



# HILLCREST

## CORRIDOR MOBILITY PLAN

### **Community Design Workshop: Improving the Plan**

Saturday, June 23<sup>rd</sup>, 2007

9:00 am to 1:00 pm

St. Paul's Cathedral

# Agenda

- Presentation & Visual Simulations 9:20 – 10:30
- Breakout Session #1 10:30 – 11:00
  - Thoughts on the Plan
- Breakout Session #2 11:00 – 12:00
  - Alternatives to the Plan
- *Brief* Lunch Break 12:00 – 12:30
- Breakout Session #3 12:30 – 1:00
  - Plan Preferences & Priorities

# Need for Improvement

- Initiated by Community
- Walking Tours Conducted
- Identified Community Based Pedestrian Safety Concerns
- 10 Priority Areas Identified in Uptown
- 5 Priority Areas along 4<sup>th</sup>/5<sup>th</sup>/6<sup>th</sup> Avenues



Prepared by



January 2003



2003

# Concerns Raised by Community

- Speeding
- Pedestrian Safety
- Accidents
- Sidewalk Conditions
- Parking
- Transit Accessibility

# Pedestrians



**Countdown  
Signal**



**ADA  
Ramps**



**Improved  
Signage**



**Enhanced  
Crosswalks**



**Curb  
Extensions**



**In-Pavement  
Flashers**

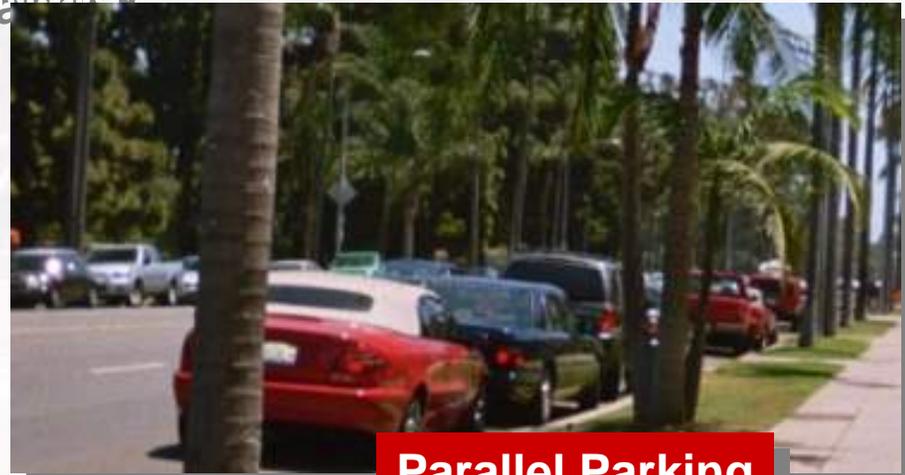
# Parking



**Back-In Diagonal**



**Head-In Diagonal**



**Parallel Parking**

# Transit



**Bus Only  
Lanes**



**Level  
Boarding**



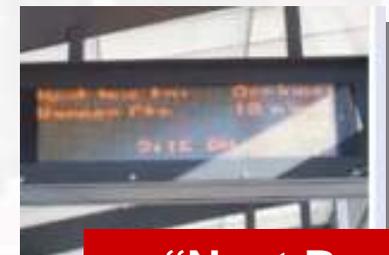
**Enhanced  
Transit Stops**



**Transit Signal  
Priority & Queue  
Jumper**



**Specialized  
Vehicles**

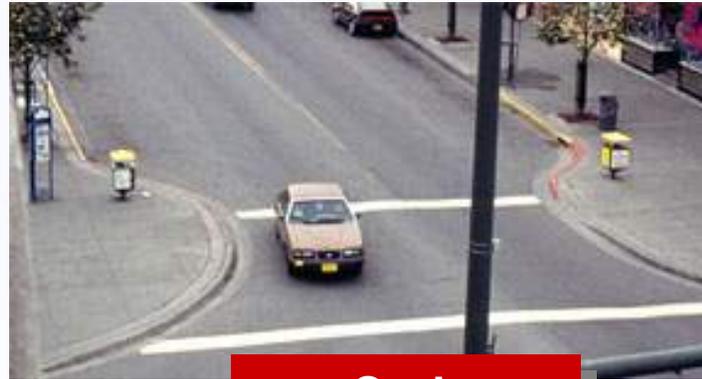


**"Next Bus"  
Signage**

# Speed Reducers



**Raised  
Medians**



**Curb  
Extensions**



**Parking**

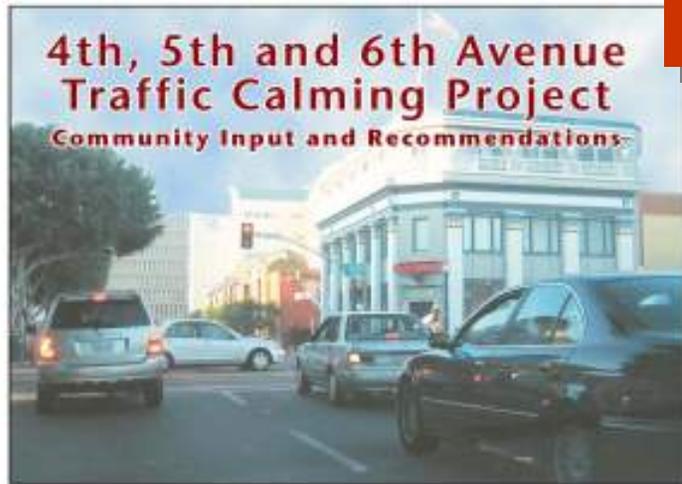


**Signage**



**Landscaping**

# Specific Corridor Improvement Concepts



Uptown Partnership, Inc.  
3108 5th Avenue, Suite 'B'  
San Diego, CA. 92103

in Association with:



KTU+A, Planning &  
Landscape Architecture

Final Report  
January 2005

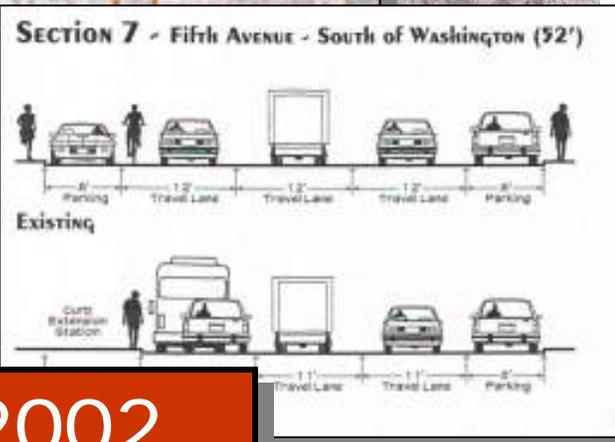
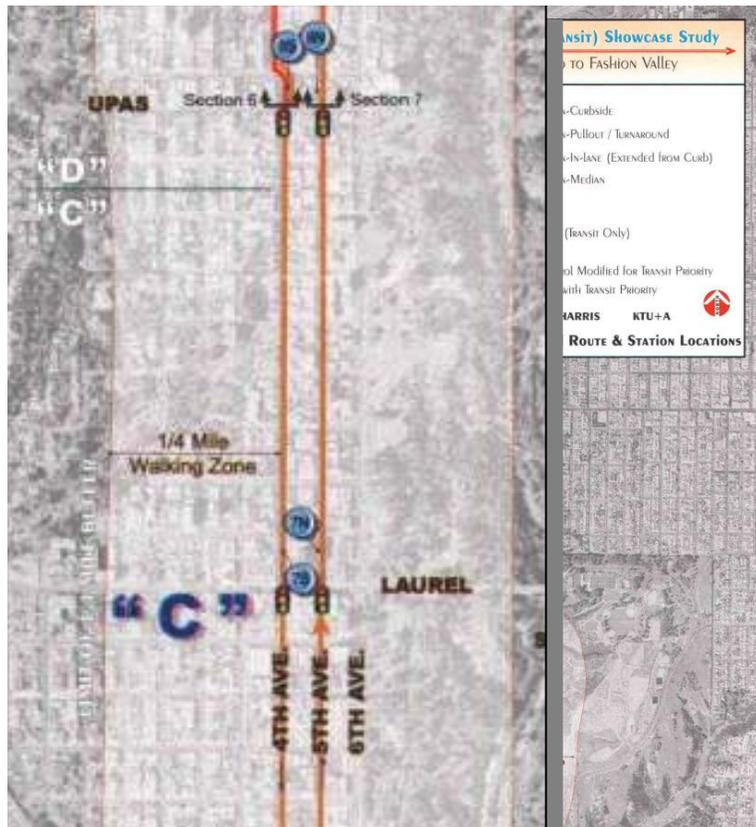
- Direction provided by Community Advisory Group
- 2 Traffic Calming Workshops (2003)
- 100 Participants
- Developed a Concept Plan

2005

# Regional Transit Improvement Concepts

## 2002 SANDAG Showcase Study

- One of Several Corridors Evaluated
- Fashion Valley, Hillcrest, Zoo & Downtown
- Assessed Feasibility of Transit Improvements along Specific Corridors (Section C – 4<sup>th</sup> & 5<sup>th</sup> Ave)



2002





# Draft Mobility Concept

- Starting Point
- Pedestrian Enhancements
- Transit Improvements
- Parking Modifications
- Traffic Operational Changes

## Goal:

Find a Balance between Travel Modes  
that Improves Overall Mobility &  
Improves Quality of Life

# Evaluate Feasibility of Concept Plan



**HILLCREST**  
CORRIDOR MOBILITY PLAN

**COMMUNITY WORKSHOP SCHEDULE**

Please join your fellow residents and other interested community members for these important Hillcrest workshops!

**This is your chance to:**

- Learn more about the project, including proposed concepts, project schedule, project development process, and plan details.
- Identify and express your ideas related to the plan.
- Ask questions about specific topics and learn about how they are being studied.
- Understand how to stay involved and informed during the process.

**Kick-Off Workshop: Introduction to the Hillcrest Corridor Mobility Plan**  
**Thursday, April 26, 2007**  
**6:30pm – 8:30pm**  
St. Paul's Cathedral  
Refreshments provided

**Hillcrest Corridor Walks**

**Monday, April 30, 2007**  
**3:00pm – 4:30pm**  
Meet at the NE corner of Sixth Avenue and Laurel Street (at the El Prado entrance to Balboa Park).

**Tuesday, May 1, 2007**  
**3:00pm – 4:30pm**  
Meet in the courtyard of Village Hillcrest behind PIZZA Nova (2055 Fifth Avenue).

**Design Workshop: Improving the Plan**  
**Saturday, July 14, 2007**  
**9:00am – 1:00pm**  
St. Paul's Cathedral  
Lunch & Refreshments provided

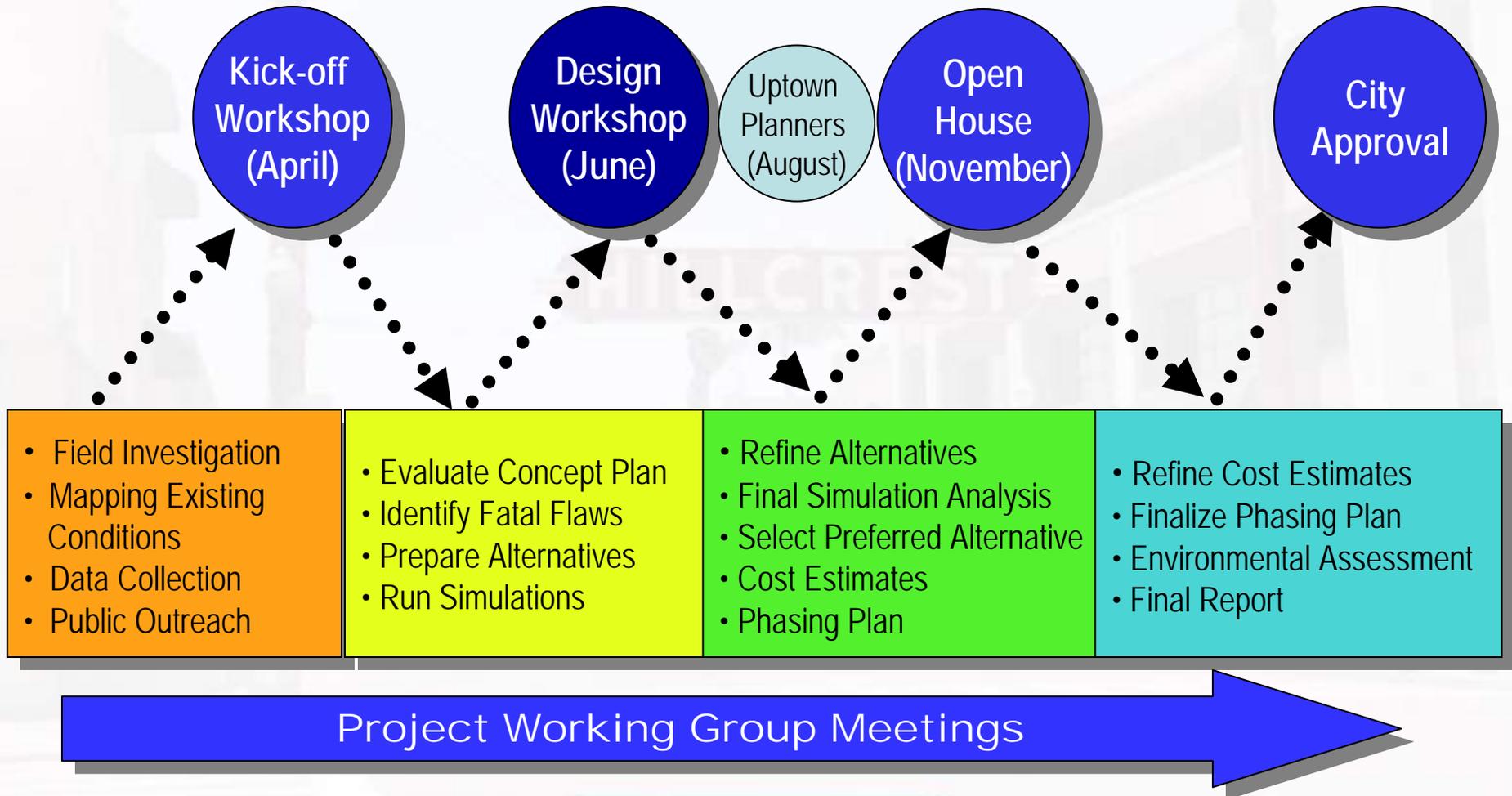
**Open House: Sharing the Final Hillcrest Corridor Mobility Plan**  
**Thursday, November 8, 2007**  
**6:30pm – 8:30pm**  
St. Paul's Cathedral  
Refreshments provided

**PLEASE JOIN US!**

For more information, please contact Major Reynolds, Project Manager, at 619-225-5200 or visit the project website at [www.hillcrestmobilityplan.info](http://www.hillcrestmobilityplan.info).

- Grant Funding Awarded – Fall 2005
- City Advertised Request for Proposals – June 2006
- Consultant Selected – August 2006
- Contract Initiated – March 2007
- **PROJECT COMMUNITY KICK-OFF MEETING – APRIL 2007**
- **PROJECT DESIGN WORKSHOP - TODAY**

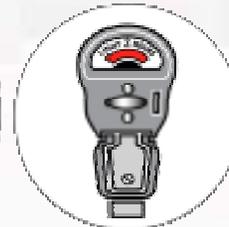
# Evaluation Process



# April 26<sup>th</sup> Meeting



- Introduction to the Work Program
- Identified Elements of Concept Plan
- Small groups discussed likes/dislikes of the plan



# April 26<sup>th</sup> Meeting

## • Northern Corridor (Washington to Walnut)

- Synchronize signals on University, Robinson & Washington
- Increase motorcycle/scooter parking
- Consider One-Way Robinson
- Consider One-Way 6<sup>th</sup> Avenue
- Leave 5<sup>th</sup> Avenue 3 Lanes
- Leave 6<sup>th</sup> Avenue 4 Lanes
- Transit
  - More Transit
  - Consider Trolley Extension (6<sup>th</sup> Avenue)



# April 26<sup>th</sup> Meeting

## • **Central Corridor** (Upas to Maple)

- New Signals Increase Noise
- Crosswalk Needed at 4<sup>th</sup>/Quince
- Consider Trolley Along 6<sup>th</sup> Avenue
- Improvements at 6<sup>th</sup>/Quince to Calm Traffic
- Safer Crossings Needed Along 5<sup>th</sup> Avenue
- Consider Removing Bus Lanes
- New Signals Good Idea
  - 6<sup>th</sup> / Nutmeg
  - 6<sup>th</sup> / Spruce
  - 6<sup>th</sup> / Quince
- Playground at 6<sup>th</sup>/Spruce



# April 26<sup>th</sup> Meeting

- **Southern Corridor  
(Laurel to Elm)**

- 6<sup>th</sup> / Juniper
  - Replace delineators
  - New signal may increase noise
  - Consider prohibiting LT out of Balboa Park with new signal
- Blight = trailers along park
- Diagonal Parking Good on 6<sup>th</sup> from Grap to Fir
- “Magic Mile Theme” from Upas to I-5
- Historic Imprints in Sidewalk on 6<sup>th</sup> Avenue
- Increase motorcycle/scooter parking

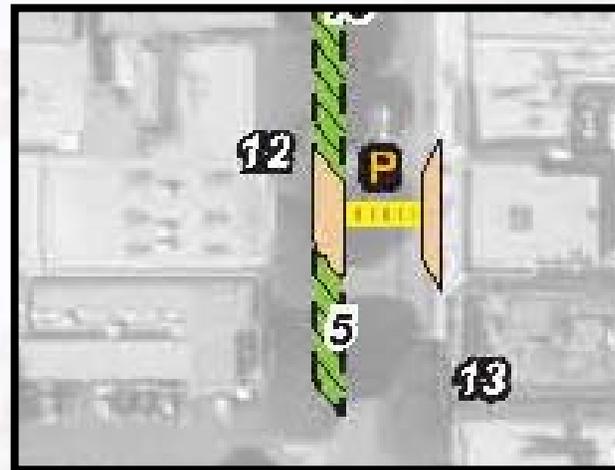
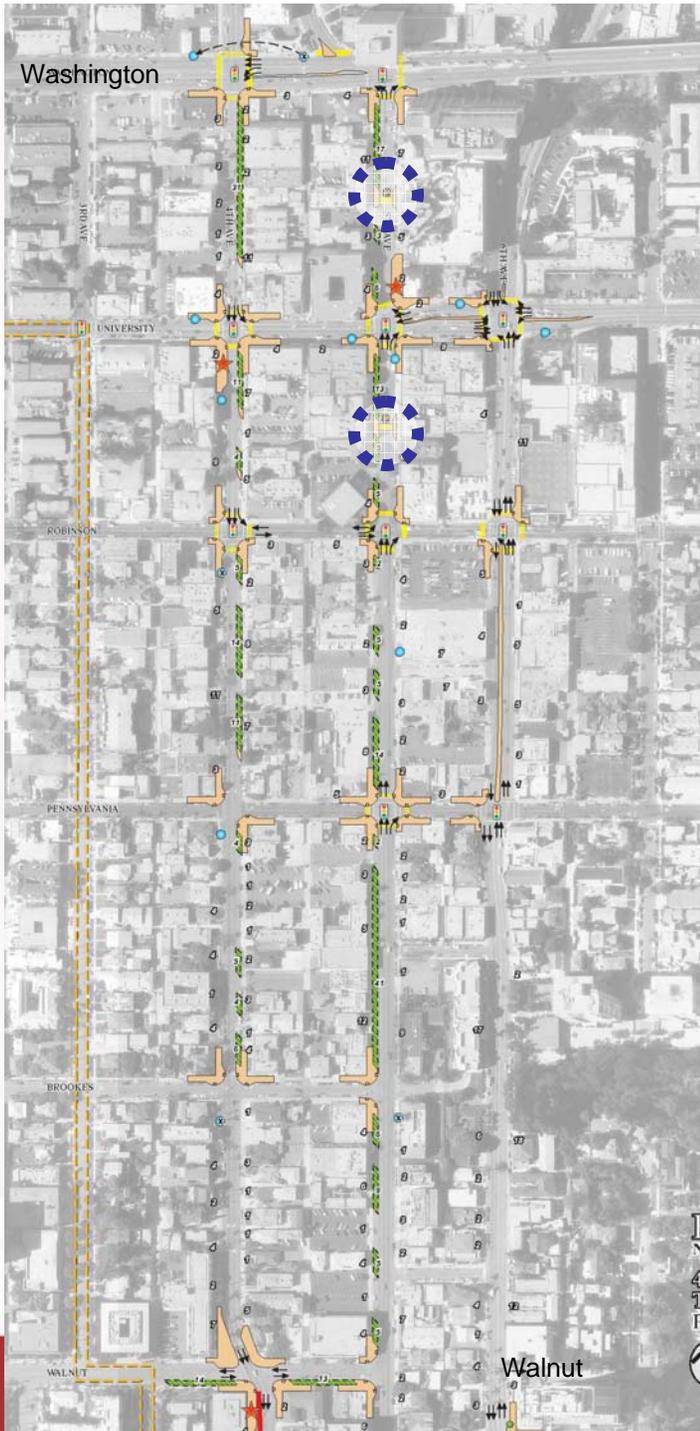


# Evaluation of the Plan

- Assess Benefits to Pedestrians, Bicycles, Transit, and Passenger Vehicles
- Conduct Operational Analysis
- Identify Infeasible Improvements
- Look for Improvements to Plan

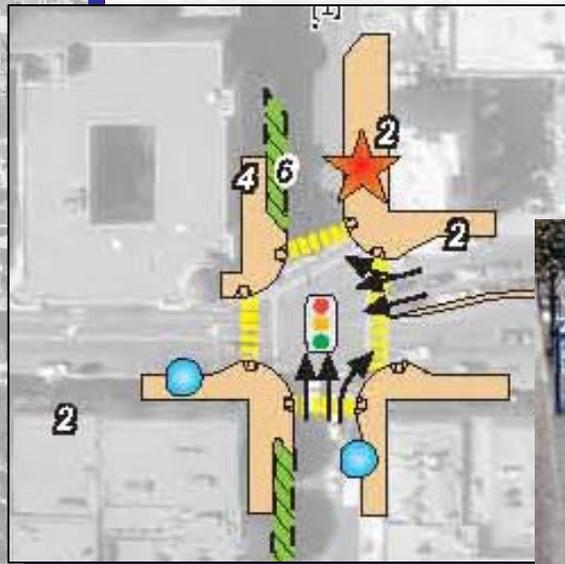
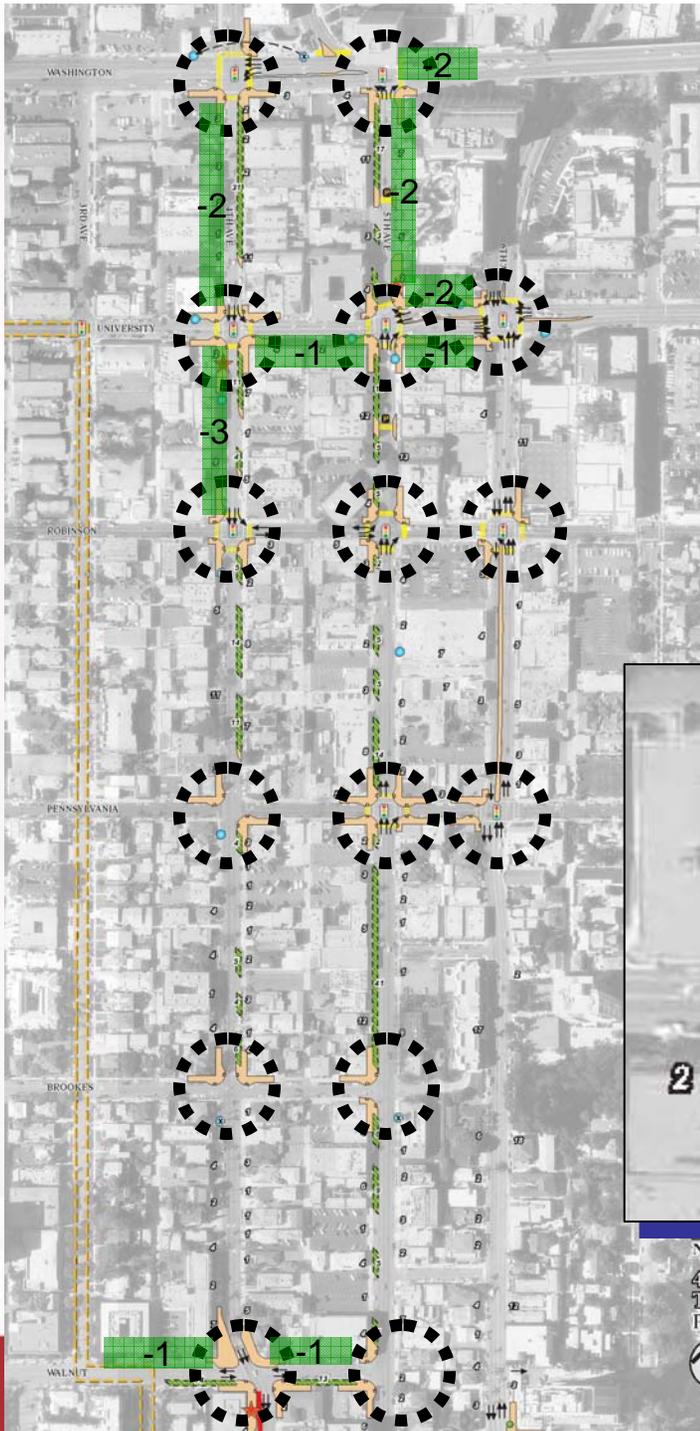
# Potential Benefits Northern Corridor

- 2 New Midblock Pedestrian Crossings



# Potential Benefits Northern Corridor

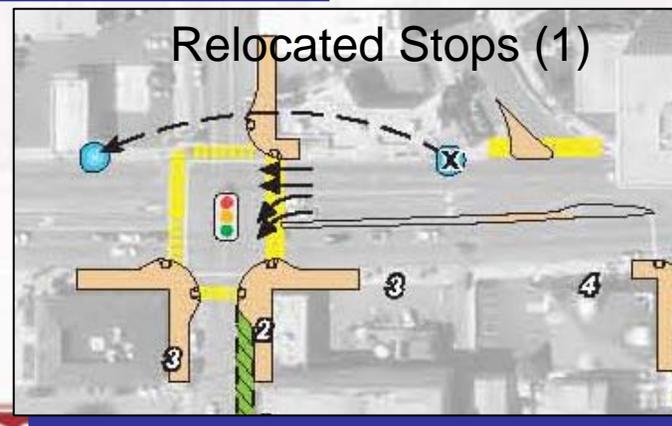
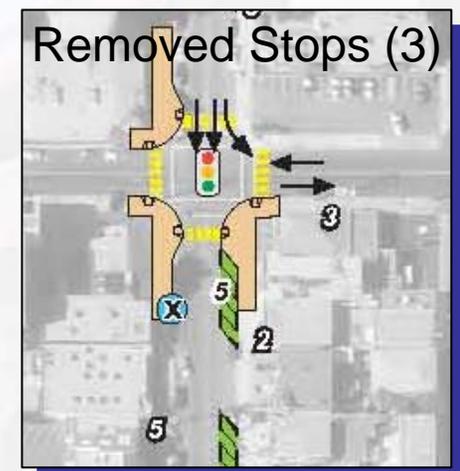
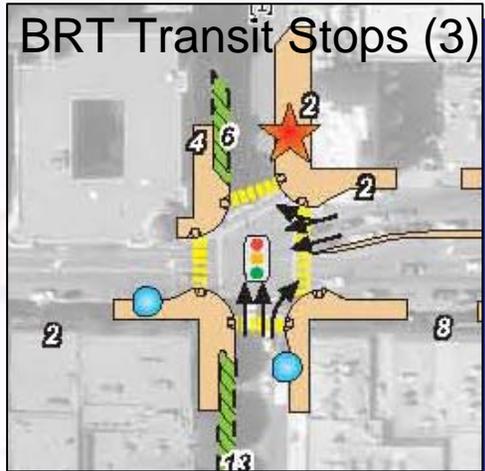
- 15 Intersections with Pop Outs
  - Shortens Crossing Distance
  - Loss of 15 Parking Spaces





# Potential Benefits Northern Corridor

- Transit Improvements





# VISSIM SIMULATION

# Affect on Traffic & Transit

## Northern Corridor

Travel Time –  
*Passenger*  
*Vehicles:*

Washington to Walnut (min:sec)	4 <sup>th</sup> SB	5 <sup>th</sup> NB	6 <sup>th</sup> NB	6 <sup>th</sup> SB
Existing	2:30	1:30	4:00	3:00
2030 No Build	4:00	6:30	4:30	6:00
2030 With Plan	3:00	12:00	3:30	9:00

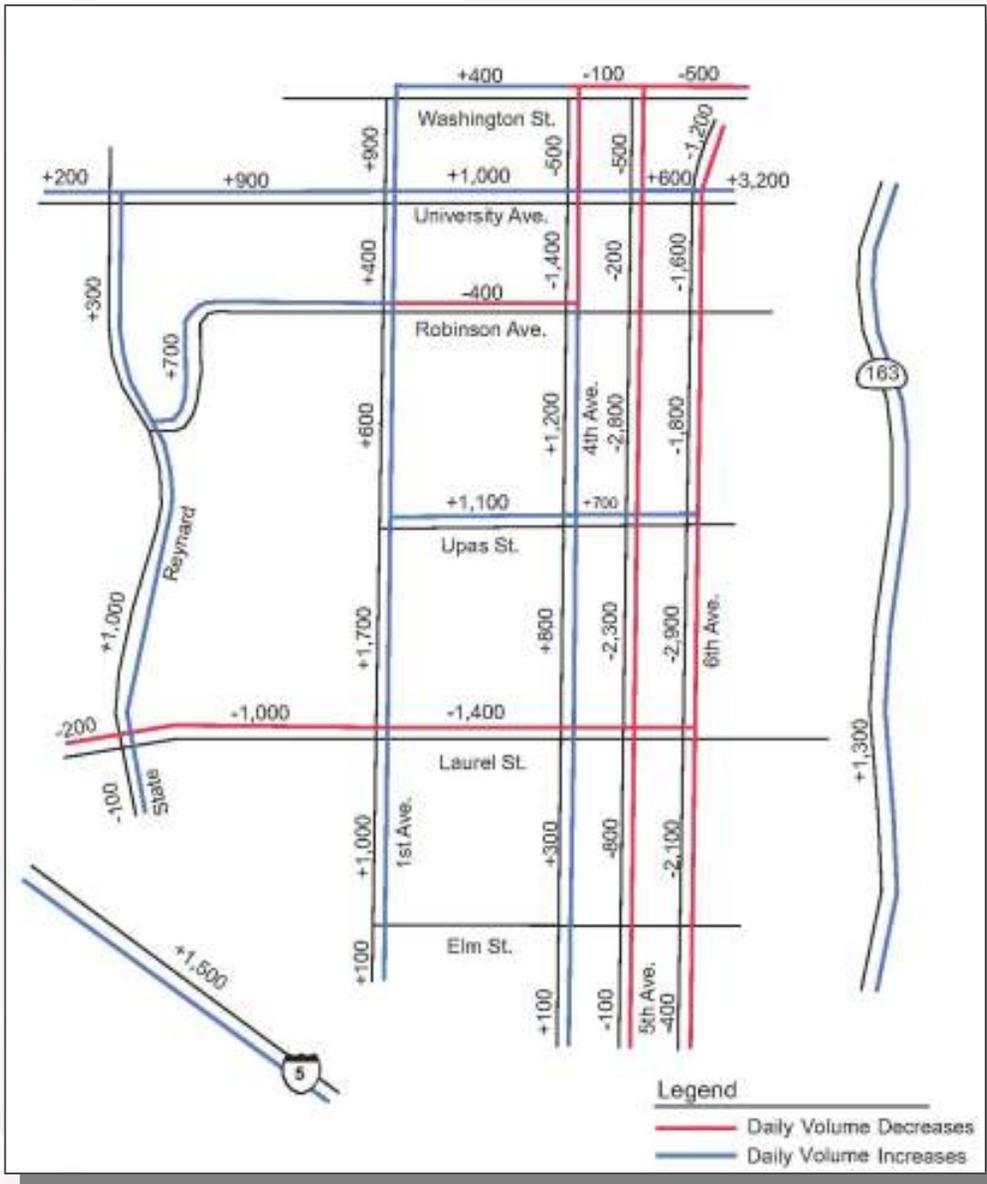
Travel Time –  
*Transit:*

Washington to Walnut (min:sec)	4 <sup>th</sup> SB	5 <sup>th</sup> NB
Existing	4:00	3:00
2030 No Build	6:00	15:00
2030 With Plan	5:30	20:00

Traffic north of Pennsylvania results in delay & increased travel time without/with Concept Plan.

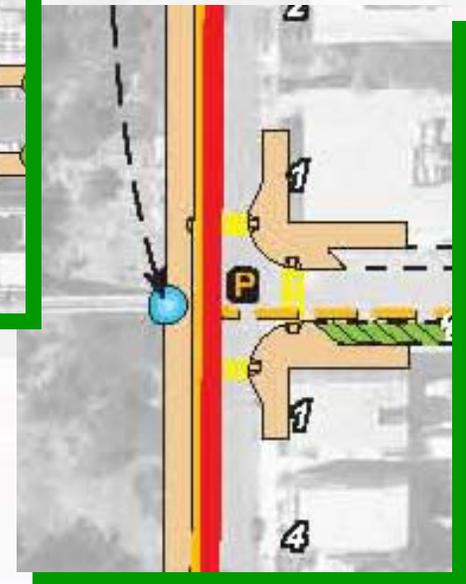
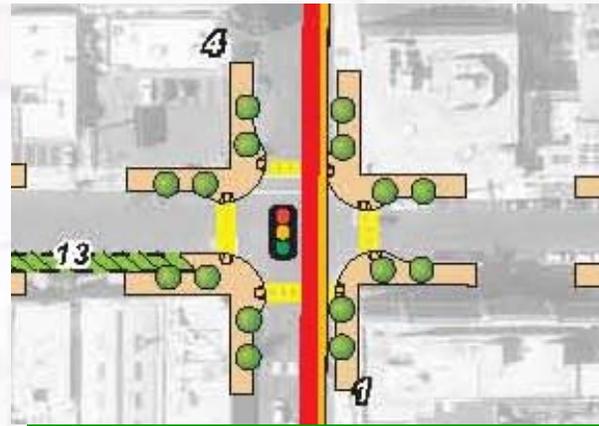
# Future Traffic Volumes

- SANDAG/City Traffic Model Data (2030)
  - Without Project
  - With Project
- Diversion to 1<sup>st</sup> Street



# Potential Benefits Central Corridor

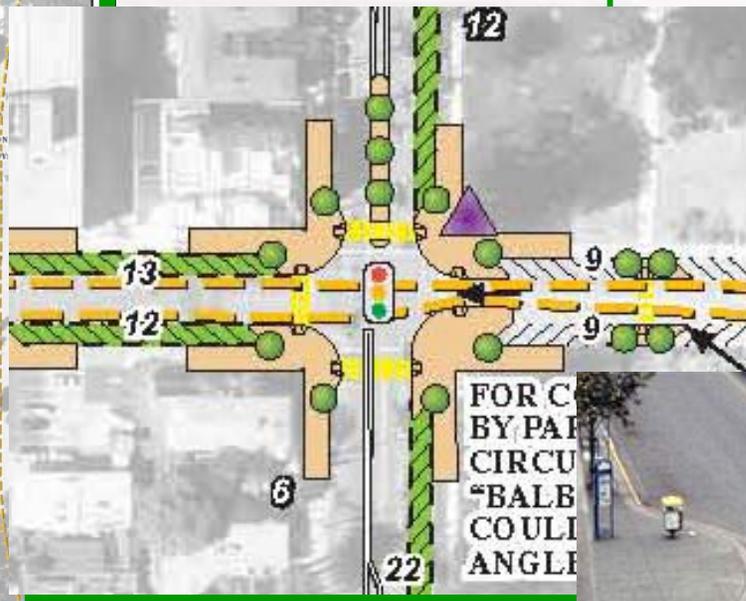
- 8 New Signalized Intersections
- 1 New Midblock Crossing



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# Potential Benefits Central Corridor

- 24 Intersections with Pop Outs
  - Decreased Crossing Distance
  - Loss of 72 parking spaces



# Potential Benefits Central Corridor

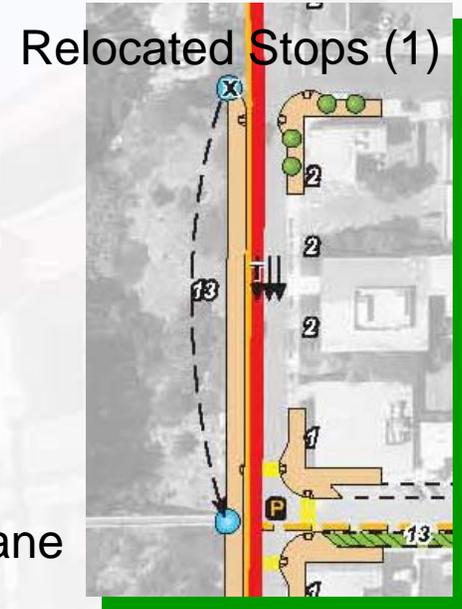
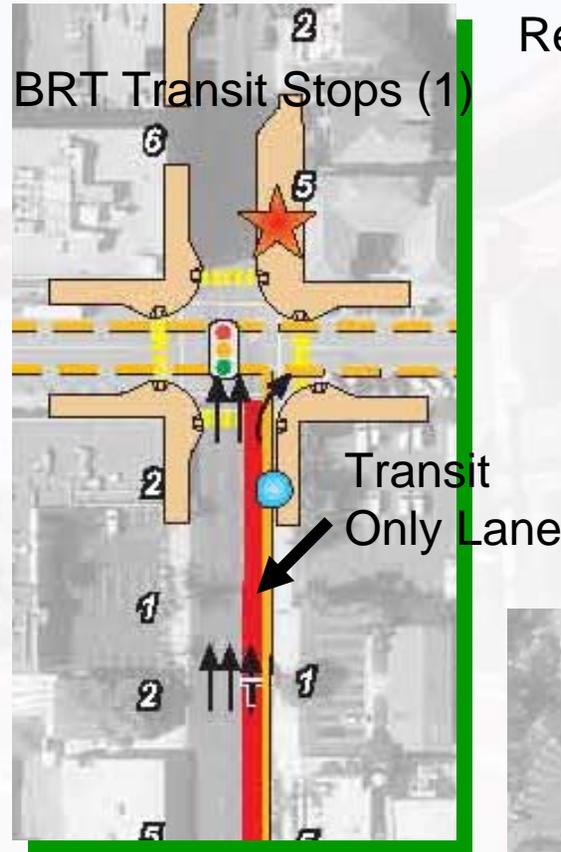
- 105 New Parking Spaces
  - +28 spaces (Diagonal Parking)
  - +77 spaces (Along 6<sup>th</sup> Avenue)





# Potential Benefits Central Corridor

- Transit Improvements





# VISSIM SIMULATION

# Affect on Traffic & Transit **Central Corridor**

Travel Time –  
*Passenger*  
*Vehicles:*

<b>Upas to Maple(min:sec)</b>	<b>4<sup>th</sup> SB</b>	<b>5<sup>th</sup> NB</b>	<b>6<sup>th</sup> NB</b>	<b>6<sup>th</sup> SB</b>
Existing	1:30	1:30	1:30	1:30
2030 No Build	1:30	2:00	1:30	1:30
2030 With Plan	2:00	4:00	2:30	2:00

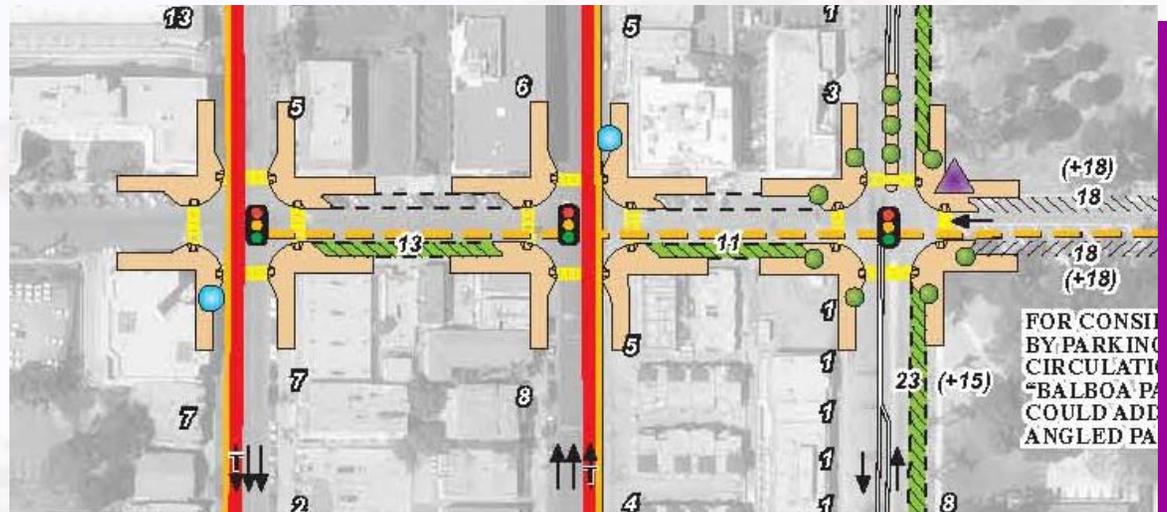
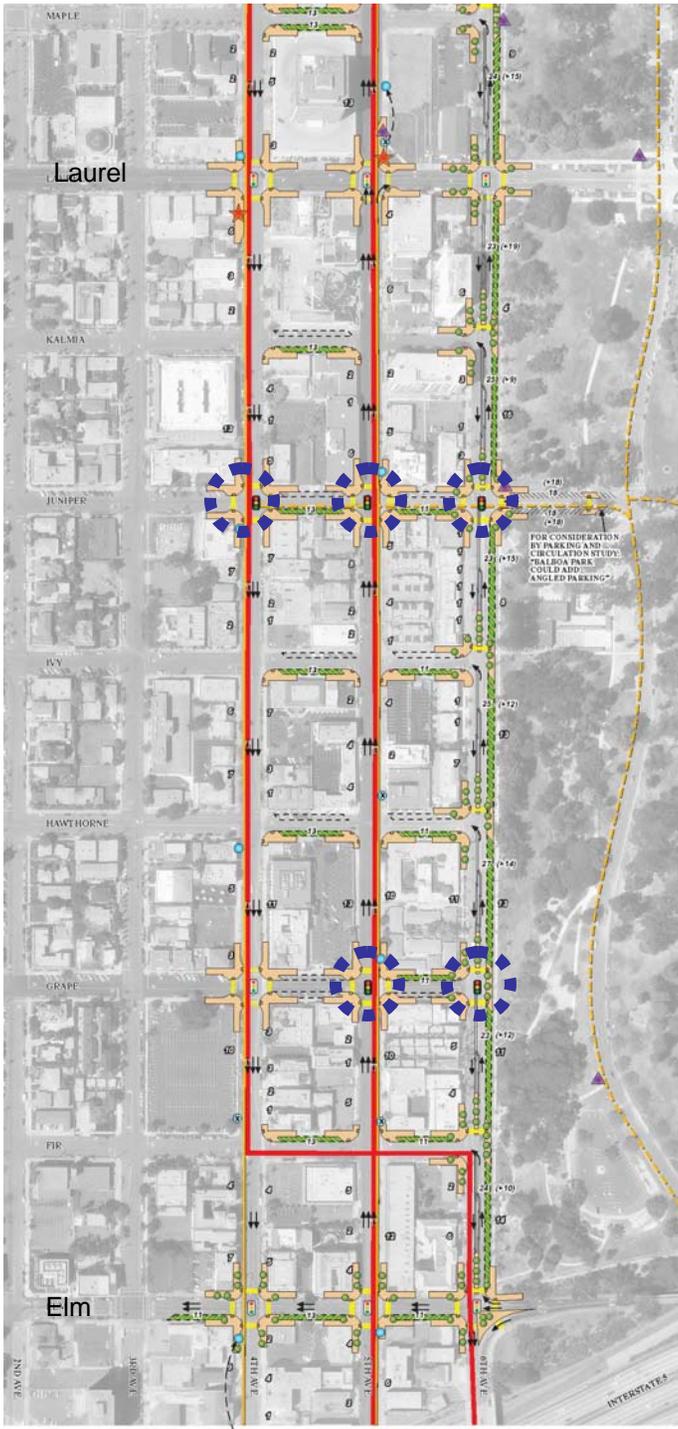
Travel Time –  
*Transit:*

<b>Upas to Maple(min:sec)</b>	<b>4<sup>th</sup> SB</b>	<b>5<sup>th</sup> NB</b>
Existing	4:00	2:00
2030 No Build	4:00	4:00
2030 With Plan	3:30	4:00

Traffic flows “freely” without and with Concept Plan. Delay may be due to signals and/or transit lane.

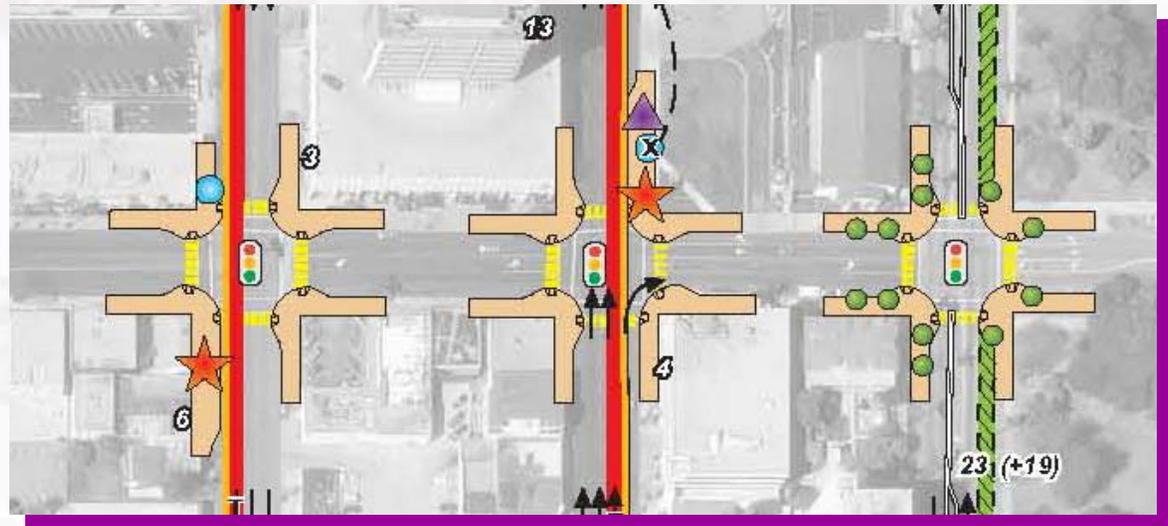
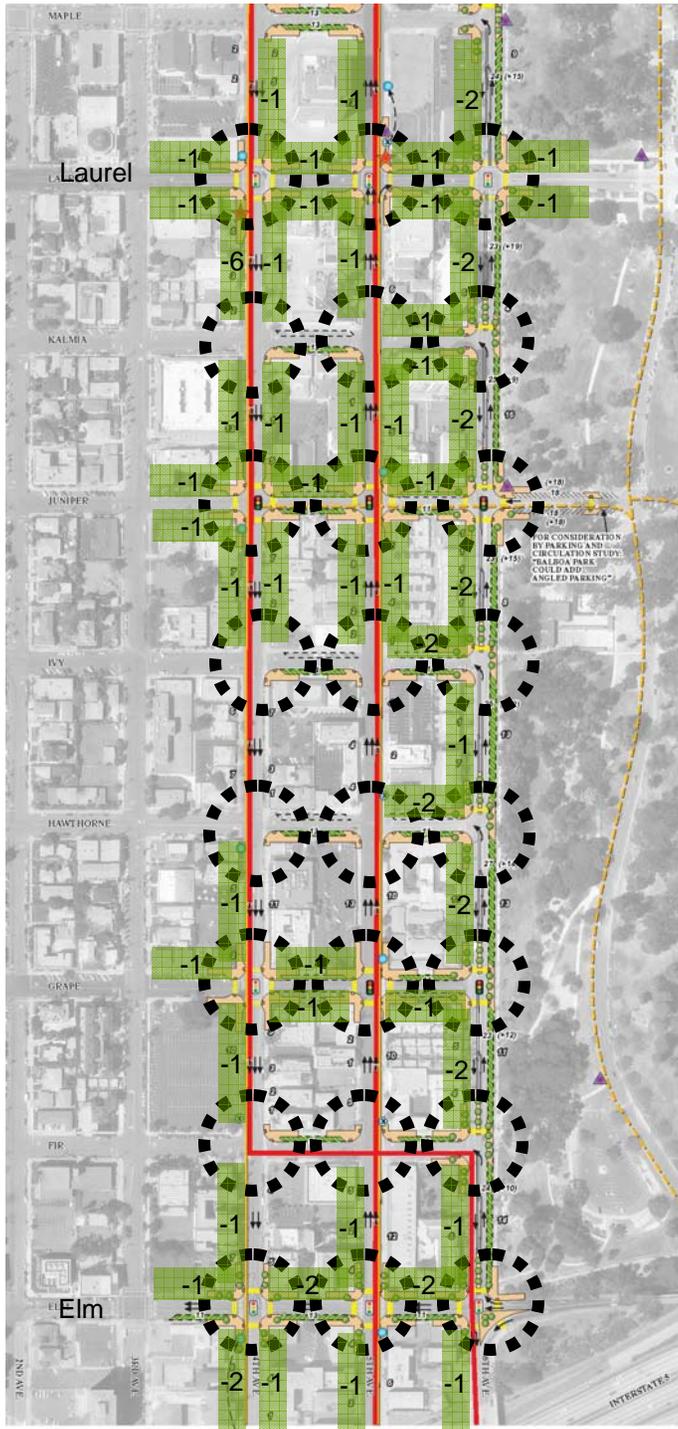
# Potential Benefits Southern Corridor

- 5 New Signalized Intersections

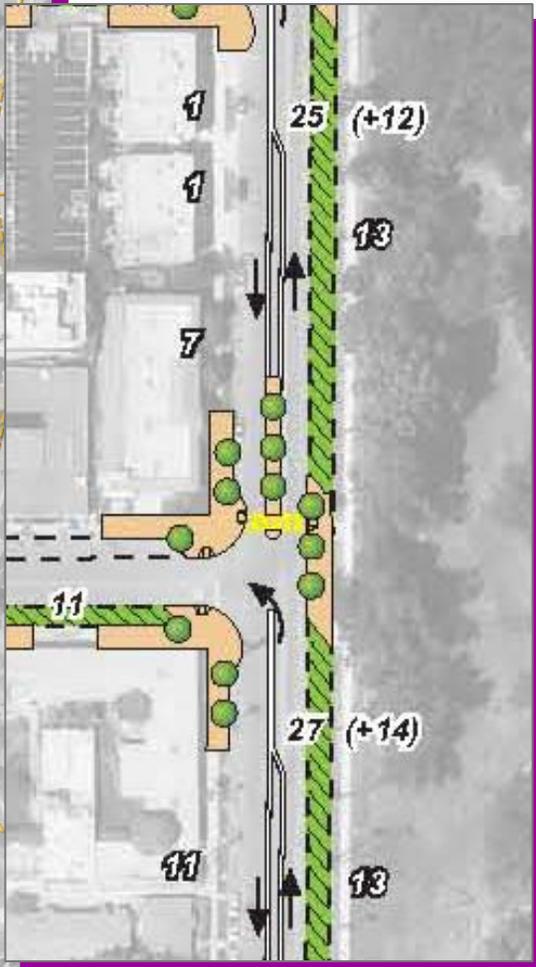


# Potential Benefits Southern Corridor

- 24 Intersections with Pop Outs
  - Decreased Crossing Distance
  - Loss of 81 parking spaces



# Potential Benefits Southern Corridor

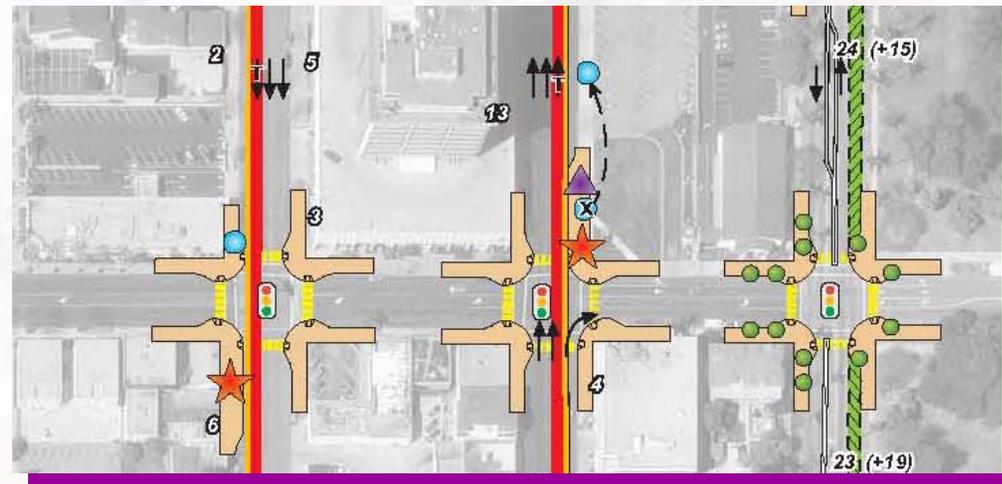


- 166 New Parking Spaces
  - +60 spaces (Diagonal Parking)
  - +106 spaces (Along 6<sup>th</sup> Avenue)



# Potential Benefits Southern Corridor

- Transit Improvements
  - 2 BRT Stations (Laurel)
  - 2 Relocated Stops
  - 3 Removed Stops
  - Transit Only Lanes





# VISSIM SIMULATION

# Affect on Traffic & Transit

## Southern Corridor

Travel Time –  
*Passenger*  
*Vehicles:*

Maple to Elm(min:sec)	4 <sup>th</sup> SB	5 <sup>th</sup> NB	6 <sup>th</sup> NB	6 <sup>th</sup> SB
Existing	1:30	1:30	1:30	1:30
2030 No Build	2:00	1:30	1:30	1:30
2030 With Plan	3:30	3:00	2:30	3:00

Travel Time –  
*Transit:*

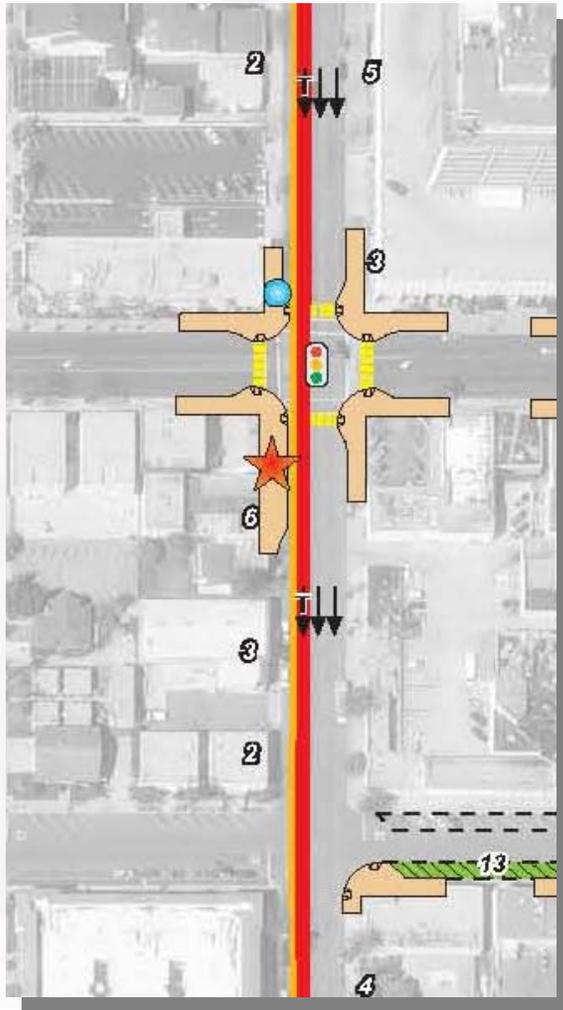
Maple to Elm(min:sec)	4 <sup>th</sup> SB	5 <sup>th</sup> NB
Existing	3:00	3:00
2030 No Build	5:00	4:30
2030 With Plan	4:30	4:00

Traffic flows at or around speed limit. Bus travel time decreases by approximately 30 seconds. Vehicle travel time increases by maximum of 1 minute 30 seconds.

# What Does This All Mean?

- **Plan Benefits Pedestrians:** Reduction in Distance between Marked Crossings
- **North of Upas:** Traffic in Corridor Results in Excessive Travel Times (without & with Concept Plan)
- **Reduction in Lanes on 6<sup>th</sup> Avenue:** Diversion to 1<sup>st</sup> Avenue & other Parallel Routes
- **South of Upas:** Traffic Flows Steadily without/with Concept Plan
- **Transit Lanes:** Reduce Transit Travel Time up to 30 seconds per Transit Vehicle (Upas to Elm)
- **Concept Plan:** Adds 1-2 minutes of Travel Time south of Upas, 5 or more minutes north of Upas

# Potential Alternatives to the Plan



- **4<sup>th</sup> Avenue**

- **Transit Changes**

- Modify Transit Only Lanes
- Other Transit Improvements
- Stop Locations/Improvements

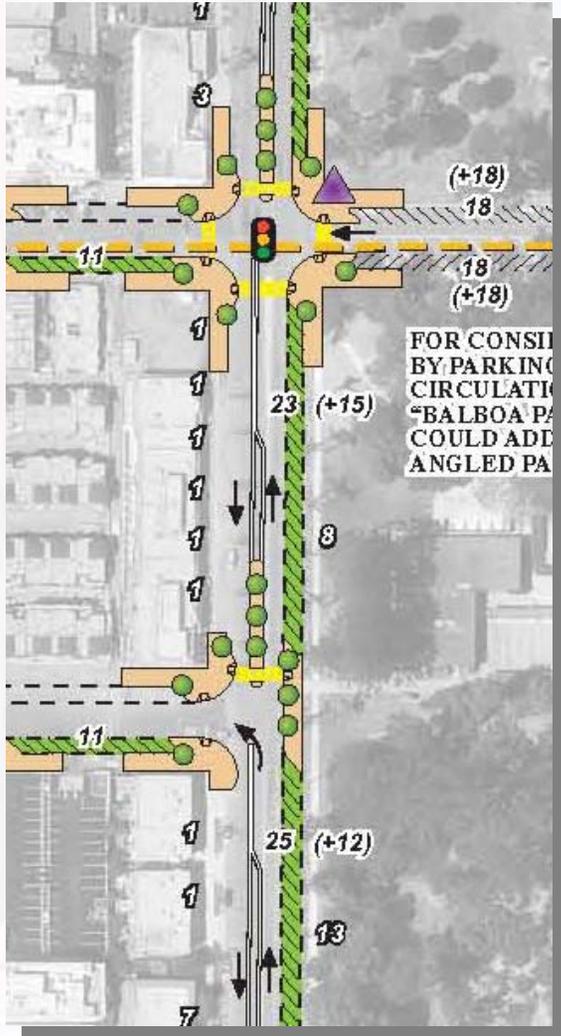
- **Pedestrian Changes**

- Add Midblock Crossings
- Remove Traffic Signals
- Adding/Removing Pop-outs

- **Parking Changes**

- Other Locations to Add or Modify Parking

# Potential Alternatives to the Plan



- **5<sup>th</sup> Avenue**

- **Transit Changes**

- Modify Transit Only Lanes
- Other Transit Improvements
- Stop Locations/Improvements

- **Pedestrian Changes**

- Add Midblock Crossings
- Remove Traffic Signals
- Add/Remove Pop-outs

- **Roadway Changes**

- Add/Remove Dedicated Turn Lanes

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# Potential Alternatives to the Plan



- **6<sup>th</sup> Avenue**

- **Roadway Changes**

- Return to 4 Lanes
- Two Northbound/One Southbound
- Add/Remove Pop-outs

- **Parking Modifications**

- Angled vs. Parallel Parking

- **Pedestrian Changes**

- Add Midblock Crossings
- Remove Traffic Signals

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# Potential Transit Improvements - BRT

## “ Rubber-Tired Rapid Transit ”

- **BRT is an Integrated System**

- Facilities
- Equipment
- Services
- Amenities



- **BRT = High Performance/High Quality Rapid Transit**
- **BRT = Greater Operating Flexibility and Lower Capital/Operating Costs Compared to Light Rail Rapid Transit**

# Benefits of BRT

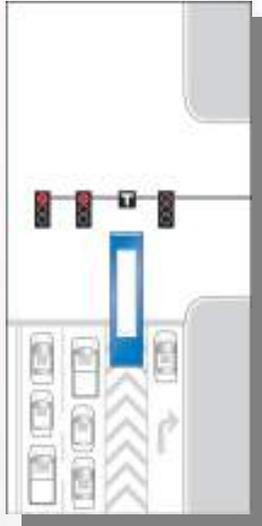
- **Faster Travel Times**
- **Reliable Service**
- **Significant Upgrade from Local Fixed Route Service**
- **More Attractive to Riders**
- **Less Expensive than LRT**
- **Larger Network of High Capacity Services**

# Arterial BRT

- A Broad Range of Features
- Dedicated Lanes/Right-of-Way
- Mixed Traffic with Priority Treatments
- Accessible, Safe, and Secure Stations
- Easy to Board, Attractive, High Capacity Vehicles
- Efficient Fare Collection
- Frequent All-Day Service



# What Make BRT “Rapid”?



**Queue Jumpers**



**Signal Priority**



**Dedicated Lanes**

## **Other Treatments/Features**

- Vehicle Tracking Systems, etc.
- Station Spacing
- Fare Collection/Management
- Active Operations/Driver Training

# Vehicles

- **Modern Image**
- **High Capacity**
- **Easy/High-Volume Boarding/Alighting**
- **Low Floor/Clean Engine**
- **Advanced Systems:**
  - Vehicle Tracking
  - Automated Stop Announcement
  - Advanced Fare Collection
  - Transit Priority



# Shelters

- **Small to Large Scale**
- **Adaptable to Specific Environments**
- **Incorporates Branding Elements**



# Branding

- **Identifies the Service as Unique**
- **Includes Name, Colors, Logo, and Slogan**
- **Deployed on Vehicles, Stations, Fare Media, Timetables, and Other Collateral Materials**
- **Facilitates a Unified Approach to Marketing**





# Goals for Today...

# Group Exercise: PRIORITIES



Bicycles



Mass Transit



Parking



Pedestrians



Vehicle Circulation

Place each sticker on the Priorities Matrix based on your priorities for the corridor plan.

#1 = Highest priority

#5 = Lowest priority

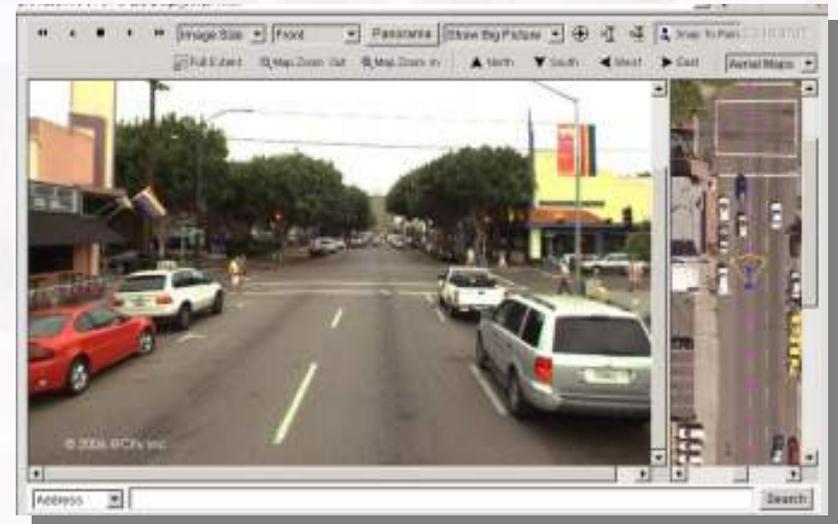
# Group Exercise: DESIGNING ALTERNATIVES

- Break into design teams:  
North, Central, South, All
- As a team, develop **alternatives to the concept plan** & record on the maps
- Complete worksheet summarizing new ideas & present to group



# DESIGN TOOLS

- Draft concept plans and/or blank aerial maps
- Tracing paper & markers
- Traffic calming illustration boards
- Analysis boards
- Community input summary boards
- Project Team members
- iStreet Viewer
- VISSIM



# TEAMWORK GUIDELINES

- Everyone's opinion counts – respect your teammates
- Argue with your pens not your mouths
- You don't need to be an artist to get your point across!
- Work toward CONSENSUS
- Don't get hung up on too many details – focus on concepts and the big ideas





# Lunch Break

# Group Exercise: DESIGNING ALTERNATIVES

- Break into design teams:  
North, Central, South, All
- As a team, develop **alternatives to the concept plan** & record on the maps
- Complete worksheet summarizing new ideas & present to group



# Final Exercise: STOPLIGHT TEST

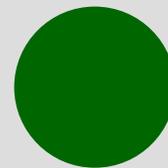
- Everyone will receive THREE red, yellow, and green dots
- Place on ideas expressed on the worksheets



RED = STOP, don't pursue this idea!



YELLOW = CAUTION, pursue this idea with care



GREEN = GO, pursue this idea as an option



**THANK YOU!**