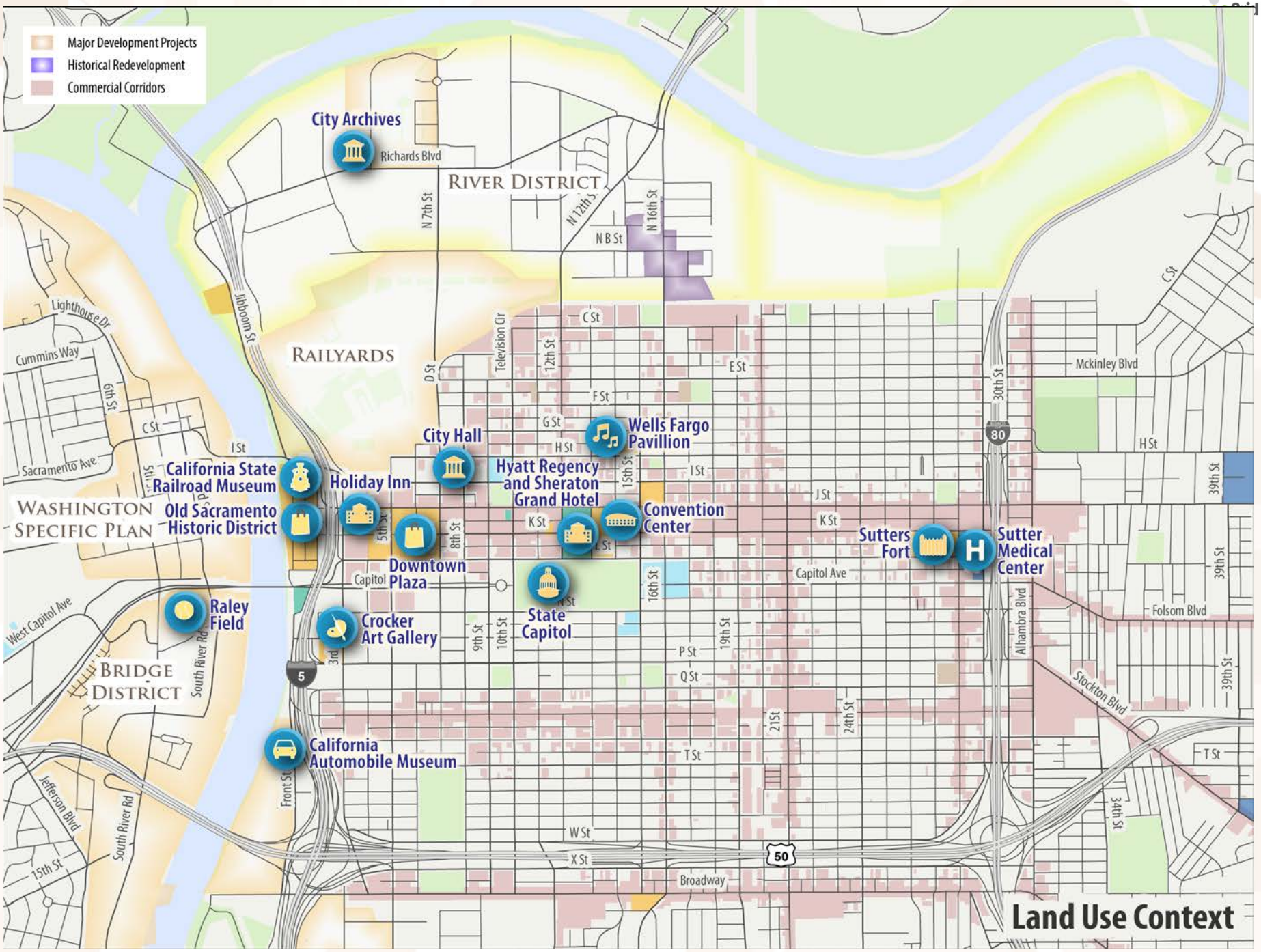
Sacramento Grid 2.0

"The Downtown Transportation Study"

April 20, 2016

The Grid

- 4.25 square miles
- Street grid defined at birth of City
- Lettered and numbered streets spaced every 400 ft
- East-west alleys halfway between lettered streets
- Flat with distances that are easily traversed on foot
- Walkability and pedestrian/bicycle accessibility level is what planners strive for



Land Use Context

Presentation Topics

- Study Approach
- Strategies & Investment Options
- Network Elements
- Performance Measures for Draft Preferred Network

Study Approach

- Use a **"systems planning approach"** to optimize access and travel on the grid
- **"Layered network"** perspective to enhance and integrate travel modes on the grid
- Challenges in accommodating all modes on a single street
- Identify **priority for travel modes** on different street segments

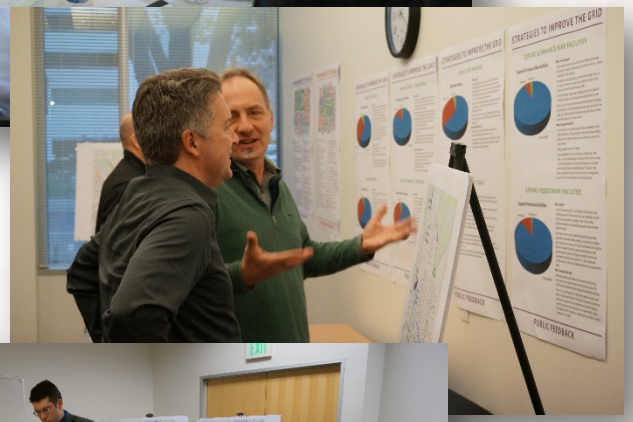
Study Phases

1: **Visioning**	▪ Ideas for projects, programs & policies
2: **Project Screening**	▪ Most effective ideas
3: **System Alternatives**	▪ Evaluate options
4: **Draft Preferred Network**	▪ The best package
5: **Implementation Strategy** (current phase)	▪ Priorities & financing

Stakeholder Engagement

The project team has met with a comprehensive group of community stakeholders representing

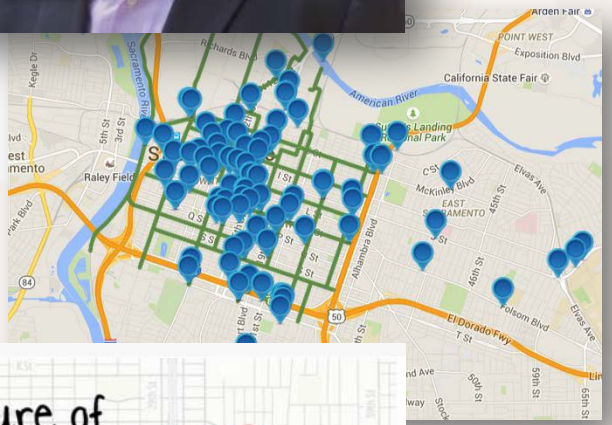
- **neighborhoods**
- **businesses**
- **property owners**
- **active transportation interests**

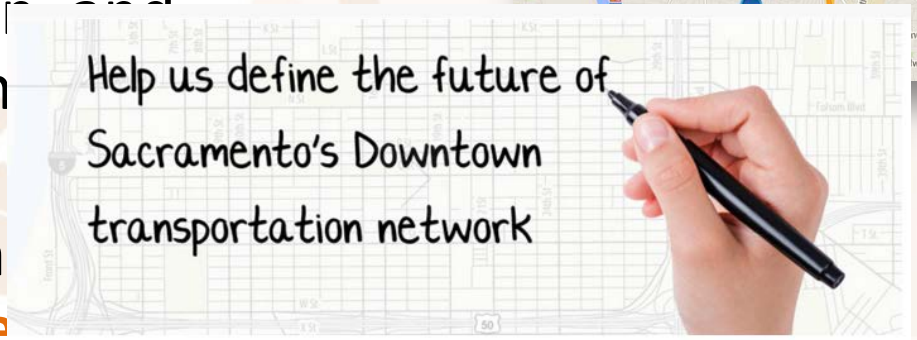


Community Engagement

Find us on Facebook!
Sac Grid 2.0

- The project team is reaching out to the community through multiple methods…
  - Four online community surveys have received more than **650 responses**
  - **SacGrid.com** includes project information and **videos** of commun leaders discussing
  - Over 400 people h connected on **Face**





Strategies to Improve the Grid

Goal	Strategy
Improve connections between neighborhoods and the downtown core, especially for biking, walking and transit trips	Convert one-way streets to expand network of on-street "commute" bike lanes
	- One-way to two-way conversions
	- Reduce one-way street from 3 lanes to 2 lanes
	Enhance "low stress" bike network
	Streetscape projects (commercial/transit streets)
	Pedestrian gap closure
Create downtown gateways and corridors worth visiting	Pedestrian enhancements on connector streets (at freeways and to/from river crossings)
	New river bridges
Protect neighborhood streets as places where parents feel safe for their children to walk and bike	Maintain adequate capacity on one-way streets to avoid diversions to neigborhood streets
	Connection to "low-stress" bike network
Improve transit circulation and efficiency with transit stops and stations that make rail and bus travel a pleasurable experience	Enhance transit stops
	Transit signal priority
	Transit lane priority
	Rail improvements
Enhance commercial corridors for safe walking and cycling and accommodating both through and local traffic	Street lighting in commercial corridors
	Convert one-way streets in commercial corridors to provide bike lanes

Types of Investments

Bike Facilities

- New Bike Lanes/Paths
- Low Stress Network
- Buffered Lanes
- Cycle Tracks

Transit Facilities

- Enhanced Stops/Wayfinding
- Transit Signal Priority
- Dedicated Lanes

Pedestrian Facilities

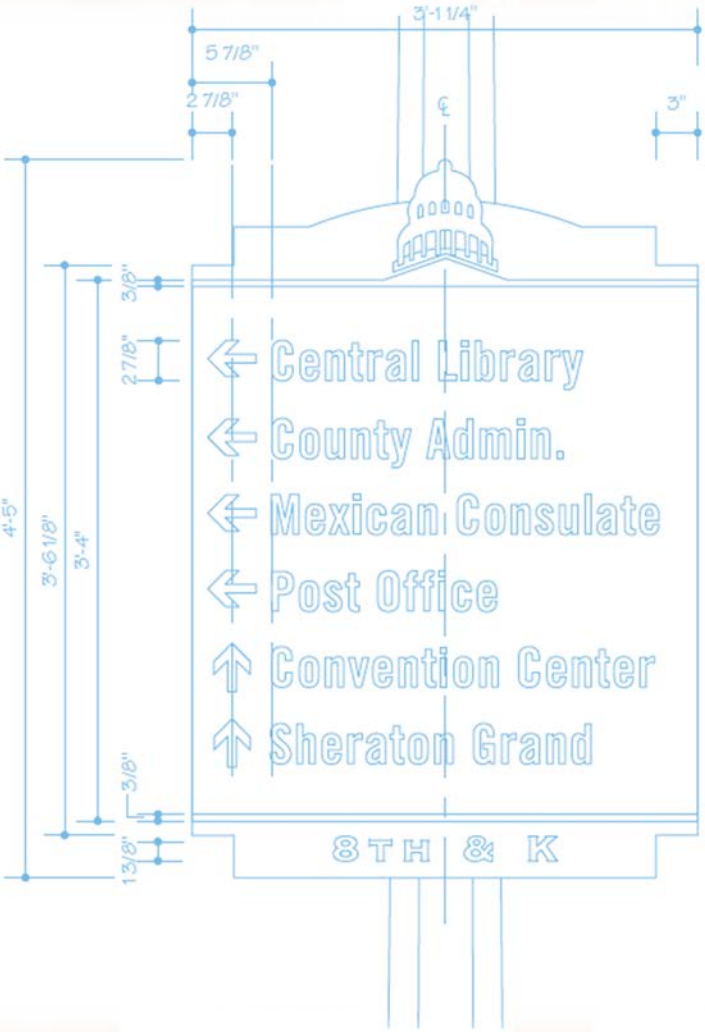
- Streetscape projects
- Activity Center Projects
- Gap Projects
- Connector Street Enhancements

Area-wide Investments

Other programmatic investments will be considered that will be common to all system options but are not shown on maps. The level of improvements will to be determined but they will include:

- **Street Lighting**
- **Wayfinding**
- **Alley Activation**

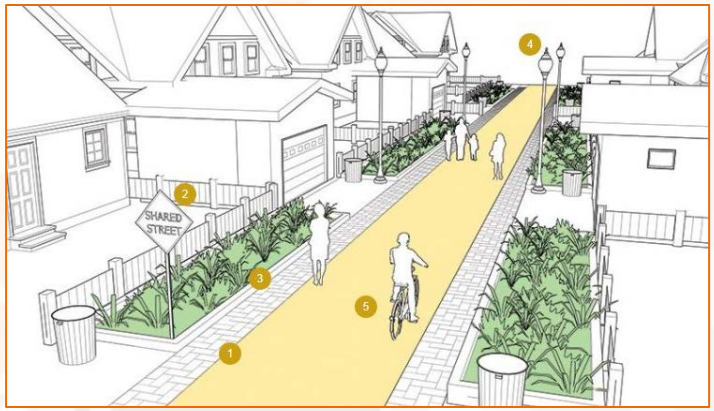
Wayfinding


3'-1 1/4"
5 7/8"
2 7/8"
3"
4'-5"
3'-6 1/8"
3'-4"
3/8"
2 7/8"
3/8"
13/8"
Central Library
County Admin.
Mexican Consulate
Post Office
Convention Center
Sheraton Grand
8TH & K


4'-10 1/2"
1/4" Painted Aluminum Icon and rules attached to graphic panel.
1/8" Painted Aluminum Panel with screened retro-reflective vinyl applied to panel. Attached to post with standard bracket/stainless strapping
3'-10 1/8"
3 1/4"
5"
WELCOME TO
SACRAMENTO
Pedestrian Signs
LOCATION PLAN
Signs are not shown to scale.
MIDTOWN INSET

Alley Activation

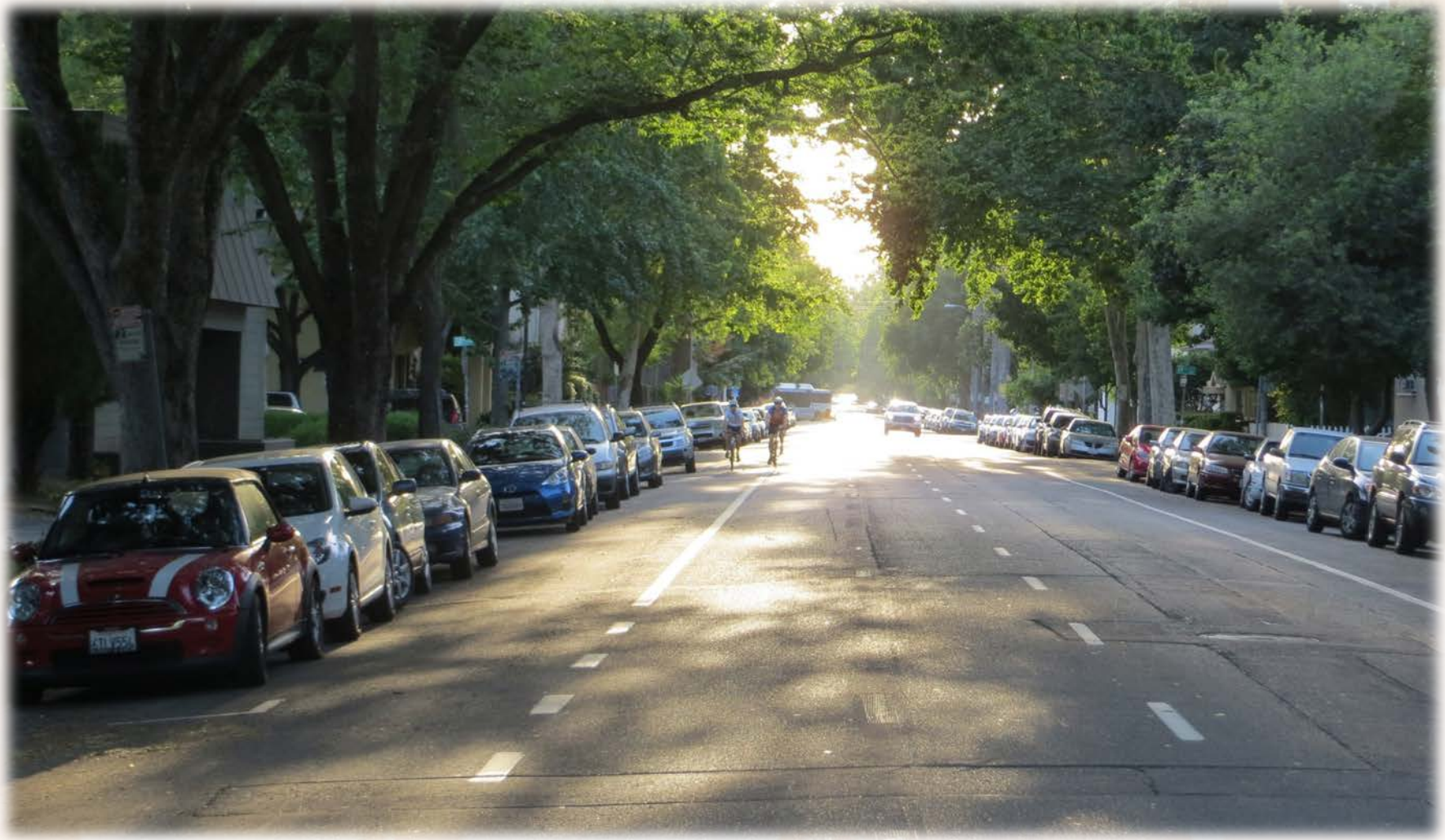
- **Commercial Alleys** can be restricted for traffic during non-delivery hours
- **Residential Alleys** can be constructed as green alleys and/or operated as pedestrian-only environments or as shared streets



Alley Activation

Opportunities on the Grid: Complete Streets

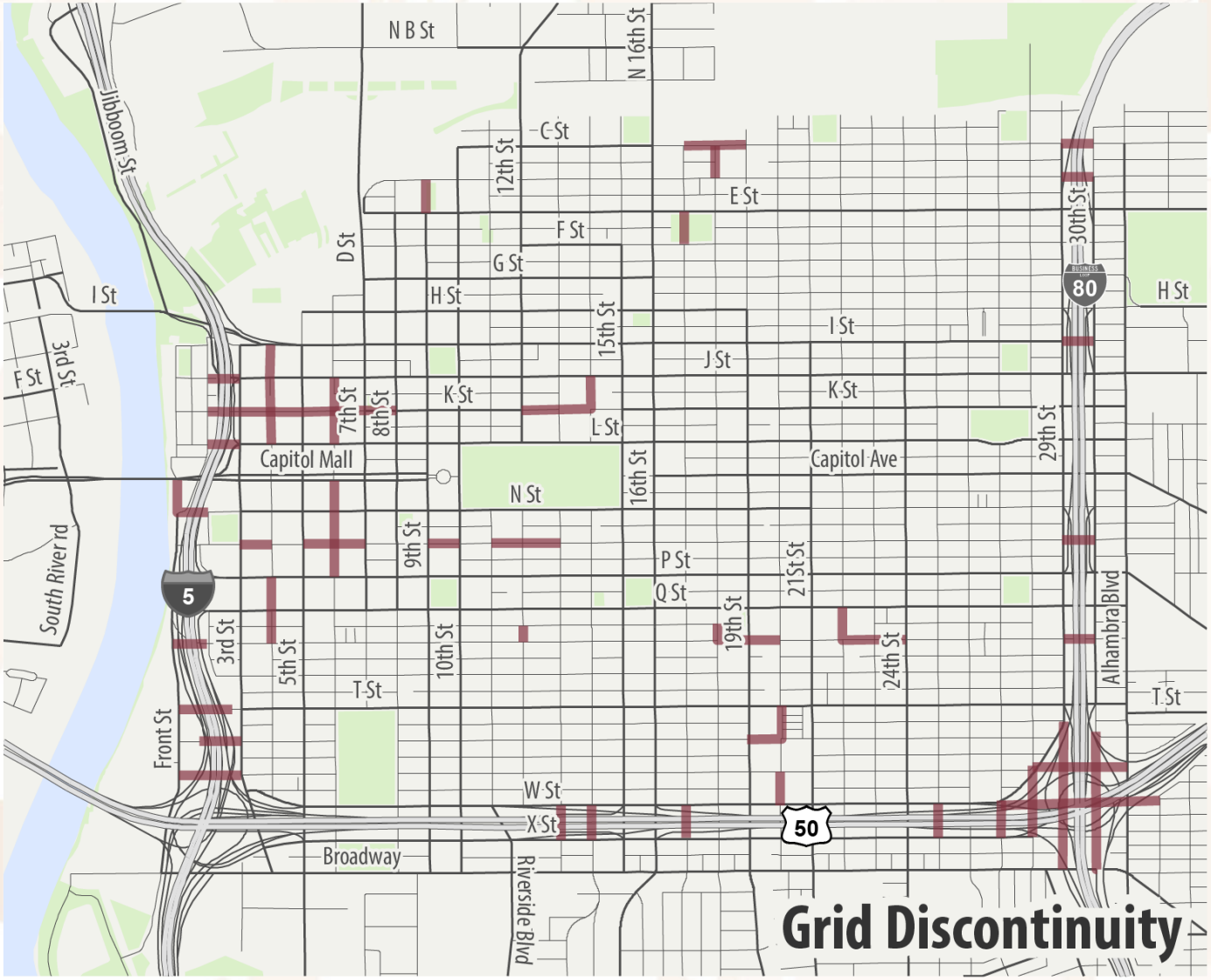
Opportunities on the Grid: One-Way Street Conversions



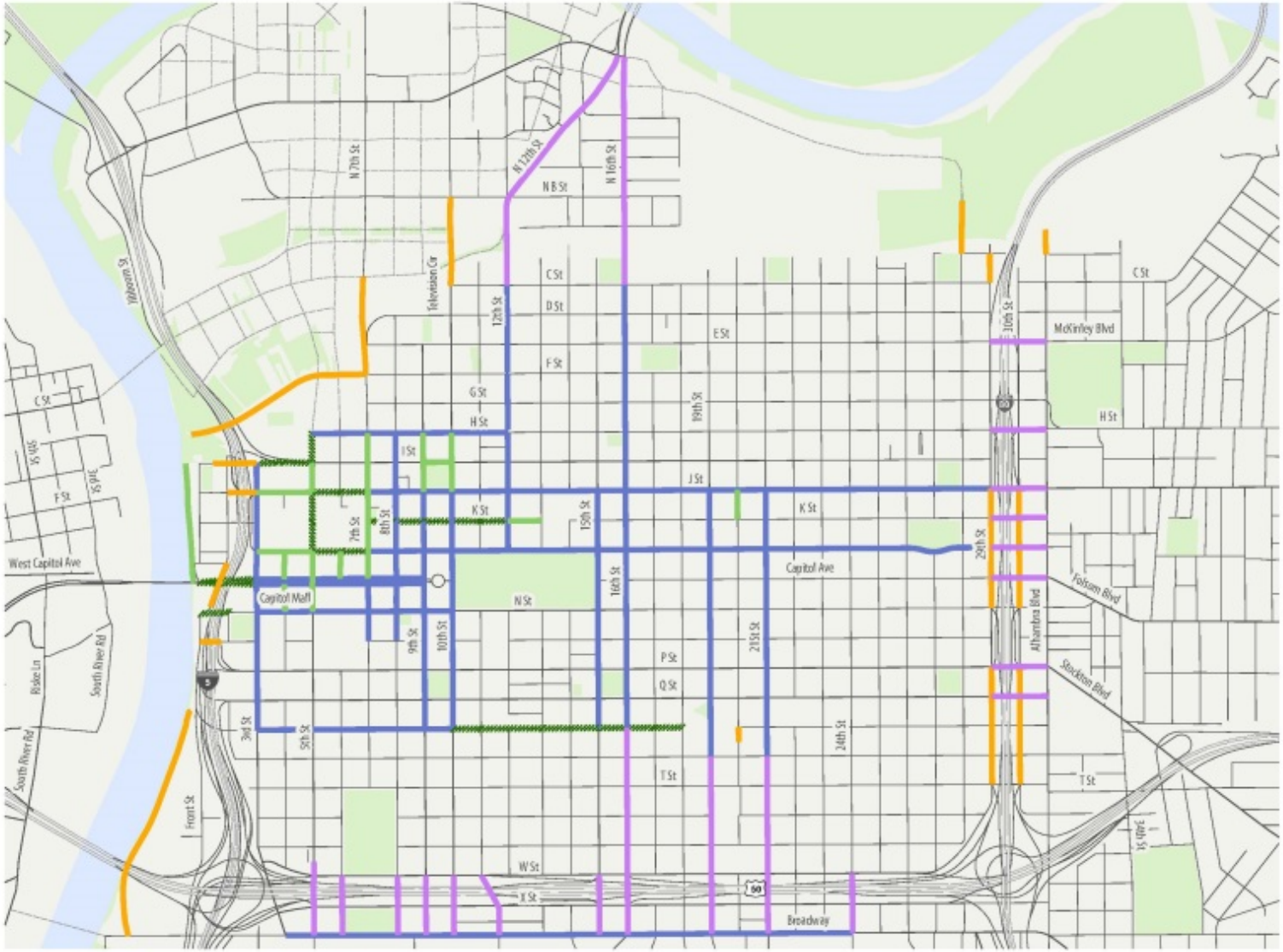
Opportunities on the Grid: Transit Corridors

Opportunities on the Grid: Gateway Access

Network Connectivity



Draft Pedestrian Investments



Preferred Pedestrian Investments

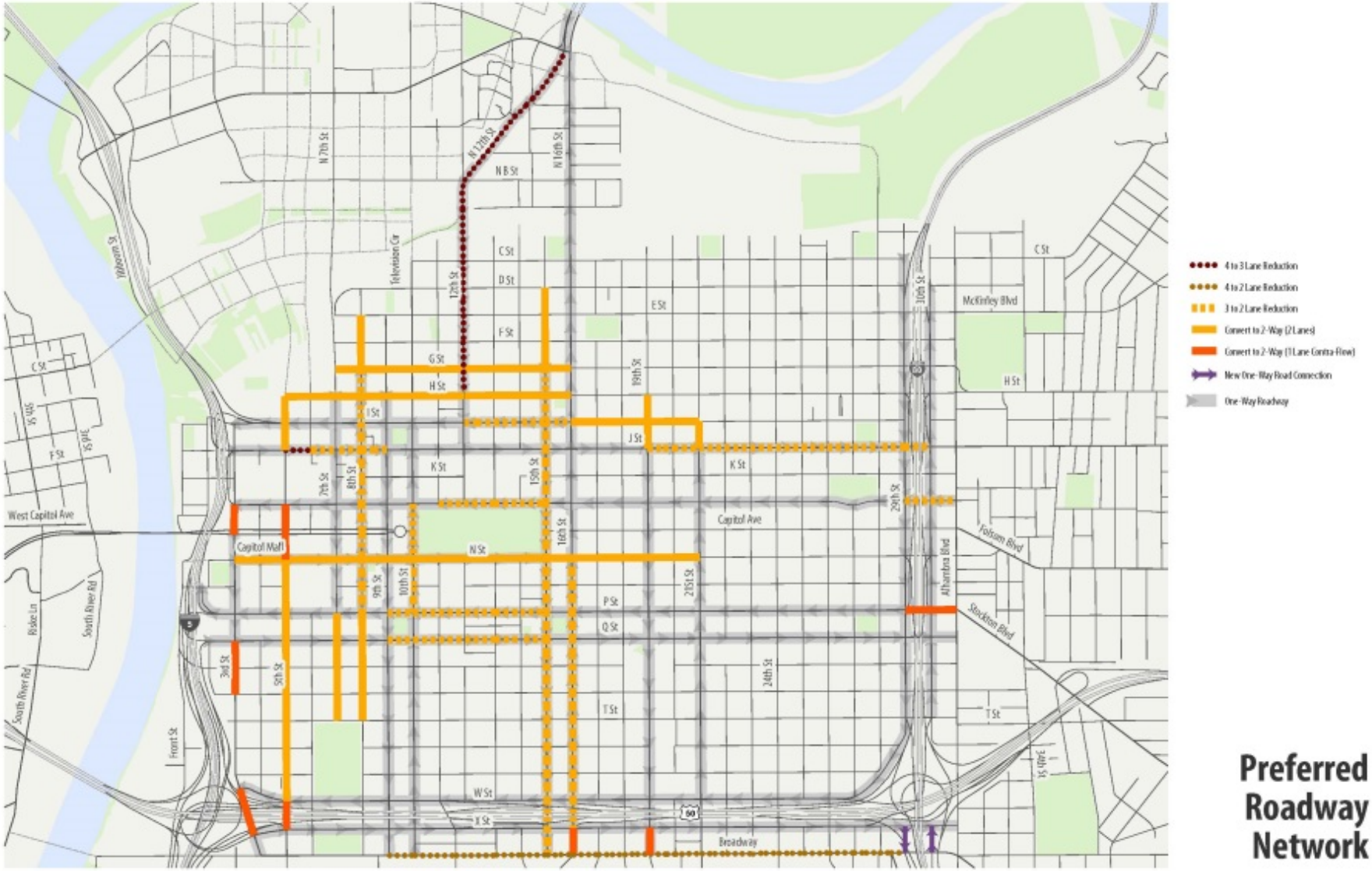
Types of One-Way Conversions

- Two-way →
  - 3 lanes one-way to 1 lane each direction plus 2 Class II

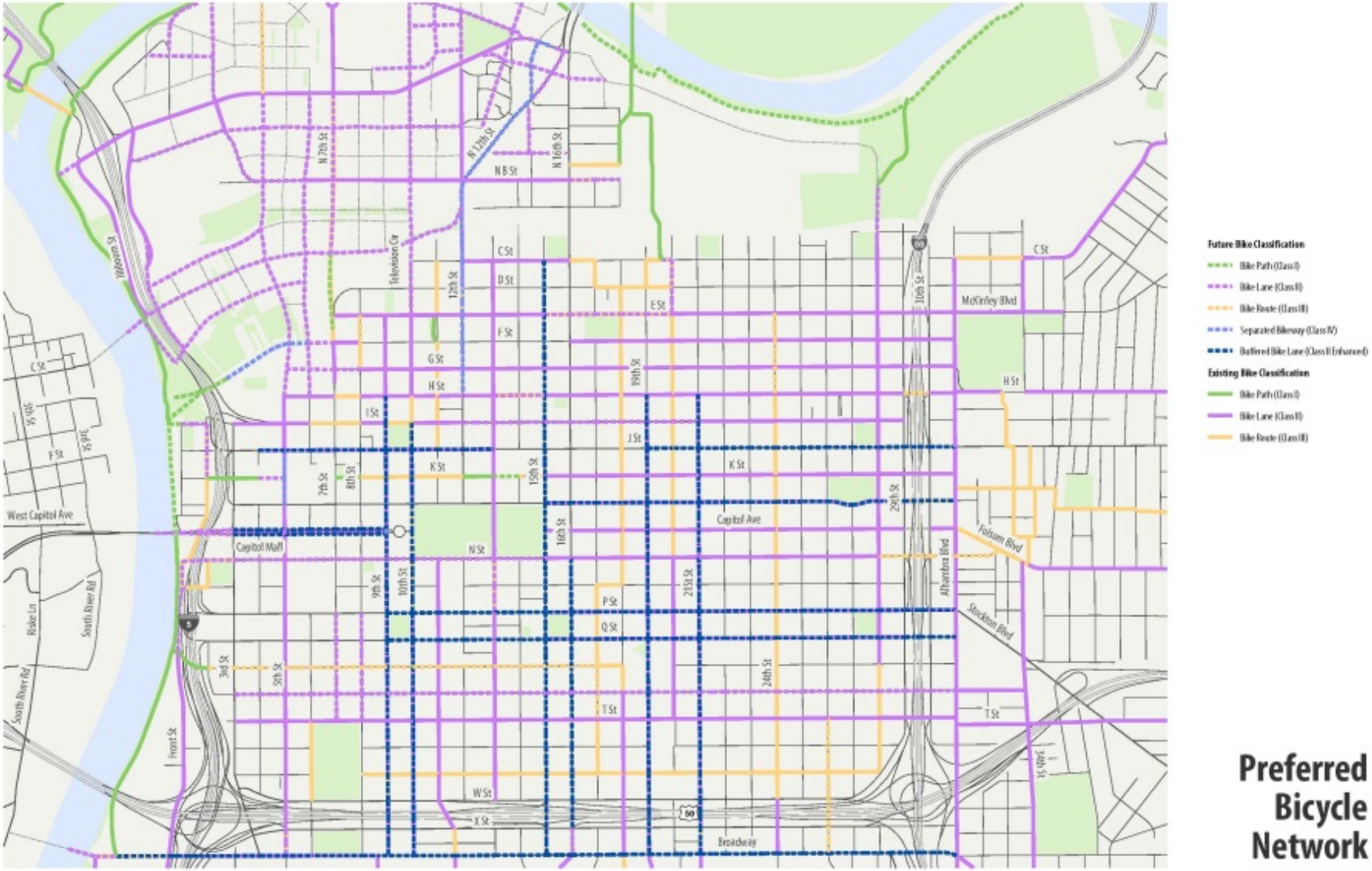
- 3to 2-Lanes →
  - 3 lanes one-way to 2 lanes one-way plus 2 Class II

- Two-way with contra-flow lane →
  - 3 lanes one-way to 2 lanes one direction and 1 lane in other direction
  - 4 lanes one-way to 3 lanes one direction and 1 lane in other direction

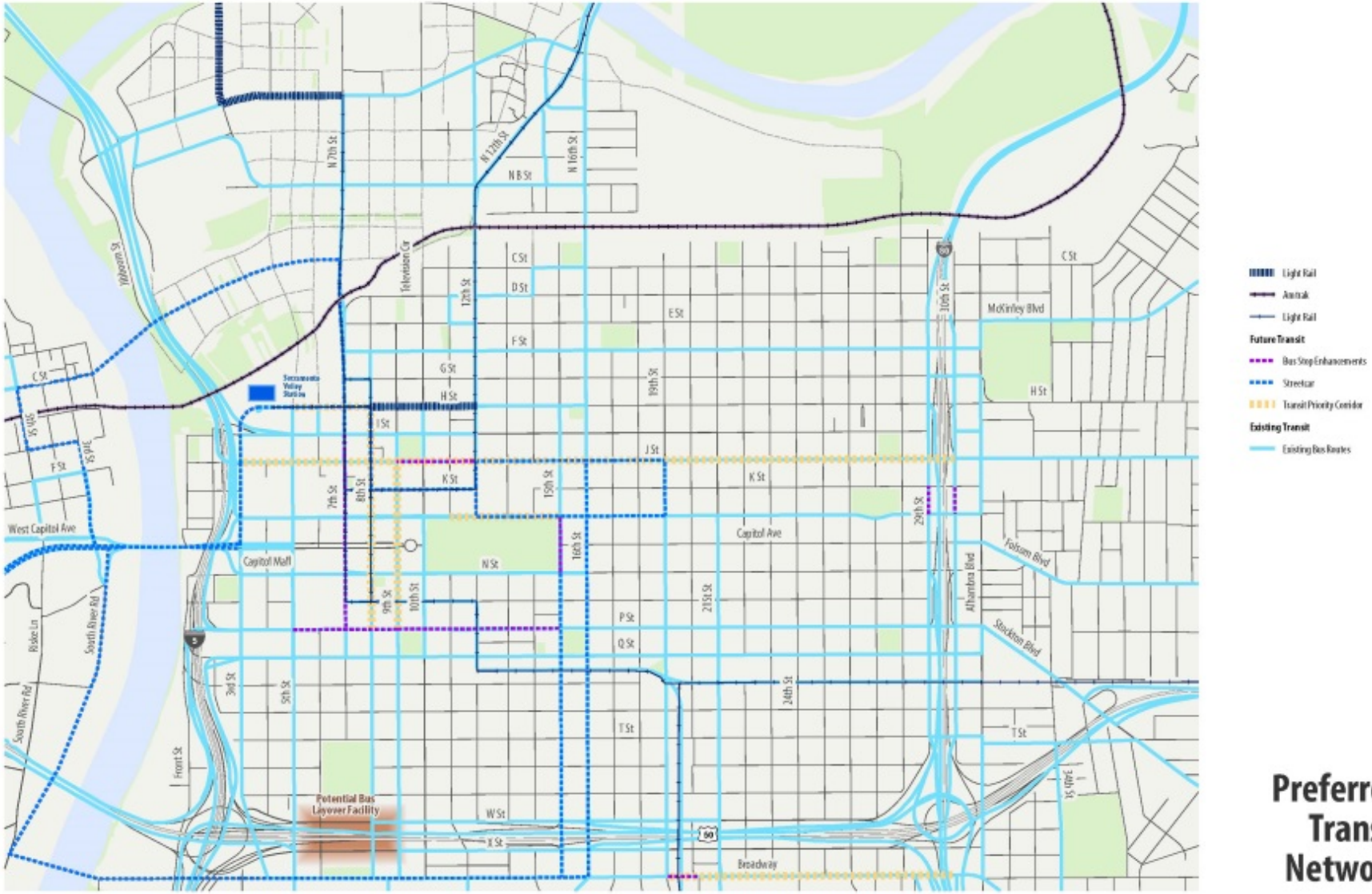
Draft Roadway Network

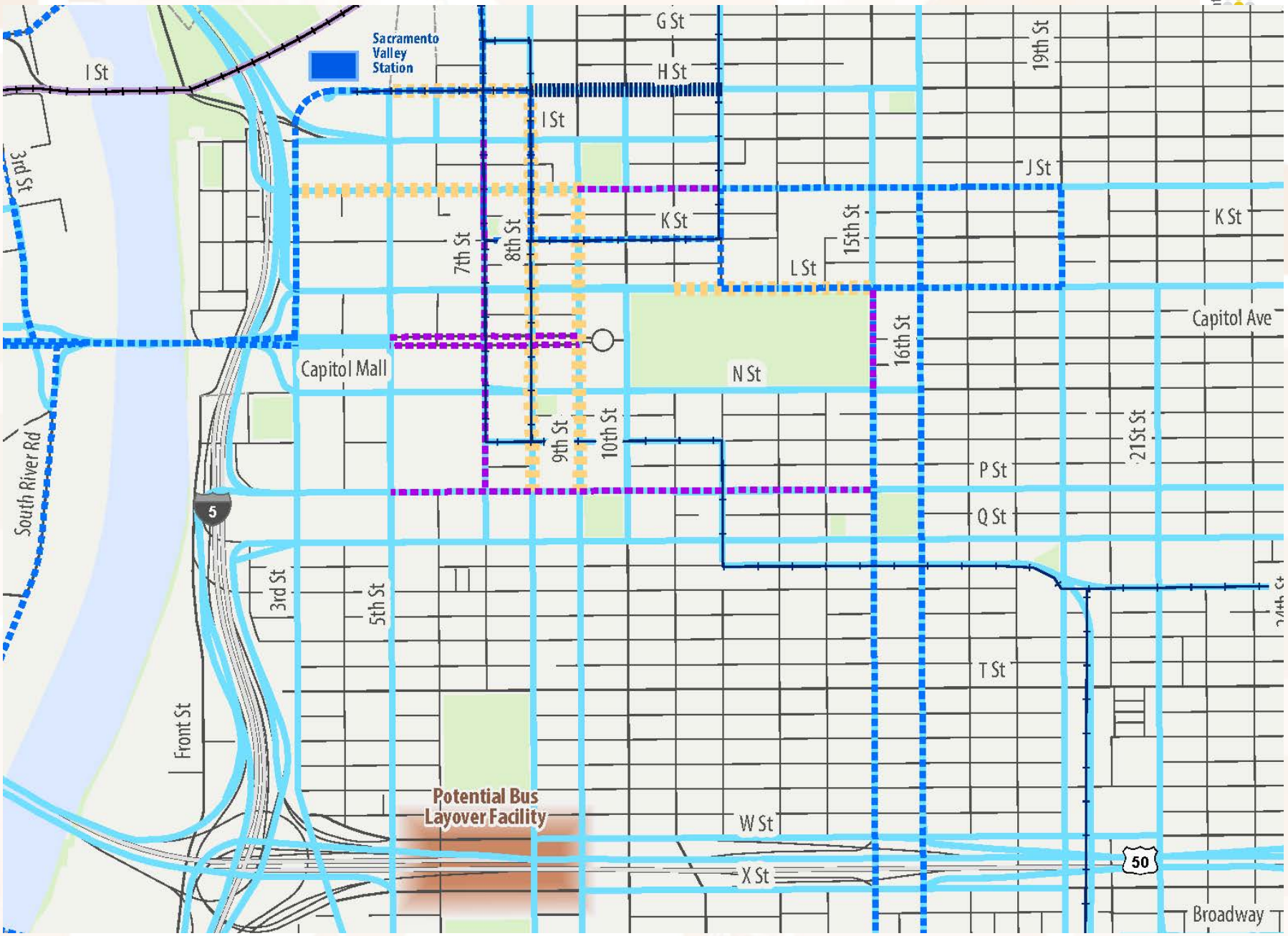


Draft Bike Network



Draft Transit Network




Sacramento Valley Station
I St
3rd St
South River Rd
5
Front St
3rd St
5th St
7th St
8th St
9th St
10th St
G St
H St
I St
J St
K St
L St
N St
P St
Q St
T St
W St
X St
15th St
16th St
19th St
21St St
Capitol Mall
Capitol Ave
Potential Bus Layover Facility
50
Broadway

Existing Total Peak Hour Bus Volumes

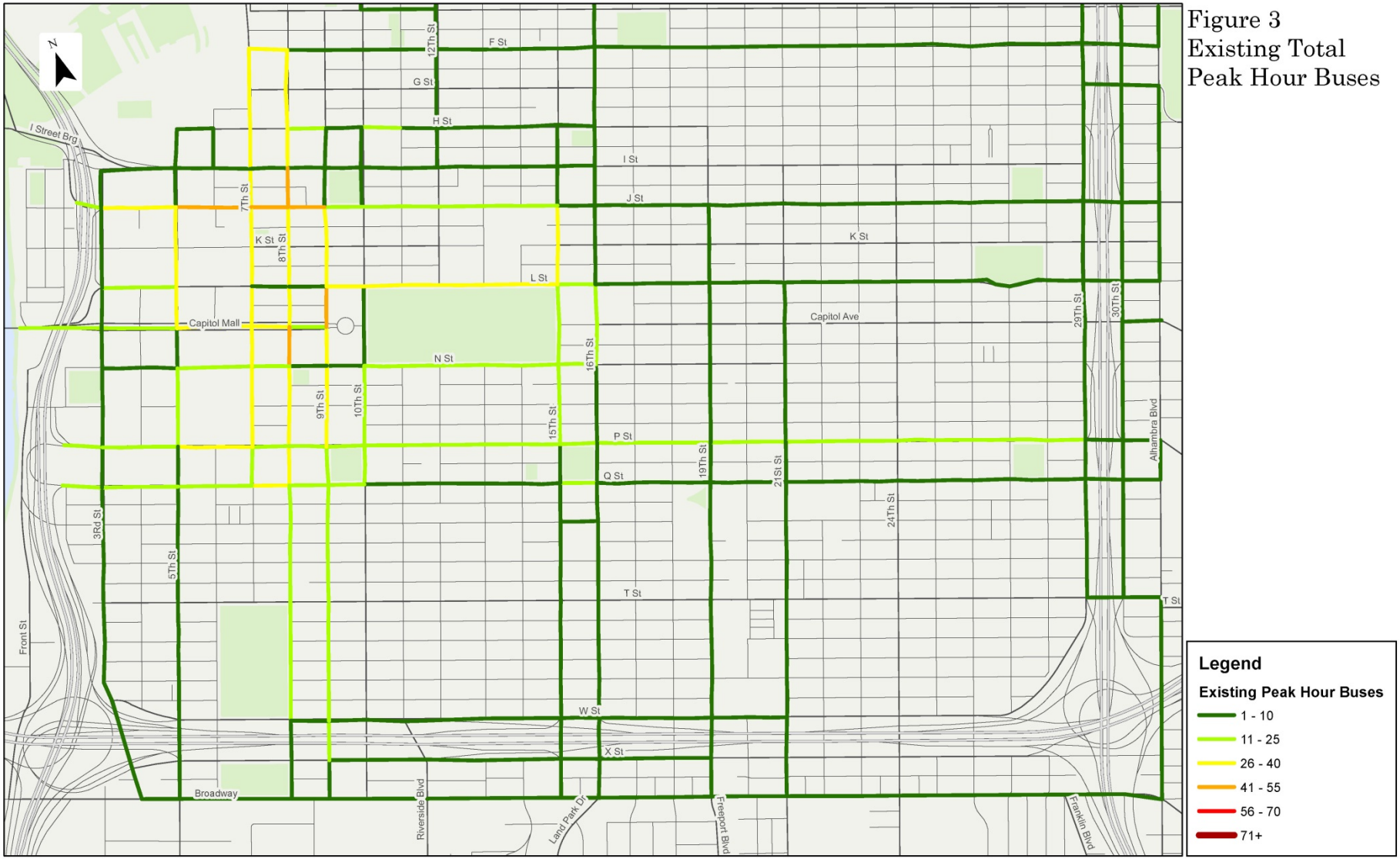


Figure 3
Existing Total
Peak Hour Buses

2035 Total Peak Hour Bus Volumes

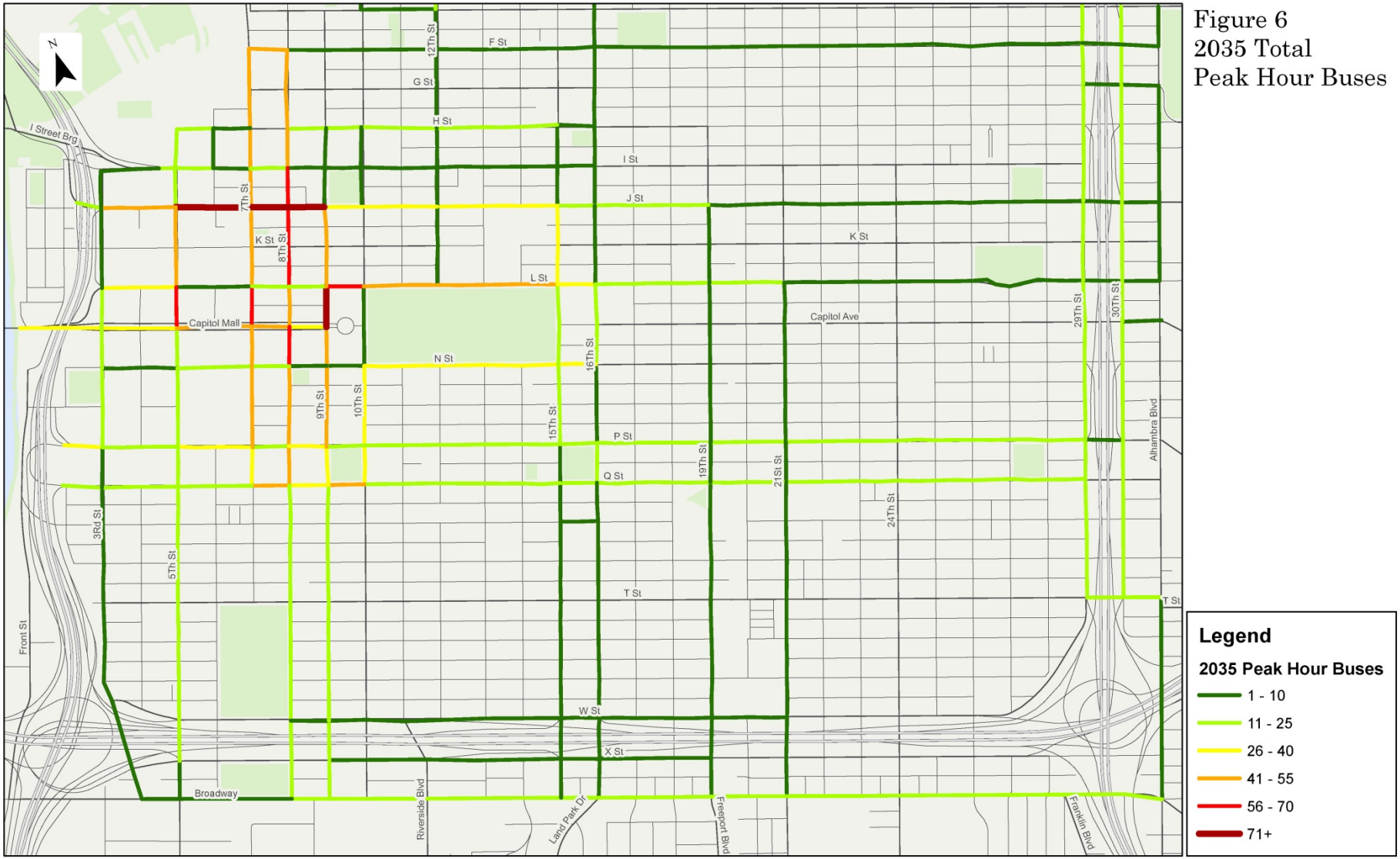


Figure 6
2035 Total
Peak Hour Buses

Type of Transit Facility Investments

<u>MTP/SCS</u>

- LRT Extensions and Enhancements – 33% increase in trains in downtown core
- Streetcar
- Expanded bus service – 75% increase buses in downtown core

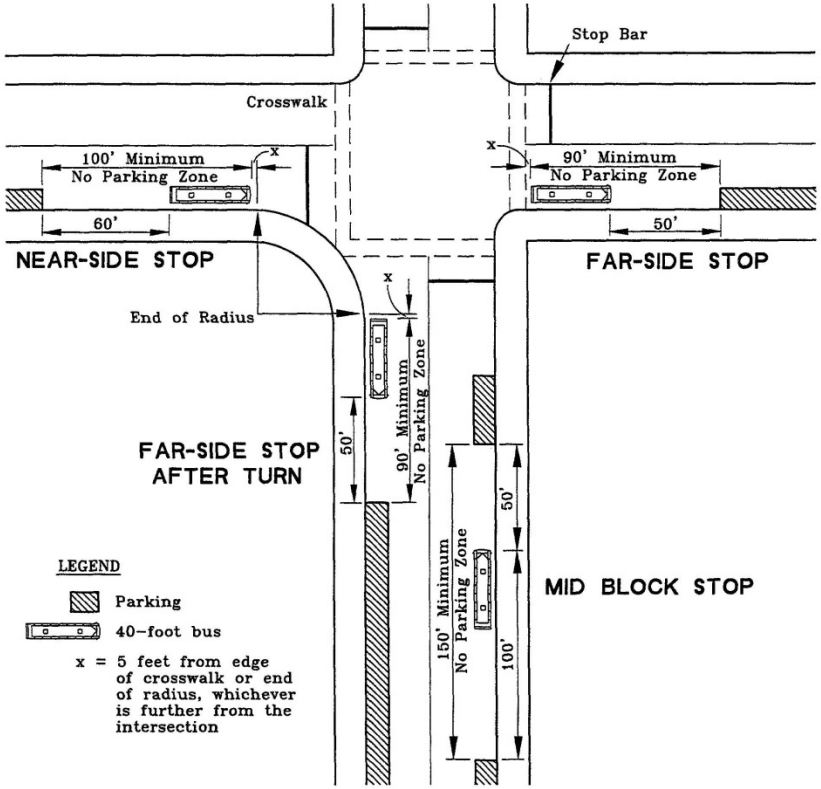
<u>City Investments</u>

- Dedicated Transit Lanes with Transit Signal Priority
- Enlarged Stops
- Bulb Outs

STREET-SIDE FACTORS

Chapter 3

BUS STOP ZONE DESIGN TYPES—Curb-Side Bus Stop Zone Dimensions



Notes:

1) Add 20 feet to bus stop zones for an articulated bus.
2) Increase bus stop zone by 50 feet for each additional standard 40-foot bus or 70 feet for each additional 60-foot articulated bus expected to be at the stop simultaneously. See Table 3 for the suggested bus stop capacity requirements based on a range of bus flow rates and passenger service times.

Figure 3. Typical Dimensions for On-Street Bus Stops.

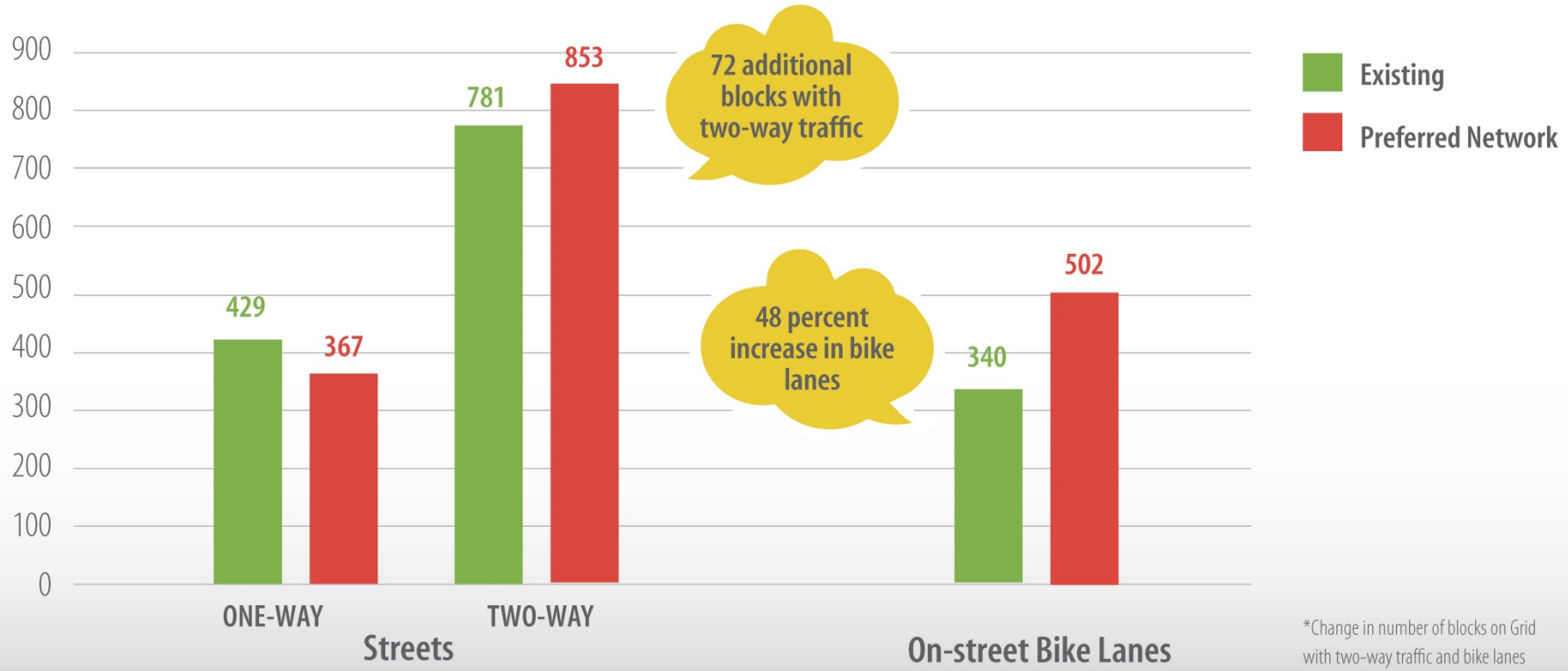
Grid 2.0 Sacramento

From:

Transit Cooperative Research Program (TCRP) Report 19

Performance Measures

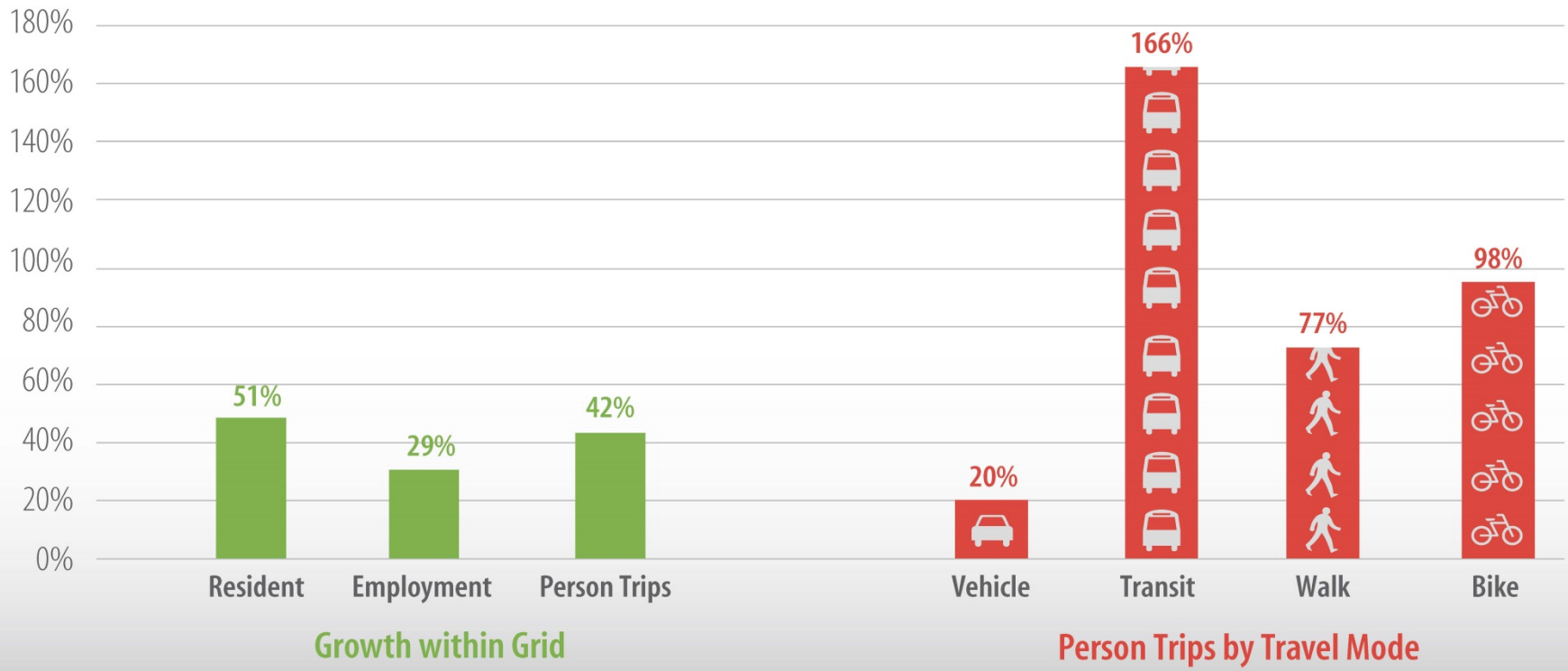
How will this plan change the grid?



*Change in number of blocks on Grid with two-way traffic and bike lanes

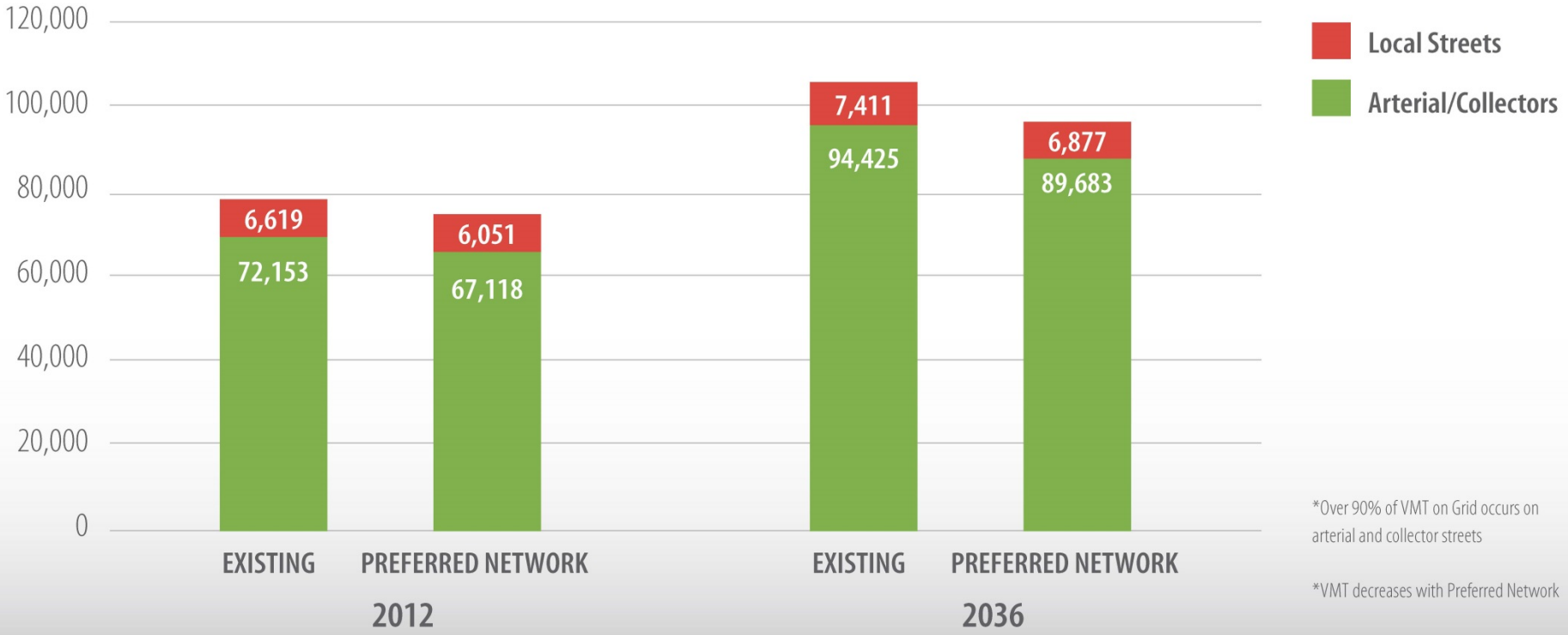
Performance Measures

How will travel change on the grid?
2012 to 2036



Performance Measures

Vehicle-Miles of Travel (VMT) on Grid during Peak Periods
(3 hours AM Peak plus 3 Hours PM Peak)



*Over 90% of VMT on Grid occurs on arterial and collector streets

*VMT decreases with Preferred Network

ON-GOING INFORMATION IS AVAILABLE AT…

WWW.SACGRID.COM

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