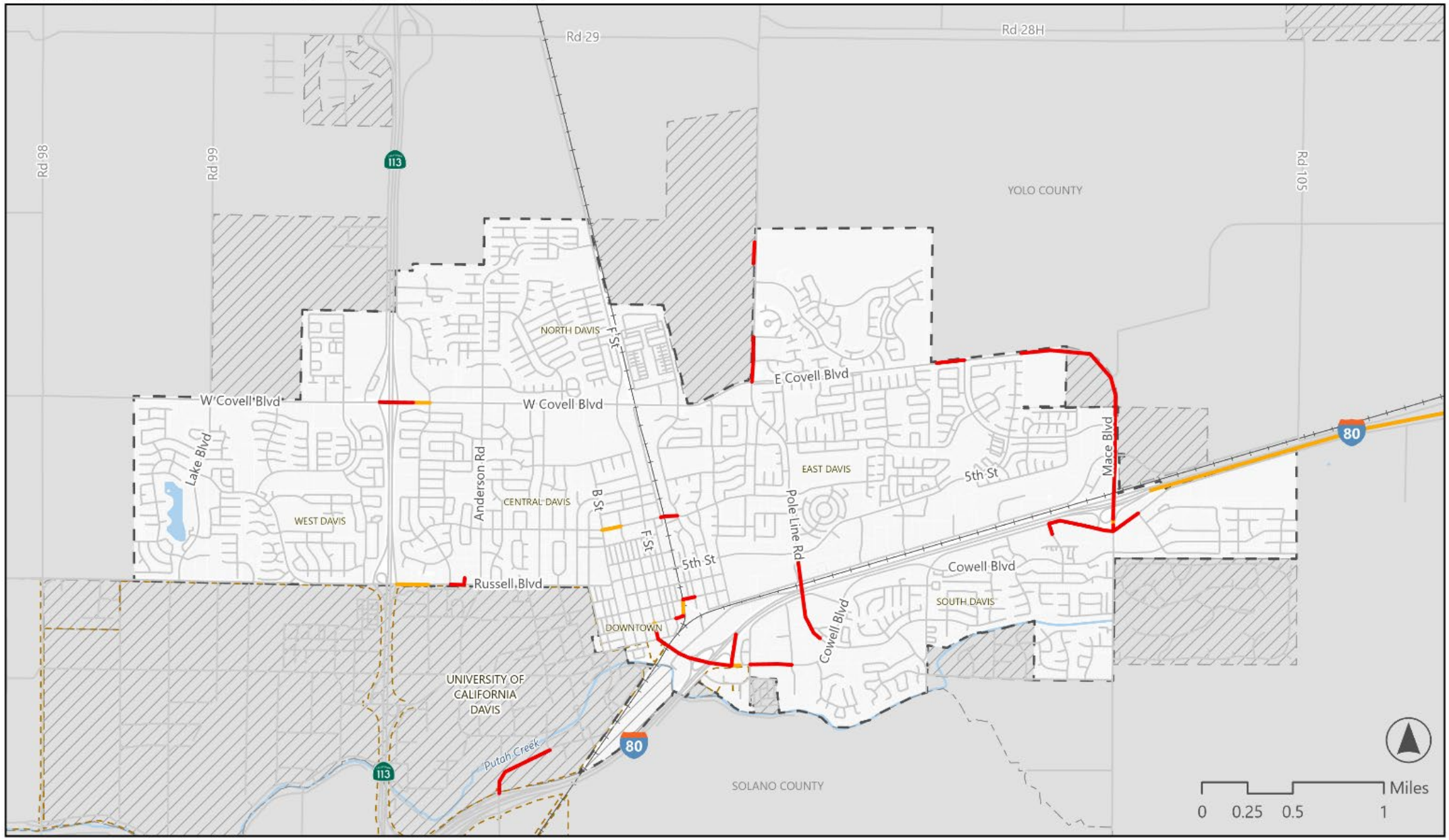
Lakes

Volume Capacity Ratio
<.95
>.95 & <=1
>1

Figure 6
Comparison of 2050 PM Peak Hour Volume-Capacity Ratios

Future without Land Use and Mobility Concept Plan



Future with Land Use and Mobility Concept Plan

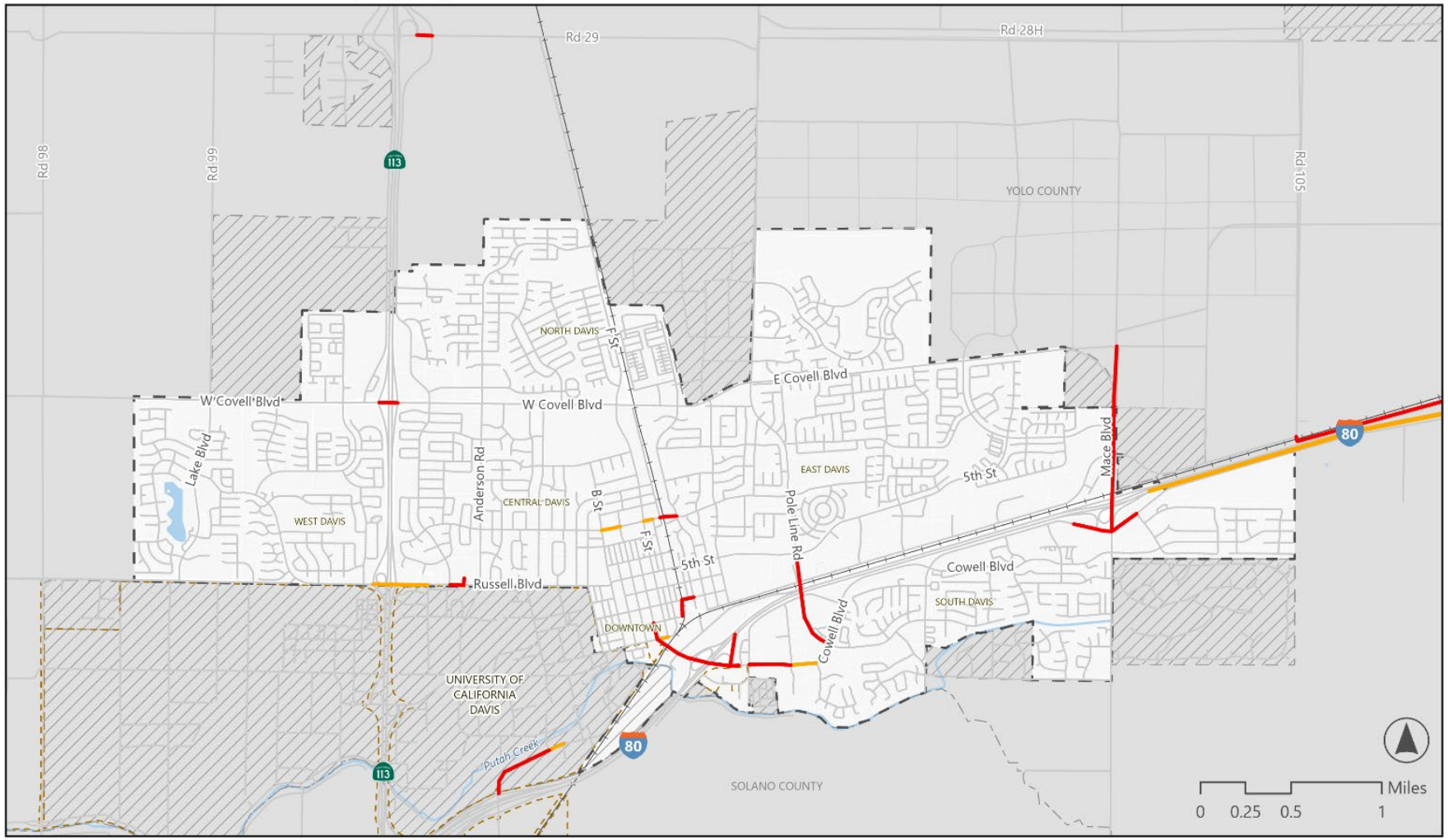


Figure 6

Comparison of 2050 PM Peak Hour Volume-Capacity Ratios

SECTION 05

Estimated Network Cost Range

Street Network Costs for Land Use and Mobility Concept Plan	$850–1,040 million	• Primary Network Streets (16.2 miles of 2-lane collector, 6.7 miles of 3-lane arterial and 7.5 miles of 4-lane arterial streets): $800–950 million • Traffic Signals or Roundabouts (16): $20–40 million • Off-Street Active Transportation Improvement (23 miles of off-street bike paths): $30–50 million
Transit Infrastructure Costs	$60–120 million	• Transit Improvements (44 floating bus stops, 5 miles of transit signal priority): $40–80 million • Two Mobility Hubs (transit hub with shelter, bus driver facilities, multi-modal facilities, wayfinding, information kiosks, and limited vehicle parking with EV charging): $20–40 million
Off-site Infrastructure Costs	$160–300 million	• CR 32A Grade Separation of UP rail line: $70–120 million • I-80 Interchange Improvements: $80–150 million • SR 113 Interchange Improvements: $10–30 million

1. Capital Cost Range Allocation for New Housing

- Assuming 100% of on-site and off-site capital costs allocated to new housing and employment in NE area
- About 78 percent of costs allocated to residential uses and 22 percent to employment uses based on relative daily trip generation
- Single family units: $125,000-170,000 per home
- Multi-family units: $60,000-85,000 per unit

Council Discussion

Questions for Council to Consider

- ❑ Are there any key considerations that are omitted from the preliminary study that could help refine the land use and mobility concept plan?

- ❑ Are there any additional implications of the land use and mobility concept plan that should be further studied in the General Plan Update?