Greater North Park Mobility and Parks

October 13, 2010

Kimley-Horn and Associates, Inc.

Agenda

Review Exhibits/Welcome (5:30 – 6:00)

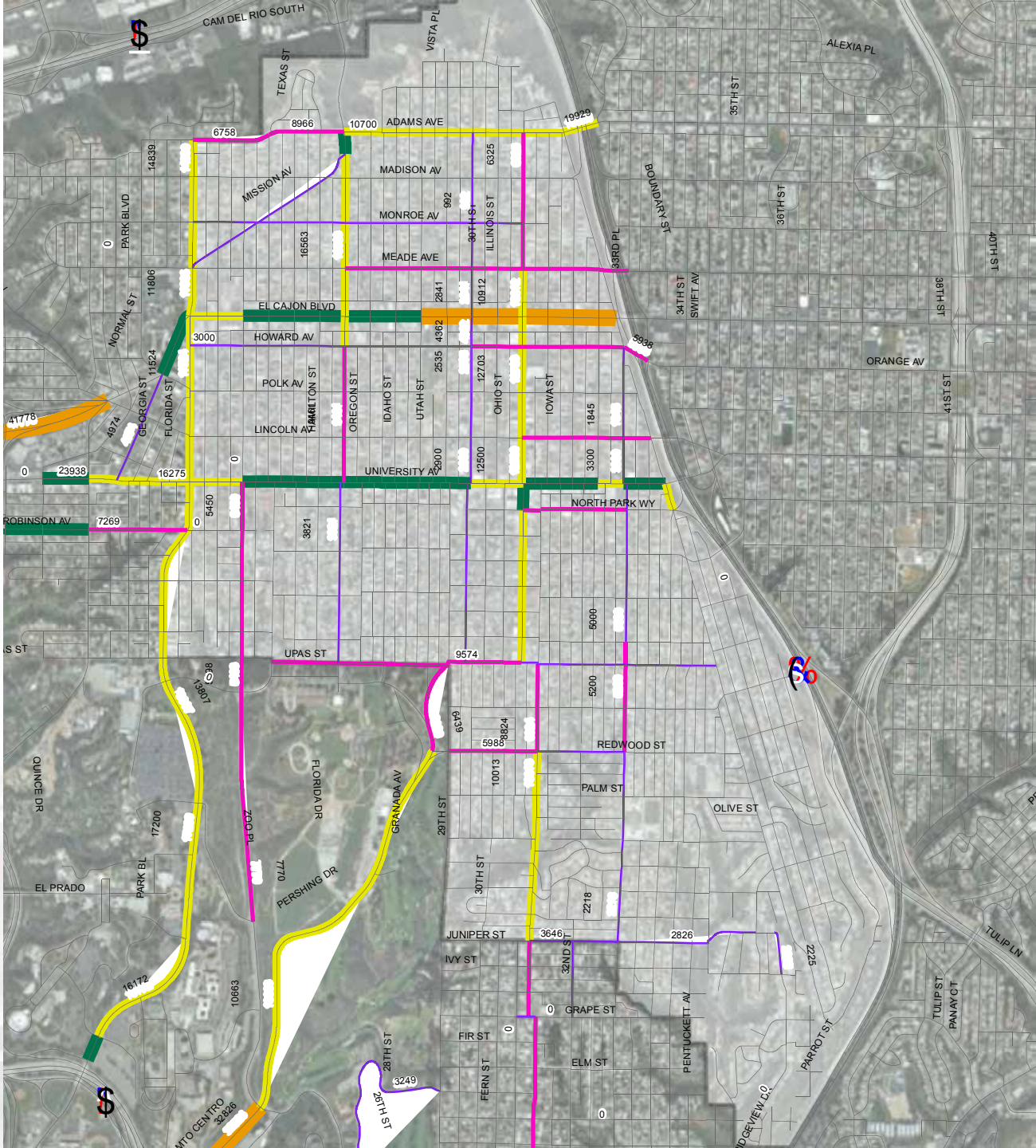
Mobility Topics (6:00 – 7:30)

Park Topics (7:30 – 8:00)

Mobility Topics

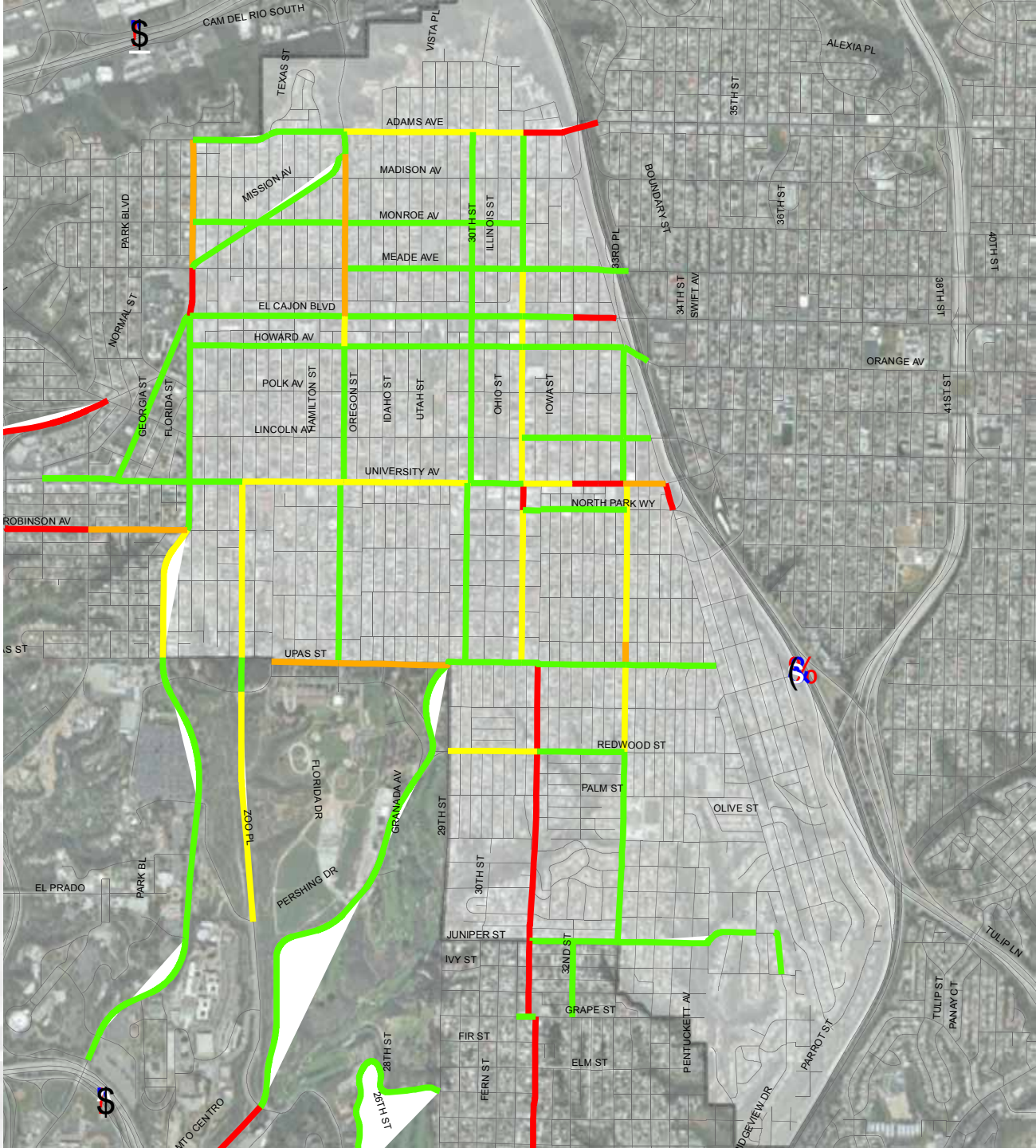
- Summary of Other Study Boards
  - University Avenue Mobility Plan
  - Mid City BRT
  - Pedestrian Master Plan
- Existing Conditions Analysis
  - Roadways
  - Intersections
  - Complete Streets
  - Pedestrian
- Discussion prompts/community survey
  - Parking
  - Transit
  - Bicycling
- Group exercise – bicycle priority streets

Existing Daily Traffic Volumes



5000 or Less
5001 - 10000
10001 - 20000
20001 - 30000
Greater than 30000

Existing Daily Level of Service



- LOS: A, B, C
- LOS: D
- LOS: E
- LOS: F

Afternoon Intersection Level of Service

- LOS: A, B, C
- LOS: D
- LOS: E
- LOS: F

What are complete streets?

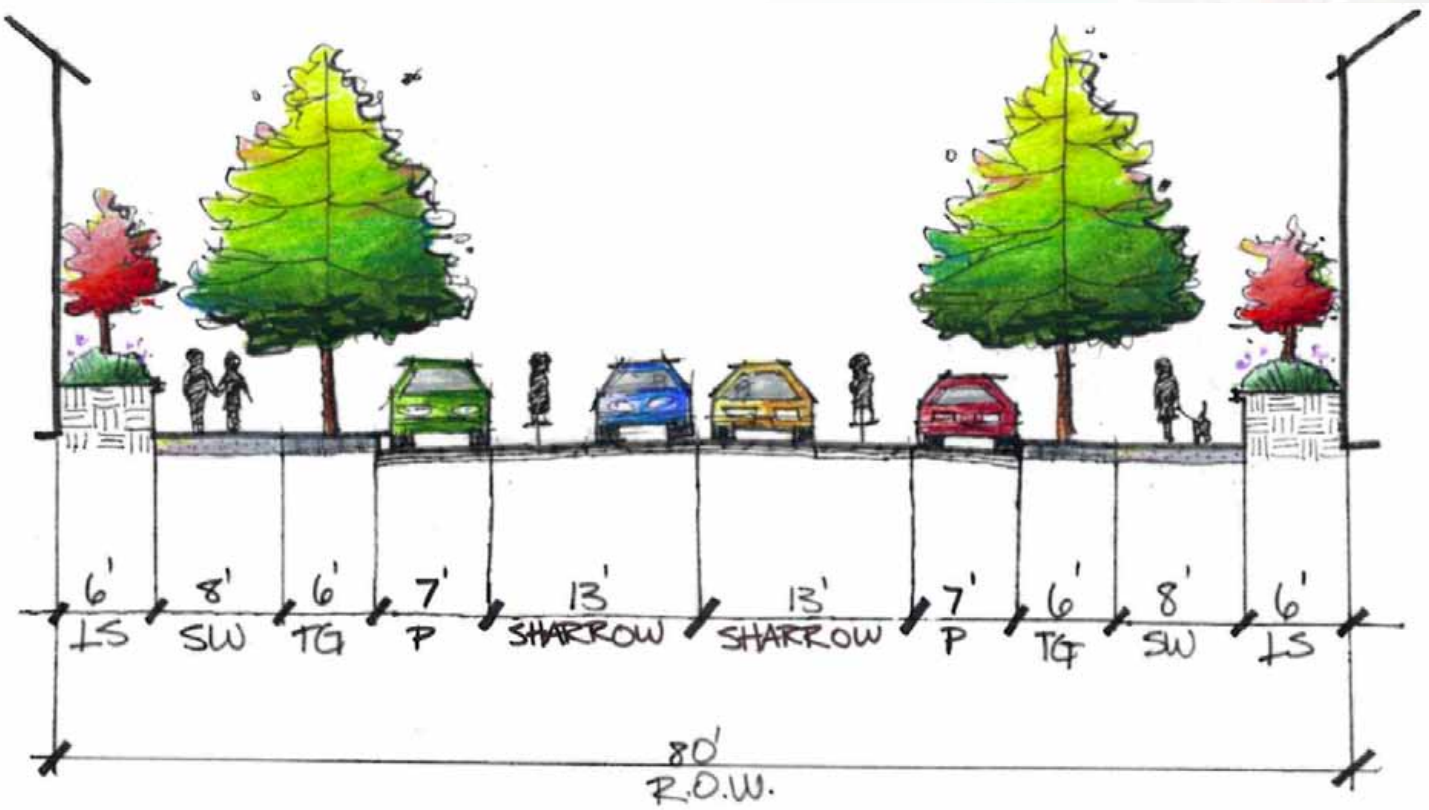
- The Federal Complete Streets Act of 2009:

  A roadway that accommodates all travelers, particularly public transit users, bicyclists, pedestrians, and motorists, to enable all travelers to use the roadway safely and efficiently.

- AB 1358 – California Complete Streets Act

  Requires all CA cities and counties to consider complete streets when next updating their General Plan.

Complete Street Example



ABBREVIATIONS:

LS = LANDSCAPING
SW = SIDEWALK
P = PARKING
R.O.W. = RIGHT OF WAY
TG = TREE GRATE

Multi-modal LOS Complete Streets Method

- Developed through NCHRP Research
- Auto Driver Perspective
  - "Stops" or "Speed" as the MOE
  - Considers:
    - intersection analysis:
      - % time green for thru movements
      - Volume
      - Turn lanes
    - speed
    - unprotected left turns

Multi-modal LOS
Complete Streets Method

- Pedestrian Perspective
  - Physical separation from moving traffic
    - Landscaped parkway (degree of saturation)
    - Parked cars
  - Crossing at uncontrolled locations

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Multimodal LOS Complete Streets Method

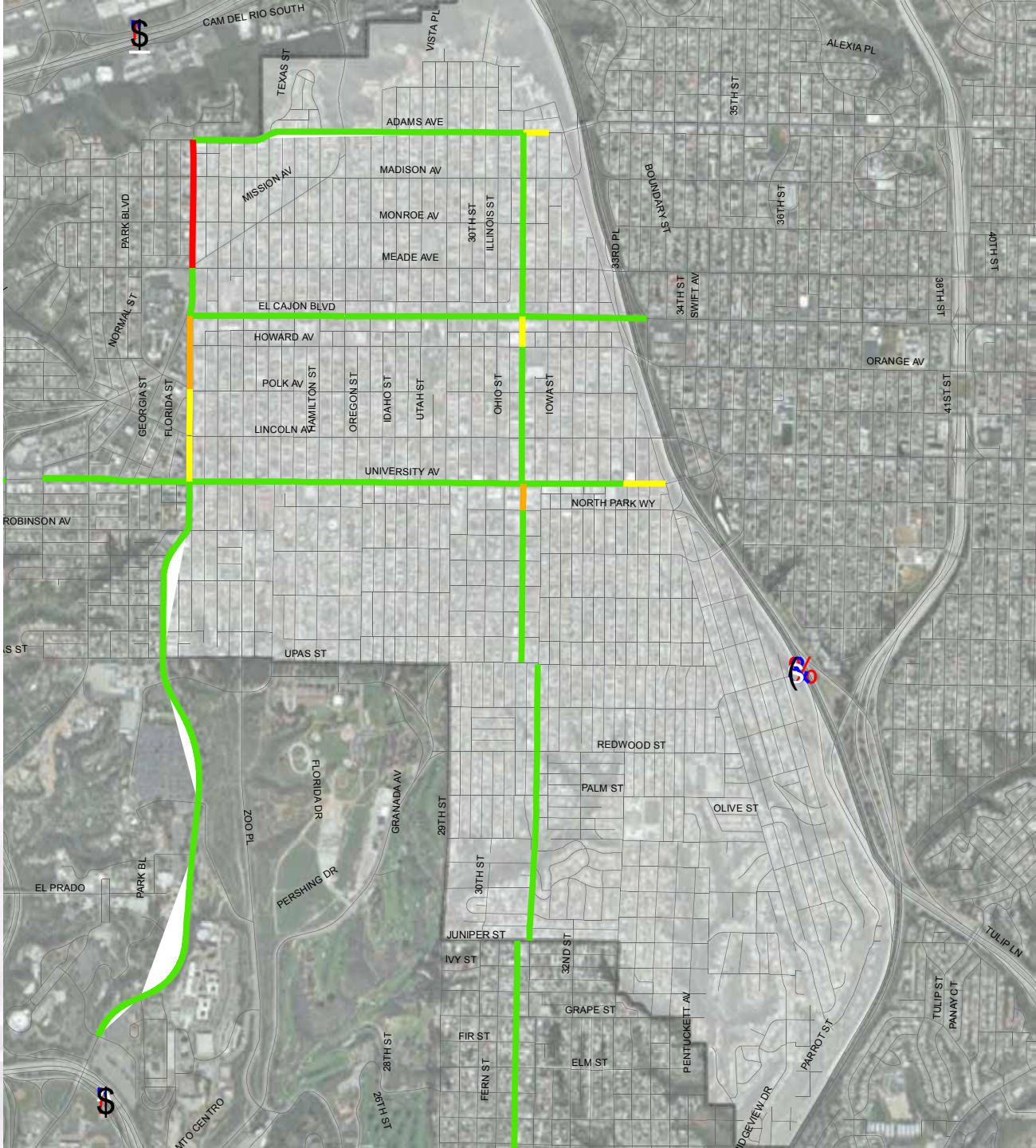
- Bicycle Rider Perspective
  - Width of outside lane
  - Volume and heavy vehicle % in outside lane
  - Parked cars
  - Crossings at uncontrolled intersections
  - Pavement condition (pot holes)

Multi-modal LOS Complete Streets Method

- Transit Rider Perspective
  - Headways
  - On-time reliability
  - Speed
  - Station amenities

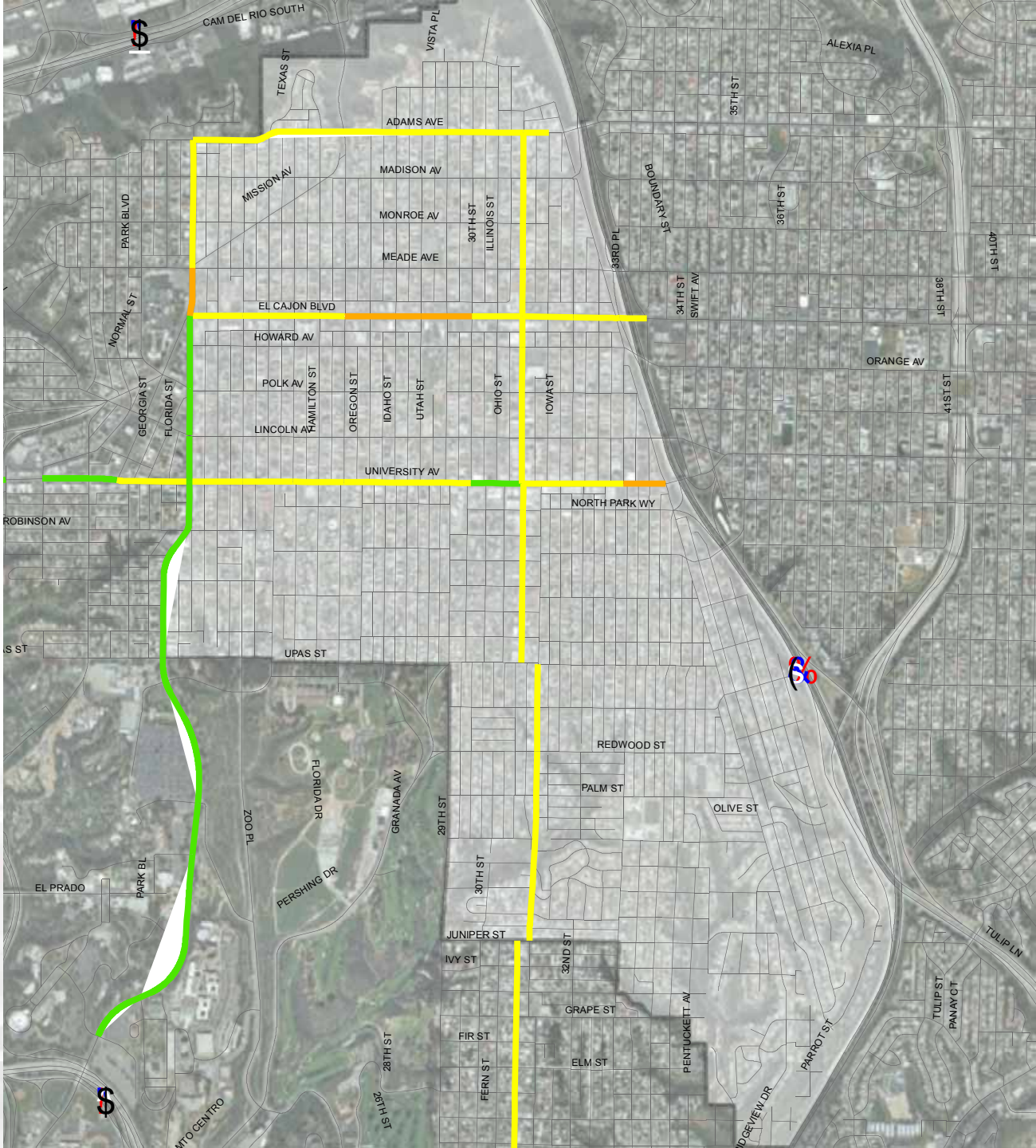
Complete Streets – Automobile LOS

Afternoon Peak



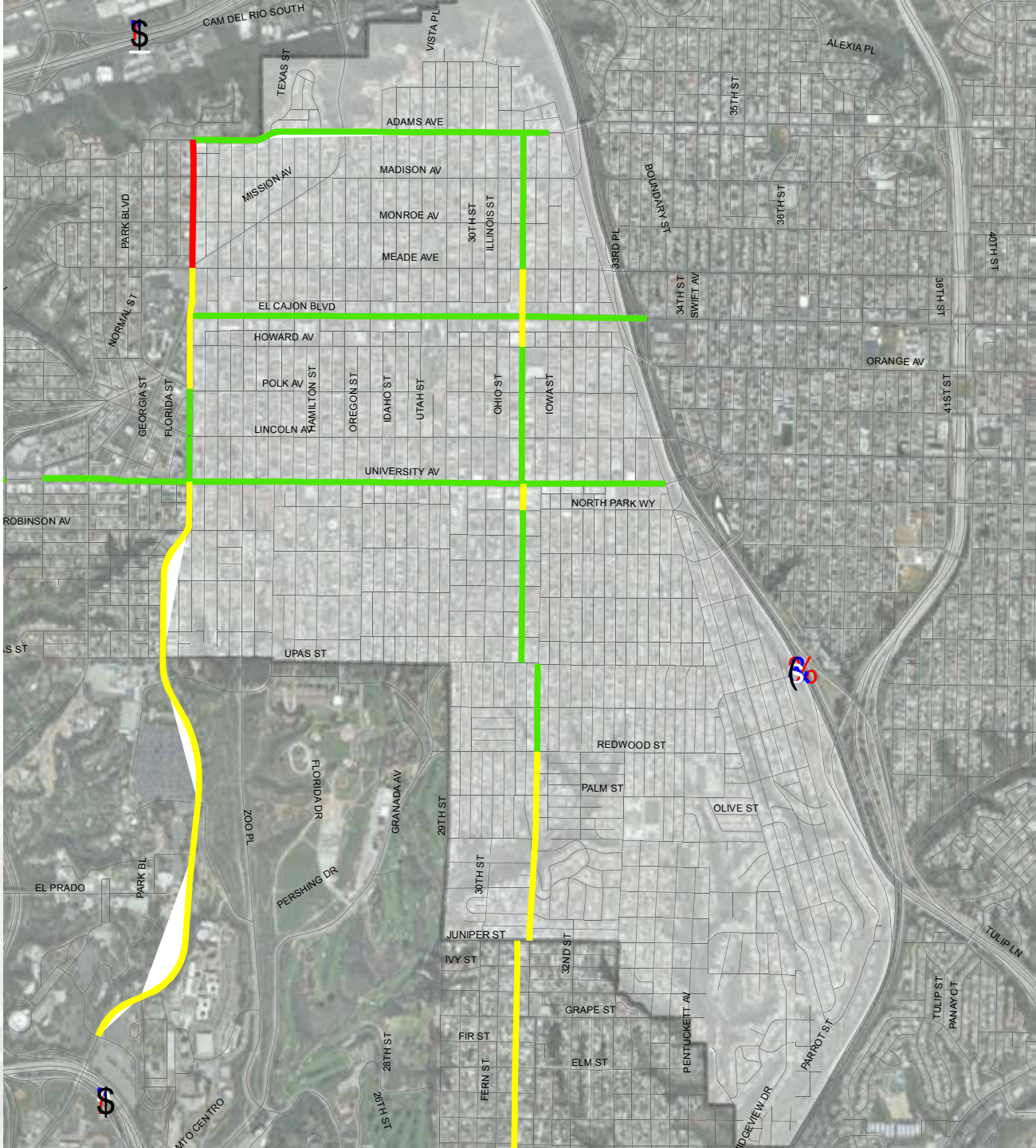
LOS: A, B, C
LOS: D
LOS: E
LOS: F

Complete Streets – Bicycle LOS Afternoon Peak



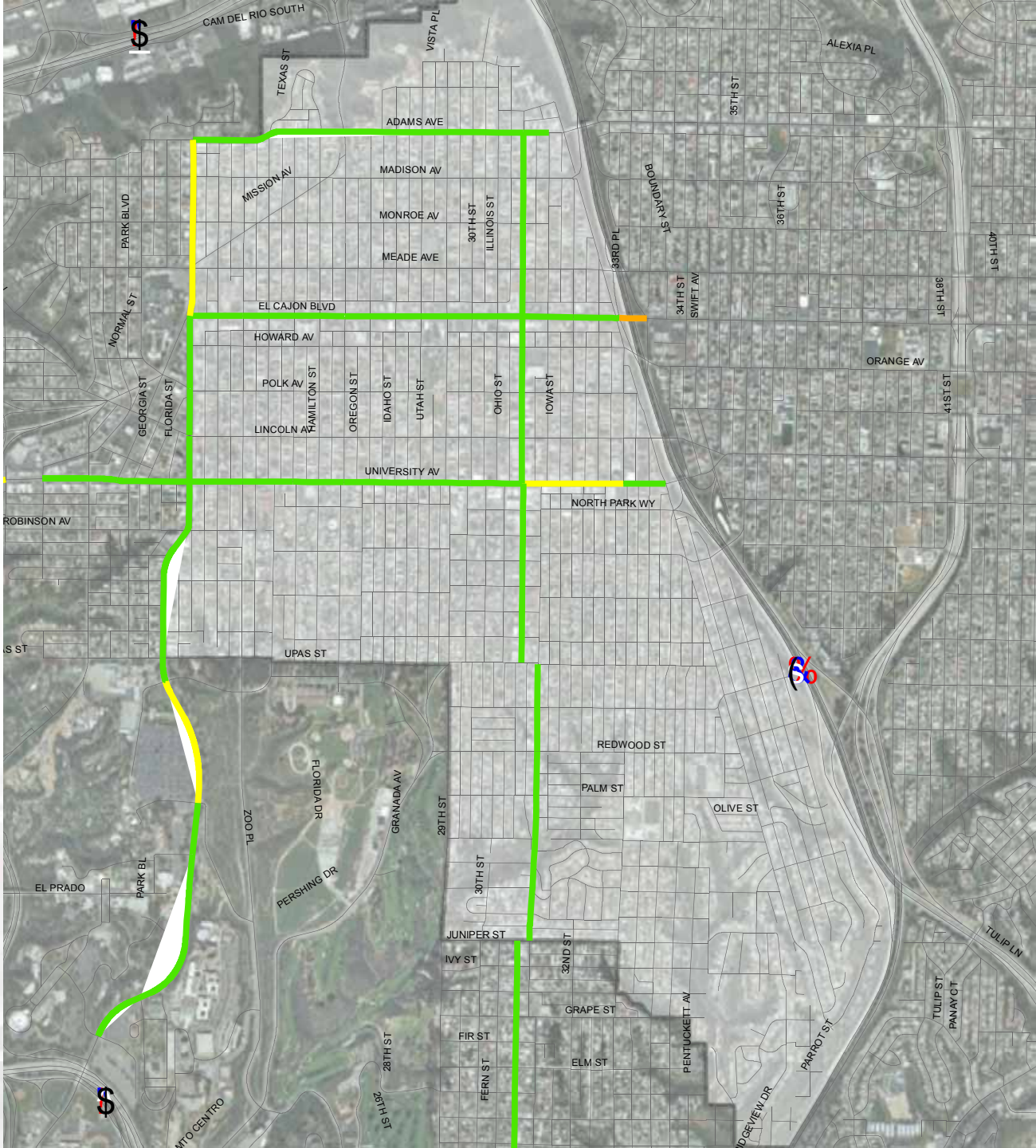
- LOS: A, B, C
- LOS: D
- LOS: E
- LOS: F

Complete Streets – Transit LOS Afternoon Peak



- LOS: A, B, C
- LOS: D
- LOS: E
- LOS: F

Complete Streets – Pedestrian LOS Afternoon Peak



- LOS: A, B, C
- LOS: D
- LOS: E
- LOS: F

Green Street
(environmentally friendly)

- *Improve water quality through natural stormwater treatment techniques*
- *Reduce heat island effect*
- *Can share characteristics of complete streets – enhanced pedestrian environment*

Rain gardens (bioretention)

- **Advantages**
  - Captures low flow/ provides retention
  - Urban retrofit
  - Aesthetics
  - High Pollutant removal
  - Shade, windbreaks, and absorb noise
- **Limitations**
  - Small drainage areas
  - Maintenance
  - Cold climates (freezing)
  - High water tables

Bioswale/vegetated swale

- **Advantages**
  - Landscape area
  - Aesthically pleasing
  - Pollutant removal
  - Reduces need for stormwater piping
  - Low maintenance
  - Cost effective
- **Limitations**
  - Mosquitos
  - Low/Medium pollutant removal
  - Steep topography (need to minimize velocities)

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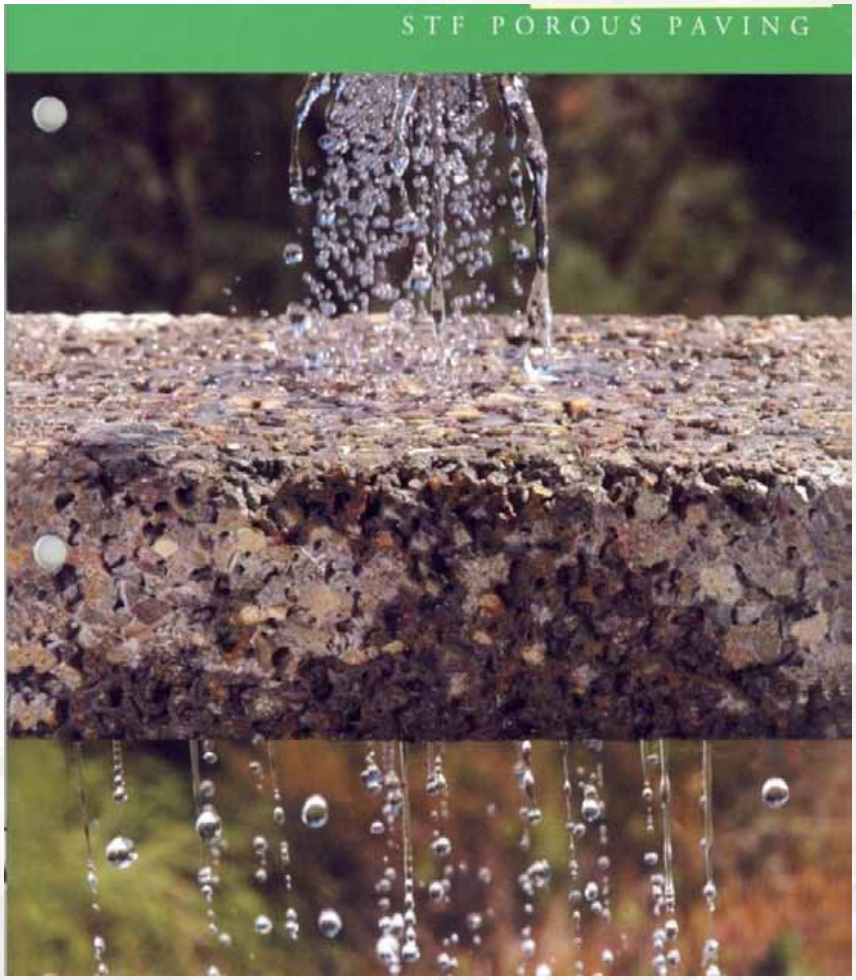
Porous/permeable pavement

- **Advantages**
  - Maximizes infiltration
  - Provides retention
  - Slows runoff
  - Minimizes impervious land coverage
  - Can reduce need for piping
- **Limitations**
  - Clogging (if not properly designed, installed, and maintained)
  - Most effective with low traffic volumes, axle loads & speeds



Porous/permeable pavement

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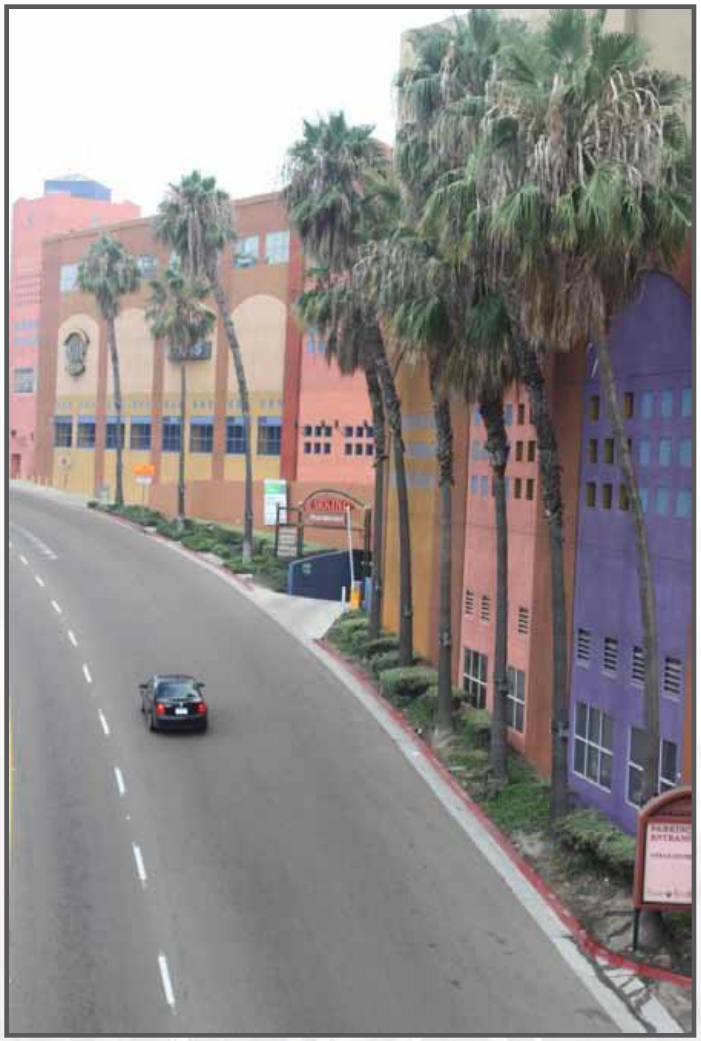
Parking

Centralized Parking



Central Hillcrest

Medical District

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Smart Parking

Automated Parking

Variable Pricing

Trailblazing Sign Way-finding

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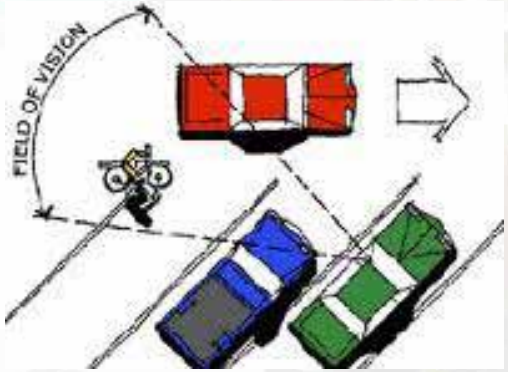
Reduced Parking Rates

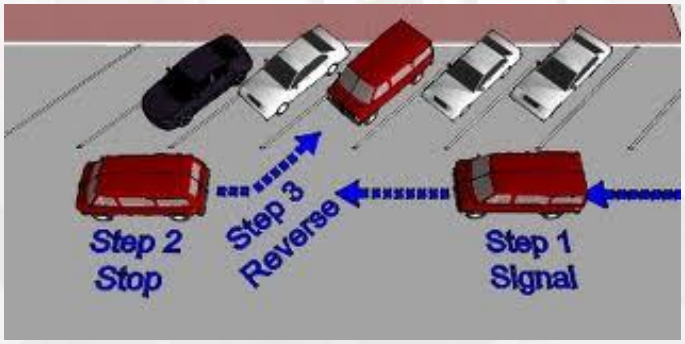
Housing Cost

- Land Value
- Construction
- Fees
- Parking
  - above $25k/space
  - below $45k/space

Pay separately for parking to lower housing cost and incentivize transit

Reverse Angle (Back-in) Parking





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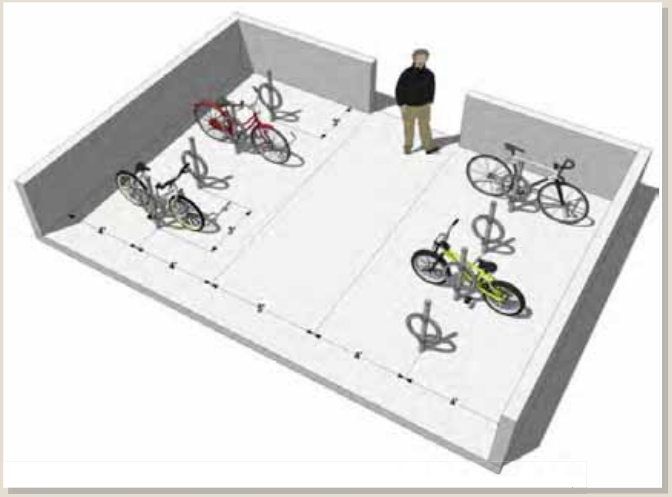
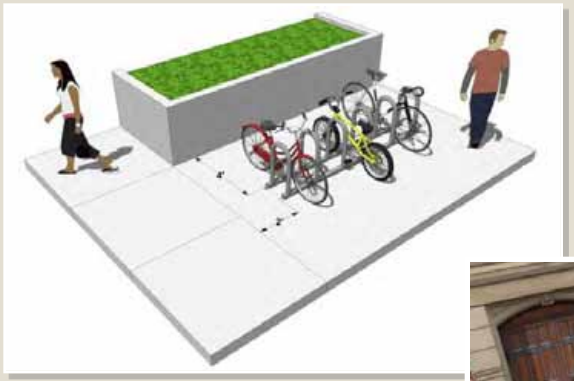
Example Bike Parking Facilities

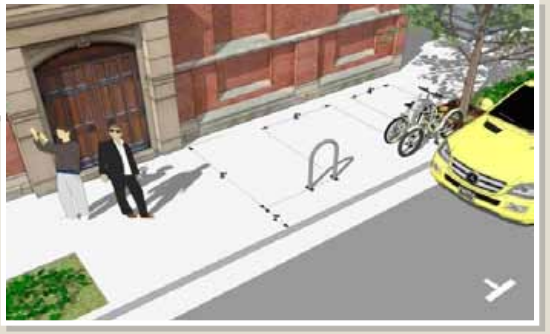
Bike Lockers

Bike Corral



Bike Parking Enclosed Area





Parking Survey

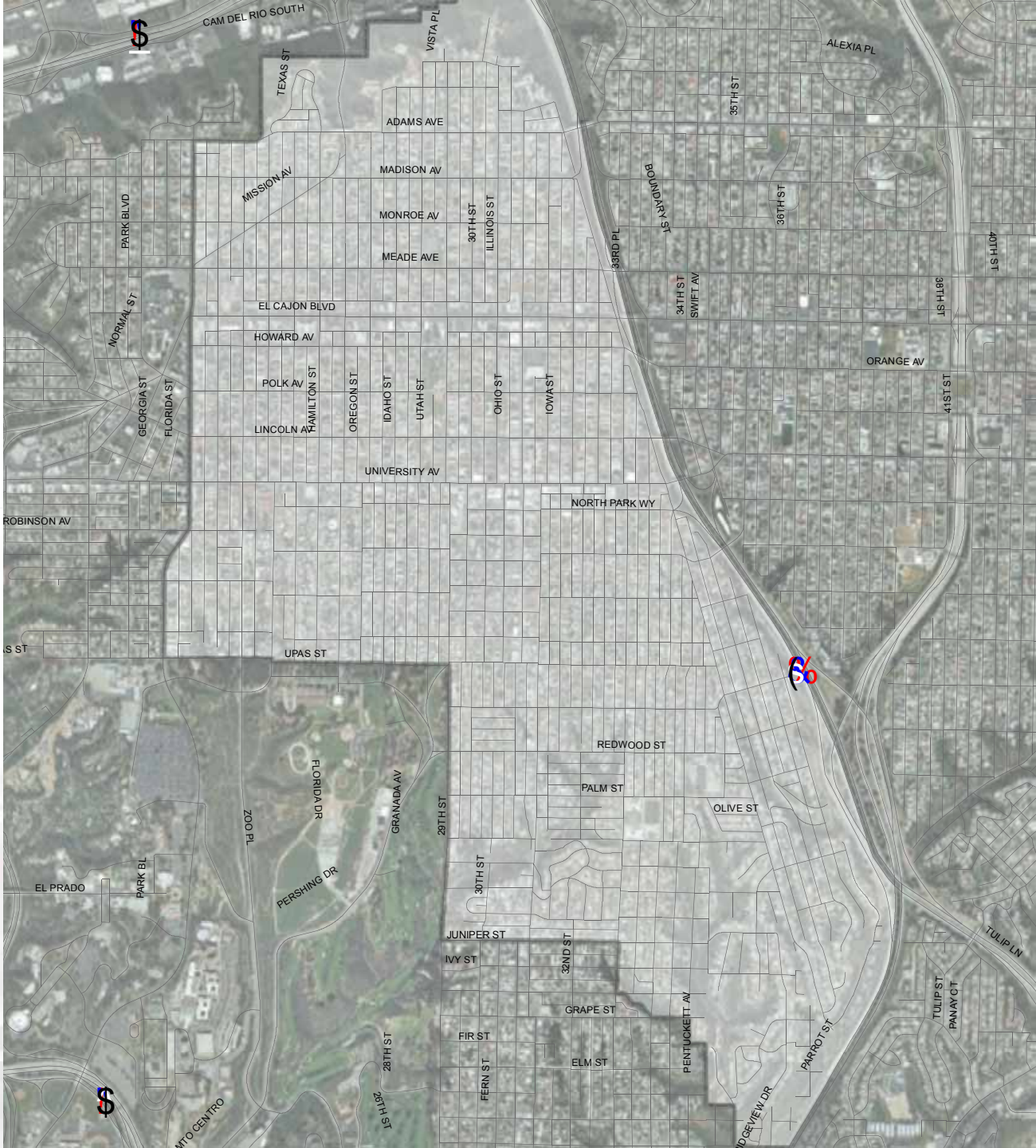
1. Would you support reducing parking requirements for developments well served by bike or transit?

- No
- Yes
- Yes, if their $s saved on parking were used to improve transit, bike or walking
- I do not know

2. Would you support replacing on street parking for bike corrals?

- Yes
- No
- I do not know

3. Circle areas of parking concern on the map?

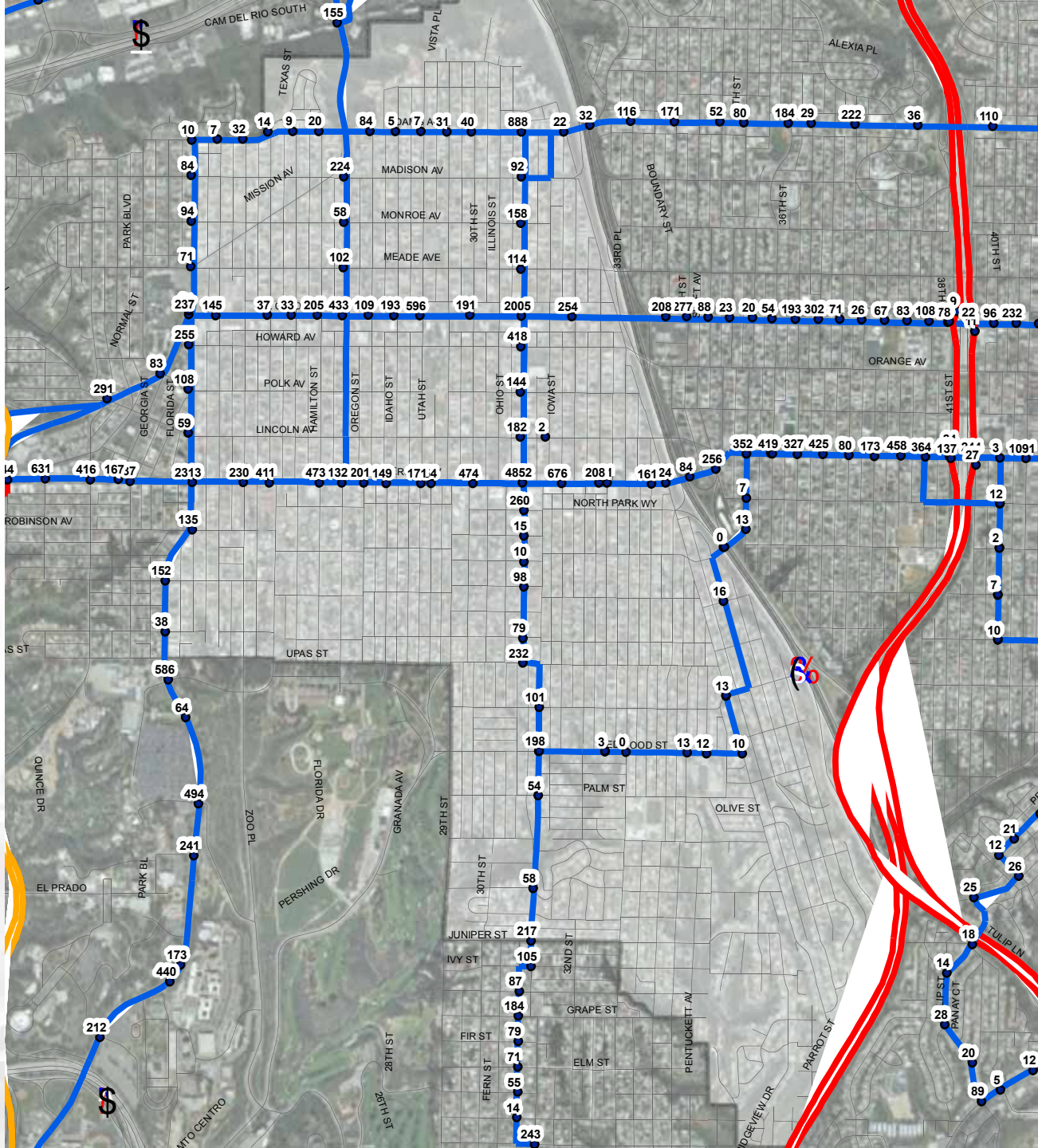


Transit

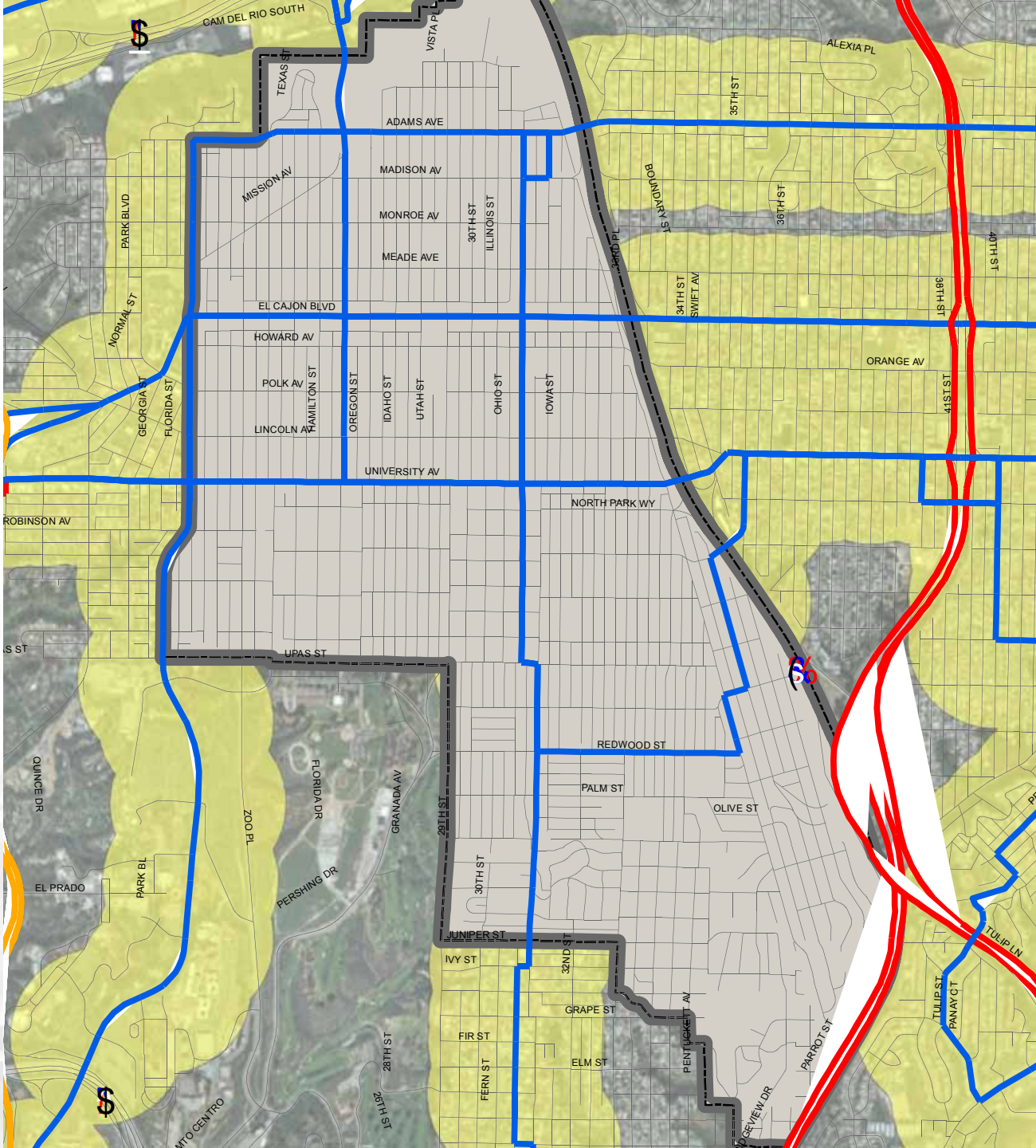
Types of Transit Service
Bus

- Operational characteristics
  - Slower speeds
  - Frequent stops
- Stations
  - Shelter amenities vary
- Multiple routes in community

Existing Transit Ridership



Existing Transit Coverage



- MTS Local Bus
- MTS Express Bus
- MTS Premium Express Bus
- Trolley
- Commuter Rail
- 0.25-Mile Walking Buffer

Types of Transit Service
Bus Rapid Transit – Rapid Bus

- Operational Characteristics
  - Fewer Stops (1-2 mile)
  - Traffic Signal Priority
  - Less time in station
  - Some exclusive lanes

- Stations
  - Pre-boarding fare collection
  - Enhanced shelters
  - Real-time information

- Proposed on Park Blvd/El Cajon Blvd/Adams Ave/30th Street

Types of Transit Service
Streetcar

- Operational Characteristics
  - Electric powered
  - Shared lane with autos
  - Tracks in roadway
  - Requires Mntc. Center
  - Requires power substation
- Stations
  - Frequent stations
  - Variable shelter amenities
- Potential route(s)

  (30th, University, Park, Sixth, Fifth)

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Rail Transit
In-Street Operation
Portland, OR

Modern vs. Historic Streetcar

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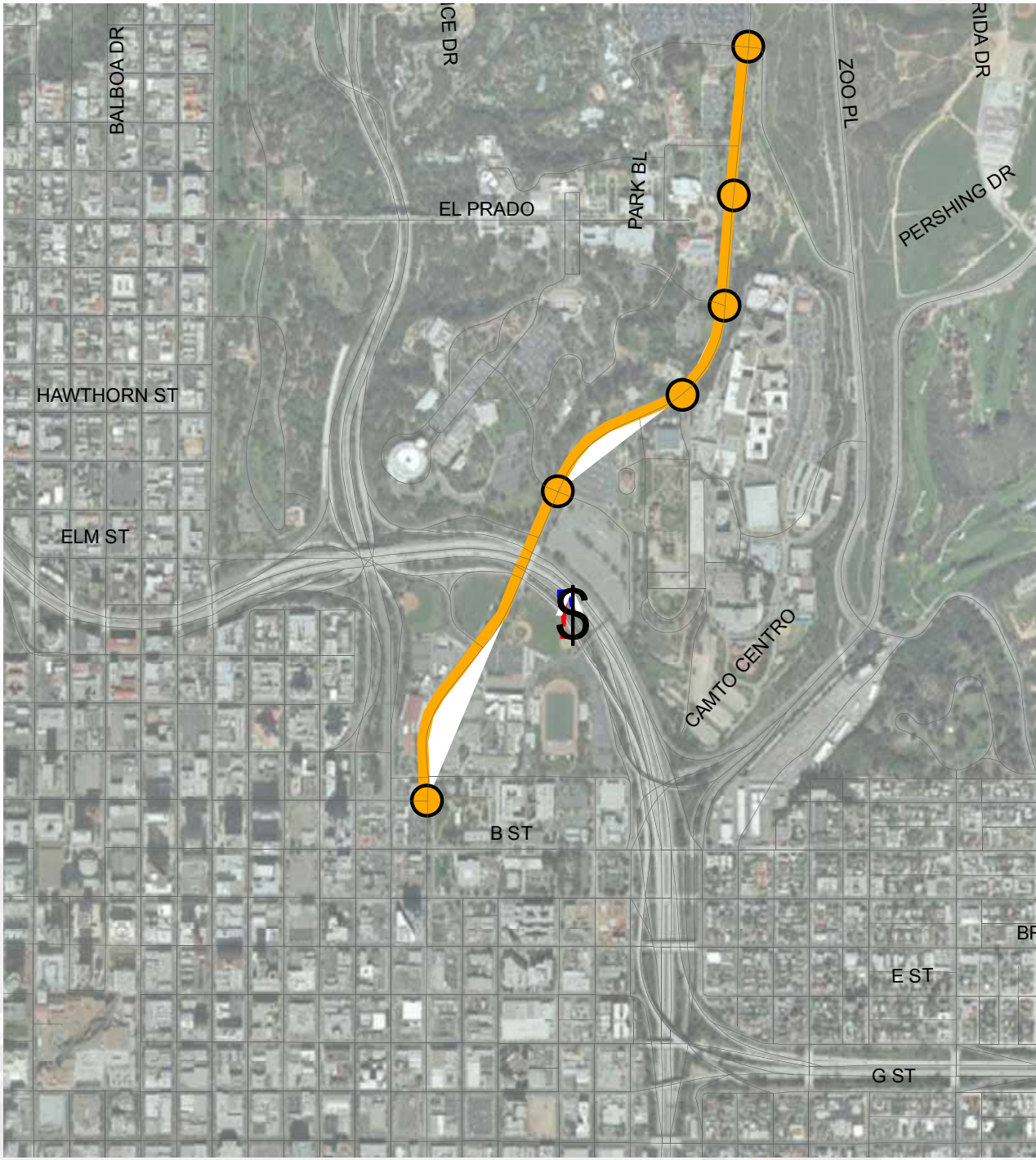
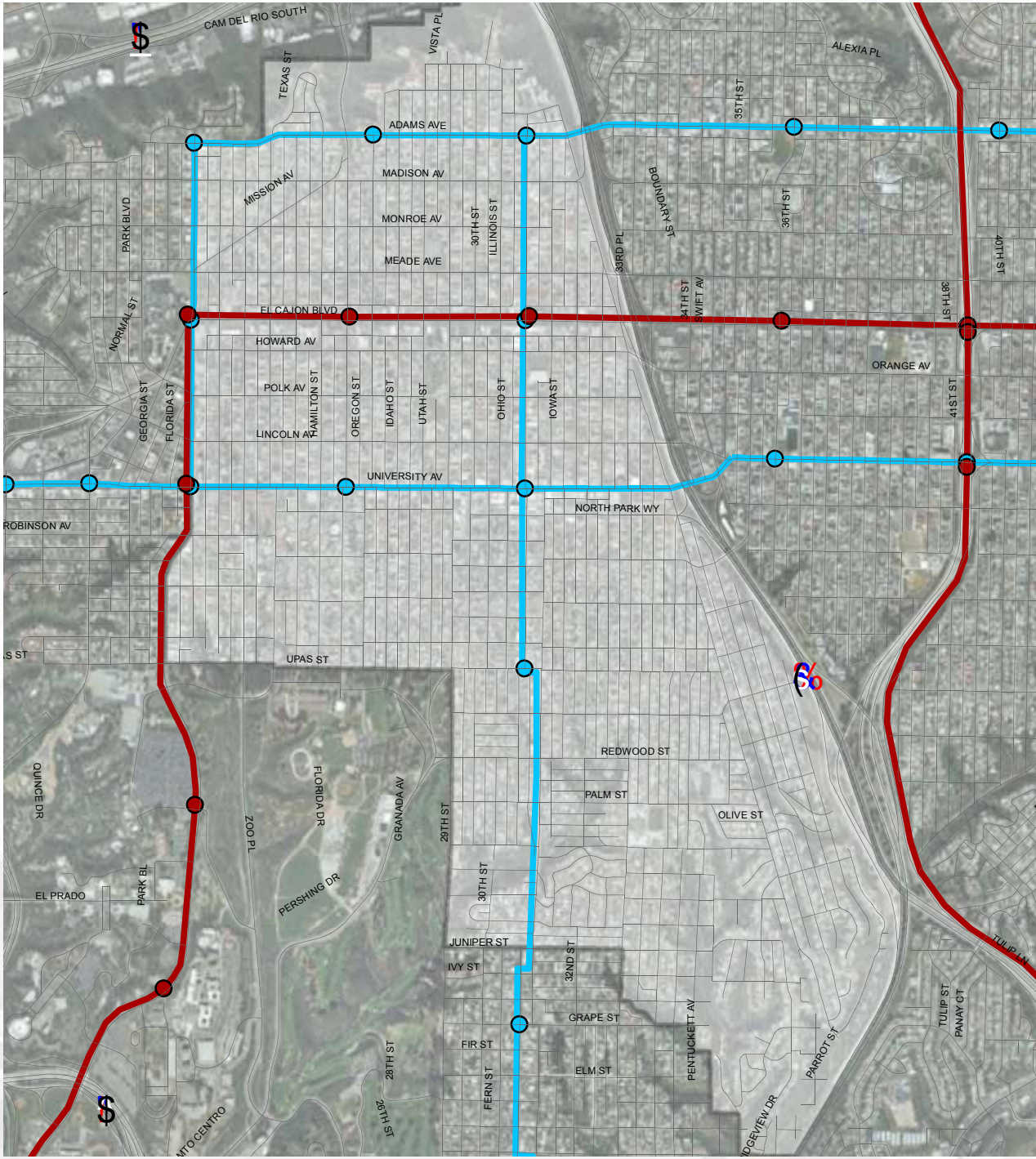
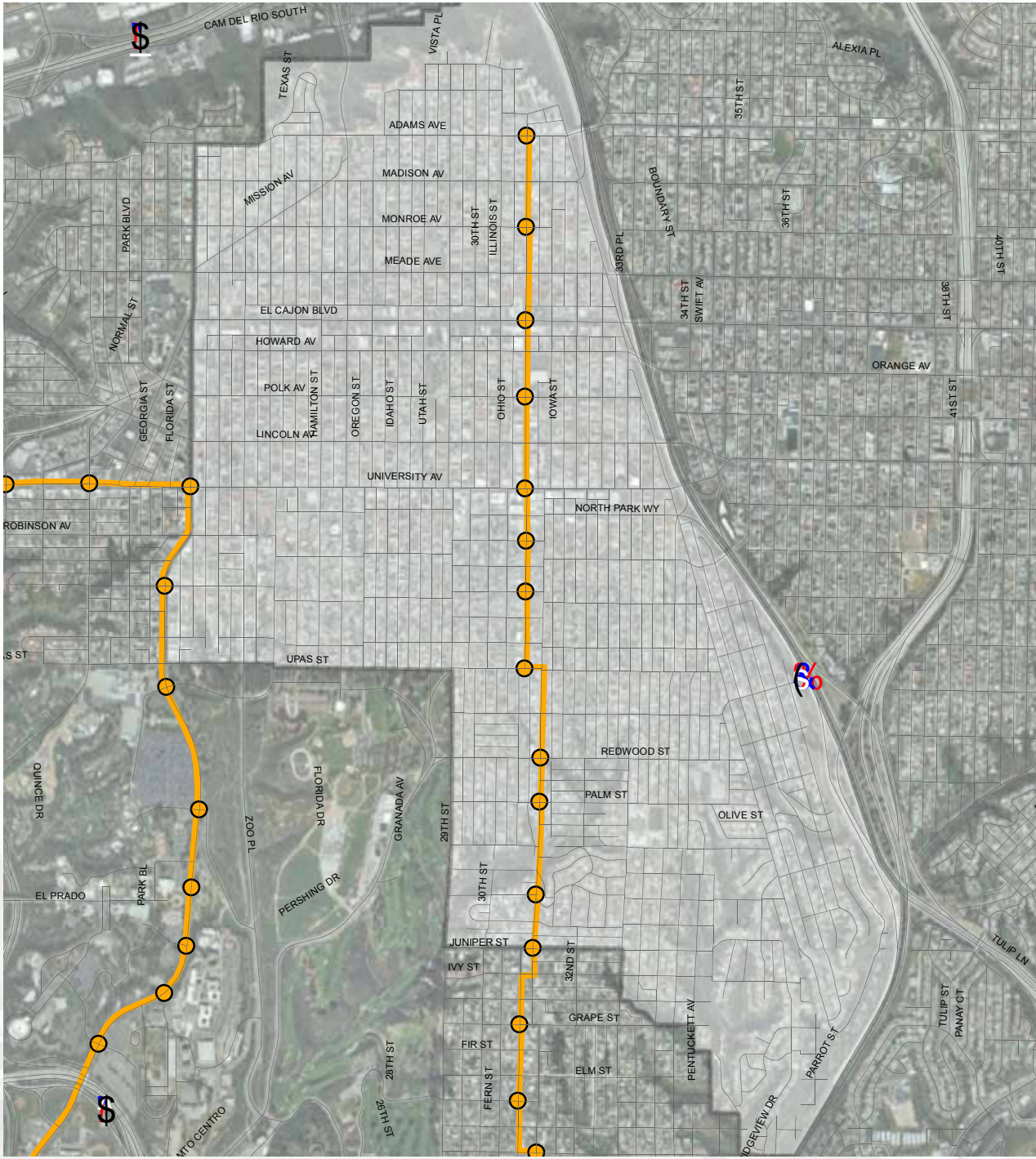
Caltrans' Grant Streetcar Study Area



2050 Regional Transportation Plan – Transit Options



2050 Regional Transportation Plan – Transit Options



Transit Survey

1. Which best describes your transit riding habits?

- Never
- Infrequently(less than once per month)
- Occasionally (once or more per month)
- Regularly (several times per week)

2. Which improvements in transit service would get more people to ride transit in North Park?

- More frequent service
- Faster service
- Routes that go where I need to go (specify where_____)
- Shorter walks to/from stations/stops
- Improved safety and comfort
- Better shelters
- Lower fares
- Higher gas and parking costs
- Nothing

3. Which type of transit service would you prefer in North Park?

- Local bus with frequent stops
- Express Bus with few stops
- Bus Rapid Transit or Rapid Bus
- Streetcars
- Other _____
- I do not ride transit

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4. Are you interested in exploring the feasibility of a streetcar?

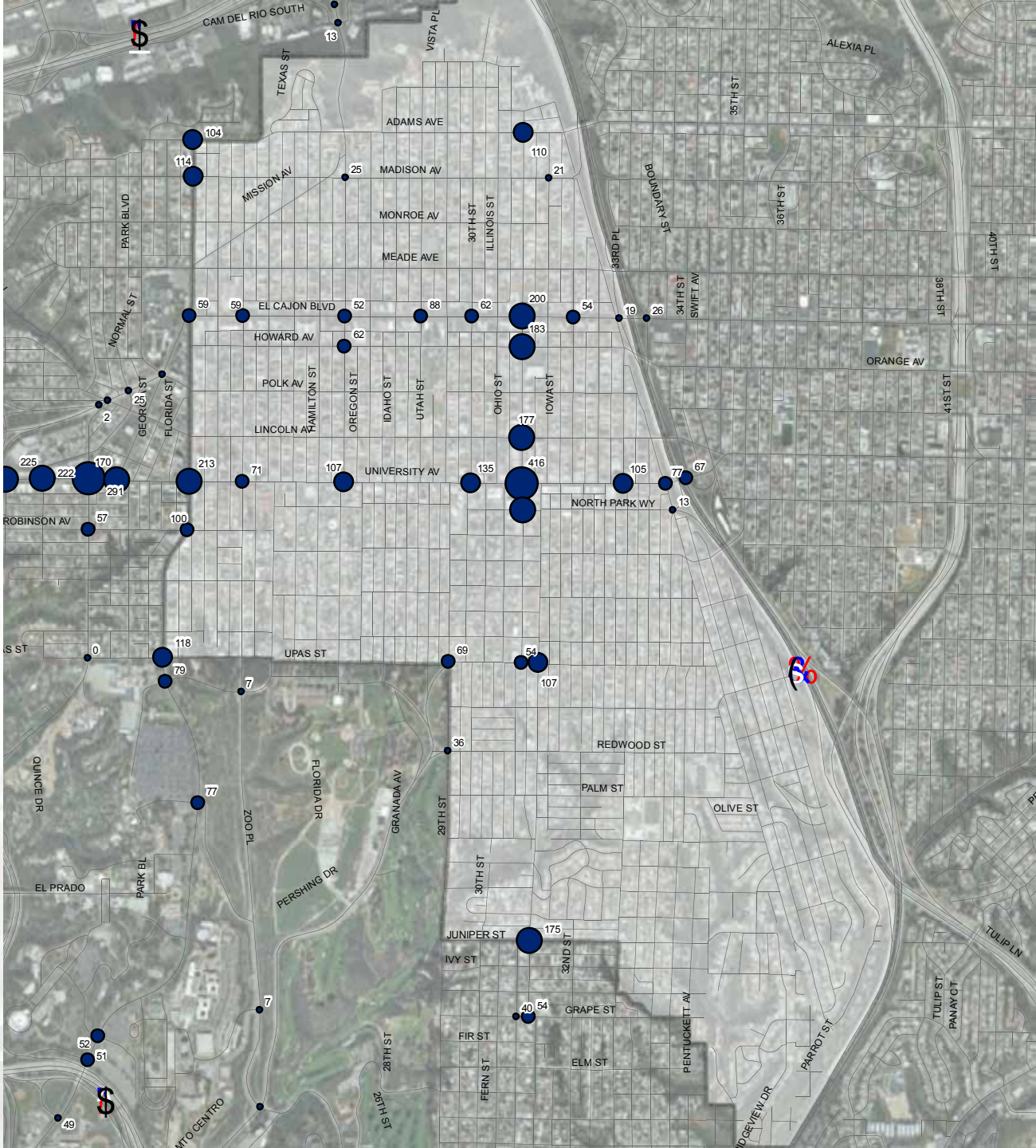
- No
- Yes – On 30th Street
- Yes – On University and Park
- I do not ride transit

Walking

Pedestrian Volumes

Afternoon Peak

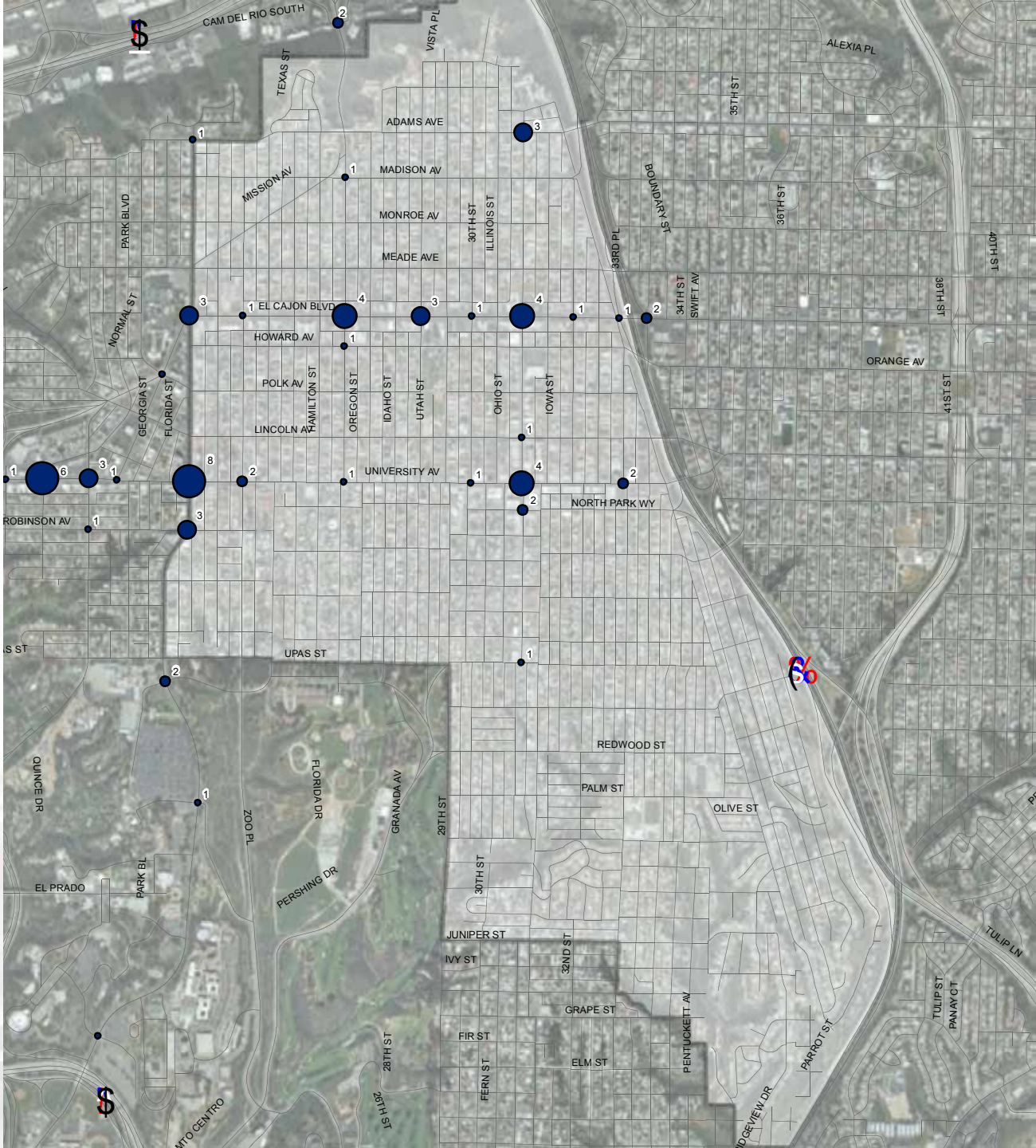
- 50 or Less Pedestrians
- 51 - 100 Pedestrians
- 101 - 150 Pedestrians
- 151 - 250 Pedestrians
- Greater than 250 Pedestrians



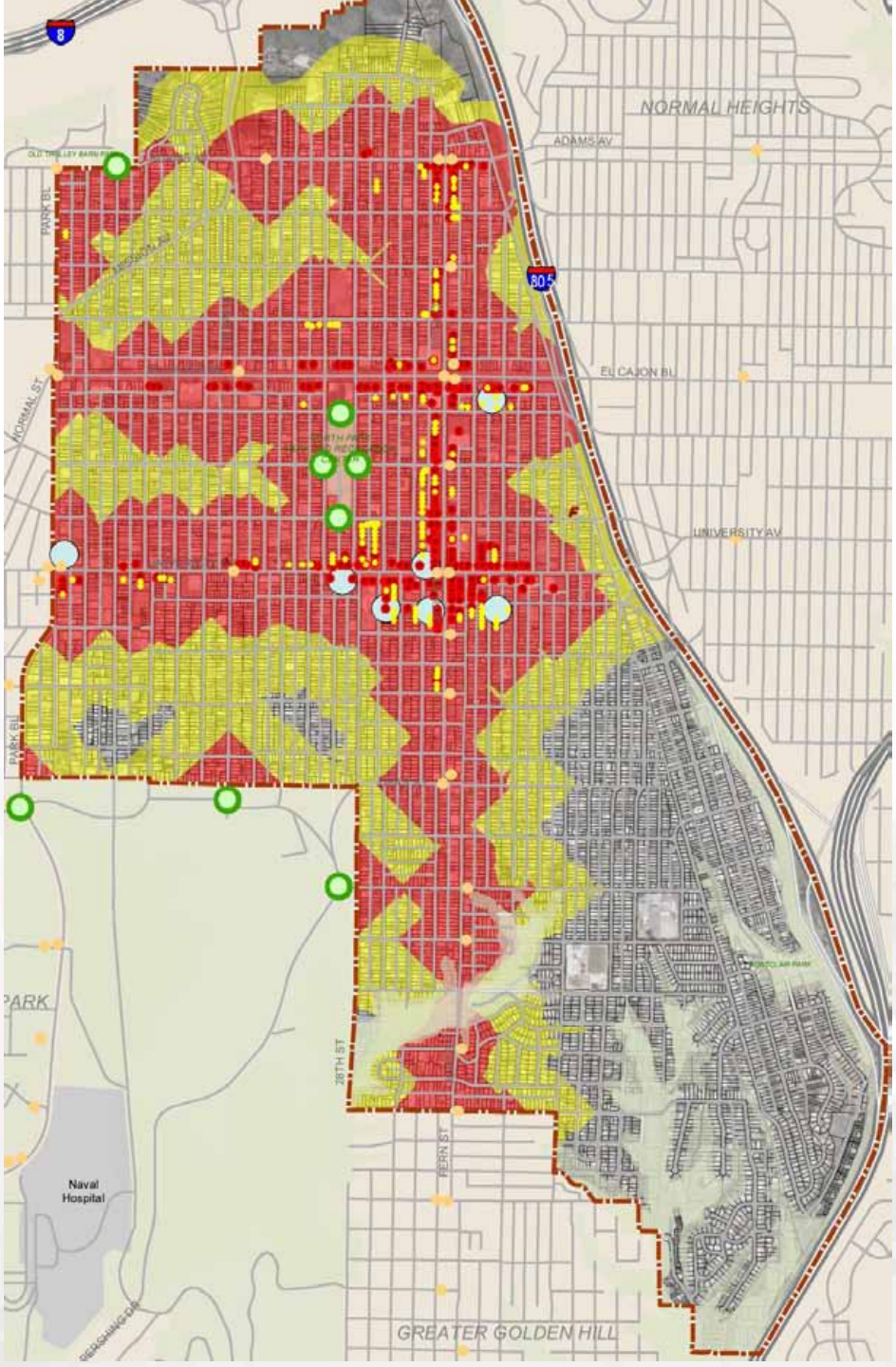
Pedestrian Involved Accidents

At Intersections

- 1 Accident
- 2 Accidents
- 3 Accidents
- 4 - 5 Accidents
- 6 - 8 Accidents



Major Walk Destinations & Walk Zones



- Fire Station
- Community Plan Boundary
- Military Use
- Community Plan Boundary
- Parks
- Destinations Public
- TransitStops
- Origins
- Destinations Private

Composite Walk Time

- 5 Minute Walk
- 10 Minute Walk

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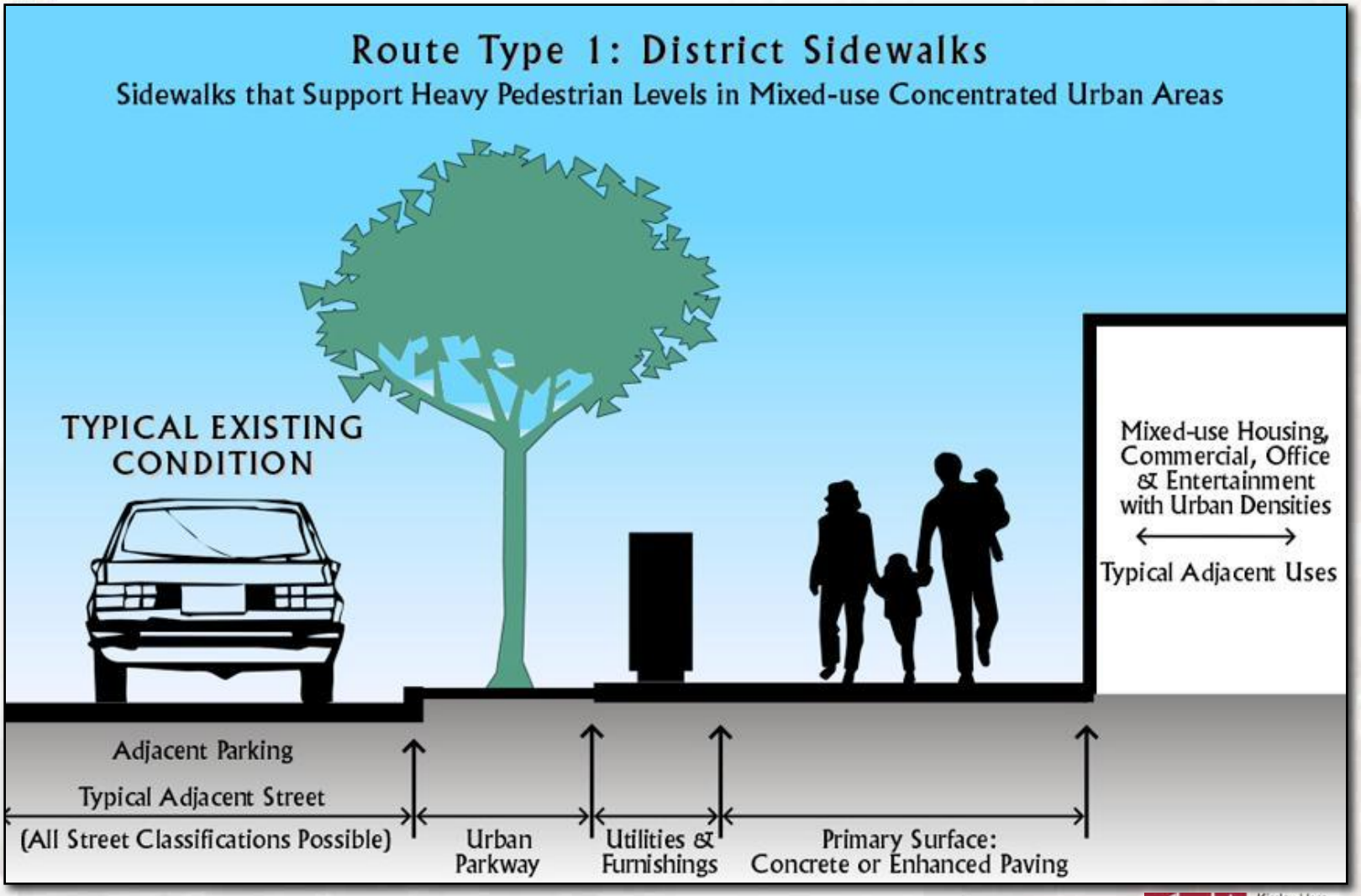
Pedestrian Master Plan
District Sidewalks



District Sidewalks

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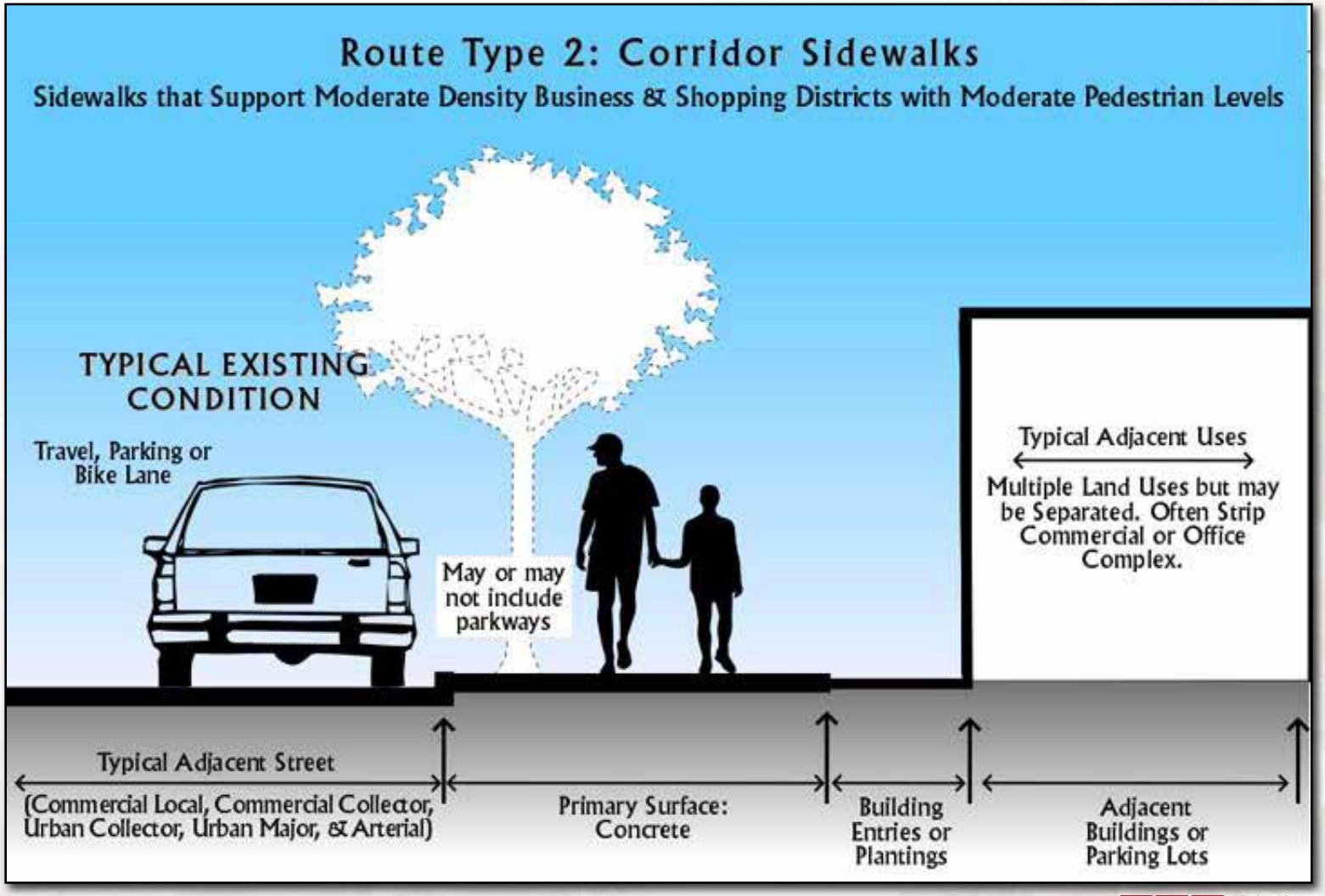
Pedestrian Master Plan
Corridor Sidewalks



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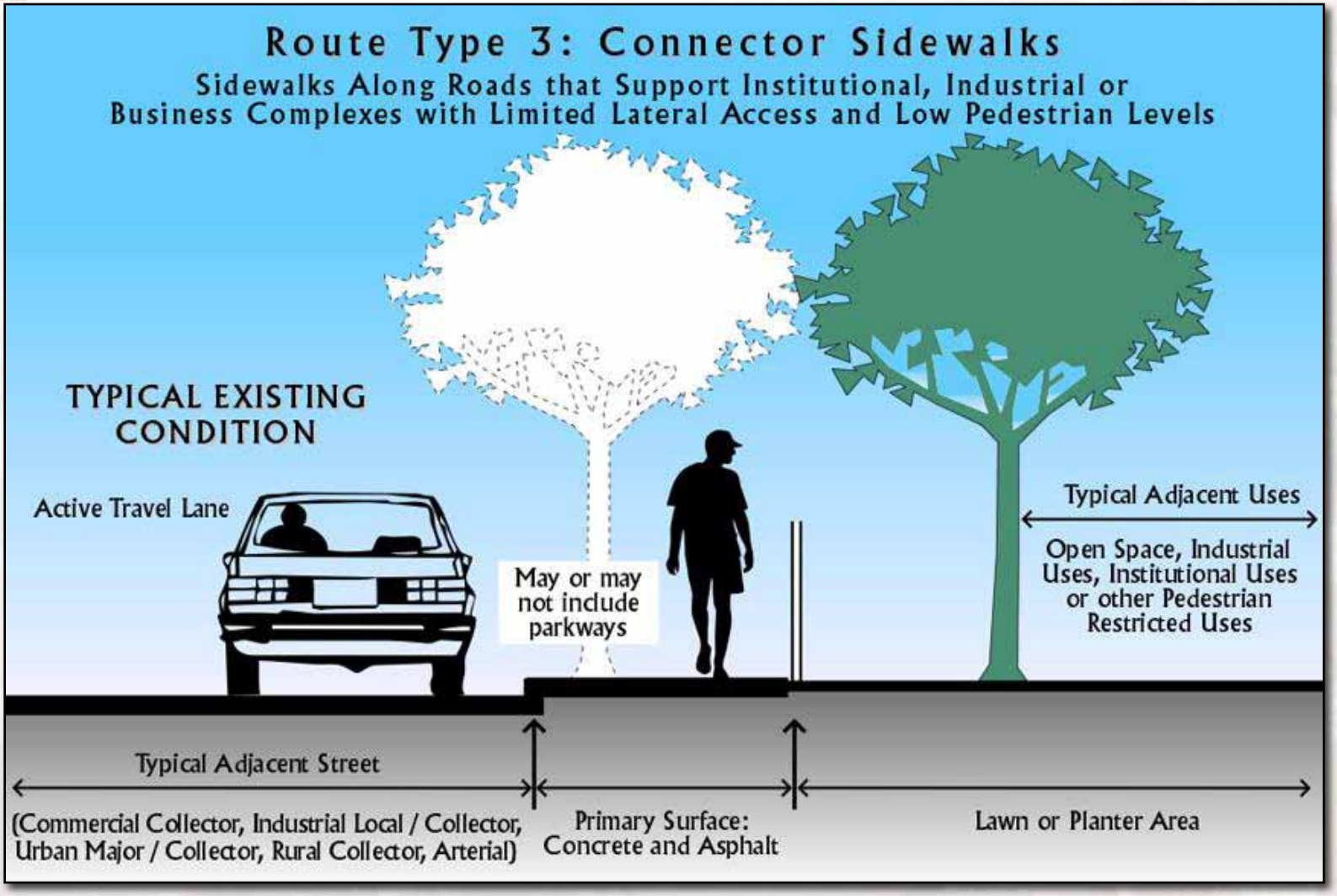
Pedestrian Master Plan
Connector Sidewalks



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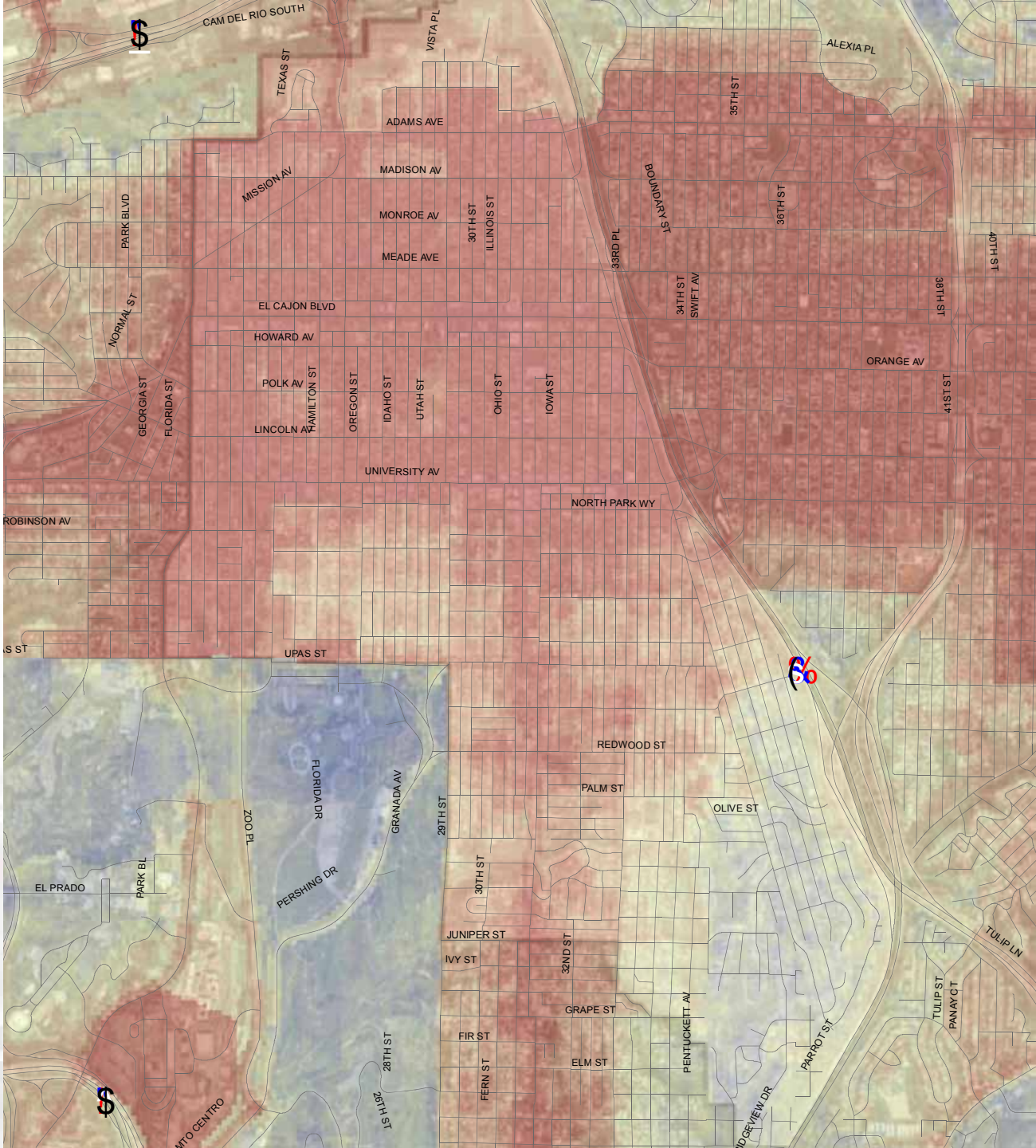
Pedestrian Priority Model

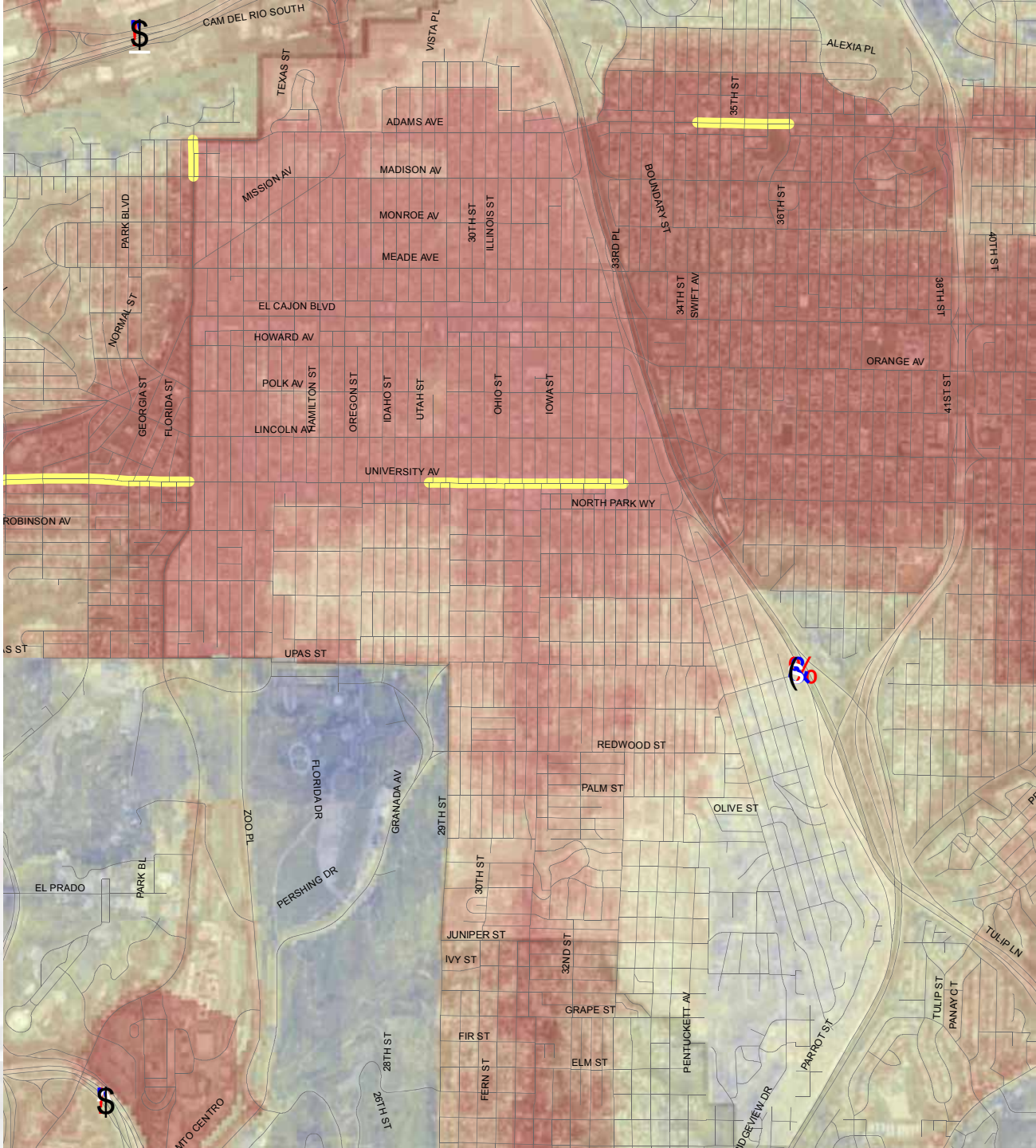


Pedestrian Priority Model

High

Low

Pedestrian Priority Model and Routes



Pedestrian Priority Model

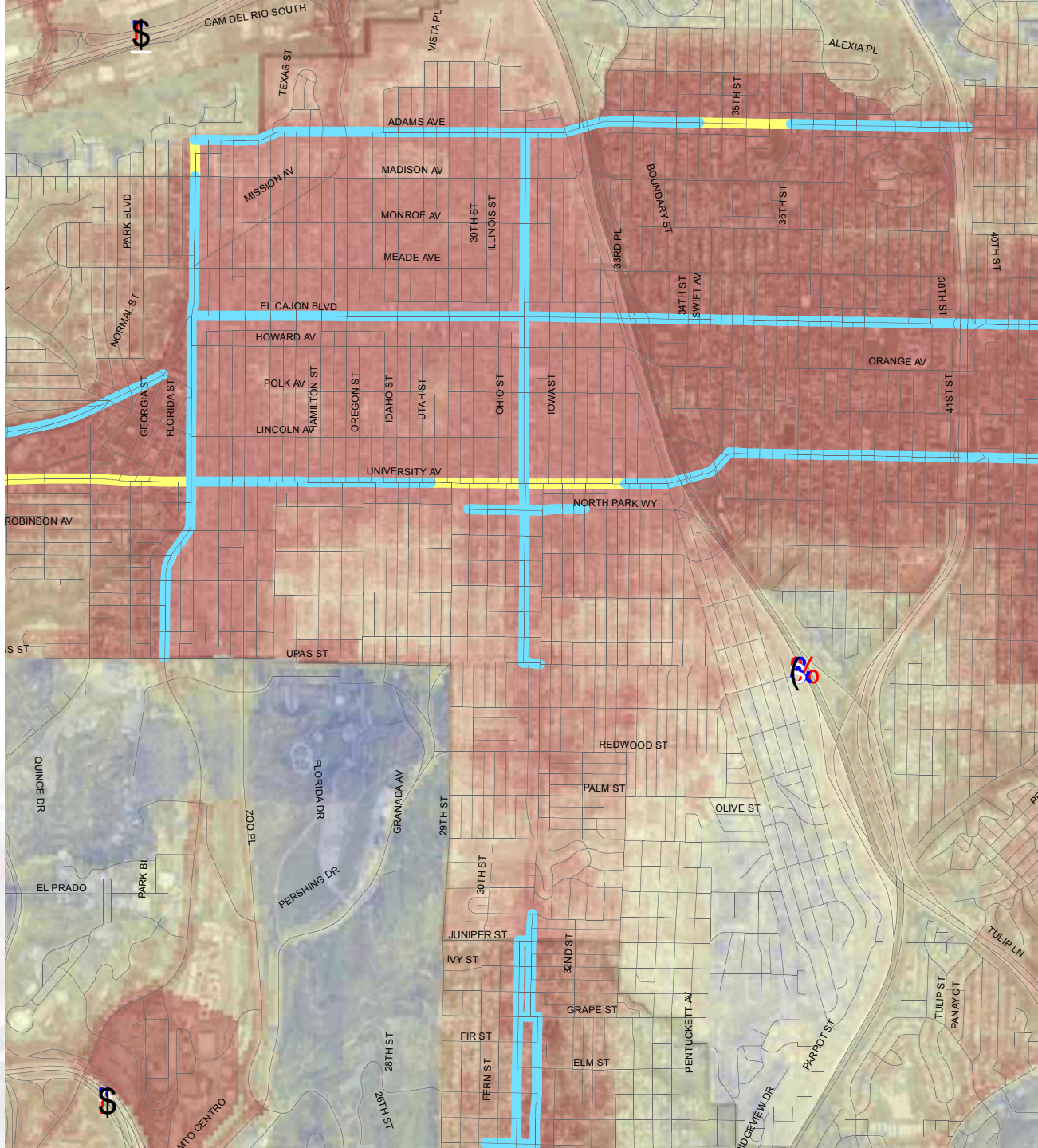
High

Low

Pedestrian Route Type

District

Pedestrian Priority Model and Routes



Pedestrian Priority Model

High

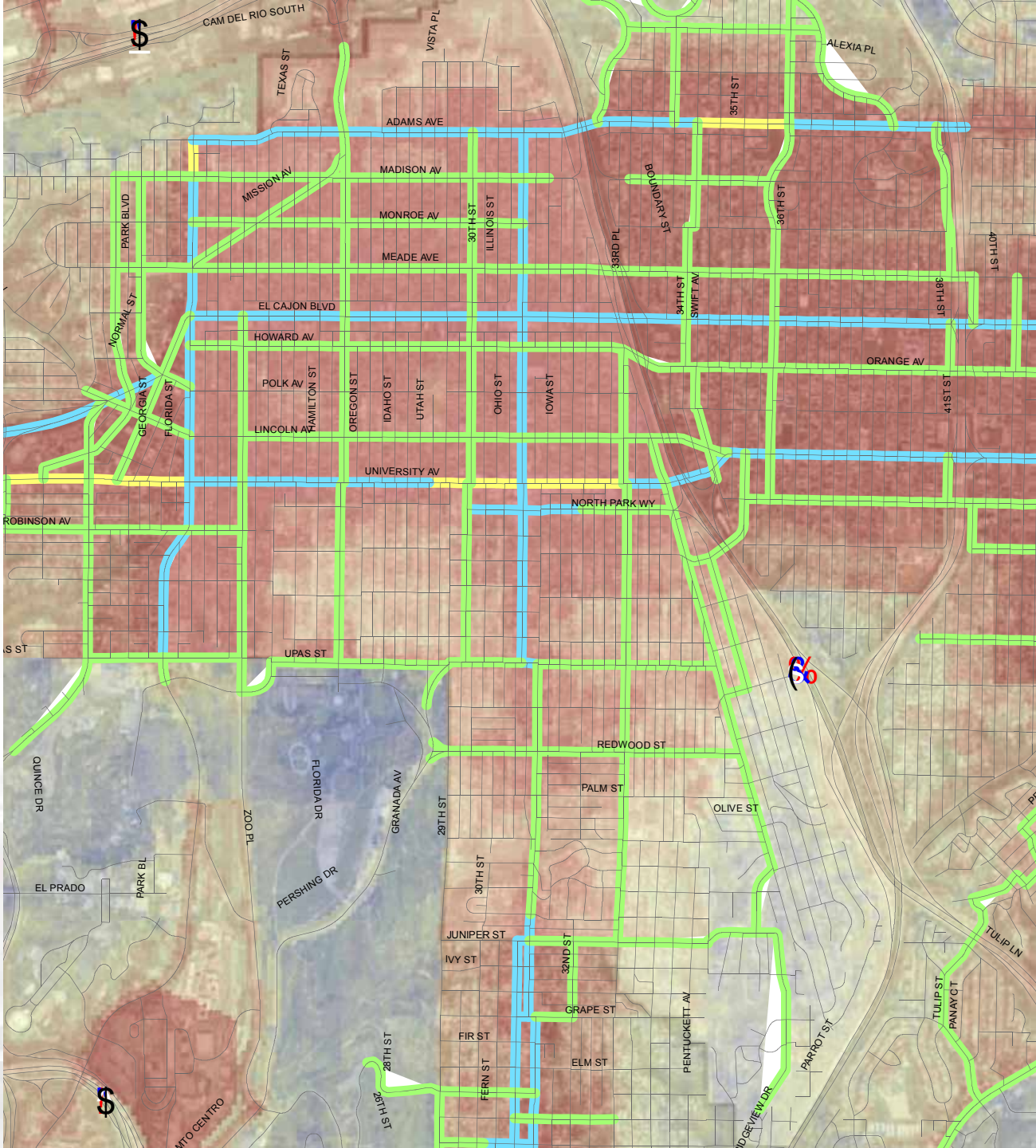
Low

Pedestrian Route Type

District

Corridor

Pedestrian Priority Model and Routes



Pedestrian Priority Model

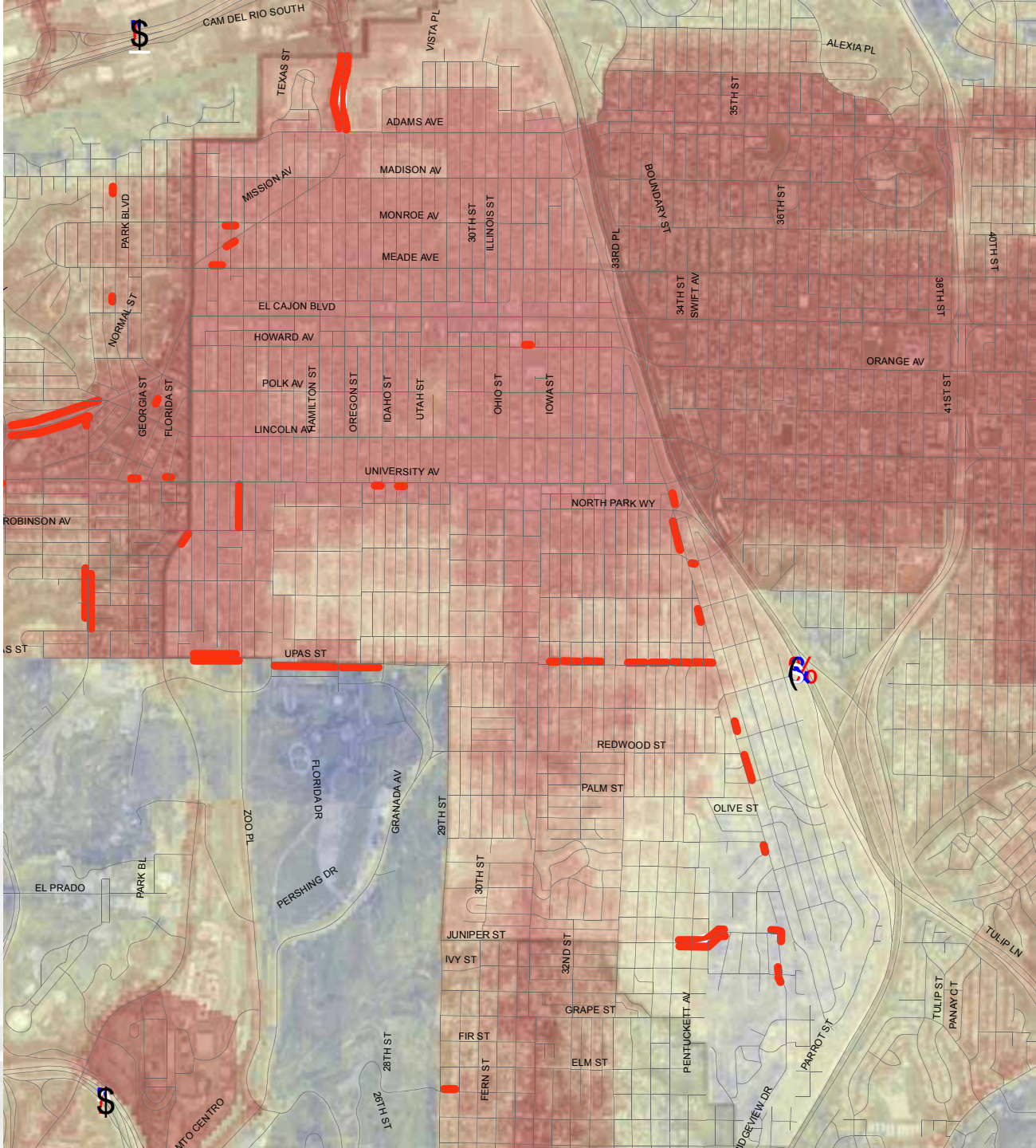
High

Low

Pedestrian Route Type

- District
- Corridor
- Connector

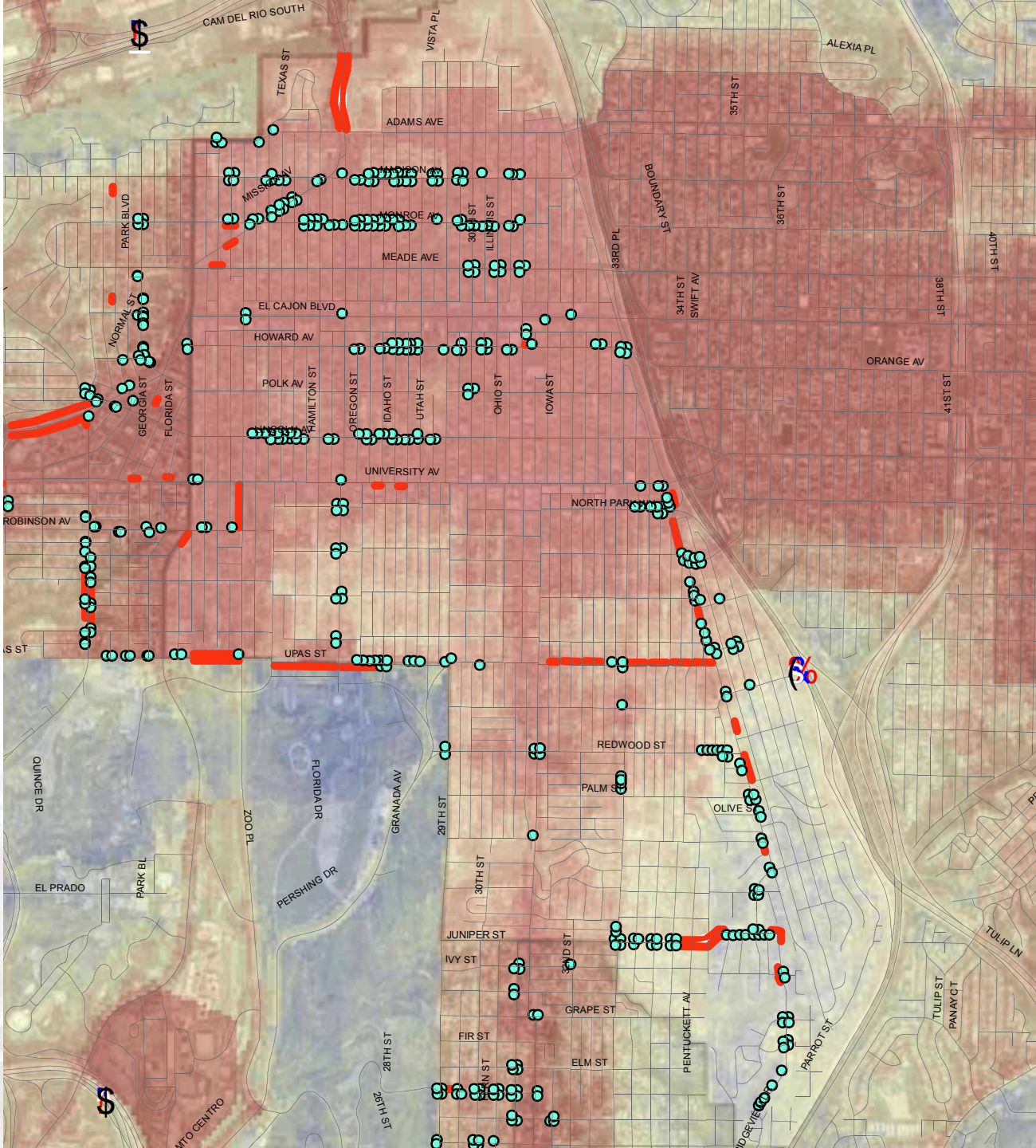
Pedestrian Priority Model and Access



Pedestrian Priority Model

- High
- Low
- Missing Sidewalk

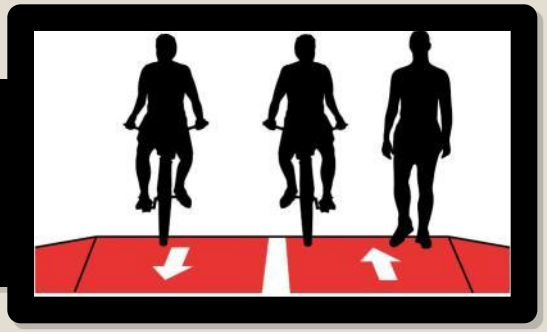
Pedestrian Priority Model and Access



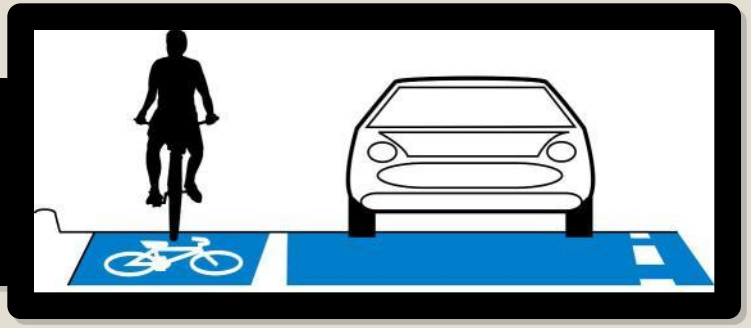
Bicycle

Bike Facility Types

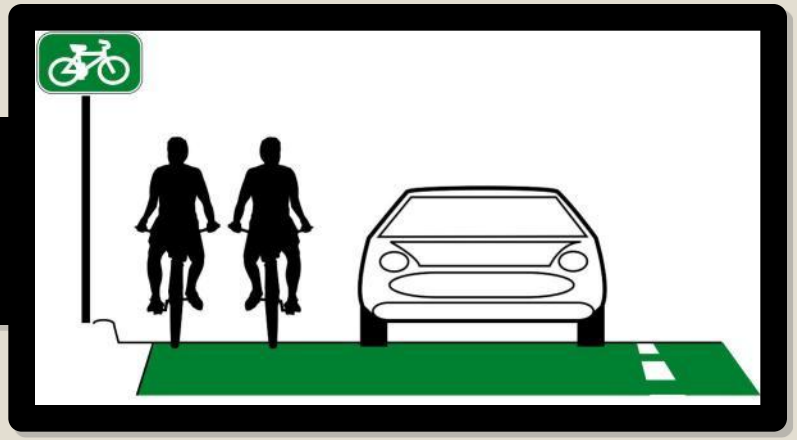
Class 1
Bike Path



Class 2
Bike Lane



Class 3
Bike Route



Bike Facility – Class 1

Class 1 Bike Path with Separated from Roadways

Bike Facility – Class 1

Class 1 Bike Path with Barrier

Bike Facility – Class 2

Class 2 Bike Lane without Parking

Bike Facility – Class 2

Class 2 Bike Lane with Parking

Bike Facility - Class 3

Class 3 Bike Route

Bike Facility – Class 3

Bike Route with Shared Lane Markings (sharrows)

New Innovative Bike Facility Types

Bike Route with Shared Lane Markings (sharrows)

New Innovative Bike Facility Types

Bike Route w/Sharrows & Back in Angled Parking

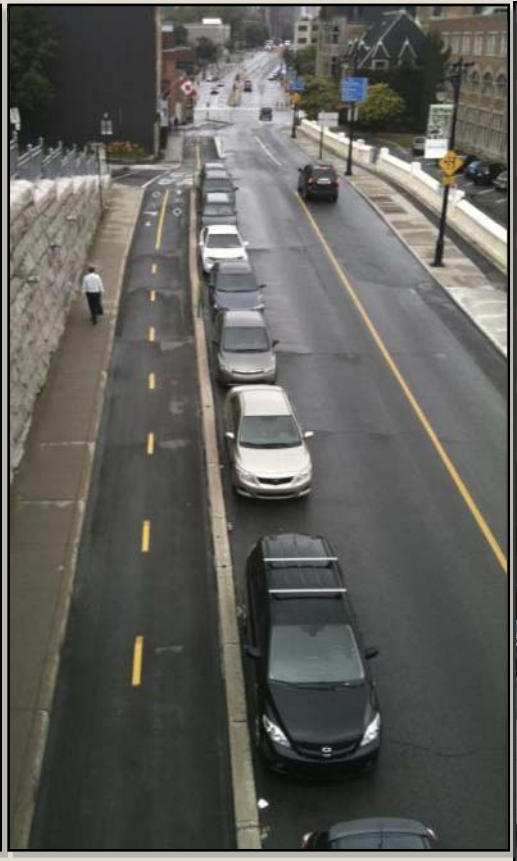
New Innovative Bike Facility Types

Green Route with Shared Lane Markings

New Innovative Bike Facility Types

Cycle Track (one-way with bollards)

New Innovative Bike Facility Types



Cycle Tracks- Two Way

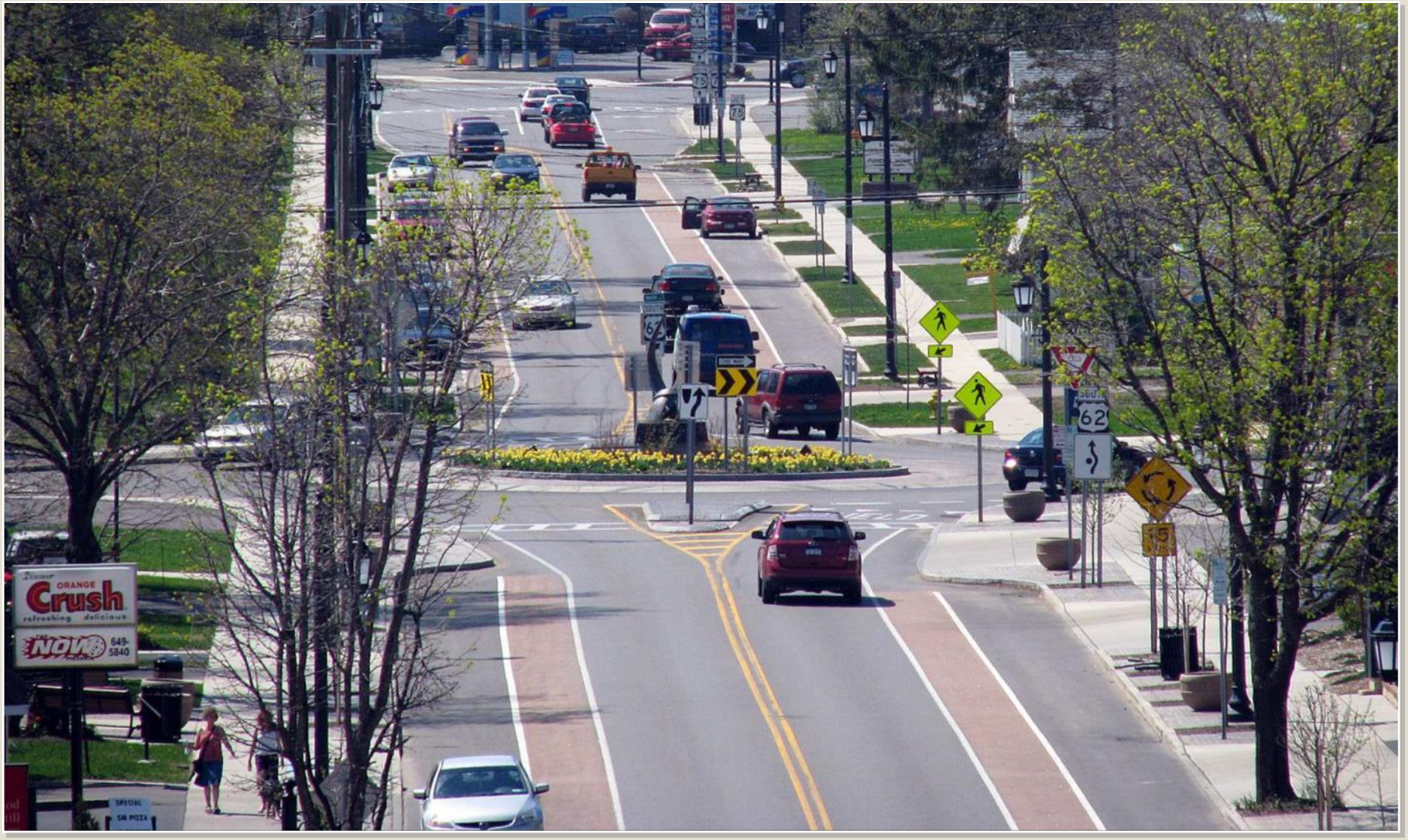
New Innovative Bike Facility Types

One Way Cycle Track

New Innovative Bike Facility Types

Painted Sharrow Lane

New Innovative Bike Facility Types

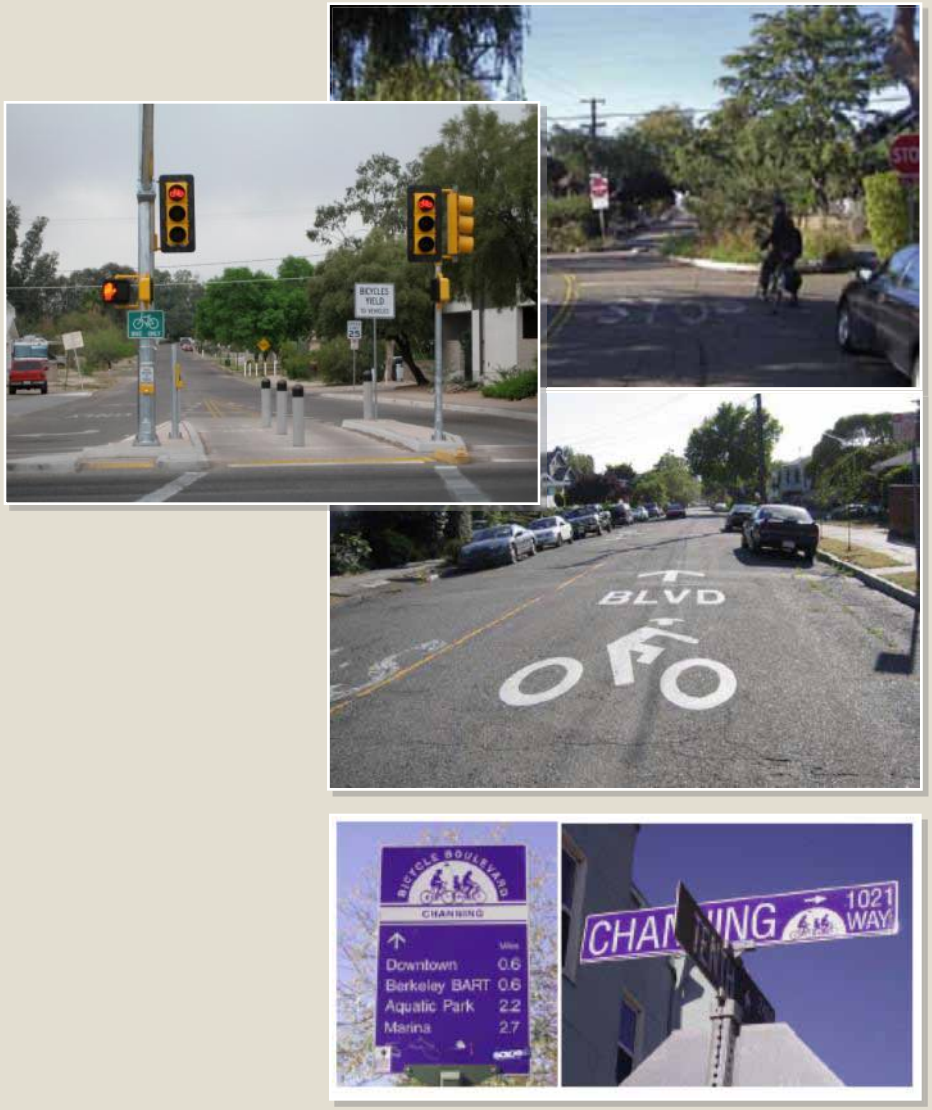


Painted Class 2 Lanes

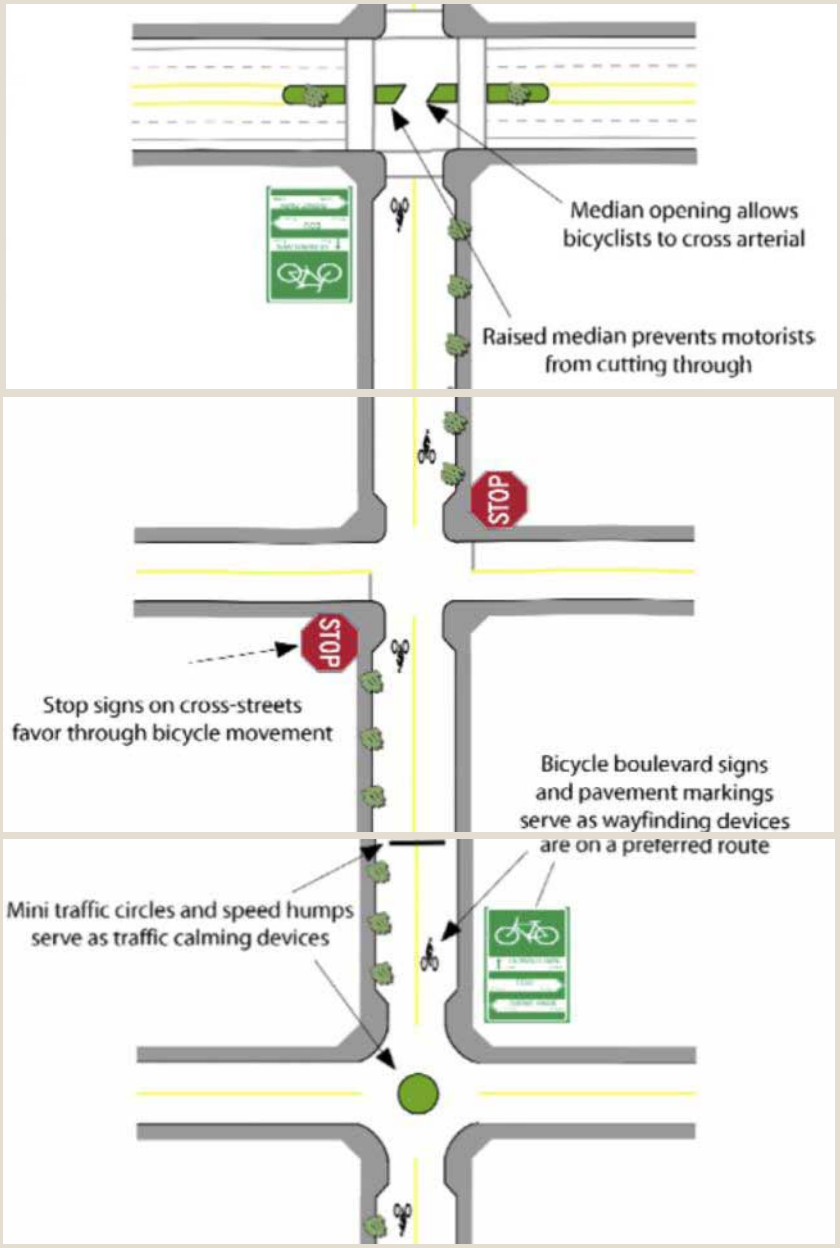
New Innovative Bike Facility Types

Vehicular Crossings Points

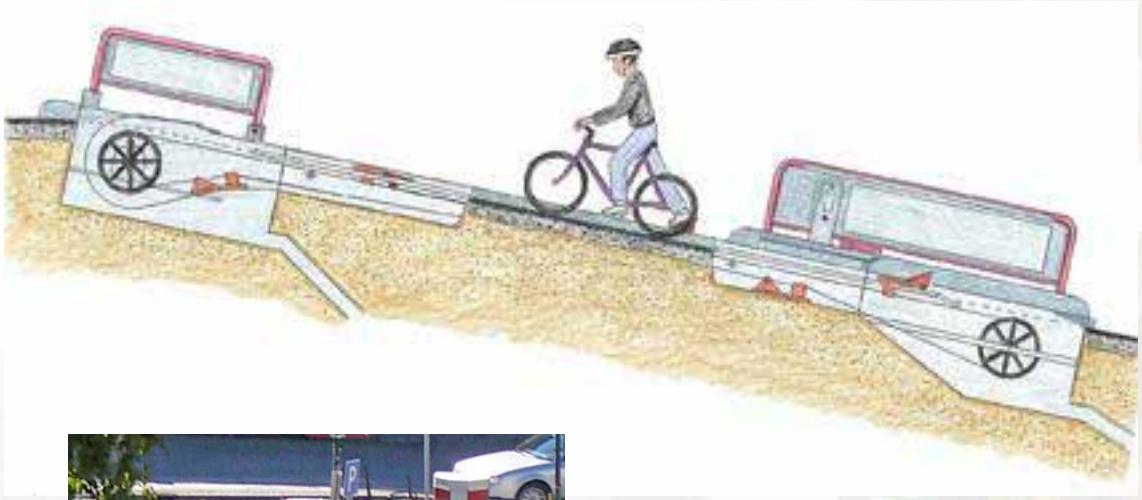
New Innovative Bike Facility Types



Bikeway Boulevard



Bicycle Lift
(Norway)



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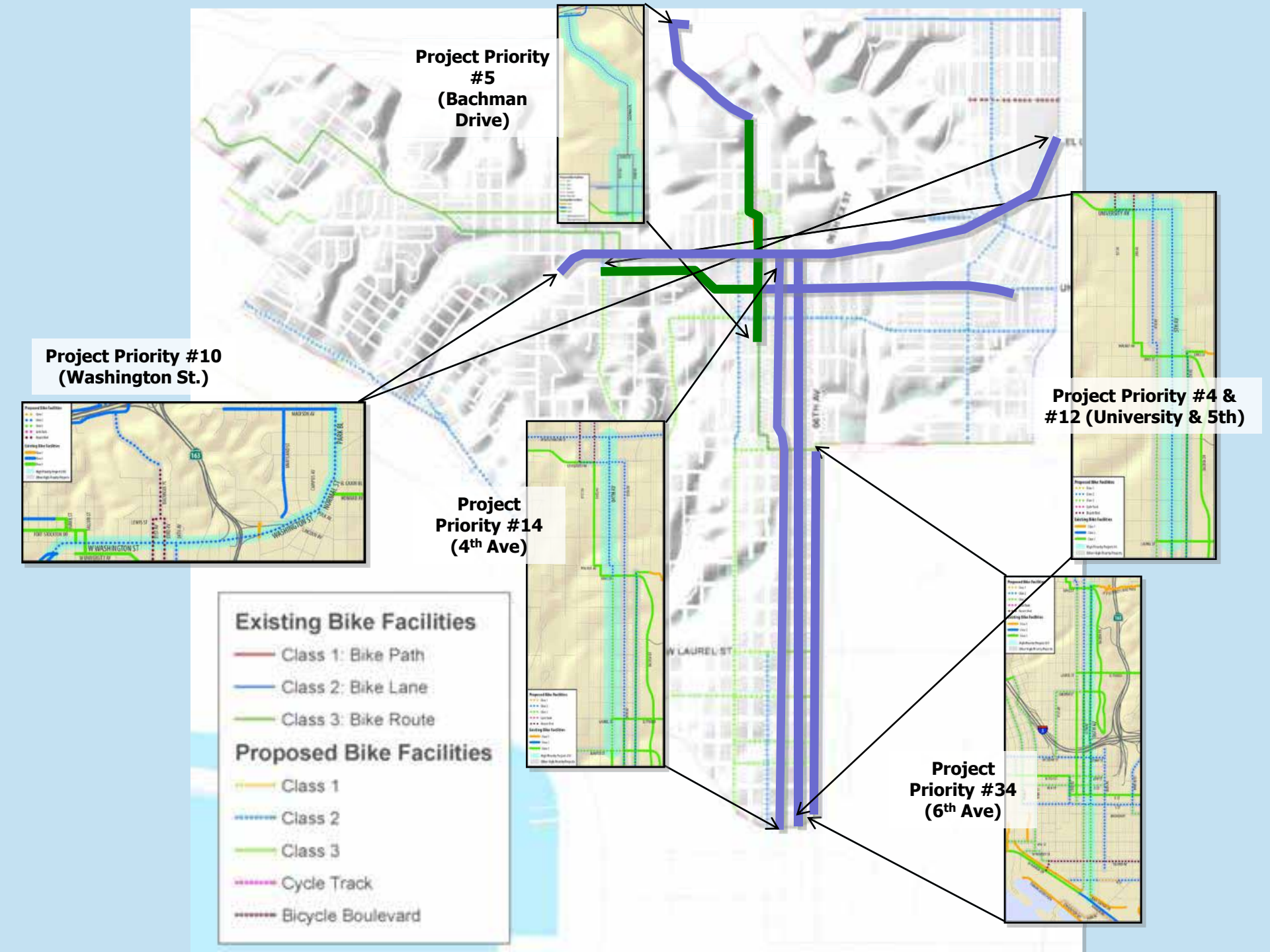
Project Priority #5 (Bachman Drive)
Project Priority #10 (Washington St.)
Project Priority #14 (4th Ave)
Project Priority #4 & #12 (University & 5th)
Project Priority #34 (6th Ave)
Existing Bike Facilities
Class 1: Bike Path
Class 2: Bike Lane
Class 3: Bike Route
Proposed Bike Facilities
Class 1
Class 2
Class 3
Cycle Track
Bicycle Boulevard

Bicycle Survey

1. Which best describes your bicycle riding habits?

- Recreational or exercise
- Occasionally run errands
- Regularly ride to work
- Occasional ride to work
- Ride to school or other public places
- Ride to transit station
- I don’t ride bikes

2. Which of the following would get more people to ride bikes in North Park?

- Bike paths (class 1)
- Bike bridges over canyons
- Striped bike lanes (class 2)
- Signed bike routes (class 3)
- Low volume streets
- More bike lockers and racks
- Other _____
- Nothing would

3. Which new innovated facility types would get more people to ride bikes in North Park?

- Cycle tracks
- Painted bike lanes
- Bike boulevards
- Bike lifts
- Nothing would

4. Bike tires can get stuck in streetcar rails. Which option would you prefer on 30th Street?

- Bike lanes
- Streetcar – put the bike lanes somewhere else
- Bike lanes for now, move them if the streetcar gets built
- I do not know

Park and Recreation

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