

4th, 5th and 6th Avenue Traffic Calming Project Community Input and Recommendations



Uptown Partnership, Inc.
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in Association with:



**KTU+A, Planning &
Landscape Architecture**

**Final Report
January 2005**

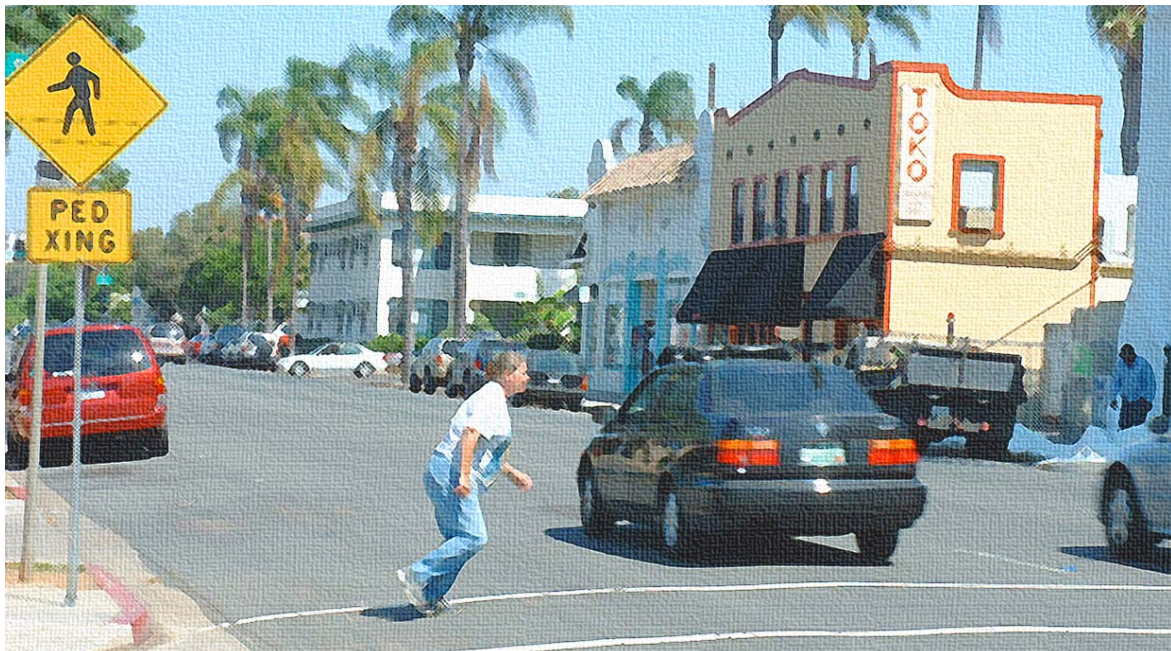
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4th/5th/6th Avenue Traffic Calming Study

The ***Fourth-Fifth-Sixth-Avenues Traffic Calming Study*** proposes strategies to improve travel in the Hillcrest corridor north of downtown San Diego, immediately west of Balboa Park. This report recommends that travel lanes be narrowed and that sidewalks be extended – or “bulbed-out” - into the parking lanes at major street corners to reduce high vehicle speeds. The study also recommends diagonal, on-street parking be installed on Fourth and Fifth Avenues in central Hillcrest to help narrow travel lanes and increase parking in the commercial area. Immediately west of Balboa Park, the study recommends diagonal parking on the east-west streets and on Sixth Avenue as well as pedestrian refuge areas and fewer through travel lanes on Sixth Avenue.

The Uptown Partnership, Inc. (UPI) is a community-based, non-profit corporation that manages the Parking Meter District program in Uptown for the City of San Diego. UPI has approved a Strategic Mobility Plan that will increase parking in commercial areas, supports transit improvements, will improve pedestrian circulation, and other community projects.

In a study completed for the Uptown Partnership in 2003, WALKSanDiego identified ten traffic calming priority areas in Uptown - four of these areas are located in the Fourth-Fifth-Sixth-Avenues Corridor.



The traffic-calming strategies proposed for Uptown are designed to maintain the capacity of the transportation system, while slowing maximum travel speeds. For example, while narrower 11-foot-wide travel lanes discourage high vehicle speed; turn pocket and traffic signal coordination also are part of the proposal to minimize delay at intersections.

The UPI Board of Directors maintained direction of the Traffic Calming planning effort through its Committees. In addition, the Board appointed a Community Advisory Group composed of area residents, business owners and representatives of community groups

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(Hillcrest Association and Uptown Planners). The Community Advisory Group made recommendations to the Uptown Partnership, Inc.'s Program Committee on the issues and direction of the study. Nearly 100 individuals attended two Traffic Calming workshops held by the Partnership in 2003.

TRAVEL IN THE UPTOWN CORRIDOR

Using City of San Diego data, the consulting firm of KTU+A provided data and maps about traffic conditions in the corridor. These maps are contained in Appendix A.

Average Daily Trips (ADT) The highest traffic volumes in the corridor are in the northern end of the corridor, decreasing on all three streets until the Grape/Hawthorne couplet and then increasing slightly as they cross I-5. Only one surface street in the corridor exceeds 20,000 vehicles/day: Sixth Avenue between University and Robinson Avenues. There is excess capacity on most north-south streets.

Travel Speeds A speed limit of 30 miles per hour is posted on all surface streets in the corridor. Mean speed exceeds 30 miles on only three segments of the corridor: Fourth Avenue between Laurel and Walnut Streets, Sixth Avenue between Upas Street and Pennsylvania Avenue and Sixth Avenue south of Juniper Street.

Accidents are clustered in central Hillcrest and between Juniper and Nutmeg Streets. These areas have higher pedestrian crossings and more vehicle turning moves.

Transit Three major bus routes provide frequent service on Fourth and Fifth Avenues. However, travel times are slow in the corridor because of frequent bus stops and high passenger usage as well as conflicts with both pedestrians and other vehicles.

TRAFFIC-RELATED COMMUNITY ISSUES

Based on the discussions of the Steering Committee, comment at a Community Planning Group meeting and comments from a community Traffic Calming workshop in May 2003, the UPI Planning Committee identified the following major problems in the corridor. A list of comments provided at the workshop is shown in Appendix B.

Speeding that occurs mainly on Fourth Avenue adjacent to the canyon south of Redwood Street; on Fifth Avenue primarily between Maple and Thorn Streets; on Sixth Avenue south of Pennsylvania; and on Robinson Street near the freeway 163 ramps.

Problem Intersections including (1) Fourth Avenue at Robinson and (2) at Walnut; (3) on Fifth Avenue between Quince and Pennsylvania because of vehicular speeds; (4) on Sixth Avenue at University Avenue because of high traffic volumes and (5) at most intersections adjacent to Balboa Park primarily because of the high number of pedestrian crossings.

Street Capacity primarily at intersections where participants felt that there was a lack of capacity on Robinson and University Avenues and that poor traffic signal phasing limited the capacity of the corridor.

Bicycle and Pedestrian Improvements including a need to provide better bike lanes throughout the corridor and a sidewalk connection to the Quince Street pedestrian bridge.

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TRAFFIC CALMING TOOLS

The City of San Diego *Street Design Manual*, adopted by Council in 2002, identifies six categories of traffic calming techniques. The techniques were considered for application in the Hillcrest corridor:

Narrower Travel Lanes: Conventional width vehicle travel lanes encourage drivers to travel at higher rates of speed. The 10 & 11 foot lanes now permitted by the *Street Design Manual* encourage more moderate speeds.

Vertical Visual Restriction: Trees and street furniture adjacent to the curb make the vehicle travel lane seem narrower to the drivers, reducing maximum automobile speeds.

Curb/Sidewalk Bulb-outs: At intersections, curbs are bulbed-out into the street the width of the parking lane; as far as the vehicle travel lanes. These bulb-outs visually narrow the street, slowing traffic and shortening the pedestrian street crossing distance.

Horizontal Deflection: Traffic moving in a straight line tends to travel faster than traffic turning. Median islands in the street, landscaped "chicanes" on alternating sides of the street and traffic circles deflects traffic and reduces vehicle speed.

Traffic Circles: By diverting the linear path of traffic and allowing the continuous movement of vehicles, traffic circles can moderate the vehicle traffic flow - slowing through traffic and eliminating red lights. However, traffic circles require much more right-of-way than conventional street intersections.

Traffic Controls: Traffic lights and pedestrian crossing signals are often not considered traffic calming techniques. However, if the signals are interconnected and timed to permit moderate speed, they can minimize vehicle stops and moderate vehicle speed.

EVALUATION OF TRAFFIC CALMING OPTIONS IN UPTOWN

Major Conclusions, based on the second Traffic Calming workshop in October 2003, included:

- Support for curb bulb-outs to provide pedestrian safety and to mark the entrance to neighborhoods within Uptown.
- Support for diagonal parking on one side of Fourth and Fifth Avenues north of Upas Street and on east-west streets west of Balboa Park.
- Support for use of group parking meters & additional electronic traffic control lights.
- Support for pedestrian improvements on the west side of 4th Avenue between Palm and Redwood Streets and along Eighth 8th Avenue north of Balboa Park.
- Support for bicycle lanes on Fourth and Fifth Avenues south of Upas Street; connected with lanes on Third Avenue north of Upas Street.
- Support for reducing the number of lanes on Sixth Avenue south of Robinson Avenue.
- Support for the diversion of freeway-bound traffic to Washington Street from the north, Sixth Avenue from the south and 10th Avenue from the east.

Major Remaining Issues for the Traffic Study to resolve included:

- The safety of diagonal parking on the east side of Sixth Avenue near Balboa Park, and on other busy streets
- The need for Bus Rapid Transit (BRT) bus lanes and service through Hillcrest,
- The type and location of pedestrian/vehicular traffic crossing lights needed, and
- The need for longer-term parking meters to accommodate downtown employees.

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RECOMMENDED TRAFFIC CALMING IN THE HILLCREST CORRIDOR

Moderate Vehicle Speeds primarily on Fourth and Fifth Avenues between Laurel & Walnut Streets and on Sixth Avenue south of Laurel Street. The traffic calming recommendations would reduce the number of through travel lanes for automobiles on the north-south streets and narrow the width of these lanes to approximately 11 feet. Curb bulb-outs at major pedestrian intersection and at the entrance to the neighborhoods in the corridor would also be used to visually narrow travel lanes. Additional traffic control lights between Elm and Walnut Streets are proposed to moderate vehicle travel speeds.

Increase Parking especially in Central Hillcrest & adjacent to Balboa Park. In the northern part of the corridor, the recommendations would provide for diagonal parking on the east side of Fourth Avenue north of Walnut Street and on the side of west Fifth Avenue north of Upas Street. In the Southern part of the corridor, the recommendations would provide diagonal parking on the east side of Sixth Avenue adjacent to Balboa Park and on both sides of east-west streets that have adequate curb-to-curb street width.

This traffic calming study also suggested the use of group meters for all diagonal parking, especially adjacent to Balboa Park. The idea of installing longer-term parking meters near downtown to accommodate employees was referred to the citywide Parking Meter Task Force.

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Provide Better Pedestrian Access To Balboa Park by reducing the number of travel lanes on Sixth Avenue south of Robinson Avenue. Adjacent to Balboa Park, one through travel lane in each direction is recommended. The Traffic Calming study recommends installing curb pop-outs on both sides of Sixth Avenue and providing pedestrian refuges in the street median refuges on the north side of many Sixth Avenue intersections

Improve Pedestrian Safety in other Areas by providing pedestrian improvements on the west side of Fourth Avenue between Palm and Redwood Streets. Although a pedestrian bridge connects Fourth Avenue across a canyon to the neighborhood to the west, a sidewalk is not provided on Fourth Avenue. The study also recommends curb bulb-outs at other intersections with moderate- to high pedestrian activity and to mark the entrances to neighborhoods within Uptown.

Increase Bicycle Safety & Use by providing a bicycle/pedestrian connection from Eighth Avenue in Hillcrest to the northern edge of Balboa Park near the freeway pedestrian bridge at Upas Street and the designation of combined bicycle-bus lanes on Fourth & Fifth Avenue south of Upas Street. The Traffic Calming recommendation supports the existing Uptown Community Plan in the provision of a major north-south bicycle route on Third Avenue north of Upas Street.

Increase Transit Use by implementing Bus Rapid Transit (BRT) service in the Hillcrest corridor using BRT transit stations and exclusive bus/bicycle lanes south of Upas Street. The study also suggests the consolidation of regular bus stops

Decrease Vehicle Traffic in Central Hillcrest by diverting freeway-bound traffic to:

- Washington Street from the north & west through interchange improvements,
- Sixth Avenue from the south through the use of signage & bulb-outs and
- Tenth Avenue from the east through signage.

Accommodate the SegWay and other mobility aids where adequate right-of-way exists.

PRIORITY TRAFFIC CALMING PROJECTS

Potential Outside Funding Availability: Cooperating with other publicly funded programs, Uptown Partnership, Inc. can leverage funding for the proposed Traffic Calming improvements. Uptown can cooperate with the Parks Department in converting much of the parking in and adjacent to the park to diagonal spaces. Similarly, the Park could potentially fund the proposed bicycle connection to the north.

In cooperation with SANDAG, the regional transit agency, UPI has applied for conceptual design funding to refine a Bus Rapid Transit (BRT) demonstration project in the Hillcrest Corridor. This project will address the design and cost of the pedestrian projects included in the Traffic Calming study.

Safety Improvements would receive the highest priority for funding in the corridor. The pedestrian improvement to access the Quince Street pedestrian bridge is already on the Development Impact Fee (DIF) priority list and potential pedestrian signalization on the Fourth and Fifth Avenues should be added. Vehicular, as well as pedestrian safety, is a concern where the street rights-of-way are off-set on Fourth Avenue at Walnut Street and on Sixth Avenue at Upas Street

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Increase Parking Supply: Uptown Partnership, Inc. places a high priority on the expansion of the parking throughout Uptown, but particularly in the commercial districts. The expansion provided through the Traffic Calming recommendations can be implemented with a relatively low cost.

A high priority is placed on the conversion of curbside parking to diagonal spaces on Fourth and Fifth Avenues north of Upas Street, with a slightly lower priority on converting the east-west streets west of Balboa Park to diagonal parking. Additional parking can be recovered through the consolidation of bus stops.

Increase Transit Speed: The consolidation of bus stops will also have the effect of increasing transit speeds and should receive a relatively high priority. This process should be coordinated with the implementation of BRT service in the corridor. BRT service will also increase average transit speed.

ACTION PROGRAM

Uptown Partnership, Inc. will take the following actions to implement the recommended Traffic Calming actions:

1. Present this study to Uptown Planners and the Planning Commission, moving toward City Council approval of the recommendations as a Traffic Management Plan and approval as an amendment to the Facilities Financing Plan of the Uptown Community Plan,
2. Assist SANDAG in refining the transit service concept in the corridor,
3. Assist the City of San Diego in refining the roadway concept in the corridor,
4. Work with developers to provide improvements to implement the concept, and
5. Work with Uptown Planners and the Hillcrest Association to identify projects to be funded through development impact fees (DIFs).
6. At the appropriate time, assist the Planning Department and Uptown Planners in revising the circulation element of the Uptown Community Plan to include this Traffic Management Plan.

REFERENCED DOCUMENTS:

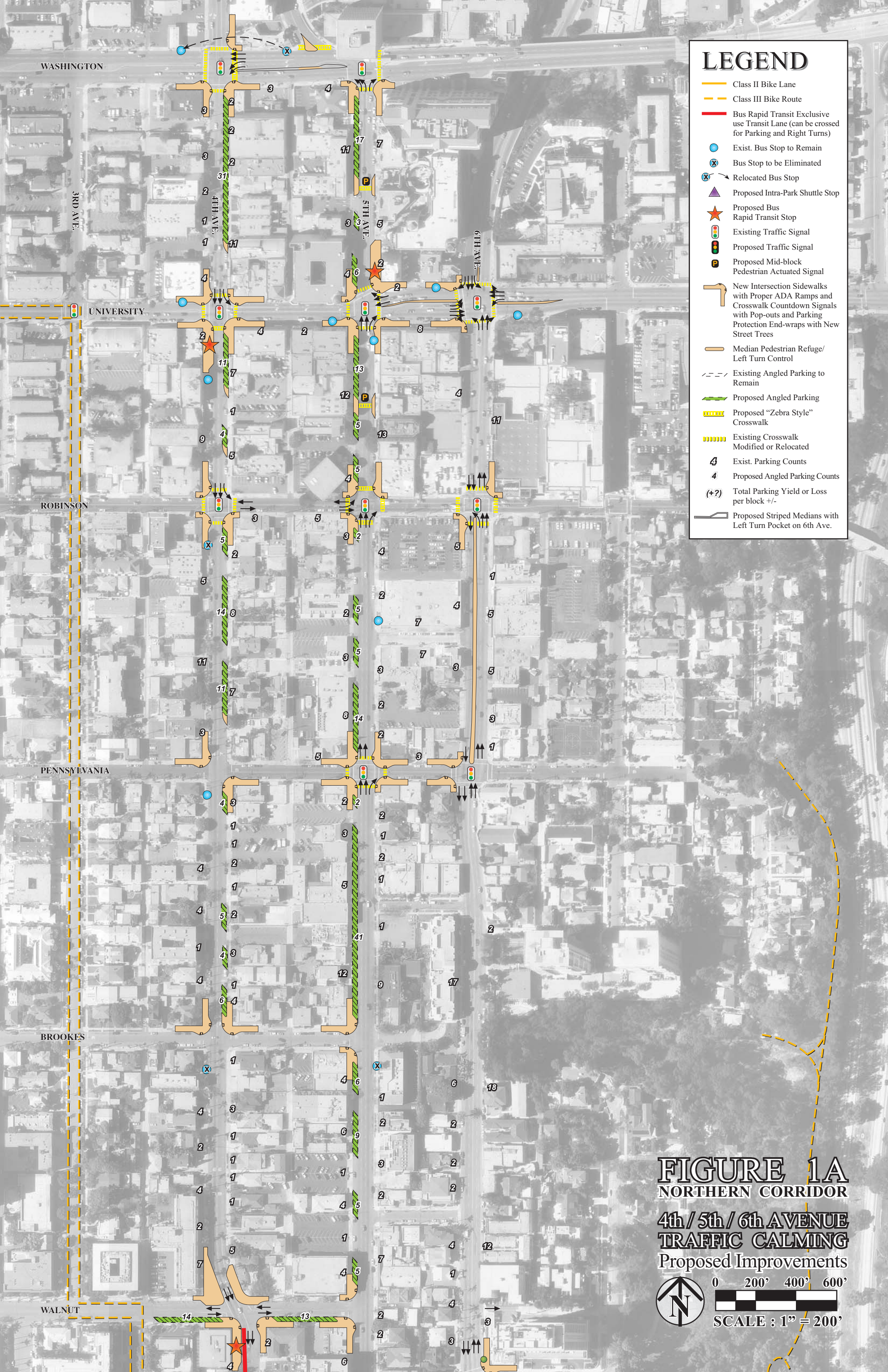
WALKSanDiego, *Feet First: Enhancing Walkability in the Uptown Parking District*, January 2003

City of San Diego, *Street Design Manual*, November 2002

SANDAG, *Planning & Designing for Pedestrians*, 2002

APPENDICES (Separately Bound)

- A. Historic Travel Information, Hillcrest Corridor Summer 2003
- B. Traffic Calming Issues and Suggested Solutions, May 2003
- C. October Workshop Conclusions, November 2003
- D. Examples Traffic Calming Elements, August 2003



LEGEND

- Class II Bike Lane
- Class III Bike Route
- Bus Rapid Transit Exclusive use Transit Lane (can be crossed for Parking and Right Turns)
- Exist. Bus Stop to Remain
- X Bus Stop to be Eliminated
- X Relocated Bus Stop
- ▲ Proposed Intra-Park Shuttle Stop
- ★ Proposed Bus Rapid Transit Stop
- Existing Traffic Signal
- Proposed Traffic Signal
- P Proposed Mid-block Pedestrian Actuated Signal
- └ New Intersection Sidewalks with Proper ADA Ramps and Crosswalk Countdown Signals with Pop-outs and Parking Protection End-wraps with New Street Trees
- Median Pedestrian Refuge/ Left Turn Control
- Existing Angled Parking to Remain
- Proposed Angled Parking
- Proposed "Zebra Style" Crosswalk
- Existing Crosswalk Modified or Relocated
- 4 Exist. Parking Counts
- 4 Proposed Angled Parking Counts
- (+?) Total Parking Yield or Loss per block +/-
- Proposed Striped Medians with Left Turn Pocket on 6th Ave.

FIGURE 1A
NORTHERN CORRIDOR
4th / 5th / 6th AVENUE
TRAFFIC CALMING
Proposed Improvements

0 200' 400' 600'
 SCALE : 1" = 200'



LEGEND

- Class II Bike Lane
- - - Class III Bike Route
- Bus Rapid Transit Exclusive use Transit Lane (can be crossed for Parking and Right Turns)
- Exist. Bus Stop to Remain
- ⊗ Bus Stop to be Eliminated
- ⊗ Relocated Bus Stop
- ▲ Proposed Intra-Park Shuttle Stop
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- ▨ Proposed "Zebra Style" Crosswalk
- ▨ Existing Crosswalk Modified or Relocated
- 4 Exist. Parking Counts
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FOR CONSIDERATION BY PARKING AND CIRCULATION STUDY: "BALBOA PARK COULD ADD ANGLED PARKING"

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FIGURE 1B CENTRAL CORRIDOR

4th / 5th / 6th AVENUE TRAFFIC CALMING Proposed Improvements





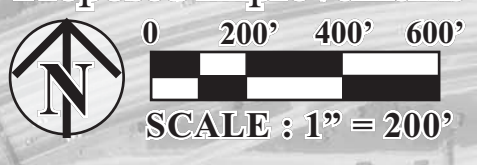
LEGEND

- Class II Bike Lane
- - - Class III Bike Route
- Bus Rapid Transit Exclusive use Transit Lane (can be crossed for Parking and Right Turns)
- Exist. Bus Stop to Remain
- ⊗ Bus Stop to be Eliminated
- ⊗ Relocated Bus Stop
- ▲ Proposed Intra-Park Shuttle Stop
- ★ Proposed Bus Rapid Transit Stop
- ⬆ Existing Traffic Signal
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- ▨ Proposed Angled Parking
- ▨ Proposed "Zebra Style" Crosswalk
- ▨ Existing Crosswalk Modified or Relocated
- 4 Exist. Parking Counts
- 4 Proposed Angled Parking Counts
- (+?) Total Parking Yield or Loss per block +/-
- ▨ Proposed Striped Medians with Left Turn Pocket on 6th Ave.

FOR CONSIDERATION BY PARKING AND CIRCULATION STUDY: "BALBOA PARK COULD ADD ANGLED PARKING"

FIGURE 1C SOUTHERN CORRIDOR

4th / 5th / 6th AVENUE TRAFFIC CALMING Proposed Improvements



INTERSTATE 5

2ND AVE. 3RD AVE. 4TH AVE. 5TH AVE. 6TH AVE.

MAPLE
LAUREL
KALMIA
JUNIPER
IVY
HAWTHORNE
GRAPE
FIR
ELM