GLENDALE DOWNTOWN MOBILITY STUDY

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CITY OF GLENDALE, CALIFORNIA

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GLENDALE DOWNTOWN MOBILITY STUDY TIMELINE

03.06.2007 City Council adopts *Downtown Mobility Study*

02.21.2007 Draft Final Recommendations presented to Joint Planning Commission and Transportation and Parking Commission

02.13.2007 Draft Final Recommendations presented to City Council

01.16.2007 Draft Final Recommendations presented to City Council

01.11.2007 Draft Recommendations presented to Downtown Merchants Association Board Members

09.28.2006 Draft Recommendations presented to Glendale Chamber of Commerce

09.28.2006 Draft Recommendations presented to Glendale Transportation Management Associates

09.12.2006 Draft Recommendations presented to City Council

08.08.2006 Draft Recommendations presented to City Council

06.27.2006 Draft Recommendations presented to Glendale Transportation Management Associates

06.26.2006 Draft Recommendations presented to Transportation and Parking Commission and Downtown Specific Plan Advisory Group

06.07.2006 Presentation to Northwest Homeowners Association (DSP and *Downtown Mobility Study*)

06.05.2006 Presentation to Glendale Homeowners Coordinating Council (DSP and *Downtown Mobility Study*)

06.05.2006 Workshop with Downtown Specific Plan Advisory Group (preliminary concepts)

05.22.2006 Parking workshop with Downtown Specific Plan Advisory Group

04.20.2006 Presentation to Brokers Roundtable (existing conditions and concerns)

04.19.2006 Presentation to Developers Roundtable (existing conditions and concerns)

04.19.2006 Presentation to Downtown Merchants Association (existing conditions and concerns)

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION

The first half of Chapter 1 provides a conceptual introduction to the *Glendale Downtown Mobility Study*, including the vision and goals of the Study, a discussion of existing conditions in Glendale and the relationship between the *Downtown Mobility Study* and the *Downtown Specific Plan*. The second half of this Chapter serves as an Executive Summary, providing a brief overview of the content of each Chapter and an outline of the recommendations contained in each Chapter.

CHAPTER TWO: STREET TYPOLOGY

To avoid increased congestion on its streets, Glendale must move towards a system that focuses on person throughput rather than vehicle throughput on its downtown street network. This Chapter proposes a new "street typology," including Primary Pedestrian Streets, Primary Transit Streets, and Primary Auto Streets, as well as a new set of measures to evaluate the performance of the street network and transit services.

CHAPTER THREE: STREET CAPACITY ENHANCEMENTS

This Chapter describes the capacity enhancement and freeway access improvement program adopted by the City of Glendale as part of the *Downtown Specific Plan*.

CHAPTER FOUR: TRANSIT SERVICE

In spite of an existing high frequency transit network on many downtown streets, residents in Glendale often find transit services inadequate, or are unaware of the level of service actually provided. Recommended improvements in transit service include improving transit speed and reliability, creation of a free, frequent, distinctive downtown shuttle, and improved rider amenities like real time information at transit stops. These local improvements will be paired with enhanced connections to and future improvements in the regional transit network.

CHAPTER FIVE: PARKING MANAGEMENT

In many communities similar to Glendale, parking management has been shown to be the single most effective tool for managing congestion. The *Downtown Mobility Study* presents policies to manage on-and off-street parking supply and demand, a set of tailored, flexible parking requirements for new development, and strategies to protect surrounding neighborhoods from spillover.

CHAPTER SIX: TRANSPORTATION DEMAND MANAGEMENT

Glendale's Transportation Demand Management (TDM) program should aim to provide all residents and employees in Downtown Glendale with a broad menu of transportation choices, backed up by substantive financial incentives to use alternative modes. To take advantage of the full potential for TDM in downtown, Glendale should strengthen the existing Glendale Transportation Management Associates (TMA), and pass a new TDM ordinance including mandatory TDM programs, and membership in a TMA.

CHAPTER SEVEN: FUNDING AND FINANCING

The capital and programmatic improvements recommended throughout the *Downtown Mobility Study* vary widely in scale and cost. Strategies to generate new revenue at the federal, state, and local levels are discussed here, with particular attention paid to new funding sources and funding tools that both provide revenue and promote long-term policy goals for downtown.

CHAPTER EIGHT: IMPLEMENTATION PLAN

The Implementation Plan provides a prioritized work plan including: a phased implementation timeline, a capital improvement program, with planning-level cost estimates for capital, operations, and maintenance costs, and any additional studies needed in order to implement the *Downtown Mobility Study* recommendations.

TABLE OF FIGURES

INTRODUCTION

1

A growing, vibrant downtown is critical for any city's economic vitality and high quality of life. However, it is often assumed that growth will be accompanied by increased traffic and parking demand that impacts the quality of life of the whole community. This *Downtown Mobility Study* challenges that assumption. The recommendations made here are designed to manage traffic congestion, to encourage the use of alternative modes, and to support the *Downtown Specific Plan* (DSP) goal to create a multi-modal and pedestrian-oriented district.

This *Downtown Mobility Study* fulfills the requirement of the *Downtown Specific Plan* (adopted by City Council on 11/7/06) for a comprehensive Mobility Program. As required by Council, this study includes:

- A program for adjusting the local and regional transit services to meet the street typology outlined in the DSP;
- A parking management program to maximize the efficiency of downtown public parking amenities;
- A capacity enhancement and freeway access improvement program for designated "auto streets;" and
- A funding and implementation schedule.

1.1 VISION AND GOALS

1.1.1 VISION STATEMENT

The *Downtown Mobility Study* will enable Glendale to realize the vision outlined in the *Downtown Specific Plan*. It aims to create an efficient, pleasant, multi-modal downtown transportation system that supports economic vitality, decreases traffic congestion, and creates a vibrant pedestrian-friendly environment.

Glendale is moving towards a mixed use, multi-modal downtown.

1.1.2 *DOWNTOWN MOBILITY STUDY* GOALS

The *Downtown Specific Plan* provides a unique opportunity to control traffic impacts of new development by concentrating development in the downtown area and implementing policies and infrastructure improvements that manage travel demand. The *Downtown Mobility Study* builds on this by providing a toolbox of strategies for minimizing the impact of downtown development on the accessibility, mobility, and livability of Glendale.

Key goals of the *Downtown Mobility Study* include:

1. Manage traffic congestion and parking demand downtown through a combination of infrastructure improvements and policies that encourage the use of alternative modes for travel to and within downtown.

2. Increase the percentage of trips made on transit by improving the quantity and quality of transit service: making transit a fast, reliable, and attractive option.

3. Manage parking supply and demand downtown to ensure that a growing downtown does not impact residential neighborhoods and to generate revenue for downtown area improvements.

4. Improve the coordination of Glendale's on-street and off-street parking policies with its transportation demand management strategies.

5. Increase the percentage of trips made by walking and biking through infrastructure improvement and new programs and policies that make walking and biking downtown easy, safe, and enjoyable.

6. Manage right of way to improve movement of people rather than just moving vehicles.

7. Develop financing strategies that allocate the cost of improvements appropriately to new and existing development and to the people who live, work, and visit downtown.

1.2 *DOWNTOWN MOBILITY STUDY* HISTORY AND CONTEXT

1.2.1 THE *DOWNTOWN SPECIFIC PLAN* (DSP)

The planning process for the *Downtown Specific Plan* began in 2004 with the goal of accommodating anticipated growth in Glendale's population while maintaining and enhancing the character and livability of existing downtown "districts" and other neighborhoods.

Glendale must meet regional housing allocations of the Southern California Association of Governments (SCAG) in order to receive its regional transportation allocations. If SCAG's projected growth and required residential units are not accommodated downtown via the DSP, they will have to be built elsewhere in the City, in existing neighborhoods. Developing downtown puts density where it can be managed. If accompanied by effective transportation policies, this strategy will best protect quality of life in growth areas and the rest of Glendale.

Based on the *Downtown Specific Plan*, it is projected that approximately 3,980 new residential units and up to a total of 1.7 million square feet of retail/office use will be developed, and that approximately 3,390 jobs will be generated in the DSP area.[1]

The *Downtown Specific Plan* (DSP) establishes a clear vision for the future of downtown:

> *Downtown Glendale will be an exciting, vibrant urban center which provides a wide array of excellent shopping, dining, working, living, entertainment, and cultural opportunities within a short walking distance.*

The DSP envisions downtown Glendale as a vibrant, mixed-use, 24-hour place that is increasingly a unique and attractive destination to work, live, and visit. The *Downtown Mobility Study* was initiated in 2005 in recognition of the intrinsic relationship between transportation and land use planning.

Downtown Mobility Study: Supporting the Implementation of the *DSP*

The *Downtown Mobility Study* works synergistically with the *Downtown Specific Plan*. Not only will the *Downtown Mobility Study* help downtown grow without significantly increased congestion, the growth envisioned by the DSP will create an ideal environment to implement a coordinated multi-modal transportation system with higher use of alternative modes. For example, transit thrives in a dense environment which means Glendale's existing transit network will be in a good position to expand and

1 Glendale *Downtown Specific Plan* Program EIR, adopted by Glendale City Council in November 2006, p. 1-1.

grow stronger in a new downtown that is more dense. Such places have lower car ownership and higher density housing near jobs and entertainment and can result in up to 50% fewer auto trips than suburban housing. The *Downtown Mobility Study* will support the DSP, and the DSP will enable the *Downtown Mobility Study* to succeed.

The *Downtown Mobility Study* supports the enactment of the *Downtown Specific Plan* specifically by:

1. Supporting and promoting programs and projects that enhance downtown's access via regional transit.
2. Providing guidance for a downtown streetscape plan, to guide improvements such as enhanced lighting, street landscaping, crosswalks, and signage.
3. Providing guidance for an integrated way-finding system that addresses pedestrian and vehicular orientation to particular locations within the downtown, as well as to/from the downtown.
4. Providing direction for establishing one or more than one specialized funding mechanisms that appropriately allocate the cost of improvements to new and existing development downtown.

1.2.2 RELATIONSHIP TO OTHER PLANS

The *Downtown Mobility Study* coordinates and integrates with other current and upcoming studies, such as:

- The *Downtown Specific Plan* and the *Downtown Specific Plan EIR*, as discussed above.
- The *Beeline Short Range Transit Plan (SRTP*) which has been developed simultaneously with the *Downtown Mobility Study*. The two plans are designed to coordinate their transit operations recommendations. Implementation of the *Downtown Mobility Study's* transit recommendations are dependant on implementation of the *Citywide Short Range Transit Plan.*
- The *East-West Connector Study* which will examine the options for adapting Glendale's MTA service to connect with Burbank and Pasadena to simultaneously serve as the primary cross-town connector for local Glendale trips.
- The next *General Plan* Circulation Element update should be informed by this *Downtown Mobility Study*. The recommendations made here are for downtown only, however many of the concepts have applicability citywide and therefore should be considered when the City undertakes the next update of its Circulation Element.
- Future studies that will be needed to finalize freeway access improvements that will require coordination with Caltrans.
- Other studies needed to implement some of the *Downtown Mobility Study* recommendations, as discussed in Chapter 8 (Implementation Plan).

Public Outreach and Community Involvement

Throughout the planning process, the City and consultant project team sought to hear which transportation and parking issues were most pressing from the perspective of Glendale's City Council, downtown stakeholders, merchants, community leaders, residents and the general public. As noted below, the project team made 14 presentations to solicit feedback from these stakeholders:

04.19.2006 – Presentation to Developers Roundtable (existing conditions and concerns)

04.19.2006 – Presentation to Downtown Merchants Association (existing conditions and concerns)

04.20.2006 – Presentation to Brokers Roundtable (existing conditions and concerns)

05.22.2006 – Parking workshop with Downtown Specific Plan Advisory Group

06.05.2006 –Presentation to Glendale Homeowners Coordinating Council (*DSP* and *Downtown Mobility Study*)

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1.3 EXISTING AND FUTURE CONDITIONS

The *Downtown Mobility Study* recommendations are based on a thorough review of existing conditions in downtown Glendale, as well as pending and proposed downtown development projects. In addition, the recommendations were developed after a comprehensive review of transportation and parking management best practices, technology, and surveys of cities comparable to Glendale. Finally, all recommendations were tailored to Glendale's unique needs based on a review of adopted community goals and stakeholder input. The recommendations are designed not only to support the DSP, but also to address existing needs for improved access and circulation within downtown Glendale. Key influences on this *Study* are described here.

1.3.1 TRANSPORTATION CONTEXT AND TRAFFIC CONDITIONS

Glendale's Position in the Region

A critical factor in the design of the study was Glendale's position as a regional shopping and employment destination in the heart of the L.A. basin. Bound on three sides by major regional freeways, its downtown streets are already affected by regional traffic congestion. Identifying strategies to improve freeway access and regional connectivity played a critical role in the *Downtown Mobility Study*, particularly identifying actions the City alone can take as well as steps that necessitate regional advocacy and funding.

Traffic Conditions

Based on the City's traffic model, Figure 1-1 shows current estimated PM peak hour traffic volumes on key streets in downtown Glendale. (See text box on next page for explanation of how to read these maps). As might be expected, streets connecting directly to the freeways (such as Pacific Avenue, Brand Boulevard, Glendale Avenue, and Central Avenue) carry the heaviest volumes of traffic. On these streets, such as Brand Boulevard, traffic volumes also climb significantly in the blocks closest to the freeway.

These few streets that cross the freeways must provide both access to freeways and cross-town transit routes. This means that motorists and transit riders on cross-town trips, with no wish to use the freeway, may nonetheless find themselves caught up in congestion at these spots.

Traffic is projected to deteriorate significantly in the future if the City takes no action. Projected traffic volumes for the year 2030 are shown in Figure 1-2. Poor traffic conditions (LOS E or F) are predicted to occur throughout downtown, rather than being isolated around the freeway access points.

The *Downtown Specific Plan* is projected to improve future conditions on some street segments, as shown in Figure 1-3. The DSP concentrates new residents in compact, mixed-use development downtown. Residents will be within walking distance of many destinations which decreases the need to drive, and the pedestrian-friendly environment the DSP creates further encourages the use of alternative modes.

To address the remaining congestion, the City has planned some limited street capacity enhancements. Future conditions with capacity enhancements, as predicted by the City's traffic model, are shown in Figure 1-4. (These enhancements are fully described in Chapter 3.)

The capacity enhancements are projected to help relieve congestion on some downtown streets; however, future traffic conditions are still projected to be poor, with many streets still severely congested (Level of Service E or F). The purpose of this *Downtown Mobility Study* is to begin to address this remaining congestion. Implemented together, the recommendations in the *Downtown Mobility Study* are expected to reduce drive alone traffic in the downtown area by up to 15% below projected future traffic without implementation of these programs. This conservative estimate is based on results in other cities, scaled to the conditions in Glendale (see Figures 1-5 through 1-9).

Downtown Mobility Study Approach to Managing Traffic

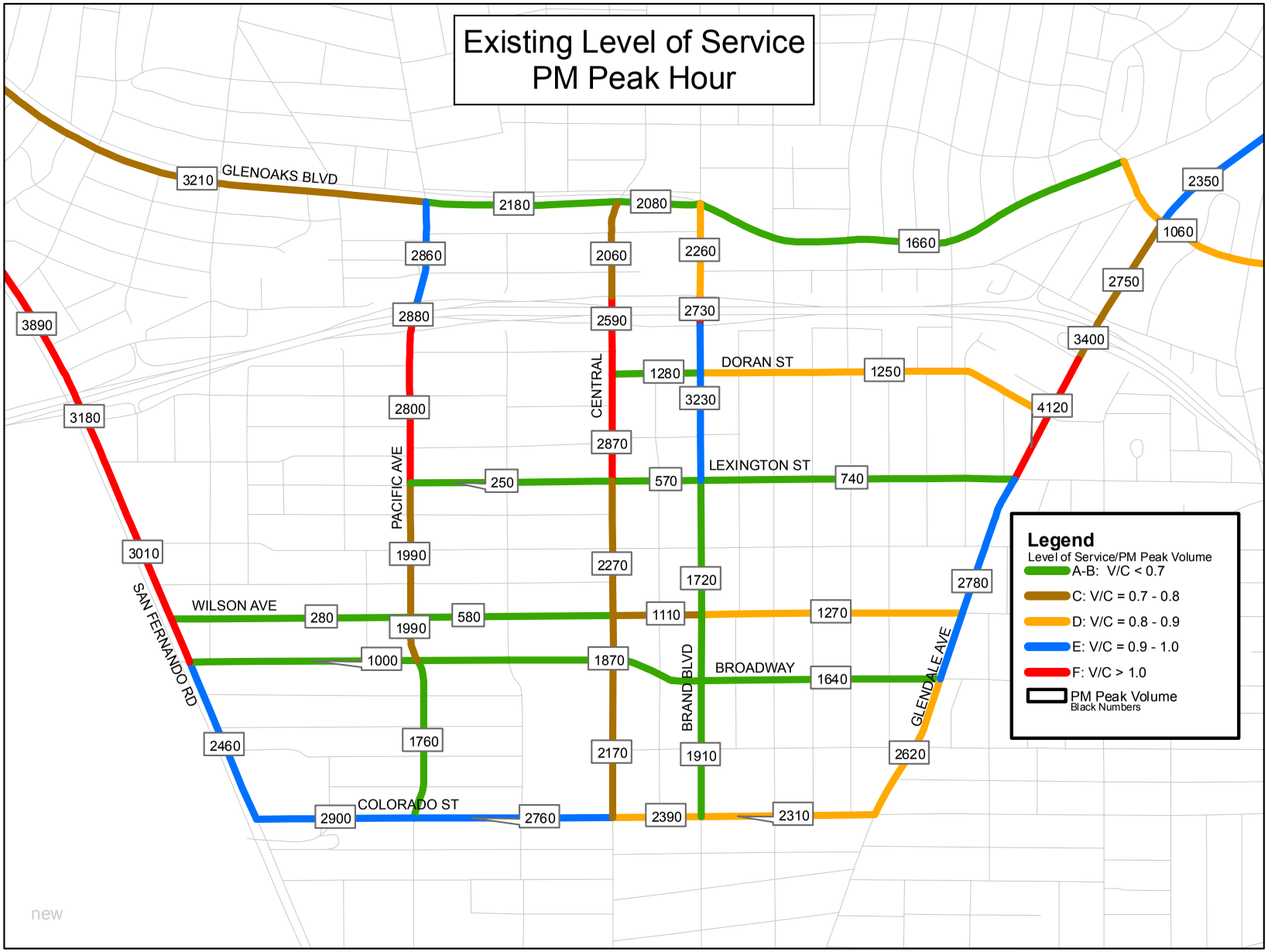
Distinct from traditional traffic accommodation strategies, which envision ever widening roadways as a means to accommodate demand, the *Downtown Mobility Study* aims to manage traffic primarily by reducing car trips. There is little room left in Glendale for widening streets without taking steps that would have a significant negative impact on existing businesses and residents. In addition, widening roads to improve traffic flow can undermine the use of other modes, by reducing space for sidewalks, making the walking environment less pleasant, eliminating street parking, and decreasing the pedestrian- and bike-friendliness of the downtown. Eventually, this path will lead to a "freeway environment" downtown, useful only to people "passing through." Further, the high cost of many roadway enhancements, especially freeway access improvements makes their short term implementation unlikely.

For these reasons, capacity enhancements are recommended only where policy changes alone will not be enough to influence congestion and are applied in places where demand is concentrated, and opportunities exist for improving capacity without significant

How to Read the LOS Maps (Figures 1-1 to 1-4)

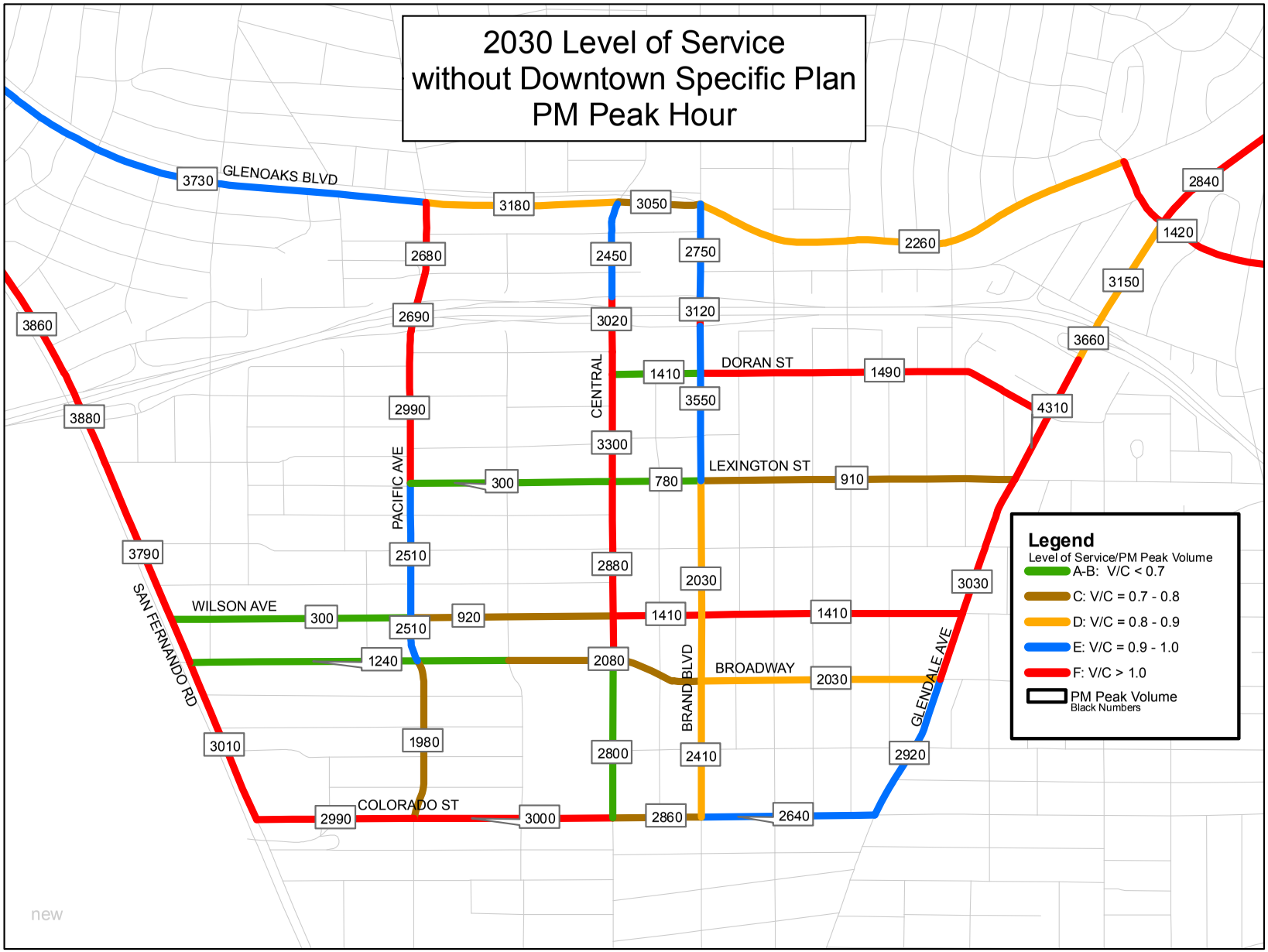
The following series of maps illustrate estimated current and future traffic conditions. They were created by the City of Glendale through the use of a traffic model which predicts how many cars travel down that street segment during the PM peak hour. The actual volume of cars on each street is indicated by a black number in a box. Based on how this volume of cars compares to the capacity of that street segment, each street segment is assigned a Level of Service (LOS) "grade" of "A" (best) through "F" (worst). Each "grade" is assigned a color as shown in the maps: A is green and F is red. The legend of each map shows the grade, its color, and corresponding volume/capacity (or "V/C") ratio.

Figure 1-1 Existing Level of Service (LOS) - PM Peak Hour



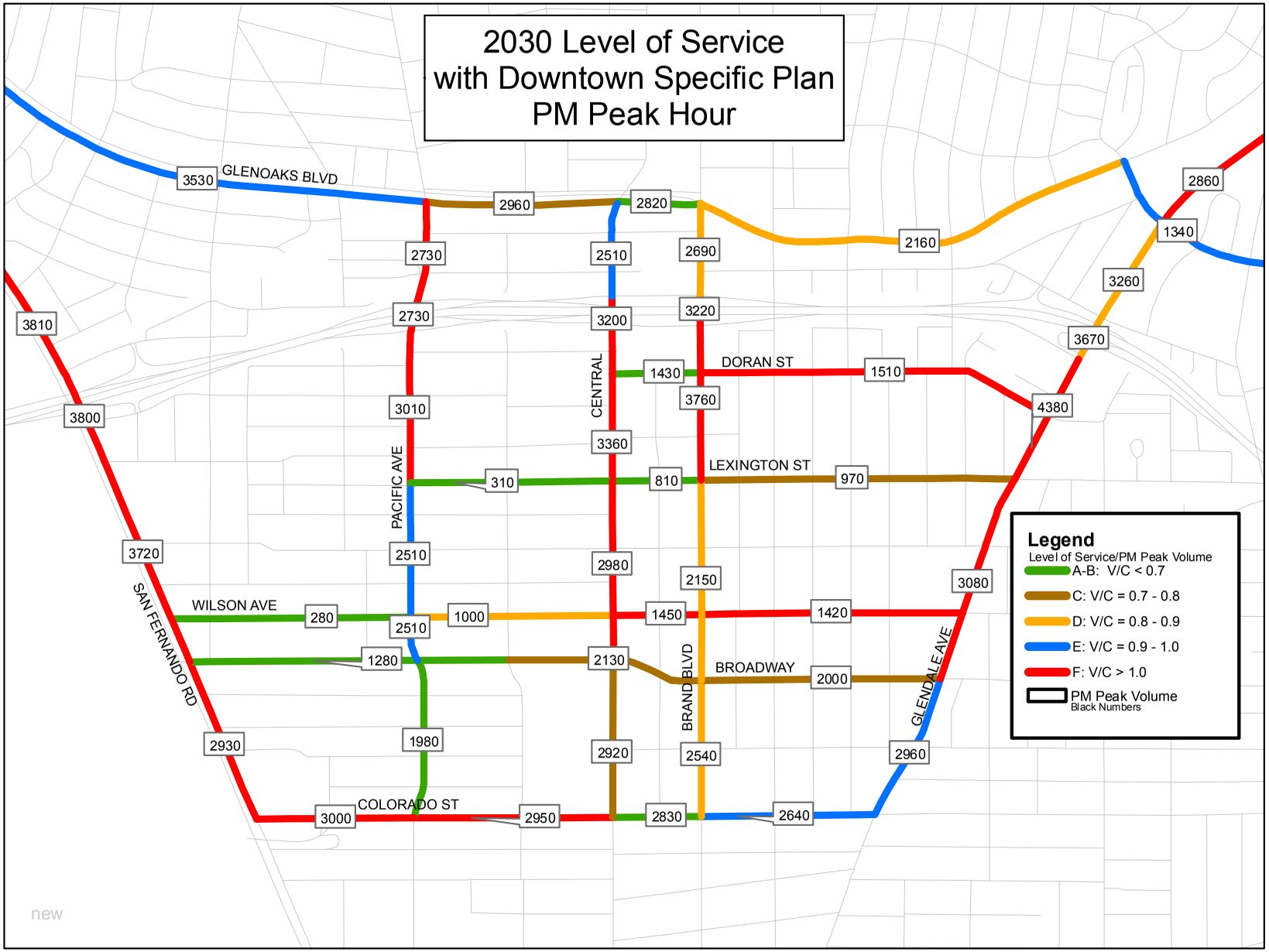
Source: City of Glendale, Department of Public Works, Traffic & Transportation Division (1/18/07)

Figure 1-2 2030 Level of Service (LOS) without *Downtown Specific Plan* (DSP) - PM Peak Hour



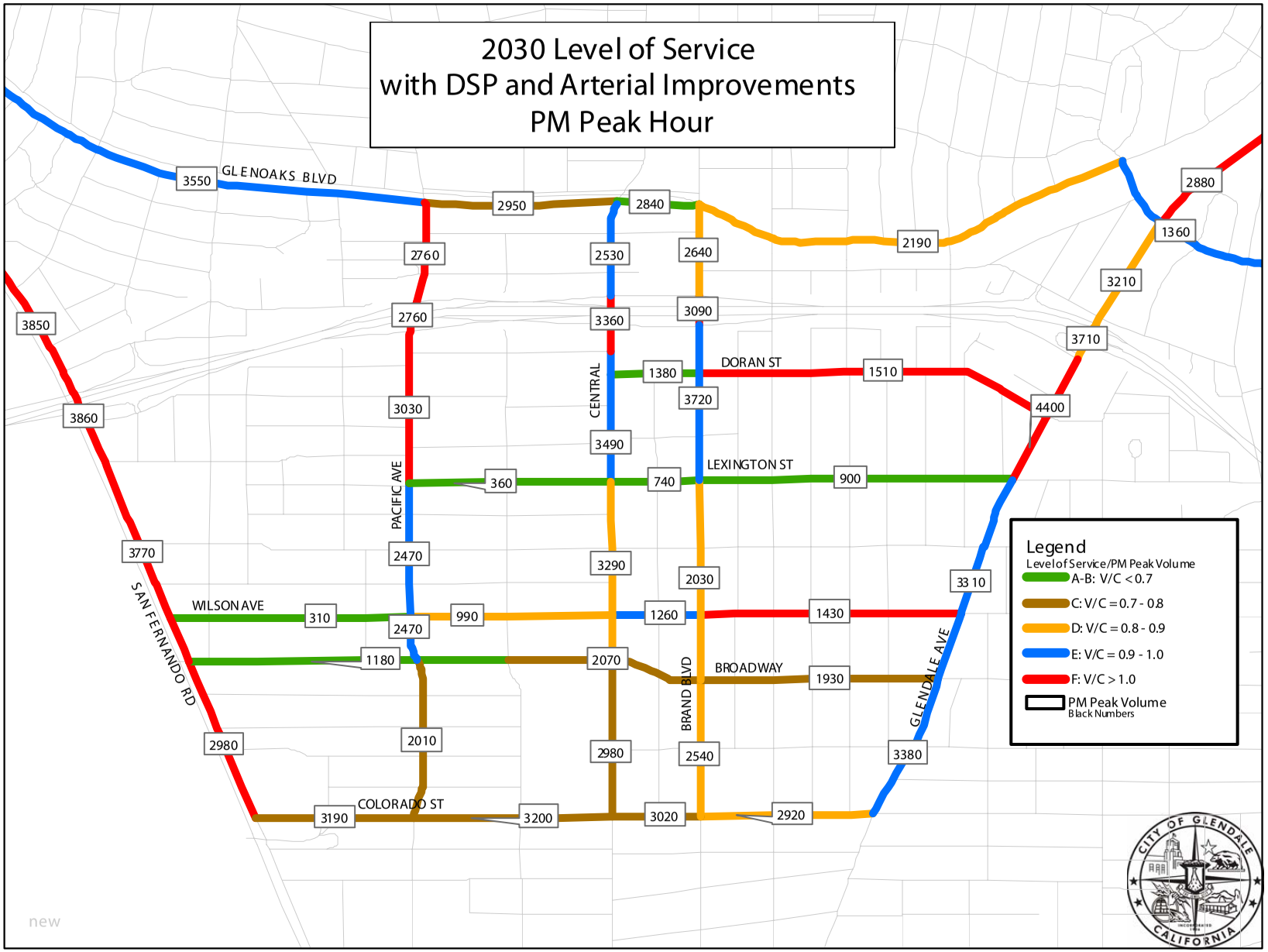
Source: City of Glendale, Department of Public Works, Traffic & Transportation Division (1/18/07)

Figure 1-3 2030 Level of Service with *Downtown Specific Plan* - PM Peak Hour



Source: City of Glendale, Department of Public Works, Traffic & Transportation Division (1/18/07)

Figure 1-4 2030 Level of Service (LOS) with *Downtown Specific Plan* (DSP) and Capacity Enhancements - PM Peak Hour



Source: City of Glendale, Department of Public Works, Traffic & Transportation Division (1/18/07)

Figure 1-5 Car Ownership in the Downtown Area

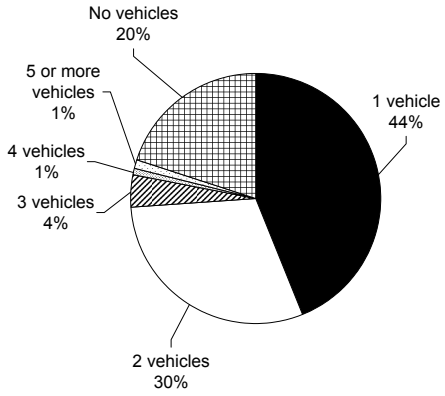


Figure 1-6 City-wide Car Ownership

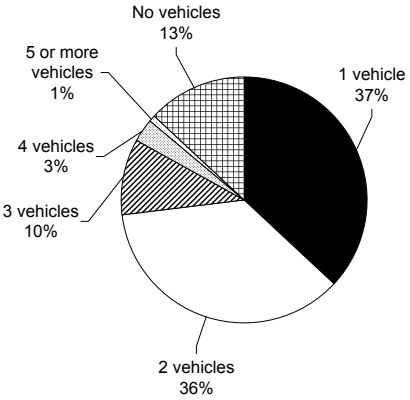
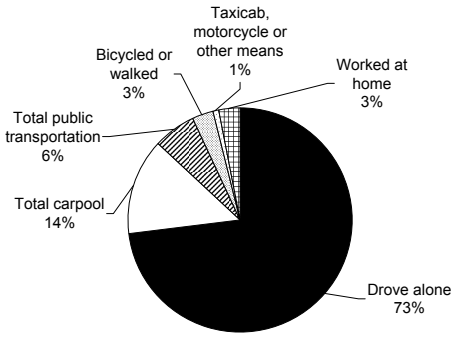


Figure 1-7 Mode Split of Residents in Downtown Area



negative impacts on other modes. The street capacity enhancement package is described in Chapter 3.

The Need for a Comprehensive Approach

There is no one silver bullet for reducing dependence on the automobile. The *Downtown Mobility Study* strategies offer a package of policies that must be implemented in concert, including: parking management, transit improvements, street performance measures, and transportation demand management programs.

These strategies have been proven successful in many communities where remarkable changes are taking place. However, to truly achieve the results that Glendale desires, elected officials and city staff must be committed to implementing a change in thinking – focusing on new residents, employees and visitors to Glendale who will travel in new ways that fit an increasingly urban lifestyle. See Figure 1-8 (a fold-out chart found on page 1-13) for a summary of cities that have achieved significant reductions in drive-alone mode share through implementation of mobility strategies similar to those recommended herein.

1.3.2 EXISTING CONDITIONS PROVIDE STRONG FRAMEWORK FOR GROWTH

While new development in downtown Glendale will bring some new residents, studying the travel patterns of existing downtown residents can provide some insight into the ways that living in a denser urban setting influence travel behavior. For example:

Lower Car Ownership:

- 64% of households in the *Downtown Specific Plan* area own 1 car or less as compared to 50% in the City as a whole, as shown in Figures 1-5 and 1-6.
- Even in higher income households, the average car ownership per household for most of downtown is less than 2 cars, whereas in many other parts of Glendale, the average is more than 2 cars per household as shown in Figure 1-9 (a fold-out map found on page 1-15).

Smaller Households:

- 55% of households have 2 people or less. This is consistent with the housing stock that is likely to be built in the DSP area, which will include apartments and condominiums with generally two bedrooms and less.

Fewer Residents Driving Alone:

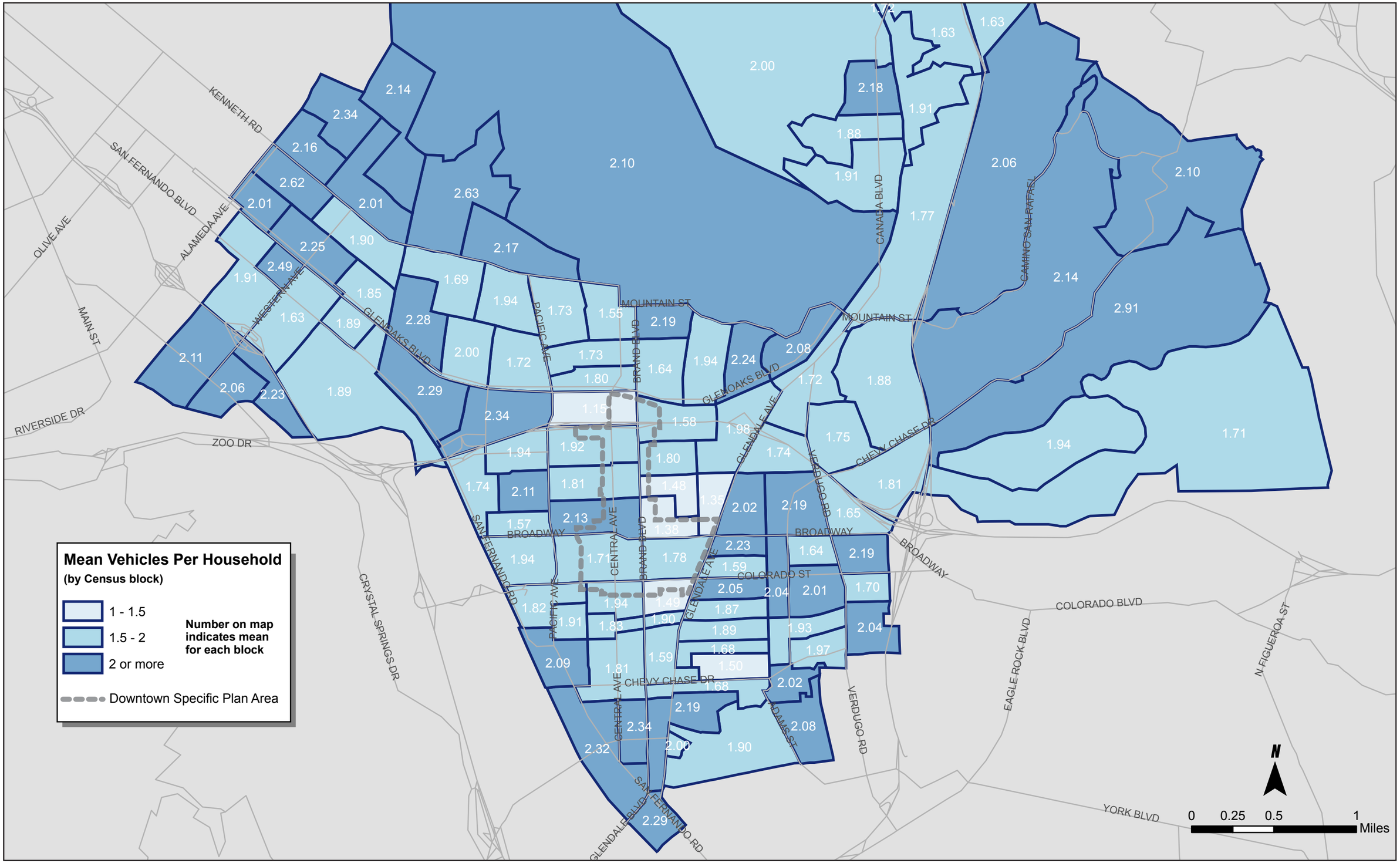
- Around 30% of DSP residents commute by modes other than driving alone as shown in Figure 1-7.

Figure 1-8 Mode Shifts Through Implementation of Mobility Strategies

Place	Drive Alone Rate before	Drive Alone Rate after	% Reduction Driving	Time Period	Description of Shift in Mode Share	Congestion Pricing	Unbundled Parking Costs Req.	Parking Cash-Out Required	Parking Tax	Lowered Min. Parking Reqs.	Eliminated Min. Parking Reqs.	Set Maximum Parking Reqs.	Priced Parking	Shared Parking/Park Once	Residential Parking Permit Dists.	Bicycle Parking Requirements	Carpool/Ride Matching Services	Car Sharing	Universal Transit Pass Program	Rail Transit	Bus Rapid Transit
Arlington County, VA (R-B Corridor)	44%	42%	5%	1980-2000	County-wide drive alone rate 55%, R-B Corridor down to 42%; Huge new development, little new traffic.				✓	✓	✓		✓	✓	✓		✓	✓		✓	
Bellevue, WA (Downtown)	81%	57%	30%	1990-2000	Drive alone commute rate fell by 30%		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Boulder, CO (Downtown)	56%	36%	36%	1995-2005	Transit mode share more than doubled, 15% to 34%.					✓	✓		✓	✓	✓	✓	✓	✓	✓		
Cambridge, MA	38%	35%	8%	1990-2000	State drive alone rate rose 2.4%, Cambridge rate fell 8%.					✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Lloyd District, Portland, OR	60%	43%	28%	1997-2005	Transit mode split has increased 86% (from 21% to 39%)					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
London, Great Britain			26%*	2003-2006	Congestion (person-hours of delay per mile traveled) fell by 26%.	✓					✓	✓	✓	✓	✓	✓	✓	✓		✓	
Portland, OR (Downtown)				Early 70s-Mid 90s	Transit mode split has more than doubled, from 20% to 48%						✓	✓	✓	✓	✓	✓		✓		✓	
San Francisco, CA (Downtown)			0%	1968-1984	Employment doubled while car trips remained the same		✓		✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	
Stockholm, Sweden			22%*	Jan-July 2006	Traffic has been reduced 22%.	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓
Vancouver, B.C.			0%	1991-2002	62% more residents; no new car trips; walking/cycling up 75% (20 to 35%).				✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*Measured differently than in US.

Figure 1-9 Vehicle Ownership by Income – $50,000 to $100,000



1.3.3 TRAVEL PATTERNS OF NEW RESIDENTS

Glendale's new downtown will attract a new kind of resident. The market for new downtown housing will be different than that in greater Glendale, and distinct from the current residents of downtown. The people moving in will be attracted to the unique convenience of having amenities, shopping, and entertainment within walking distance. Also, as downtown changes, not only new units, but vacancies in existing buildings will be filled with different types of residents than those who are currently living there.

ABOVE: The "Dalton" in Pasadena by Champion Development. *Rendering courtesy of the architecture firm Studio One Eleven.*

BELOW: The Met Lofts in Downtown LA.

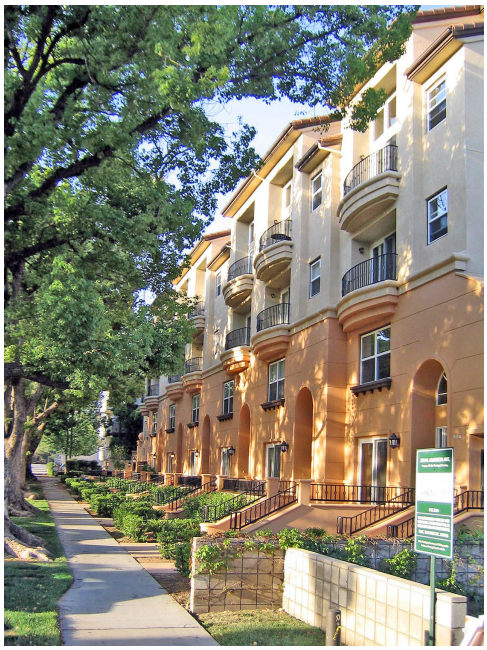
Comparable developments in Pasadena, Burbank, and Long Beach (like those shown on the following pages) have primarily attracted the following demographic:

- Empty nesters, retired singles, and baby boomers who want smaller homes with greater amenities, reduced maintenance, convenient, compact communities closer to shopping, medical services and near-by social activities.
- Successful, young, highly skilled urban professionals (usually mid-20s to mid-30s) without children who are looking for an exciting, dense, urban environment with an easy walk to the store, to work, and to entertainment and restaurants.
- Lower than average auto ownership (can be 15-20% in smaller units).

One developer in downtown Burbank described the market segment for their downtown residential projects as follows:

> *…mostly young and very well paid but currently living on the "West Side" and driving an hour to work. Most who live in Pasadena, work there as well so they don't commute. Our goal with Burbank is to make it hip and I believe our project is the beginning of the "remaking" of downtown Burbank. We are working alongside the Burbank redevelopment agency to make this happen.*[2]

2 Kimberly Williams, Director of Marketing, MCSP, CMP, Champion Development Group, email, July 20, 2006.



ABOVE: The Madison Avenue development in Pasadena.

BELOW: The Walnut Street development in Pasadena.

BELOW, RIGHT: Melrose Triangle in West Hollywood. *Image courtesy of Studio One Eleven.*

The young, well-paid singles this developer refers to are relatively mobile and would be eager to eliminate their hour-long commute if there were an attractive neighborhood with entertainment, restaurants and amenities closer to work. This market is well developed in other regions and is rapidly growing in Los Angeles due to the pressures of increasing congestion and traffic, increasingly stringent regulations to control air pollution, decreasing available land, controls on developing green fields, and increasing land values.

These market segments tend to have lower car ownership, and experience has shown that once people live downtown, their lifestyles will evolve to shed cars once they realize they don't need them. For more information, see sidebar at the end of this Chapter, "Changing Residential Preferences and Downtown Revitalization."

1.4 SUMMARY OF *DOWNTOWN MOBILITY STUDY* RECOMMENDATIONS

Street Typology (Chapter 2)

The space for street widening and other capacity enhancements on Glendale's streets is becoming more and more limited which means Glendale needs to begin to think differently about mobility. Chapter 2 proposes a new approach to Glendale's street network, identifying primary streets for different types of users each with different performance and design criteria. This new street typology includes the following three designations: Primary Transit Streets, Primary Auto Streets, and Primary Pedestrian Streets and outlines the improvements that will be necessary to ensure the success of each mode on its designated street. The central tenant of this new approach is a focus on optimizing the person-carrying capacity of streets rather than the vehicle-carrying capacity.

The chapter identifies the streets that currently have the most frequent combined transit services for establishment of a Primary Transit Network, and discusses steps that can be taken to increase transit speeds on these streets. In addition, it includes a discussion of improvements in pedestrian safety and comfort that should be implemented on the Primary Pedestrian Streets. The chapter also proposes a new set of indicators for measuring the performance of the street system and a rational, practical method for balancing the needs of different modes of transportation, as they compete for limited space on Glendale streets.

These new classifications, new ways of measuring the performance of the street system, physical improvements, and other supporting transportation policies are a central part of Glendale's new mobility approach that will help downtown Glendale continue to grow without increasing traffic congestion.

Street Typology Recommendations

2.1 Support and promote programs and projects that enhance downtown's access via regional transit. Adjust local and regional transit services to meet new performance criteria.

2.2 Create a *Downtown Streetscape Plan*.

2.3 Adopt the recommended Downtown Street Typology.

2.4 Use performance measures as a guide for downtown streets:

- Use auto performance measures to optimize person-carrying capacity of streets rather than vehicle-carrying capacity.
- Use transit performance measures, including a new indicator – Transit Quality and Level of Service.
- Use pedestrian and bicycle performance measures.

Street Capacity Enhancements (Chapter 3)

As part of the *Downtown Specific Plan*, the City of Glendale has adopted a significant capacity enhancement and freeway access improvement program for Glendale Avenue, Colorado Street, and Central Avenue, as well as certain freeway interchanges and frontage roads. Chapter 3 describes these necessary enhancements to street capacity that will enable traffic flow to improve on the Primary Auto Streets.

Street Capacity Enhancements Recommendations

3.1 Implement a capacity enhancement and freeway access improvement program for some downtown streets, freeway interchanges, and frontage roads.

ABOVE: Glendale must not only improve local service, but work with MTA to improve regional connectivity.

Transit Service (Chapter 4)

Transit services in Glendale include the Beeline local transit system and the services provided by the MTA. These systems combine to provide frequent transit service on many key streets in downtown Glendale. Despite the high frequency of service on many downtown streets, many residents in Glendale find transit services inadequate, or are unaware of the level of service actually provided.

The *Downtown Mobility Study* develops a comprehensive plan for new transit service in Glendale, based on the *Short Range Transit Plan* recommendations. Central to the *Downtown Mobility Study* is the creation of the "Buzz" Shuttle, providing free, frequent and friendly connections between the major traffic generators in Glendale. The Shuttle supports the "Park Once" concept for commuters to park their cars if they must drive, and leave their car behind as they circulate downtown.

Improvements on the local Beeline system are integrated with future enhancements in the regional transit network including new Metro Rapid routes and a proposed East-West connection service, providing fast and reliable transit between Pasadena, Glendale, Burbank and downtown Los Angeles, serving the major work trip patterns for Glendale residents and employers.

High-frequency transit service will be offered on streets designed to maintain transit reliability, with signal priority, real time information, and other enhancements that would further encourage transit use.

Transit Service Recommendations

4.1 Market the transit resources in Glendale as a single system to show the richness of the transit network in and through Glendale.

4.2 Create a downtown shuttle to encourage non-auto circulation through the downtown.

4.3 Operate the downtown shuttle frequently, with no fare collection, and with a unique and attractive vehicle.

4.4 Implement the recommendations of the *Short Range Transit Plan* including service and capital improvements that affect downtown.

4.5 Bring the price of all transit fares closer together, increasing Beeline fares to $0.50 except on the shuttle.

Negotiate with MTA for a local Glendale fare that will match Beeline fares within the City limits.

4.6 Consolidate high frequency services to the extent possible on a limited number of streets, which will be optimized for transit operation.

4.7 Consider signal priority and other operational enhancements on all streets with combined service of at least 10 minutes during peak periods.

4.8 Work with MTA to create an "east-west" connector service operating on the HOV infrastructure of Highway 134, and provide convenient connections between this new service and the downtown shuttle.

4.9 Create amenity standards for downtown transit stops based on the number of riders boarding at each location.

4.10 Incorporate real time information in all high amenity bus shelters using Next Bus technology.

4.11 Consider utilizing new revenue generated by the Downtown Transportation and Parking Management District to enhance shuttle and other transit services.

4.12 Utilize the Universal Transit Pass to encourage transit ridership among new downtown residents.

4.13 Develop performance standards for transit streets that incorporate transit quality of service.

Parking Management (Chapter 5)

The *Downtown Mobility Study* proposes a comprehensive parking management plan to manage the entire parking supply as part of an integrated system. This chapter discusses policies to manage both existing and new supply and demand in order to provide the optimal amount of parking to meet parking needs, while also limiting spillover impacts on residential neighborhoods. In many communities similar to Glendale, parking management has been shown to be the single most effective tool for managing congestion. In addition, parking management can improve the visitor experience, protect the downtown's historic character, stimulate high quality development, and improve the overall livability of downtown and its surrounding neighborhoods.

One of the primary parking problems Glendale currently faces is the perception of a parking shortage. In fact, there are merely localized shortages and imbalances due to improper pricing and management policies. Glendale has an adequate parking supply: even at the peak hour only about half of the public parking spaces are full. This chapter proposes creation of a "Park Once District" in downtown with improved wayfinding signage and a new pricing system designed to achieve 85% occupancy in all parking facilities.

This system should direct parkers to the most appropriate facility depending on the length and type of stay and enable them to park once and stay there throughout their visit to downtown. These prices will need to change over time as demand shifts and new development comes on line. Flexible and efficient administration of the parking system will be managed through a Transportation and Parking District and all parking revenue will flow into a Downtown Transportation Fund to be invested in transportation and streetscape improvements.

To accompany this new management system, Glendale should consider converting the city's existing neighborhood Preferential Parking program into a Residential Parking Benefit District program where residents can park for free or at low annual cost but non-residents pay to park. This will prevent spillover parking in neighborhoods and will generate revenue which can be invested in the neighborhood. Lastly, to ensure the continuation of good parking management in the future, Glendale can implement new parking standards for downtown development including shared parking, flexibility in minimum parking requirements, and the assessment of a traffic congestion impact fee.

ABOVE: Glendale should implement a comprehensive parking wayfinding system for downtown.

Parking Management Recommendations

5.1 Create a "Park Once" district in downtown Glendale.

5.2 Implement coordinated parking management policies for on- and off-street parking.

5.3 Implement parking pricing system for Glendale Transportation Center parking.

5.4 Implement a multi-modal transportation and parking wayfinding system.

5.5 Install networked multi-space pay stations and occupancy sensors.

5.6 Continue existing City protocols that dedicate adequate parking spaces for loading zones, taxi stands, and ADA-accessible parking.

5.7 Create a Transportation and Parking Management District, and dedicate all parking revenue to a Downtown Transportation Fund for a broad array of downtown transportation projects.

5.8 Authorize Traffic and Transportation Administrator to adjust parking rates, hours, and time limits as needed to achieve 85% occupancy.

5.9 Pursue a study of how the City could enter into contractual arrangements with one or more valet parking operators for all of downtown.

5.10 Require parking in new development to be made available for public parking when not needed for its primary use as a condition of approval.

5.11 Require parking in new development to be shared among uses with different parking demands as a condition of approval.

5.12 Consider implementing a "traffic congestion impact fee" based on parking spaces or peak hour vehicle trips.

5.13 Revise zoning code to legalize more efficient parking arrangements in new downtown development.

5.14 Expand existing provisions in zoning code that allow new development to go below existing parking minimums, under very specific conditions.

5.15 Prevent spillover parking in neighborhoods adjacent to downtown and the Glendale Transportation Center with implementation of Residential Parking Benefit Districts as needed.

5.16 If parking demand cannot be met with existing supply after *Downtown Mobility Study* recommendations, build new shared public parking as needed.

Transportation Demand Management (Chapter 6)

Implementation of TDM strategies is one of the most cost-effective ways to increase the efficiency of the transportation system by increasing the use of transit, biking, and walking and avoiding costly infrastructure expansion. In spite of an existing City-run Transportation Demand Management (TDM) program and a well-established Transportation Management Association (TMA), there is huge untapped potential for TDM in Glendale. Expanding and strengthening its TDM programs should be Glendale's first line of defense in controlling traffic and congestion in its expanding downtown.

This Chapter recommends adoption of a new TDM Ordinance for Glendale's downtown. It should include: mandatory TDM programs for both new and existing development and mandatory membership in a TMA. This should provide all residents and employees in downtown Glendale with a broad menu of transportation choices, backed up by substantive financial incentives to use alternative modes. In addition, it will strengthen the TMA through enhanced resources and membership.

In addition, the City must clarify the partnership between the TMA, City of Glendale, and local businesses by instituting measurable goals and expectations, a revitalized management structure with clear delineation of roles and responsibilities, and stronger lines of communication. Finally, Glendale must require and fund ongoing evaluation, monitoring, and enforcement of all existing and new TDM programs in order to expand cost-effective programs and improve less cost-effective ones.

ABOVE: Glendale should expand on existing TDM programs to maximize alternative mode use in downtown.

Transportation Demand Management Recommendations	
6.1 Adopt a new strengthened TDM Ordinance including mandatory TMA membership and TDM programs.	6.5 Glendale should encourage establishment of a carsharing service in Glendale.
6.2 Require Beeline Universal Transit Passes for all downtown residents through new TDM Ordinance. Require MTA universal transit passes if feasible.	6.6 Establish a centralized Downtown Transportation Resource Center.
6.3 Require parking cash-out for all downtown employers through new TDM Ordinance.	6.7 Strengthen the existing Glendale Transportation Management Associates (TMA) and define roles and responsibilities between the TMA and the City.
6.4 Revise development standards to include bicycle facility requirements through new TDM Ordinance.	6.8 Monitor effectiveness of TDM programs and implement new measures as needed.

Funding and Financing (Chapter 7)

The capital and programmatic improvements recommended throughout the *Downtown Mobility Study* vary widely in scale and cost. Chapter 7 identifies and provides an overview of potential revenue sources, explaining how Glendale can access these funds and the scale of resource that each represents.

New federal, state, and local funds are discussed, with particular attention paid to new funding sources and funding tools that both provide revenue and promote long-term policy goals for downtown. Equity in fee assessment, diversity of funding sources, and stakeholder involvement are key elements to keep in mind as Glendale pursues these funding strategies.

New local funding strategies will require working closely with local business and property owners to ensure buy-in for new fees, taxes, and assessments. State and federal funding options will require working closely with regional transportation planning organizations and elected officials to ensure Glendale's projects are prioritized in regional, state, and federal transportation planning efforts.

Some new local funding options that are discussed are a transportation development impact fee, a commercial parking tax, and either a Business Improvement District or a Mello-Roos District. At the state level, Glendale can work to make *Downtown Mobility Study* projects eligible for state transportation bond monies that were recently approved by voters (Proposition 1B, November 2006).

Funding and Financing Recommendations

7.1 Maximize utilization of new parking revenue that will come from parking management and pricing changes to fund *Downtown Mobility Study* recommendations by broadening eligible uses of parking funds.

7.2 Dedicate Redevelopment Agency investments from downtown tax increment revenue to implement *Downtown Mobility Study* recommendations.

7.3 Pursue implementation of a gross receipts parking tax on commercial parking.

7.4 Work with downtown merchants and property owners to form either a downtown Business Improvement District (BID) or a Mello-Roos District.

7.5 Initiate a transportation impact fee nexus study and if a reasonable nexus is found, implement an impact fee for the downtown.

7.6 Implement a program to share costs of new transit service with schools through a cost-share arrangement between and/or a Universal Transit Pass program.

7.7 Maximize utilization of grant sources and change budgeting to recognize grant funds as revenue.

7.8 Work with local and regional transportation leaders to position projects to be eligible for funding under the state transportation bond package.

7.9 Identify state funding opportunities for *Downtown Mobility Study* projects, such as the new Safe Routes to School.

7.10 Work to make *Downtown Mobility Study* projects a priority within the next update of the Regional Transportation Plan.

7.11 Work with Congressional delegation attempt to secure federal funding of high priority large-scale capital projects in the next transportation bill (2009).

Implementation Plan (Chapter 8)

Chapter 8 is an Implementation Plan that provides a prioritized work plan for implementation of the downtown transportation improvements, policies, and programs recommended in the *Downtown Mobility Study*. Recommended actions are divided into four implementation timelines:

- **Immediate-term**— to be completed within one year.
- **Short-term**— to be completed in 1-5 years.
- **Medium-term**—to be completed before 2020 (in approximately 5-13 years).
- **Long-term**— to be completed before 2030 (in approximately the next 25 years).

The Chapter provides an Action Plan (Figure 8-1) which includes the following for each recommendation:

- A phased implementation timeline
- Immediate next steps
- The responsible implementing agency
- Any necessary new ordinances and/or changes to city ordinances required for implementation
- A capital improvement program, including planning-level cost estimates for capital, operations, and maintenance costs

Any additional studies that will be needed in order to implement recommendations are also included at the end of this Chapter.

ABOVE: The full implementation of the *Downtown Mobility Study* recommendations will build on Glendale's existing strengths, and protect its unique downtown character and high quality of life.

Phased Implementation Recommendations

The Action Plan Chart at the end of this Report includes all the recommendations of this *Downtown Mobility Study* organized by phase.

Changing Residential Preferences and Downtown Revitalization

As the US population ages and time budgets shrink, housing location decisions for many demographic groups are shifting to a preference for living in pedestrian-friendly, mixed-use neighborhoods with a variety of retail, personal services, and other amenities located within walking distance. These changing housing location preferences are primarily seen amongst the so-called "urban professionals" and "empty nesters" demographics,[a] but are seen among all population segments to various degrees. For example, various residential preference surveys have found that:[b]

- 17-33% of home buyers prefer an urban or town residential style to a conventional suburban residential style.
- 14-17% of housing customers prefer alternative residential styles such as duplexes, town houses, and condominiums.
- 37%-57% of housing customers prefer higher density housing developments, indicated by a preference for smaller lots and/or clustered development.
- Half of housing consumer respondents favor a less auto-oriented environment in their ideal neighborhood including narrower streets with shopping and services within walking distance of home.
- Customers place an added value on better quality neighborhood design: home buyers are willing to pay $5,000-$30,000 extra for homes in mixed-use, higher-density, pedestrian-oriented developments relative to similar homes in nearby conventional subdivisions.

These trends are expected to continue over time, with some authors noting "a definite shift under way" so that 31% of total homeowner growth during 2000-2010 will be home buyers over age 45 who prefer denser, more compact housing alternatives, double the same segment's market share in the 1990s. For this reason, cities and developers should be poised to prepare for the "implications for building more compact cities that include walkable neighborhoods."[c]

The return of these relatively affluent demographic groups – whose consumer preferences include variety, emphasis on specialty products and services, and convenient access – to mixed-use downtown neighborhoods can influence the business location decisions of retailers and service providers. This trend is strengthening the regional competitive position of downtown districts. This is because in a downtown, mixed-use environment, many different types of businesses can "cluster" together in a single district that provides good local and regional access. This clustering helps achieve the commercial density necessary to attract a critical mass of retail customers, who value the ability to compare products and services and to experience variety in a location that is convenient to get to.[d]

Sources:

a William J. McAuley, Cheri L. Nutty. "Residential Preferences and Moving Behavior: A Family Life-Cycle Analysis." *Journal of Marriage and the Family*, Vol. 44, No. 2 (May, 1982), pp. 301-309.

b Dowell Myers and Elizabeth Gearin. "Current Preferences and Future Demand for Denser Residential Environments." *Housing Policy Debate*, Vol 12, No.4 (2001), pp.633-659.

c *Ibid*.

d John Niles and Dick Nelson. *Measuring the Success of Transit-Oriented Development: Retail Market Dynamics and Other Key Determinants*. Prepared for the American Planning Association, 1999 National APA Conference (Seattle, Washington, April 24-28, 1999, Session S-180: Will Retailing Collide with TOD?).

STREET TYPOLOGY

2

Most cities have transportation systems that are designed for "auto-mobility" rather than for comfortably and safely moving people. Over time, as traffic demands have increased, street widths have increased, turning our urban roadways into "freeways" that are uncomfortable for anything other than "driving through." Every street is expected to serve all modes equally well, but in the end, the "car is king."

The need to think differently about mobility is a matter of "geometry" rather than ideology. In Glendale, most streets have been widened to the point where their widths can not be easily increased. Added lanes fill up faster than they can be built.

The essential strategy of the *Downtown Mobility Study* is to rethink the street network, identifying primary streets for different types of users. Each type of street – "primary pedestrian," "primary transit," and "primary auto" will have different performance and design criteria. While capacity will be increased where necessary, streets will be designed for the mobility of people.

2.1 PRINCIPLES

- Glendale's approach to streets should focus on moving people, not cars.
- Each street should have a primary purpose (auto traffic, transit, pedestrian, bicycle) and should be designed to maximize efficiency and comfort of that mode.
- The City should evaluate each type of street according to a set of standards that optimizes use of its primary mode.
- Glendale should have a system to balance between all modes.

2.2 SUMMARY OF RECOMMENDATIONS

Recommendation 2.1

a. Support and promote programs and projects that enhance downtown's access via regional transit (i.e. Rapid Bus, Busways, Light Rail).

b. Implement a program for adjusting the local and regional transit services to meet the recommended performance criteria for transit frequency, hours of operation, speed, reliability, and passenger loads on the Primary Transit Network.

Recommendation 2.2

Create a *Downtown Streetscape Plan*, consistent with this *Downtown Mobility Study*, to guide improvements such as enhanced lighting, street landscaping, crosswalks, and signage.

Recommendation 2.3

Adopt the recommended Downtown Street Typology to provide clearer policy guidance for future decisions on street design and operation.

Recommendation 2.4

Use performance measures as a guide for downtown streets, as follows:

a. Use auto performance measures for downtown streets to focus on optimizing the person-carrying capacity of streets rather than vehicle-carrying capacity.

b. Use transit performance measures as a guide for downtown streets, including a new performance indicator – Transit Quality and Level of Service – that complements existing transit performance indicators.

c. Use pedestrian and bicycle performance measures.

ABOVE: Downtown Glendale already has some excellent assets, like the Alex Theater. New development will build on and enhance these existing assets.

2.3 DISCUSSION OF RECOMMENDATIONS

New Approach

The City of Glendale faces a fundamental challenge, and a remarkable opportunity. Continued reinvestment is required for the ongoing vitality of downtown and the private sector appears more than ready to invest in new residences and shops, with the potential to improve Glendale's already high quality of life. However, Glendale already experiences the impacts of automobile traffic, both on local streets and on the freeways that ring downtown. New development, if it follows the same patterns and same transportation policies as previous development, will certainly exacerbate this traffic congestion.

Can Glendale build its way out of traffic congestion? The *Circulation Element* of Glendale's *General Plan*, adopted in 1998, answered the question in this way:

> *The more traditional capital-intensive road-widening projects are becoming less feasible as many crucial arterials have already been widened. Further widening greatly increases both construction and ancillary costs, which generally renders such proposals infeasible within the timeframe of this element.*

Today, in 2007, the prospects for simply building our way out of traffic congestion are no better. The strategy of widening roads has essentially reached its end in Glendale, as roads cannot be further widened without removing existing land uses and forever changing the character of the city. Overall, Glendale has already recognized that simply increasing roadway capacity is no longer a reasonable or sufficient approach to meeting the challenges of new development. While some capacity enhancements are included in this plan (see Chapter 3), they can provide at best a partial solution. If Glendale wishes to accommodate major investment in downtown, with little increase in traffic congestion, a new approach will be needed.

This *Downtown Mobility Study* provides that approach. The street typology described in this chapter is a crucial tool for accommodating traffic and for realizing the vision outlined in the *Downtown Specific Plan*, so that downtown residents, employees, and visitors can spend more time enjoying downtown Glendale and less time trying to get there.

Evolution Not Revolution

The *Downtown Mobility Study* proposes three key steps to increase the use of alternative modes without neglecting the needs of automobile drivers. They are:

- Establish a new street typology (i.e. a set of street types) for Glendale, including defining Primary Pedestrian Streets, Primary Transit Streets and Primary Auto Streets.
- Set new performance measures for streets and transit services.
- Adopt a rational, practical method for balancing the needs of different modes of transportation, as they compete for limited space on Glendale streets.

The essential strategy is simple. To encourage people to travel by foot, bike, or transit, there needs to be infrastructure designed to make those choices more attractive. By applying proven travel management tools, including appropriate pricing of parking, improving the visibility and performance of transit services, and encouraging the use of alternative modes, traffic congestion can be managed and new development can be accommodated without significant increases in congestion.

It should be noted that this chapter is about evolution, not revolution. As a given, it assumes the overall policy goals adopted by the City of Glendale in the *General Plan*, with particular attention given to the transportation goals and policies of the *Circulation Element*. The intention of this chapter is to provide tools for implementing those policies, and to suggest practical, financially feasible, and incremental steps toward their realization.

It should be stated clearly: The recommendations contained herein do not mean that the needs of automobile drivers are abandoned. Auto access will continue to be a key part of the economic health of the downtown. The solution is to clearly designate priorities for different types of streets, as outlined in this chapter, by creating a new set of street types (a street typology) for Glendale.

Capacity Enhancements

Within the greater downtown, there are still places where additional capacity can be added, mostly by removing on-street parking and narrowing sidewalks, but this strategy has two drawbacks. For commuters heading home, adding capacity at downtown intersections leading up to the freeway ramps may result in no net improvement in travel time from work to home: congestion is controlled by the metering lights, not by local street capacity. At rush hour, Caltrans uses metering lights to control the flow of traffic from Glendale onto the freeways. This is because the finite capacity of the freeway to accept additional rush-hour trips has been filled and further widening of the freeways is infeasible. Traffic destined for the freeway backs up onto Glendale's local streets, as they essentially serve as "storage" for cars awaiting permission to enter the freeway.

Second, attempting to satisfy all demands for road space by removing parking and narrowing sidewalks seriously conflicts with Glendale's goal of creating a more livable downtown, where both existing and new residents enjoy living in a walkable environment and strolling and shopping on foot.

Proven Strategies

Fortunately, numerous cities have demonstrated that even without new rail service, it is possible to control traffic, improve transit ridership, and improve quality of life during a period of growth (see Los Angeles case study at the end of this chapter).

Across the country, cities have adopted mobility plans that increase transportation choices and create a walkable, transit-oriented environment that encourages the use of alternative modes in a realistic way. In virtually every one of these cities, improving the pedestrian environment and improving speed, reliability, and frequency of transit service has been crucial. The sidebar on the following page and Appendix 2A describe several successful examples, demonstrating that it is clearly feasible for a city like Glendale to grow without increasing traffic.

Glendale, too, can make big gains by implementing a comprehensive package of mobility strategies. In most cities, key aspects of success have included the reform of parking policies and improvements to transportation demand strategies (as described in Chapter 5 and Chapter 6 of this *Study*, respectively), and providing additional transportation choices, particularly transit. To support improved transit, the design and classification of streets must also change, to devote new attention to providing transit priority on at least some key transit streets, and new attention to cyclists and pedestrians. Often, this requires new partnerships between transit planners and traffic engineers.

Finally, measurements of the performance of streets must be revised, to acknowledge the reality that since lanes can no longer be added to the freeways, performance measures need to focus on optimizing the person-carrying capacity of streets, rather than the vehicle-carrying capacity.

This chapter focuses primarily on these last two areas. In the next few pages, essential recommendations are given for: (a) measuring the performance of streets and transit services; (b) classifying streets; and (c) balancing the needs of competing users.

Examples of Success

Vancouver, Canada

In 1991, as a deliberate transportation strategy, the City of Vancouver increased housing capacity in the downtown area in order to place residents near jobs and simultaneously called for streets to be the "focal point of public life." Their plan included such changes as: public realm improvements (e.g. wider sidewalks, bike lanes, and maintaining curb parking as a buffer), a major expansion in transit, no road capacity increases, improved bicycle access both to and within downtown, short-term parking management, and maximum parking requirements. As a result, transit now carries the largest share (about 40%) of commuters to downtown. Walking and cycling trips make up 35% of all daily trips (in 1999). At the same time, car trips into downtown have remained relatively constant.

Downtown San Francisco

According to the San Francisco Planning Department, employment in downtown San Francisco doubled between 1968 and 1984, while the number of cars traveling into the downtown stayed the same. To achieve this, San Francisco encouraged a compact, walkable, highly dense downtown development pattern. An important part of their strategy was the creation of Transit Preferential Streets. Market Street, the spine of downtown, is the classic example. Bus-only lanes (though imperfectly enforced) give priority to transit. New curb cuts and garage entries are prohibited virtually everywhere along it, reducing the number of auto drivers with a reason to use it; the sidewalks are wide and the adjoining buildings are now required by design standards to provide pedestrian-friendly façades.

Boulder, Colorado: Just Buses

The successes of Boulder, Colorado are particularly notable for Glendale because of the similarities between the two cities. Boulder is set in a region dominated by auto commuting, with a population of about 100,000 people, no rail transit in the city, and no control over its main transit provider. Boulder made a concerted effort to invest in a package of alternative mobility strategies including a major investment in additional local transit services (the "Hop", "Skip," and "Jump" shuttles, among others), based upon the principle of investing in the most cost-effective programs to improve mobility. As a result, use of alternative modes increased from 35% in 1993 to 47% in 1997. At the same time, sales tax receipts in downtown Boulder during this period increased by more than 100%.

2.3.1 GLENDALE'S EXISTING POLICY FRAMEWORK

General Plan

The City of Glendale's *General Plan* forms the policy basis for the recommendations in this chapter. Based on that vision, the *Circulation Element* identifies the following primary transportation goals (particularly relevant objectives are noted as well):

- Goal 1: Preservation and enhancement of the quality of life in Glendale's unique communities.
- Goal 2: Minimization of congestion, air pollution, and noise associated with motor vehicles.
- Objective: Increase/support public and high-occupancy vehicle transportation system improvements through mitigation of traffic impacts from development.
- Goal 3: Reasonable access to services and goods in Glendale by a variety of transportation modes.
- Objective: Encourage growth in areas and in patterns which are or can be well served by public transportation.
- Goal 4: Functional and safe streetscapes that are aesthetically pleasing for both pedestrians and vehicular travel.
- Goal 5: Land use which can be supported within the capacity constraints of existing and realistic future infrastructure.

Glendale's Existing Street Classifications

Glendale has one of the most sophisticated street classification systems in California, improving upon the often oversimplified "arterial, collector, local" system so common in late-20th century suburban cities. The basic list of street classifications (a.k.a. street types), which are described in detail in the *Circulation Element* of the *General Plan*, is as follows:

- Freeways
- Major Arterials
- Minor Arterials
- Urban Collectors
- Community Collectors
- Neighborhood Collectors
- Local Streets
- 'Signature Street' Overlays

Essentially, this hierarchical system classifies streets by the volume of automobile traffic that they are intended to carry, from highest traffic volumes (freeways) to lowest (local streets).

While Glendale's existing street classification system is useful for many purposes, it also has some important limitations. Some of these are described below:

- The major existing street types do little to distinguish between a street that is extremely important for transit (a Primary Transit Street) and one that has no transit service at all. As defined, a ma-

jor arterial street may carry thousands of bus passengers per day (like Brand Boulevard and Broadway) or none at all.

- The Signature Street Overlays help somewhat to overcome the above problem, but the definition of this overlay, and the way in which it should affect the underlying basic street designation, is not entirely clear.
- The existing classifications specify that auto-oriented land uses (e.g. car washes, parking garages, body shops) should be encouraged to locate along major arterials. This makes sense for arterials with little transit and therefore few pedestrians, but is this desired along major transit corridors, since transit ridership generally benefits from high-density mixed-use land uses?
- In general, the existing street type definitions mix land use and transportation functions in somewhat inconsistent ways.
- The transportation and land use classifications are not consistently linked to one another.
- Tools that take into account all modes of transportation are not consistently provided to inform key design or street management decisions in a given corridor. If an arterial has thousands of transit passengers, does it need more frequent pedestrian crossings than an arterial with no one crossing to the bus stop?
- Tools are not provided to help balance modes that compete against one another, or transportation goals that compete with land use goals. If a street is very important to both transit and autos, how can one decide which mode takes priority in matters such as signal timing, lane designations (e.g., bus 'queue jumps' at signals), or streetscape design?

This chapter builds upon Glendale's existing efforts in order to address these gaps in the current street classification system.

ABOVE: The character of Brand Boulevard north of Milford is quite distinct than the rest of the street. The street carries four lanes northbound and daily traffic volumes are substantially higher than other sections.

BELOW: In the Alex Theater area, Brand Boulevard takes on much more of the character of a traditional Main Street.

Glendale's Existing Auto Performance Measures

The Glendale *General Plan* adopts Automobile Level of Service (LOS) as the primary quantitative measure with which to judge the performance of the street system. As the *Circulation Element* describes it:

> *Level of Service is a measurement of the ability of the street or intersection to accommodate its traffic. In order that a street provide an acceptable level of service to the driver, it is necessary that arterial or collector street service volume be considerably lower than the capacity of the street.*

Glendale's *Circulation Element* establishes the following performance target:

> *"A minimum desired level of service is 'D' during afternoon peak hours, except at intersections along major arterials, where a minimum desired level of service is 'E'."*

While useful for estimating the effects of congestion on motorists, Auto LOS and Volume-to-Capacity (V/C) ratios do not offer the full picture of a transportation network in a place as complex as downtown Glendale. Relying on this measure alone to measure transportation performance results in several shortcomings:

- Auto LOS and V/C ratios do little to measure progress toward Glendale's five primary *Circulation Element* goals, on themes such as preserving and enhancing quality of life, protecting the character of residential neighborhoods, and minimizing adverse environmental impacts.
- By focusing on spot locations, Auto LOS and V/C ratios say nothing about the ability of the overall transportation network to carry traffic. For example, they do not allow planners to estimate actual average travel time among various destinations. This constitutes a significant gap in the planning process, as travel time (along with travel costs) is the factor that travelers care most about.
- More importantly, these measures estimate delay only to vehicles, not people. A bus with 50 passengers on board is counted the same as an automobile with one passenger. In order to improve Auto LOS at a given intersection, for example, traffic engineers may feel obliged to remove transit priorities in order to give more accommodation for cars. The result may be that the intersection can handle more vehicles but fewer people. In the long-term, moreover, as the city grows, managing the transportation system with an exclusive focus on auto congestion paradoxically results in more auto congestion than an approach that considers all modes.
- A street system that is optimized for cars may not be optimized for transit. Due to their fundamental need to stop to board passengers, buses and streetcars travel a certain fraction slower than other vehicles under free-flow conditions in a given street. Synchronization of traffic lights, which may significantly speed up auto flow, may actually worsen transit speeds, as buses and streetcars fall behind "platoons" of cars and hit every light red.

As auto speeds improve and transit speeds worsen, two effects take hold: induced demand toward driving and mode shift most from transit. Since travel time is the primary factor by which most individuals decide to make trips and choose their travel mode, projects that reduce congestion by expanding capacity are often filled to capacity only a short time after opening – as new travelers are "induced" into using the new capacity. Similarly, as auto travel time improves relative to transit travel time, many individuals give up on transit and shift to driving. If cities respond to these shifts by continuing to expand auto capacity while allowing transit to deteriorate, the result is a spiral of ever-increasing congestion and steady reductions in the ability of the overall system to move people.

This chapter creates a framework to break this inefficient cycle by managing the transportation system as a whole, not just as a collection of unrelated modes.

Glendale's Existing Transit Performance Measures

Glendale's existing Beeline transit service performance measures include at least four route-level performance indicators:

- Riders per revenue hour
- Farebox recovery (ratio of operations revenue to operations cost)
- Passenger miles per revenue seat mile
- Passenger miles per revenue hour

All these indicators are important efficiency measures from the operator's perspective, but they do not take into account factors that transit passengers care most about: frequency, reliability, travel time, etc. Furthermore, Glendale currently uses only Auto Level of Service to measure the performance of the streets where transit runs. While simple to do, this results in measuring just one extremely limited aspect of transit service, namely if buses are caught in congestion.

This *Study* recommends adoption of new performance indicators for all transit services described in the "Performance Measures" section later in this chapter.

Recommendation 2.3
Adopt the recommended Downtown Street Typology to provide clearer policy guidance for future decisions on street design and operation.

2.3.2 STREET TYPOLOGY REDEFINED

The new street typology for Glendale includes primary auto streets, primary transit streets, and primary pedestrian streets. It closely links together land use and transportation. Most importantly, it provides a comprehensive classification system, which helps to sort out and intelligently prioritize the needs of different modes of transportation, street-by-street and block-by-block throughout Glendale, and especially on the major downtown corridors.

The classification system described here and in Appendix 2A creates a new comprehensive street typology for Glendale. It includes three key elements:

- **Function.** Function is the relative importance of the street for each mode of transportation. Glendale has already defined many functional priorities and has included these in its Geographic Information System database. Function is the starting point for the system-wide transportation performance measures in this chapter.
- **Context.** Context is the adjacent buildings and land uses. This is particularly important for downtown retail patterns and downtowns, which have special needs regarding traffic speed, pedestrian accommodation, and on-street parking. It is also a key factor in street design standards. Context informs system-wide transportation performance measures in this chapter.
- **Form.** Form is the physical shape of the right of way. Form is the starting point for street design standards, which are not thoroughly considered here. Designations such as "Alley" or "Boulevard" are primarily related to form.

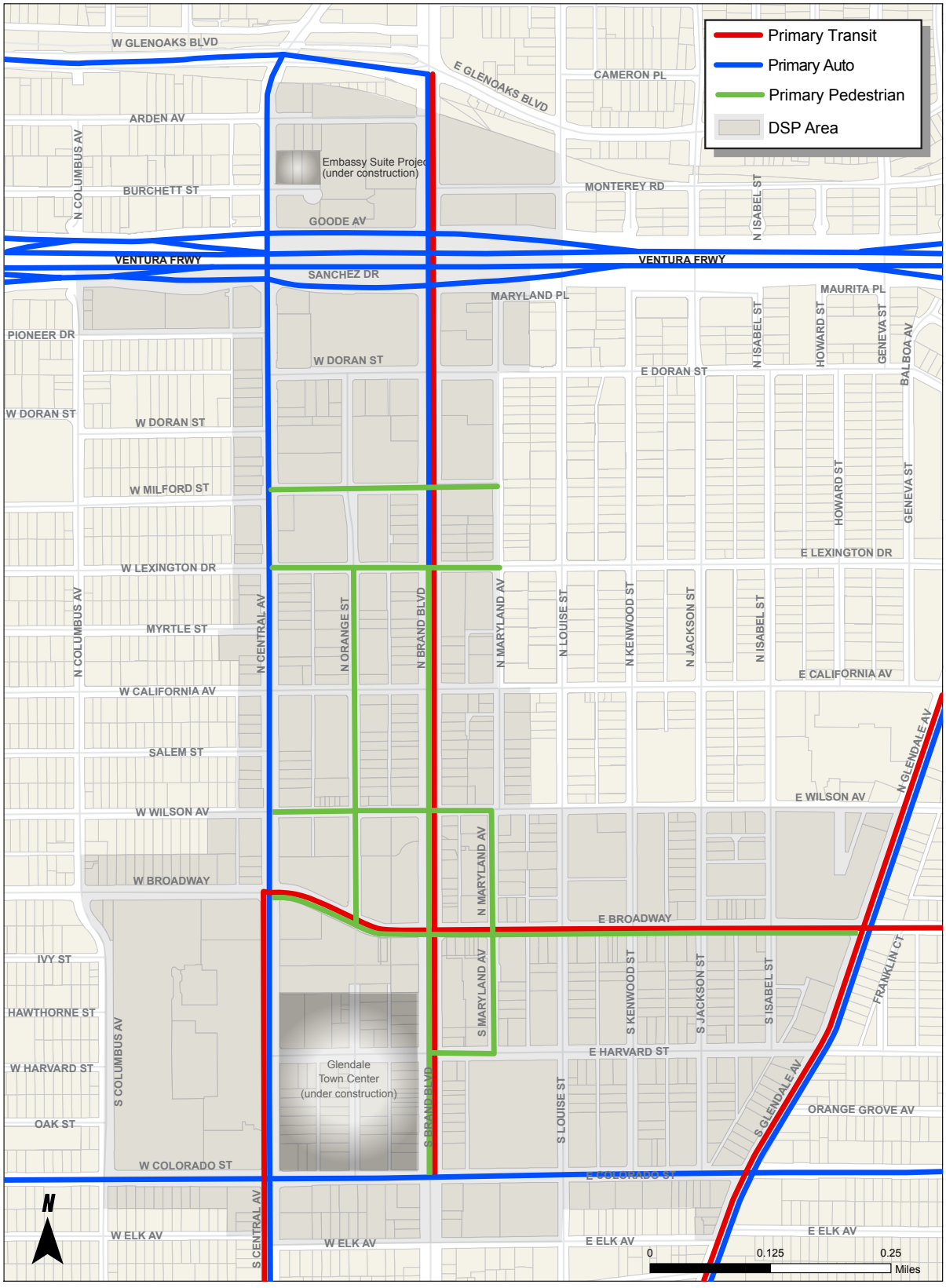
These elements are combined in different ways to inform decisions about street design and management. Specifically:

- When measuring the performance of a given corridor as part of the overall transportation network, the functional role of the corridor is paramount, followed by its adjacent land use context. The physical form of the street is less important.
- When considering the design standards for a corridor, the physical form is typically paramount. Context informs critical elements such as the provision of on-street parking, and function determines important details such as bicycle lanes, bus bulbouts, and intersection design.

Figure 2-1 illustrates the complete new recommended street typology including Primary Transit Streets, Primary Auto Streets, and Primary Pedestrian Streets.

The following sections describe each of these street types.

Figure 2-1 Street Classification Showing Primary Transit, Primary Auto, and Primary Pedestrian Streets



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consulting associates

Recommendation 2.1

a. **Support and promote programs and projects that enhance downtown's access via regional transit (i.e. Rapid Bus, Busways, Light Rail).**

b. **Implement a program for adjusting the local and regional transit services to meet the recommended performance criteria for transit frequency, hours of operation, speed, reliability, and passenger loads on the Primary Transit Network.**

ABOVE: Improving the pedestrian amenities on Primary Transit Streets is integral to the success of Glendale's multi-modal downtown.

Primary Transit Streets

In most cities where growth has occurred with little or no increase in traffic congestion, a fundamental part of that success was improving the visibility and reliability of transit service. This does not necessarily mean making a major investment in new transit technology, although the opening of a rail line, for example, does generate excitement. Existing bus technologies can be rebranded and repackaged to be attractive to more riders. MTA's Metro Rapid service is a good example of bus technology that was rebranded and gained significant ridership. Key to the gains on the implementation of Metro Rapid was improving transit reliability. For transit reliability to improve, the primary transit services, operating on a few key transit corridors, must be improved. A key part of most improvements is protecting transit vehicles from rising traffic congestion, which will otherwise cause steadily declining transit speeds, increasing unreliability, higher operating costs, and eventually deterioration of the entire transit network.

In addition, key corridors – including all transit corridors and connections between transit corridors and major destinations – should ideally give the highest possible level of comfort and safety for pedestrians. These goals need to be constantly balanced against the needs of auto drivers, which will continue to be an important part of travel downtown.

Primary Transit Streets give first priority to moving transit. These are the streets where, for example:

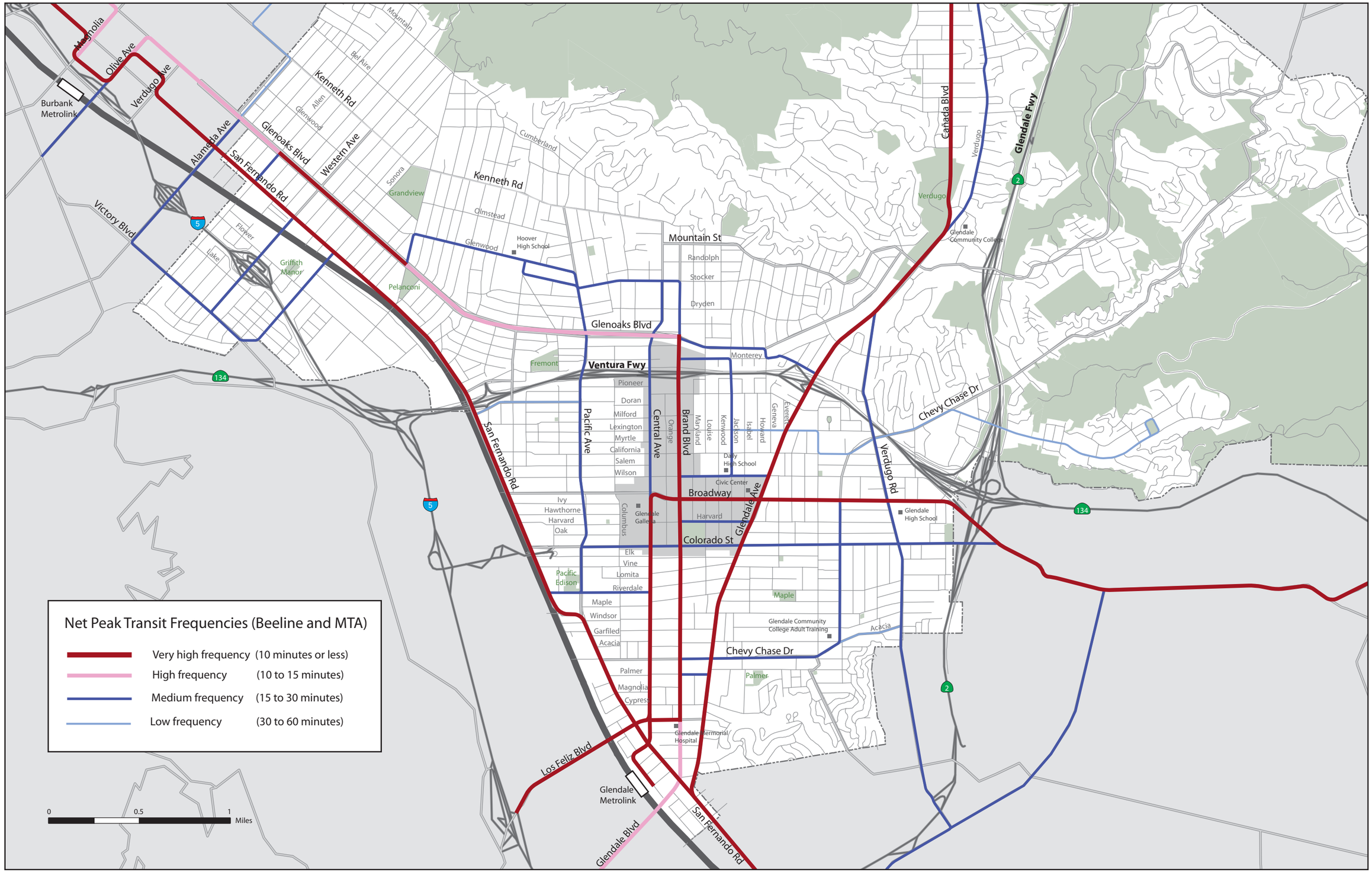
- Signal prioritization devices and traffic signal timing should give first priority to speeding up buses, even at the expense of some loss of performance or automobile level of service.
- Bus bulb-outs should be installed where needed, and where first priority is given for investments in transit amenities, such as better shelters.
- High priority must be given to creating excellent conditions for pedestrians, in the design of both streets and buildings.

The Primary Transit Streets combined create a Primary Transit Network. The recommended Primary Transit Network is shown in Figure 2-2.

As shown in the map of the frequencies of the *existing* transit services on Glendale streets (Figure 2-3), the streets designated as Primary Transit Streets are those which already have high-frequency transit, and which in the future will have even more frequent service. Streets with less frequent transit service, such as Colorado Street, are not designated as Primary Transit Streets. It is important to note that transit service is not eliminated from streets that are not designated as "primary transit streets" but that some streets with transit service will not warrant special treatment. In addition, it is worth noting that all streets with transit service must have some minimal level of safety and amenities for pedestrians and transit passengers.

Figure 2-2 Primary Transit Network

Figure 2-3 Frequency of Existing Transit Services



Not every street with transit service can be in the Primary Transit Network. Investments in the network would be concentrated on those corridors that serve the most riders and provide the highest quality of service. Transit will operate on other streets, but defining a primary network provides the basis for making investments in transit and pedestrian infrastructure. The Primary Transit Network should have performance criteria for the five key dimensions of transit quality:

- **Frequency.** The Primary Transit Network runs at least every 15 minutes considering all services on that corridor in combination.
- **Span.** The Primary Transit Network runs at the above frequency for at least 18 hours a day, 7 days a week.
- **Speed.** Primary Transit Network services have an average operating speed, including stops, of no less than 35% of the speed limit. For example, if the speed limit on the street is 30 miles per hour, transit services must operate at 10.5 miles per hour or greater including all stops.
- **Reliability.** Actual headways between consecutive buses will exceed scheduled headways by a coefficient of variation not to exceed 0.30.
- **Loading.** Standing loads but not crush loads are acceptable: peak hour loads should not exceed 85% of total seating and standing capacity averaged across all buses operating on the corridor.

Defining a Primary Transit Network does not require implementing rail service or other non-bus technologies, although any future streetcar or other rail service in Glendale would almost certainly meet the criteria for the primary transit network. Creating a Primary Transit Network serves to reinforce, on the level of policy, that certain bus service corridors are permanent, and will be supported with a high level of investment. This allows bus corridors to be the foundations of compact, transit-oriented neighborhoods.

Whether formed by light rail, streetcars or bus service, the Primary Transit Network is a foundational element of the City's infrastructure. For the high-density portions of the city, it will become as essential as power lines. Because it is designed to serve a large share of the city's population with a minimum of line miles, it can offer not just the best frequencies and spans of service, but also many other premium features, including:

- Priority for low-floor, high-capacity coaches and any new coach technologies that expedite comfort or operations.
- Premium shelters with many of the amenities associated with rail stations.
- Information features, including real-time information in shelters (the number of minutes until the next bus comes) and informational displays within buses (such as the time and the next stop).

ABOVE: A reliable, efficient transit system with vehicles that have bike racks can extend the range of bicycling significantly making it more comparable with auto use. Improvements in transit service could spur increased bicycle use as well.

- A distinct image that sets the Primary Transit Network apart from the less-frequent supporting services.
- Reinforced street pavement for smooth travel and fewer maintenance interruptions.

The Primary Transit Streets which pass through the *Downtown Specific Plan* area are:

- Brand Boulevard from Glenoaks to Colorado
- The corridor defined by the MTA Metro Rapid 780 buses: Broadway from just east of Verdugo Road to Central Avenue, Central Avenue from Broadway to Chevy Chase Drive
- Glendale Avenue from I-134 to Chevy Chase Drive

Primary Auto Streets

Primary Auto Streets give first priority to moving automobile traffic. In terms of measuring their performance and design, they essentially follow the existing definition of a primary arterial street in Glendale. On these streets, first priority is given to meeting automobile level of service standards (e.g., in signal prioritization). Other modes, while not entirely ignored, take second priority. The downtown streets designated as Primary Auto Streets are the blocks of the major arterial streets:[1]

- Colorado Street (throughout its length)
- Central Avenue (throughout its length)
- Glendale Avenue (throughout its length)

The Capacity Enhancements section (see Chapter 3) describes the specific capacity enhancements proposed for these Primary Auto Streets, for the freeway interchanges and certain associated streets (such as the frontage roads) serving downtown. These capacity enhancement projects will provide these primary auto streets with additional capacity to move traffic.

Design standards for Primary Auto Streets are the same as for primary arterial streets, as described at length in the *Circulation Element* of the *General Plan.* For the sake of brevity and since no new design elements for Primary Auto Streets are introduced by this plan, those standards are not repeated here.

Primary Pedestrian Streets

Primary Pedestrian Streets give first priority to creating excellent conditions for pedestrians. This designation is usually most important on primary retail and transit corridors, but also desirable on many residential streets. Typically, this means wide sidewalks, fine well-designed streetscapes, curb parking to buffer pedestri-

1 Note that portions of several streets, such as Brand Boulevard, are designated as both Primary Auto Streets *and* Primary Transit Streets.

ans from passing traffic, and frequent safe crossings. On Primary Pedestrian Streets, the removal of parking should be avoided, additional traffic lanes should not be added, and the existing curb-to-curb width of roadways should not be increased, since this diminishes the remaining space for sidewalks and landscape strips.

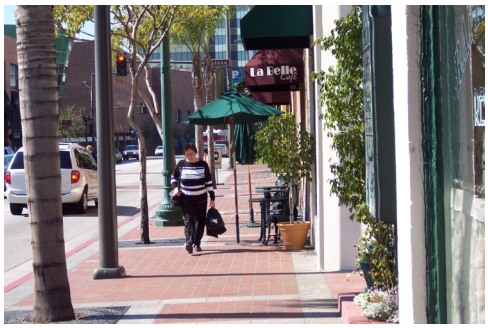
Improving pedestrian conditions has been a theme of Glendale planning in recent years. However, implementation of changes to enhance the pedestrian realm has only been partially executed or not at all. This is likely due to two factors. First, pedestrian planning is almost always part of another planning effort, so it is easily de-prioritized. Second, and perhaps more importantly, attempts to create high-quality pedestrian environments are often overruled by changes to downtown streets that prioritize cars over pedestrians. As a result, Glendale has few downtown streets that are ideal for pedestrians and others where conditions discourage pedestrian activity. To overcome this problem and genuinely implement the *Downtown Specific Plan*, prioritizing pedestrians in Glendale's planning and engineering decisions will become even more important.

Glendale's economic vitality hinges on its walkability. Downtown Glendale's competitive niche is as a charming, walkable, mixed use district. Downtown must leverage and enhance its existing assets to remain competitive with suburban shopping malls and auto-oriented commercial strips. If the visitors, residents, and workers who come to downtown to do their shopping and errands want to come back again, merchants will thrive.

Improving pedestrian conditions is also key to protecting safety and public health. In a statewide traffic report issued 5 years ago, the City of Glendale was ranked fifth highest for pedestrian fatalities among 45 cities with similar-sized populations (between 100,000 and 250,000). In addition, the city ranked 49th highest in a statewide comparison among all cities and counties (there are over 478 incorporated cities and towns and 58 counties in California). These safety statistics have quantifiable costs, as well as indicating human tragedy. Glendale taxpayers must pay for increased life safety and first responder resources, lost economic productivity for the City due to missed time at work for both the injured and their caretakers, lost wages, and the increased cost of health care and other public services for those that are injured and not insured.

Defining Primary Pedestrian Streets

The *Downtown Specific Plan* includes extensive land use and building guidelines to encourage a pedestrian friendly downtown, including:



ABOVE: Improving pedestrian conditions throughout Glendale is key to the success of its downtown.

BELOW: The sidewalks along the office towers along North Brand Blvd. are wide, however they provide quite limited ground-floor retail and there is relatively little of interest to the pedestrian.

- Land use standards and policies that focus on pedestrian-oriented ground floor commercial development, and a mix of uses that brings more residential development downtown and creates a 24-hour environment.
- Urban design policies and development standards for building height, floor-area-ratio, architectural features, minimum and maximum building setbacks, façades and frontages, entrance locations, building orientation, and parking entrance locations. These requirements vary throughout downtown to create a set of distinct districts, each with a unique scale and image.
- A plan for an open space network which is accessible within a 5-minute walk of any location downtown. This includes streets, parks, plazas, courtyards, and paseos, each with specifications for ratios, location, design, and landscaping.
- An urban art program.
- Pedestrian safety at midblock crossings and intersections.

Guidelines for Primary Pedestrian Streets

The Primary Pedestrian Street recommendations below are designed to complement these DSP standards and guidelines. These recommendations focus specifically on how pedestrians fit in with the overall transportation system. This includes improving pedestrian mobility and ensuring safe and fluid interface between pedestrians and other modes. Recommendations address: sidewalk conditions, intersection and crosswalk conditions, continuity and connectivity of the pedestrian network, and safety:

- Develop a network of Primary Pedestrian Streets (as shown in Figure 2-1) that provides access throughout downtown, linking the various downtown districts. High quality pedestrian routes should be established between offices, housing, restaurants, entertainment, recreation, and other prominent downtown destinations.
- The pedestrian network must integrate transit stops and stations to encourage fluid interface between walking and transit use.
- On pedestrian priority streets, pedestrian-orientation should guide all elements of street and sidewalk design and a higher level of pedestrian amenities should be provided.
- Designs should improve pedestrian safety to achieve a reduction in pedestrian injuries and fatalities.

Urban Design for Pedestrians

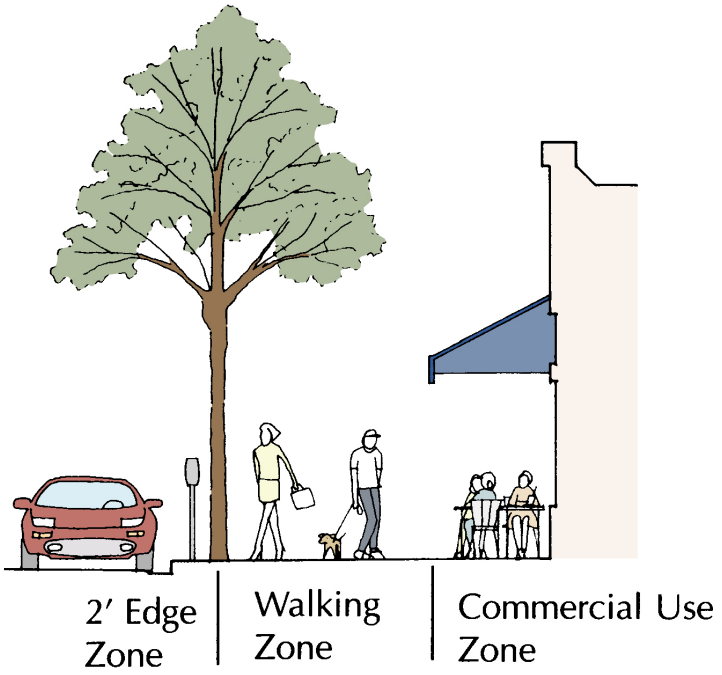
As Figures 2-4 through 2-10 illustrate, Primary Pedestrian Streets should include the following design features:

- **Sidewalk Widths:** Preserve and enhance current sidewalk widths. All Primary Pedestrian Streets should maintain a sidewalk width of at least 12-18 feet.

Figure 2-4 Examples of Design Strategies to Recreate a "Pedestrian Buffer" if On-Street Parking is Removed

ABOVE and RIGHT: Two examples of how landscaping and pedestrian-scale lighting standards can help to recreate a pedestrian buffer when on-street parking is removed.

Figure 2-5 Street Design for Pedestrians



ABOVE LEFT: Primary pedestrian streets should include widths of 12-18 feet and adequate buffers between moving cars and pedestrians.

Figure 2-6 Glendale Chess Park and Mid-block Passageway

BELOW LEFT: Example of a well-designed, active mid-block passage.

Figure 2-7 Santa Barbara Alleyway

ABOVE RIGHT: Example of the vitality of properly-designed and programmed alleyways.

BELOW: Pedestrian amenities such as landscaping and seating.

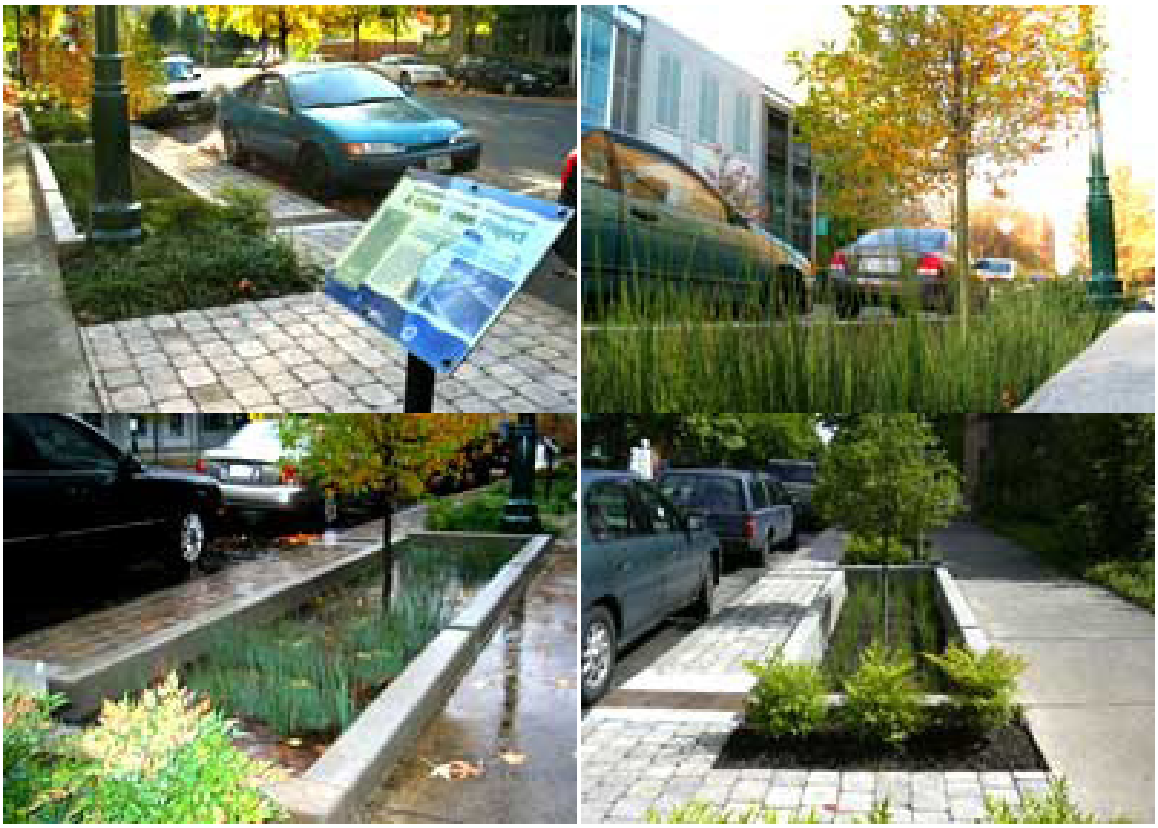
Figure 2-8 Pasadena Alleyway

Figure 2-9 Chicago's State Street

LEFT: Pedestrian-friendly design increases the economic activity and safety of urban streets. *Photo courtesy of Sky Scraper Page. Accessed at www.skyscraperpage.com on 1/18/07.*

BELOW: Ped-friendly streetscape design can incorporate "green" features to promote environmental sustainability. *Photo courtesy of Kevin Perry, City of Portland.*

Figure 2-10 Portland's SW 12th Avenue "Green Street" Project



- **Buffers from Moving Traffic:** Preserve on-street parking and other adequate buffers between moving cars and pedestrians where possible and add where absent.

Sidewalks

A truly pedestrian-friendly sidewalk includes more than simply space for pedestrians to walk through. First, providing a buffer between the road and the sidewalk through on-street parking or landscaping is one of the most important ways to increase real and perceived pedestrian safety. A sidewalk should also include space for comfortable pedestrian circulation as people shop and stroll; landscaping, street furniture, and other amenities like bike parking and newspaper boxes; and adequate space for businesses to expand onto the sidewalk with outdoor displays and seating, creating a more vital sidewalk environment.

Technically these activities can be divided into four zones:

- The edge zone where the sidewalk meets the street
- The furnishings zone which can provide a buffer to moving traffic (especially important in the absence of on-street parking)
- The throughway zone which is the clear area for pedestrian movement
- The frontage zone which is the area immediately adjacent to the building wall

Twelve to eighteen feet allows for flexibility to accommodate the features most necessary to maximize pedestrian comfort and pleasure.

Generally the *Downtown Specific Plan* specifications for setbacks from the sidewalk will accommodate these zones adequately. Depending on the type of street frontage, the *Downtown Specific Plan* calls for setbacks ranging from 12-24 feet. These requirements bear repeating because the sidewalk is the heart of the pedestrian realm. Inadequate sidewalk conditions will undermine any other improvements to pedestrian conditions.

The *Downtown Specific Plan* also includes general sidewalk prescriptions including: paving patterns, landscaping, street lighting, curb extensions, and sidewalk furniture.

Sidewalk Widths

Prioritizing sidewalk widths, even in the face of pressure to widen roads and increase auto throughput may be difficult. It will require leadership and maintaining focus on Glendale's goals for its downtown. However, success of all modes relies upon an excellent and complete pedestrian network. A walkable environment improves overall quality of life and is central to the success of the

DSP. Therefore, degradation of pedestrian conditions should be avoided at all costs.

Intersections

Primary Pedestrian Streets must also provide safe and convenient pedestrian crossings at all downtown intersections. Intersection design elements should include: high visibility pavement markings; decreased pedestrian crossing distances by minimizing curb radii and/or providing curb bulb outs; and heightened visibility for pedestrians and drivers wherever possible.

In a pedestrian-oriented district like Downtown Glendale, intersections must be designed with pedestrian accessibility and safety as the priority. The first strategy to protect pedestrians is to limit the time they must be in the intersection by decreasing crossing distances. Curb radii must be considered according to context and uses of the street as a whole because it affects not only pedestrian crossing distance, but also vehicle speeds and ease of turning movements for transit and other large vehicles. Curb radii must accommodate turning vehicles, especially into one-lane "exits." Sidewalk bulb-outs are an alternative to smaller curb radii. In addition to shortening crossing distances, they enhance the visibility of pedestrians and drivers and provide additional sidewalk space for pedestrian movement and amenities.

Pedestrian Safety

Other key factors in pedestrian safety that should be considered in intersection design are:

- Wide visible crosswalk striping
- Advance stop bars
- Pedestrian count-down signals
- Signal timing that is adequate to allow pedestrians to cross and signal cycles that are frequent enough to discourage jaywalking
- In-pavement crosswalk lighting at mid-block crossings and unsignalized intersections

At each intersection, Glendale will need to balance the needs of different modes to determine the correct configuration for the intersection. However, on all Primary Pedestrian Streets, pedestrians should take priority where conflicts with autos arise.

- **Mid-block Crossings:** Preserve and create mid-block crossings and pedestrian passageways. On major streets, these crossings should be signal controlled.
- **Curb Cuts and Loading Zones:** Minimize interruptions to the pedestrian realm, like areas for loading and trash collection and curb cuts for driveways and parking garage entrances.

Pedestrians are particularly sensitive to indirect routes because they are moving at slow speeds and thus longer distances make for much longer travel times. Increasing connectivity of pedestrian routes by providing pedestrian pass-throughs, mid-block crossings, and cul-de-sac connectors can significantly increase the attractiveness of walking. Ideally, downtowns have short block lengths and high street network connectivity. However, as in many cities, this is not the case in all parts of Glendale. This makes the mid-block crossing a useful tool. It shortens pedestrian walking distances, increases directness of routes, and lessens the temptation to cross at unprotected locations. Generally, mid-block crossings should be provided whenever block lengths are greater than 300 feet and located where justified by demand. For safety, these mid-block crossings should be controlled by pedestrian-activated signals on major streets.

Continuity

The continuity of the pedestrian realm is similarly important. Minimizing interruptions and obstacles to walking makes for a more pleasant pedestrian experience. If necessary at all, curb cuts should occur no more than every 200 feet on primary pedestrian streets. One way to eliminate curb cuts is by interlinking parking facilities and sharing parking to decrease the need for separate entrances. This topic is also discussed at length in the *Downtown Specific Plan* in the pedestrian network and urban design guidelines.

Accessibility

Provide for the special mobility requirements of the young, the elderly, and wheelchair or mobility impaired users of the sidewalk network. All downtown streets must satisfy disability access standards, including crosswalk treatments, sidewalk widths and curb ramp design, as required by the Americans with Disabilities Act.

Ultimately, Glendale should undertake a full streetscape plan to ensure implementation and expansion of all the elements described here and to ensure the success of the DSP's vision for a walkable, vibrant downtown.

Recommendation 2.2
Create a *Downtown Streetscape Plan*, consistent with this *Downtown Mobility Study*, to guide improvements such as enhanced lighting, street landscaping, crosswalks, and signage.

Primary Bicycle Streets

Primary Bicycle Streets are the key streets in the bicycle network. The bike routes recommended in the *1995 Bikeway Master Plan* have never been implemented. The first step Glendale should take is to update and implement the *1995 Bikeway Master Plan*.

For the sake of brevity and clarity in this chapter, bicycle recommendations are touched on only lightly here, and should be considered in more detail in future planning efforts.

Conflicts and Trade-Offs

The designation of different street types raises a major question. If a portion of Central Avenue, for example, is designated both a Primary Auto Street and a Primary Transit Street, at least in some blocks, which mode should take priority? In these cases, priorities need to be clear: only a small handful of streets in the entire city are designated as Primary Transit Streets, and on these few streets, first priority must be given to speeding up transit, to meet the City's goals for increasing transit ridership. However, on streets with shared designation, the techniques needed to speed up transit will largely be the same techniques that would speed and increase traffic flow.

In many places, trade-offs are required to address conflicts between modes. A highly constrained right-of-way (e.g. Broadway at Brand) may be designated as both a Primary Transit Street and a Primary Pedestrian Street, while still needing to serve some automobile traffic. Something has to give. In the case of Broadway at Brand, four lanes are created by removing parking – providing enough street capacity to keep autos and transit moving – while pedestrians gain a finely detailed streetscape, but lose the buffer the parking had provided. This design, probably necessarily, resolves the conflict by giving first priority to transit over pedestrians.

When removal of the on-street parking pedestrian buffer is absolutely necessary to achieve transit performance measures, several design strategies - such as installation of additional landscaping, pedestrian-scaled lighting, street furniture, public art, and/or vertical signage elements - can be implemented to re-establish some semblance of a pedestrian buffer. Examples of these strategies are shown in Figure 2-4. It is critical to note that adequate sidewalk widths and clear travel paths should be maintained in conjunction with the deployment of these pedestrian buffer design strategies, per minimal ADA requirements and sidewalk width standards, especially for Primary Pedestrian Streets.

2.3.3 PERFORMANCE MEASURES FOR A NEW STREET TYPOLOGY

Glendale's existing primary transportation performance measure, Automobile Level of Service (LOS), is an important performance measure, and this *Study* does not propose that it should be abandoned. Measuring auto performance remains key, and should remain the primary measure of performance on the Primary Auto Streets. However, Glendale needs additional performance measures, to be able to measure how well other modes of transportation are doing, and in particular, how well transit is performing on the Primary Transit Network.[2]

The City of Glendale is most interested in allowing its transportation system to accommodate planned growth in a sustainable manner, with a strong focus on quality of life. For Glendale, achieving this will require a new focus, including performance measures, that concentrates on moving people rather than automobiles, particularly on the streets of the Primary Transit Network. Overall, the focus that is proposed in this *Study*, which we recommend should be adopted in the *General Plan*, environmental compliance guidelines, congestion management program, and elsewhere as appropriate, is the following:

- Level of Service should reflect "person delay" rather than "vehicle delay."
- Volume-to-Capacity ratios should examine "person capacity" rather than "vehicle capacity."

Recommended Transit Performance Measures

The new performance indicators for all transit services operating in downtown Glendale, including both regional and local service, (with the proposed goal indicated in parentheses) are as follows:

- **Mode Split**: Increase the transit mode share for trips within downtown Glendale (10%), and also between Glendale and neighboring cities (8%).
- **Productivity for Shuttle Service**: Measured in Passengers per Revenue Service Hour (Buzz = 20 passengers/hour, Beeline = 15 passengers/hour).
- **Travel Speeds on Transit Priority Streets**: Measured as percentage of posted speed limit (transit speed greater than or equal to 35% of the posted speed limit for all services combined).
- **Connectivity**: Transit ridership will increase to the extent that transit services can be packaged as a single system.
- **Fares**: Measured in farebox recovery (Buzz is free; all other fares to recover at least 15% from farebox).

Recommendation 2.4

Use performance measures as a guide for downtown streets, as follows:

a. Use auto performance measures for downtown streets to focus on optimizing the person-carrying capacity of streets rather than vehicle-carrying capacity.

b. Use transit performance measures as a guide for downtown streets, including a new performance indicator – Transit Quality and Level of Service – that complements existing transit performance indicators.

c. Use pedestrian and bicycle performance measures.

2 These additional performance measures would be used as a guide, rather than for analysis.

A complete explanation of these standards, including all variations for local and regional service, can be found in the section entitled "Measuring Success" at the end of Chapter 4 (Transit Service).

Other Performance Measures

To implement this overall approach, Appendix 2A examines the following specific level of service measures, which cover each of the various modes in turn:

- Vehicle Level of Service (adopted)
- Transit Quality of Service and Level of Service
- Pedestrian Level of Service
- Bicycle Level of Service
- Freight Level of Service

This approach recognizes that no transportation planning process for any mode takes place in isolation. Smart transportation planning must take into account other modes sharing (and competing for) space on each major street. Based on this recognition, this *Study* provides a process that focuses on bringing the different modes together in consideration of the land use context along each street. By considering the transportation modes together with the context, it provides the opportunity to:

1. Balance the often competing needs of the different modes within different street/building contexts.
2. Inform a process of compromise in decisions about street design and operation whereby the net public gain for the community can be maximized while the net impact on different modes and street/building contexts can be minimized.

2.3.4 CONCLUSIONS

Downtown Glendale already has many of the features that make for a great place to walk: it is compact and mixed-use, providing many of the necessities of daily life within a five-minute walk; it has an established network of traditional streets, blocks, and buildings that are generally conducive to walking; and the *Downtown Specific Plan* provides guidelines for architecture and urban design that help create good pedestrian conditions. By implementing the guidelines in this chapter for Primary Pedestrian Streets and Primary Transit Streets, Glendale will broaden its focus on moving people rather than simply moving vehicles.

By establishing the Primary Transit Network and designating the Primary Transit Streets on which this network must move, Glendale will achieve reliability and speed for its transit services. Because the buses operating on these Primary Transit Streets carry the majority of the system's riders, the improvements made on the streets will have a magnified impact on both ridership and service costs. By reworking the Primary Transit Streets to improve speed and reliability, Glendale will achieve the greatest savings in service hours, and will reduce travel times and schedule variability for the greatest number of riders. By investing in pedestrian improvements and transit stop improvements on these streets, the City will target scarce transportation dollars toward improvements that benefit the greatest number of transit passengers.

On Primary Pedestrian Streets, the conditions most important to pedestrians will be improved, encouraging more people to "park once" or take other modes and walk through downtown. Increased pedestrian activity is good for business, as pedestrians become "window shoppers" and eventually customers. Increased pedestrian activity increases everyone's safety by providing more "eyes on the street." Perhaps most important, increased pedestrian activity makes a city a real "place" — not just a place to pass through.

On the Primary Auto Streets, the proposed capacity enhancements (detailed in Chapter 3) will provide, insofar as is possible given the physical constraints of the existing downtown environment, additional automobile capacity.

Overall, the investments and policy changes described in this chapter will improve the safety, convenience, and joy of walking in downtown Glendale, increase the efficiency of the transportation system, and help Glendale achieve its goals for ongoing revitalization of downtown without significantly increasing traffic congestion.

Los Angeles Metro Rapid Program

As a local example of quickly deployed investment in transit, it is worth noting the success of the Metro Rapid Program. This partnership between the Los Angeles County Metropolitan Transportation Authority (MTA) and the city of Los Angeles Department of Transportation (LADOT) resulted in major improvements in street design, designed to protect the speed and reliability of transit, with investment in frequent service, better buses, and less frequent stops.

In basic terms, on the transit provider side (primarily under the MTA's control), the key attributes are: frequent service, headway-based schedules, simple route layouts, less frequent stops, level boarding and alighting, and carefully branded, color-coded buses. On the street design side (primarily under the LADOT's control), the key attributes are: bus signal priority and improved stops designed to emulate light rail transit stations (with amenities such as bus bulb-outs and better shelters, real-time arrival displays, etc.).

The program is a primary example of how close cooperation between city traffic engineers (the professionals who design streets, set street standards, and set measures for the performance of streets) and transit planners (who route and schedule buses) can result in a major increase in the performance of transit service - even when relatively little funding is available, and the prospects for rail transit funding appear distant.

According to the Federal Transit Administration (FTA), the result is an express arterial bus service that has reduced passenger travel times by as much as 29%, with ridership increases of nearly 40%. According to the FTA, approximately one-third of the reduction in travel time results from the bus signal priority system, with the majority of the balance attributed to fewer stops and headway-based schedules.

MetroRapid images courtesy of Suisman Urban Design and LA MTA.

STREET CAPACITY ENHANCEMENTS

3

Auto access will continue to be a key part of the economic health of the downtown. While most streets in Glendale are at the point where their widths cannot easily be further increased, there are some locations where motor vehicle capacity can usefully be enhanced. Glendale's Primary Auto Streets (such as Central Avenue, Colorado Street and Glendale Avenue) are intended to give first priority to moving automobile traffic. This chapter describes the specific capacity enhancements proposed for these Primary Auto Streets and for the freeway interchanges (and certain associated streets, such as the frontage roads) serving downtown.

Taken together, these capacity enhancements will provide significant additional capacity for automobile traffic into and out of downtown, doing what can reasonably be done to add capacity given the constraints of existing buildings, freeway interchange locations, and other aspects of the existing downtown environment.

3.1 PRINCIPLES

While it is not possible for Glendale to build its way out of traffic congestion, a multi-modal mobility plan must consider the needs of automobile drivers. Auto access is and will continue to be a key part of the economic health of the downtown. Where feasible, on those streets where first priority is given to moving automobile traffic, a set of capital improvements is proposed to increase automobile capacity. This leads to the following principle:

> *Glendale's Primary Auto Streets (such as Central Avenue, Colorado Street, and Glendale Avenue) are intended to give first priority to moving automobile traffic. On the streets, a capacity enhancement and freeway access improvement program will be completed.*

Many of the proposed capacity enhancements included in this chapter are already included as mitigation measures for the Town Center development. Implementing these core improvements will create the framework for longer term improvements on those streets.

3.2 SUMMARY OF RECOMMENDATIONS

Recommendation 3.1

Implement a capacity enhancement and freeway access improvement program for Glendale Avenue, Colorado Street, Central Avenue, and the appropriate freeway interchanges and frontage roads, as depicted in the Appendix A of the *Downtown Specific Plan*.

a. Develop and submit to Council a plan to implement the street capacity enhancement improvements not requiring the acquisition of rights-of-way identified in Appendix A of the DSP no later than July 1, 2007.

b. Implement a capacity enhancement and freeway access improvement program for improvements not requiring acquisition of rights-of-way no later than December 31, 2010 (as identified in Appendix A of the DSP).

c. Implement street capacity enhancement improvements that do require the acquisition of rights-of-way identified in Appendix A of the DSP as opportunities develop and funding allows.

3.3 DISCUSSION OF RECOMMENDATIONS

As part of the *Downtown Specific Plan*, the City of Glendale has adopted a significant capacity enhancement and freeway access improvement program for Glendale Avenue, Colorado Street, and Central Avenue, as well as certain freeway interchanges and frontage roads. This capacity enhancement and freeway access improvement program is defined and depicted in the "*Downtown Mobility Study* - Freeway Access and Capacity Enhancements" report submitted to the City Council on October 3, 2006, and more specifically in Appendix A of the *Downtown Specific Plan*. The planned and proposed capacity enhancements are illustrated and described below.

Recommendation 3.1
Implement a capacity enhancement and freeway access improvement program for Glendale Avenue, Colorado Street, Central Avenue and the appropriate freeway interchanges and frontage roads, as depicted in the Appendix A of the *Downtown Specific Plan*.

- **a. Develop and submit to Council a plan to implement the street capacity enhancement improvements not requiring the acquisition of rights-of-way identified in Appendix A of the DSP no later than July 1, 2007.**
- **b. Implement a capacity enhancement and freeway access improvement program for improvements not requiring acquisition of rights-of-way no later than December 31, 2010 (as identified in Appendix A of the DSP).**
- **c. Implement street capacity enhancement improvements that do require the acquisition of rights-of-way identified in Appendix A of the DSP as opportunities develop and funding allows.**

Capacity Enhancements

The capacity enhancements recommended in the *Downtown Mobility Study* build on mitigation measures already anticipated as part of the Town Center project. These mitigations include improvements on the key auto streets — Colorado, Central, and Glendale Avenue. The initial mitigations are expected to be implemented in time for the opening of the Town Center in 2008.

Colorado Street

Colorado Street between Central and Brand will be widened from two lanes to three travel lanes plus a center left-turn lane in each direction (as shown in Figure 3-1A). This is a continuation of the dimensions of Colorado adjacent to the Galleria (7 lanes). Minimal widening will occur on Colorado between Brand and Glendale in the short term. In the long term more substantial widenings will occur and parking prohibitions will go into effect on the north and south sides of the street. The roadway widenings on Colorado will require moving curbs back on both sides of the street (see Figure 3-1A).

After mitigation measures on Colorado are complete, longer range plans for Colorado Street between I-5 and Central will increase capacity from two through travel lanes to three lanes in both directions, from a total of 5 to a total of 7 lanes across. Currently there is no on-street parking on either side of Colorado west of Pacific. These enhancements are contingent on redevelopment over time, as acquisition of approximately 12 feet of additional right-of-way will be required (as shown in Figure 3-1B). Colorado Street between Brand and Glendale will be widened and parking removed on both sides to increase the existing two eastbound lanes to three and, in addition, to provide a continuous center left-turn lane.

Central Avenue

The Town Center plan requires **Central Avenue** between Colorado and Wilson to be widened from two lanes to three lanes in each direction plus a center left-turn lane (as shown in Figure 3-2A). This will require moving curbs between Colorado and Broadway and a combination of moving curbs and parking restrictions between Broadway and Wilson. Parking will be prohibited at all times on the northbound side of Central and parking will be prohibited at the pm peak on the southbound side of Central (see Figures 3-2A and 3-2B)

Beyond the Town Center mitigation project, Central Avenue between Wilson and Lexington will increase from two lanes to three lanes in each direction which will require minor moving of curb lines on both sides of the street (as shown in Figure 3-2B). Central between Lexington and SR-134 will increase from two lanes to three lanes in the southbound direction with no changes for the northbound side (which is already three lanes in these blocks). The southbound increase will require curbs to be moved outward by two feet on both sides of the street. A more substantial 10-foot widening on the east side between Doran and Sanchez would occur as part of an adjacent parcel's redevelopment.

Glendale Avenue

Mitigation measures for **Glendale Avenue** between Harvard and Broadway include on-street parking restrictions on the northbound side of the street during the PM peak to allow for a third lane of northbound traffic from 4 pm to 6 pm (as shown in Figure 3-3). This will not require any widening of the existing roadway.

Longer term, Glendale Avenue between Broadway and Doran will be increased from two lanes to three lanes in the northbound direction during the PM peak (4-6 pm) with no change in the southbound lanes (as shown in Figure 3-3). This will only require a parking prohibition during the PM peak on the east side from Broadway to California. From California to Lexington this will require widening on both sides of the street; the eastern widening will also require right-of-way acquisition. Between Lexington and Doran this will require a tapering widening from 4 feet to zero feet on the eastern side of the street.

Freeway Access Enhancements and Street Extensions

The following changes are proposed for improving freeway access:

- Restripe Goode Avenue to add a fourth westbound travel lane. Widen Sanchez Drive on the south side and restripe to add a fourth eastbound travel lane (as shown in Figure 3-4).
- Extend Orange Street north to Goode Avenue (as shown in Figure 3-5), including right-of-way acquisition (currently a 1,000-space parking garage is on this site).

There are various options for Sanchez Drive which remain under consideration and will require further study:

- Extend Sanchez east to Maryland Avenue as an eastbound one-way (as shown in Figure 3-6).
- Extend Sanchez further east as a two-way street to Geneva (as shown in Figure 3-7), including right-of-way acquisition.
- Extend Sanchez to Geneva as an eastbound one-way and convert Monterey Road to one-way westbound between Geneva and Brand (as shown in Figure 3-8).

Another option in the long term for improving freeway access is to extend Monterey Road over Verdugo Wash with a bridge to connect to Glenoaks Boulevard (as shown in Figure 3-9). This would require right-of-way acquisition as well as a partial street closure on Glenoaks Boulevard.

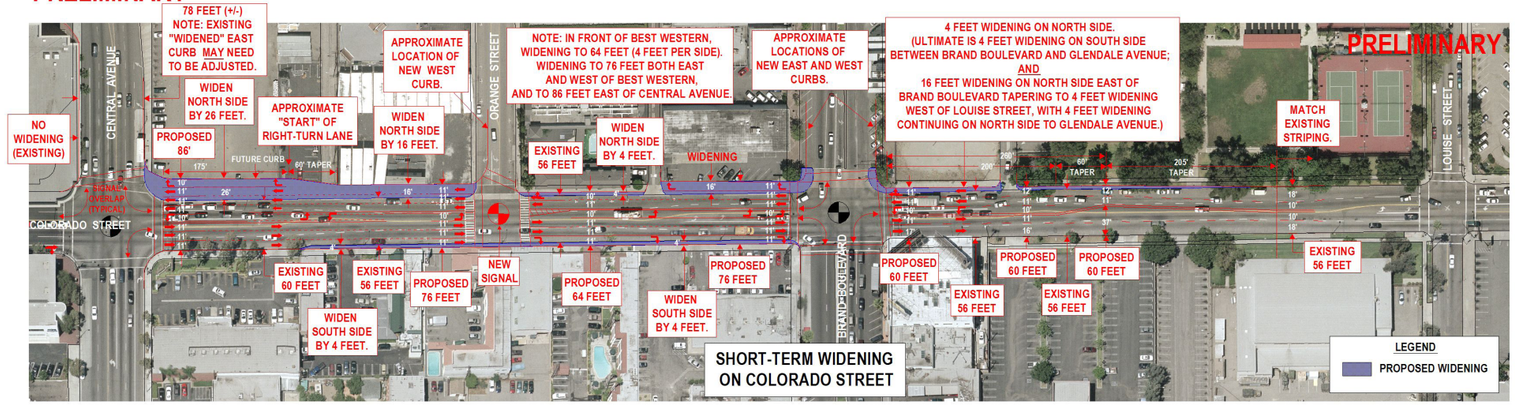
The cumulative freeway access enhancements and street extensions are shown in Figure 3-10 (with Sanchez as a two-way to Geneva) and Figure 3-11 (with Sanchez as a one-way to Geneva).

3.3.2 CONCLUSIONS

As described in previous chapters, **Primary Auto Streets** are intended to give first priority to moving automobile traffic. The package of capacity enhancements proposed in this chapter will provide significant additional capacity for these Primary Auto Streets and for the freeway interchanges (and certain associated streets, such as the frontage roads) serving downtown. Taken together, these capital projects will maximize traffic flow into and out of downtown, within the constraints of existing buildings, freeway interchange locations, and other aspects of the existing downtown environment.

Figure 3-1A Proposed Capacity Enhancements for Colorado Street

PRELIMINARY



N
NO SCALE
JUNE 20, 2006
REVISED AUGUST 18, 2006

SOURCE: PUBLIC WORKS - TRAFFIC & TRANSPORTATION DIVISION

PRELIMINARY

SEE ABOVE FOR COLORADO BETWEEN CENTRAL AVENUE AND BRAND BOULEVARD

PRELIMINARY

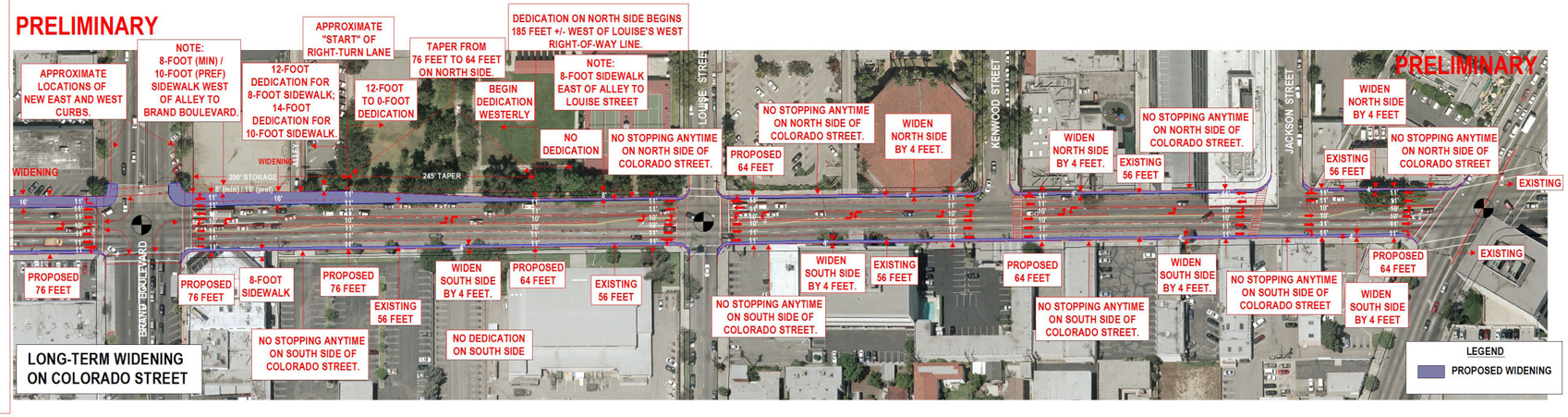
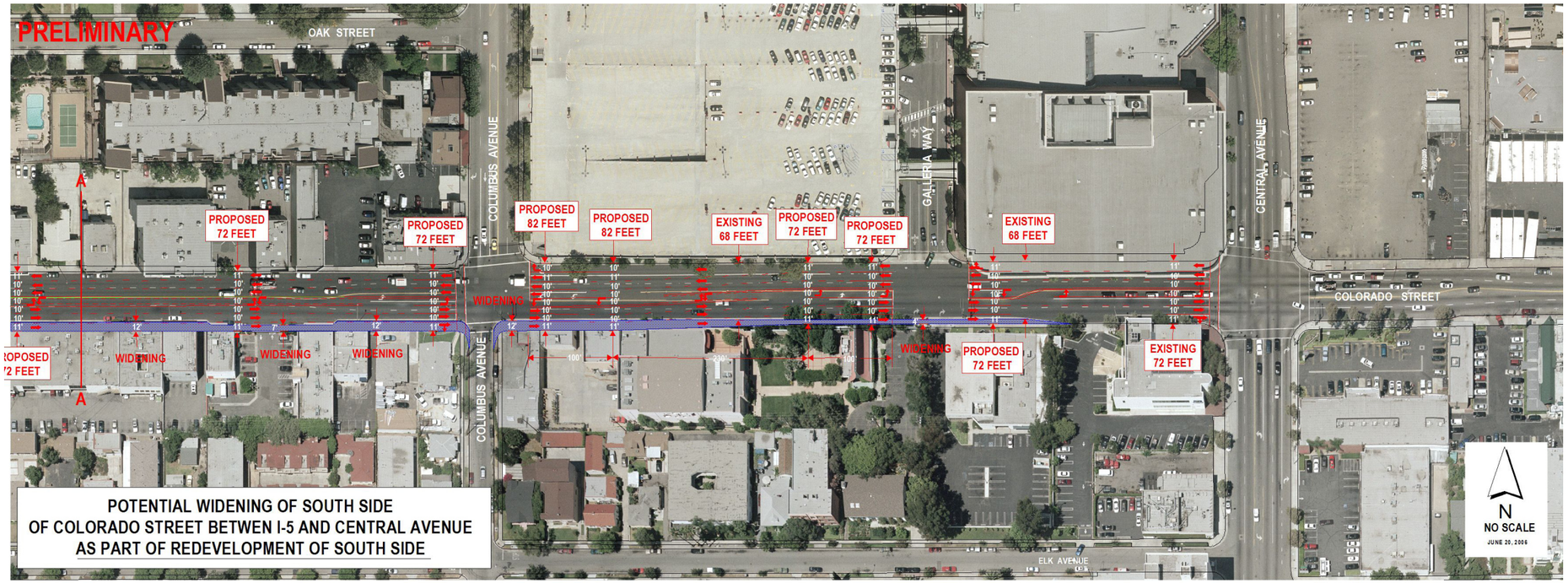
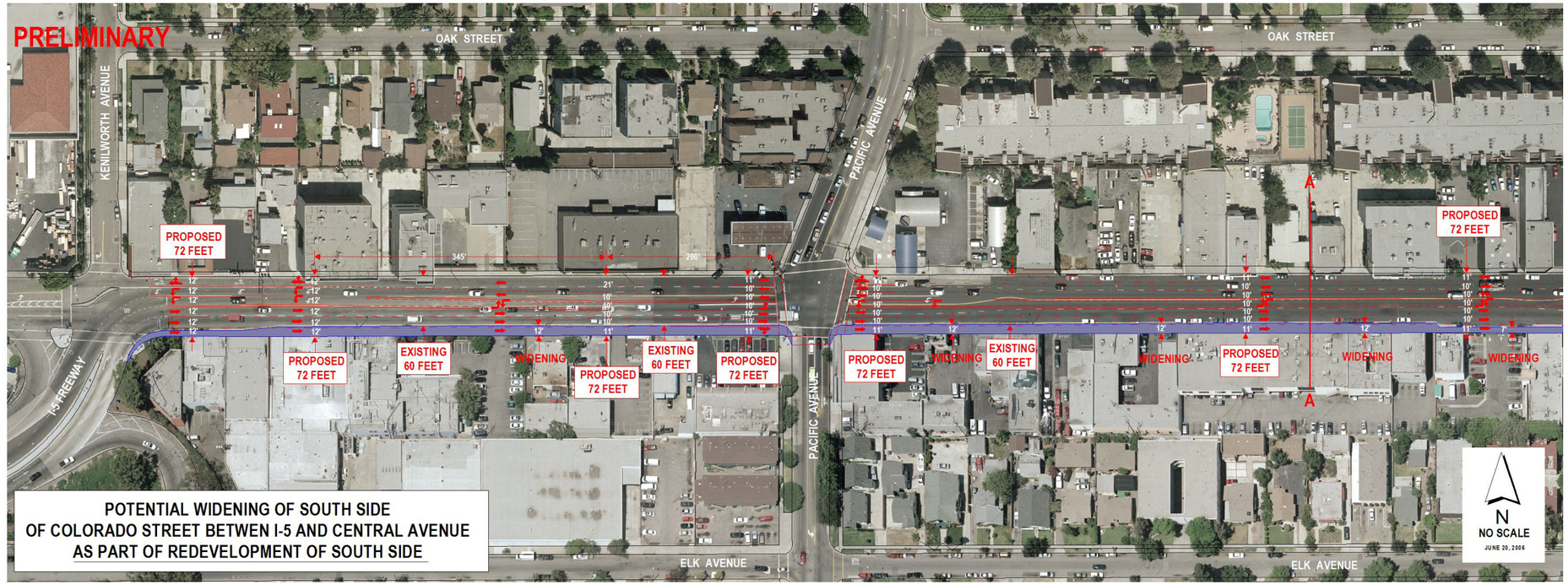


Figure 3-1B Proposed Capacity Enhancements for Colorado Street

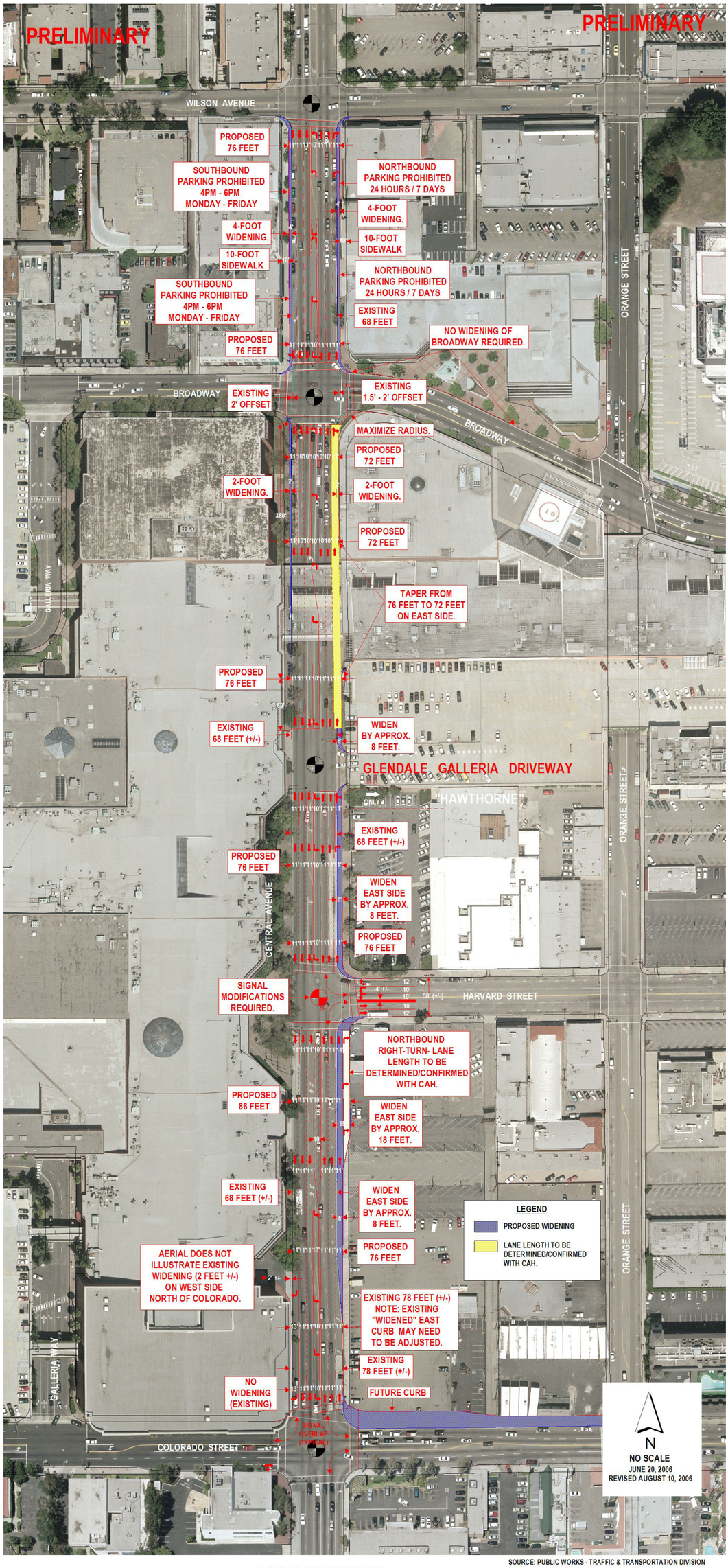


SOURCE: PUBLIC WORKS - TRAFFIC & TRANSPORTATION DIVISION



SOURCE: PUBLIC WORKS - TRAFFIC & TRANSPORTATION DIVISION

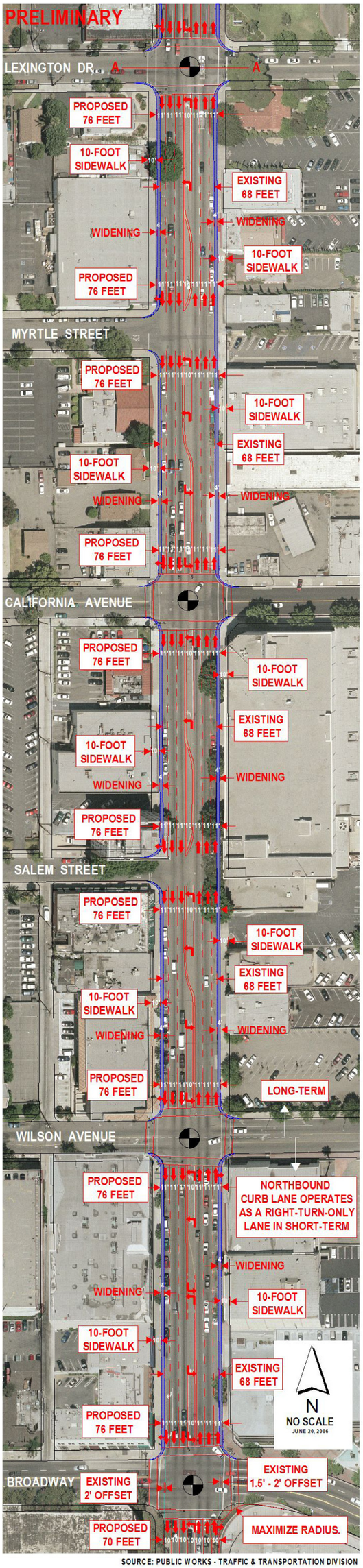
Figure 3-2A Proposed Capacity Enhancements for Central Avenue



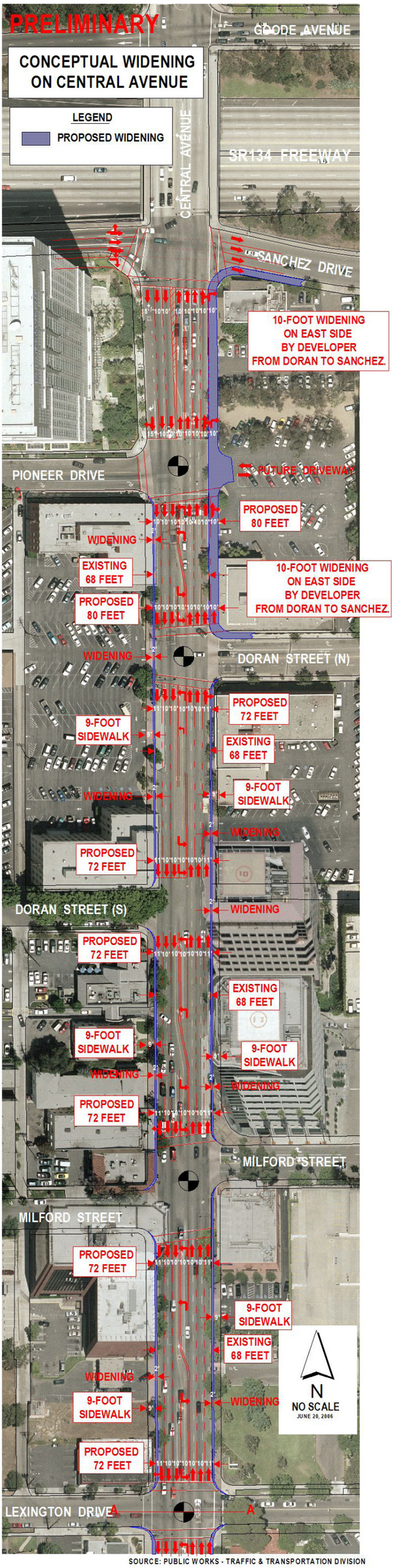
SOURCE: PUBLIC WORKS - TRAFFIC & TRANSPORTATION DIVISION

PRELIMINARY

Figure 3-2B Proposed Capacity Enhancements for Central Avenue



SOURCE: PUBLIC WORKS - TRAFFIC & TRANSPORTATION DIVISION



SOURCE: PUBLIC WORKS - TRAFFIC & TRANSPORTATION DIVISION

Figure 3-3 Proposed Capacity Enhancements for Glendale Avenue

Figure 3-4 Proposed Freeway Access Enhancements for Goode Avenue and Sanchez Drive

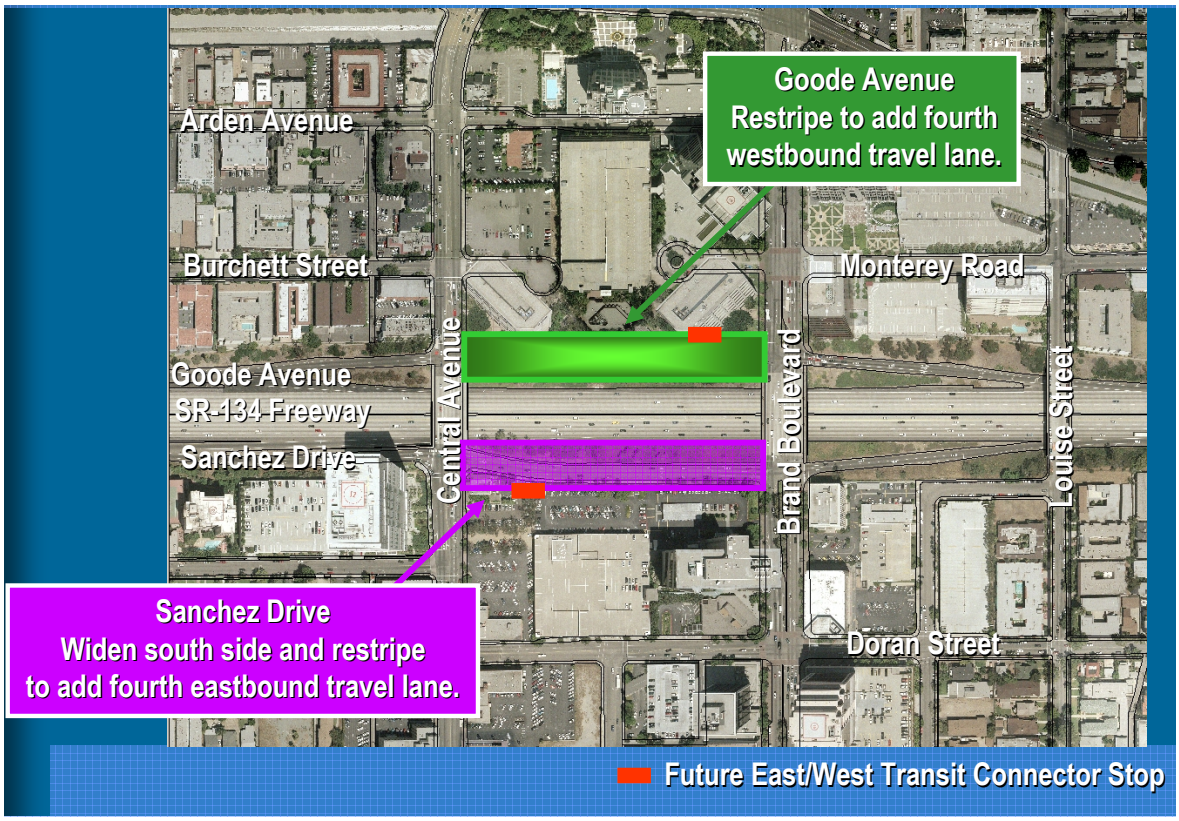


Figure 3-5 Proposed Freeway Access Enhancements for Orange Street Extension to Goode Avenue

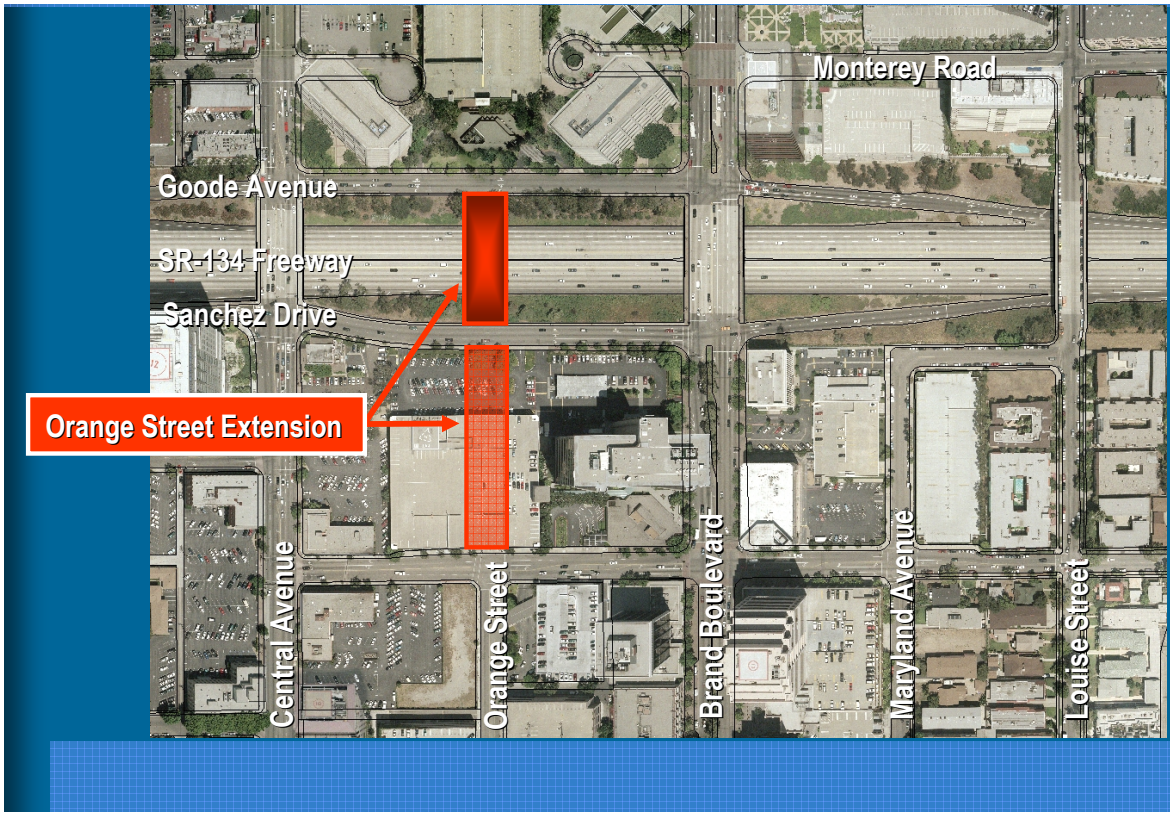


Figure 3-6 Proposed Freeway Access Enhancements for Sanchez Drive Extension to Maryland Avenue

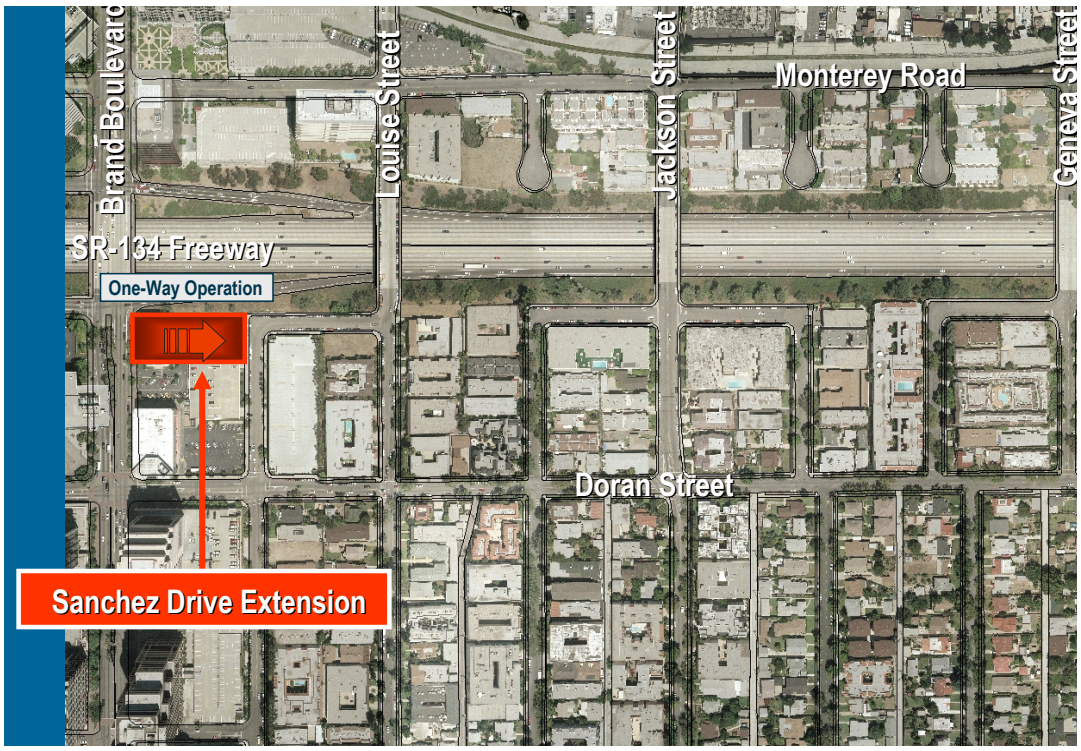


Figure 3-7 Proposed Freeway Access Enhancements for Sanchez Drive Extension (Two-Way) to Geneva Street

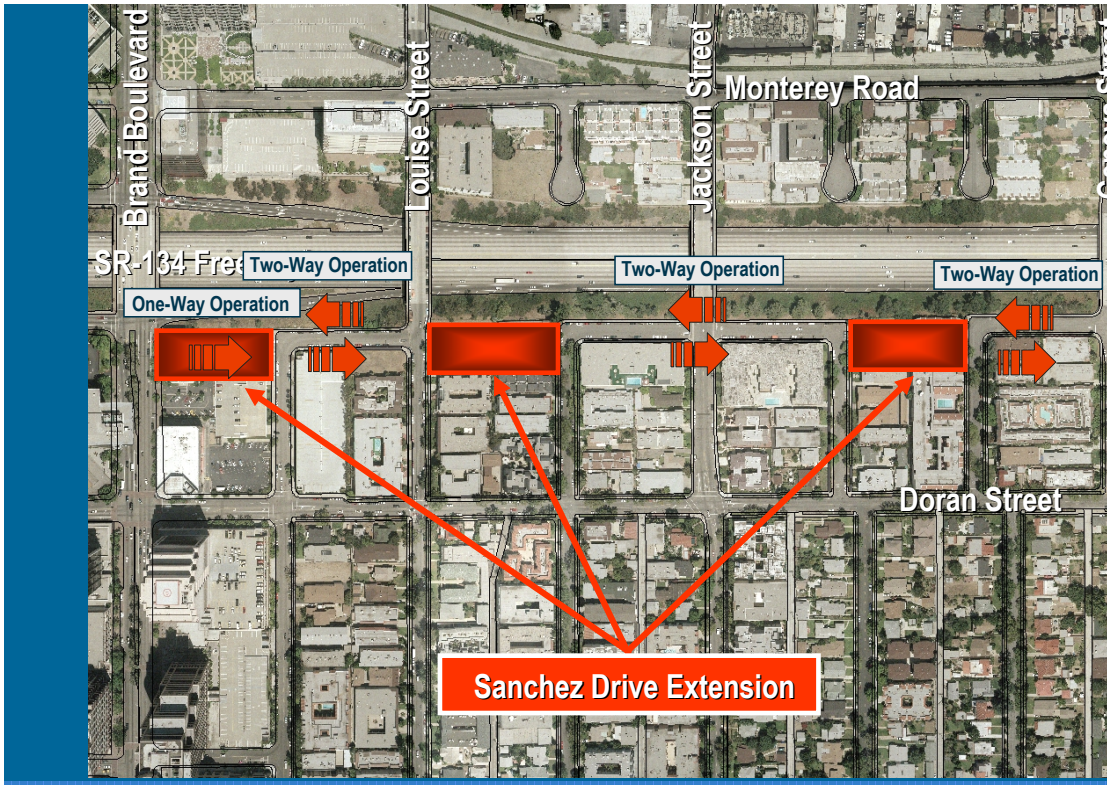


Figure 3-8 Proposed Freeway Access Enhancements for Sanchez Drive Extension (One-Way) to Geneva Street

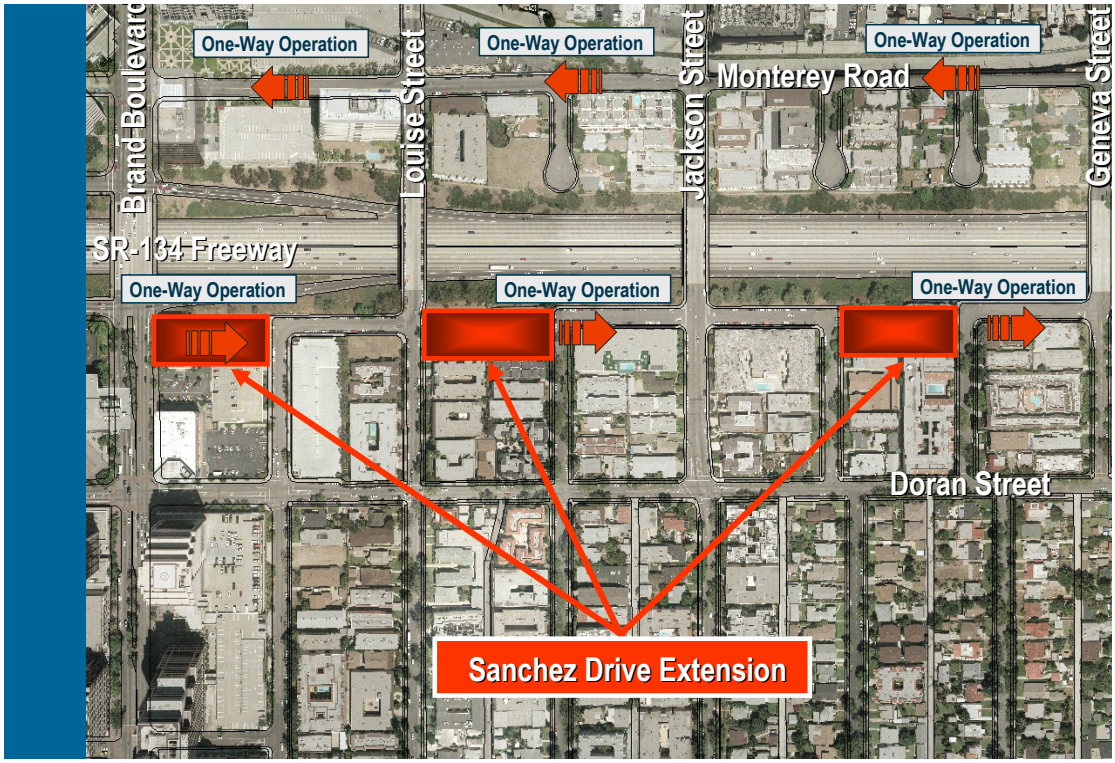


Figure 3-9 Potential Freeway Access Enhancements for Monterey Road Extension over Verdugo Wash

Figure 3-10 Proposed Freeway Access Enhancements: Cumulative with Sanchez Drive Two-Way to Geneva Street

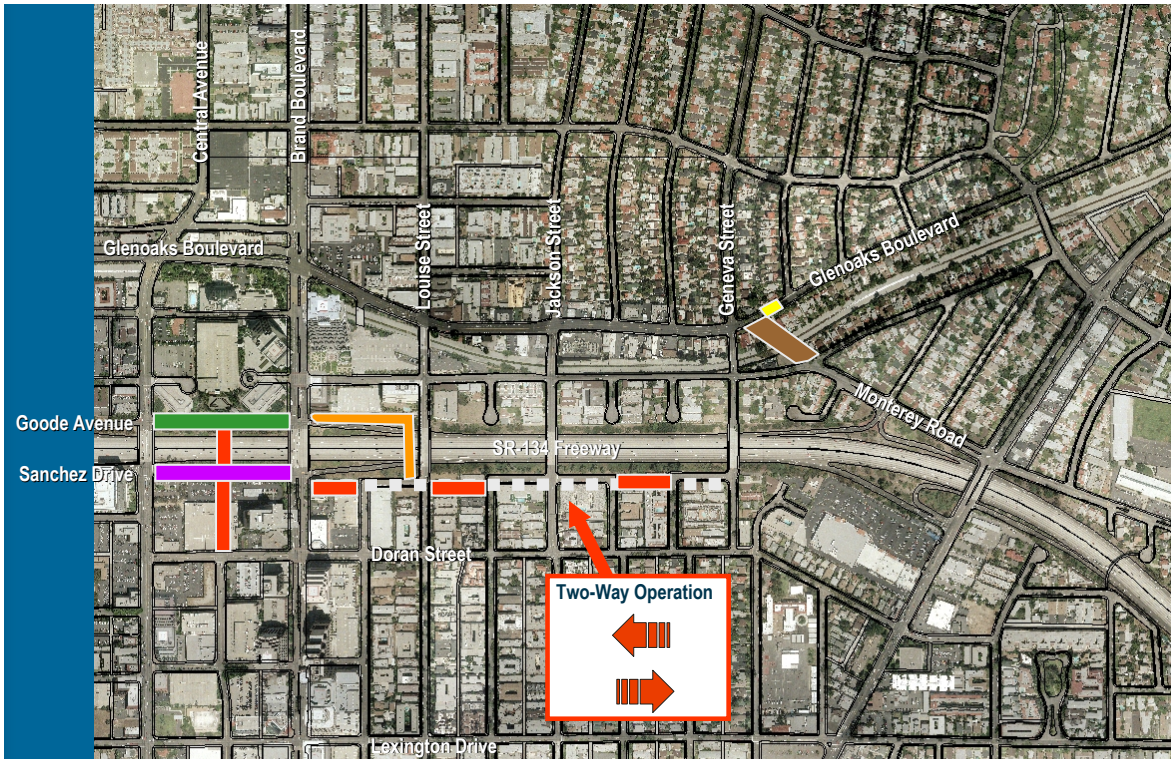
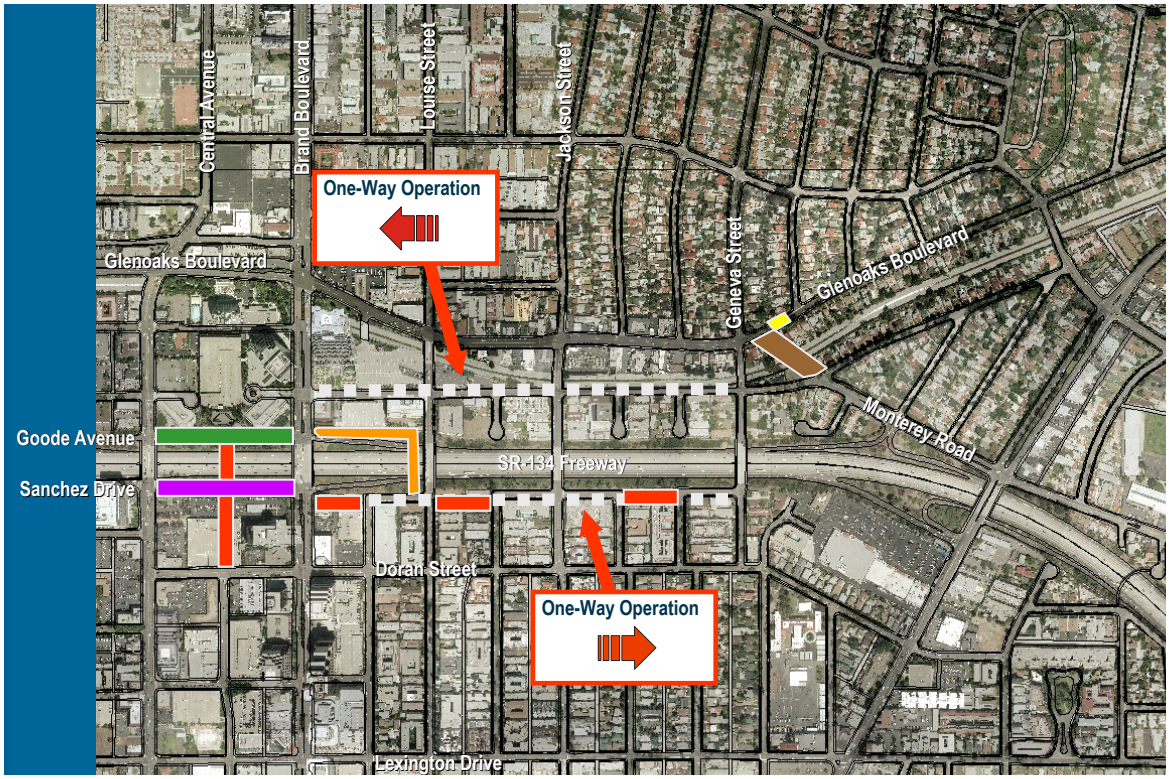


Figure 3-11 Proposed Freeway Access Enhancements: Cumulative with Sanchez Drive One-Way to Geneva Street



TRANSIT SERVICE

4

Transit services in Glendale include the Beeline local transit system and the services provided by the MTA. These systems combine to provide frequent transit service on many key streets in downtown Glendale.

Transit service is offered at least every 10 minutes on Brand, Central south of Broadway, San Fernando, Glendale Boulevard, and Broadway. With service this frequent, riders do not need to carry a schedule, but can depend on the next bus arriving soon after they reach their bus stop. Figure 4-1 shows the existing transit services in the study area, including services provided by MTA and the City of Glendale.

Despite this network of high frequency transit services, many residents in Glendale find transit services inadequate, or are unaware of the level of service actually provided.

4.1 PRINCIPLES

The key principles for improving transit service in Glendale include increasing awareness about the services that are available, and marketing a complete system to riders who can choose whether an MTA or Beeline route serves them best. The *Downtown Mobility Study* recommends operating a new shuttle route which will be dedicated to downtown travel, and linking regional transit corridors with the commercial, entertainment and employment opportunities in the Glendale core. The shuttle route, which can begin service almost immediately using existing resources, should ultimately be improved and expanded for a long term future that may include streetcar operations.

- Create and market a comprehensive system of coordinated regional and local transit that takes advantage of the relatively high level of service that already exists in Glendale, and emphasizes new linkages where needed.
- Create and expand on a downtown circulator service that connects regional transit nodes with residential, shopping, entertainment and employment destinations downtown and promotes a "park once" environment.
- Create transit infrastructure that supports a positive urban environment and maximizes transit ridership downtown.
- Support transit priority treatments on streets with high quality transit service.

4.2 SUMMARY OF RECOMMENDATIONS

Recommendation 4.1
Market the transit resources in Glendale as a single system to show the richness of the transit network in and through Glendale.

Recommendation 4.2
Create a downtown shuttle to encourage non-auto circulation through the downtown. The route should connect regional transit, and key downtown destinations.

a. Begin service within existing resources.

b. Change downtown shuttle to a hybrid bus or other unique vehicle.

c. Implement a new technology for shuttle and other lines.

Recommendation 4.3
Operate the shuttle as frequently as possible, with no fare collection and with a unique and attractive vehicle.

Recommendation 4.4
Implement the recommendations of the *Short Range Transit Plan* including service and capital improvements that affect downtown.

Recommendation 4.5
Bring the price of all transit fares closer together, charging at least $0.50 per trip on the Beeline. Attempt to negotiate with MTA for a local Glendale fare that will match Beeline fares within the City limits.

Recommendation 4.6
Consolidate high frequency services to the extent possible on a limited number of transit priority streets, which will be optimized for transit operation.

Recommendation 4.7
Consider signal priority for and other operational enhancements on all streets with combined service of at least 10 minutes during peak periods, including all streets with Metro Rapid service.

Recommendation 4.8
Work with MTA to create an "east-west" connector service operating on the HOV infrastructure of Highway 134, and provide convenient connections between this new service and the downtown shuttle.

Recommendation 4.9
Create amenity standards for downtown transit stops based on the number of riders boarding at each location. Maximize amenities including enhanced signage, shelters and other amenities along the shuttle route and other transit priority streets.

Recommendation 4.10
Incorporate real time information in all high amenity bus shelters using Next Bus technology.

Recommendation 4.11
Consider utilizing new revenue generated by the Downtown Transportation and Parking Management District to enhance shuttle and other transit services.

Recommendation 4.12
Utilize the Universal Transit Pass to encourage transit ridership among new downtown residents by requiring passes be provided to new residents through condominium fees.

Recommendation 4.13
Develop performance standards for transit streets that incorporate transit quality of service, and go beyond auto level of service.

4.3 DISCUSSION OF RECOMMENDATIONS

The transit policy recommendations include improvements to local and regional service connectivity, the development of a new downtown shuttle, and improvements in customer experience. Improvements to the Beeline service are based on the *Short Range Transit Plan* combined with other enhancements that can be implemented as funding becomes available.

Figure 4-2 shows the proposed Beeline service network and peak service as proposed by the *Short Range Transit Plan*.

Figure 4-1 Glendale Beeline and MTA Existing Transit Service

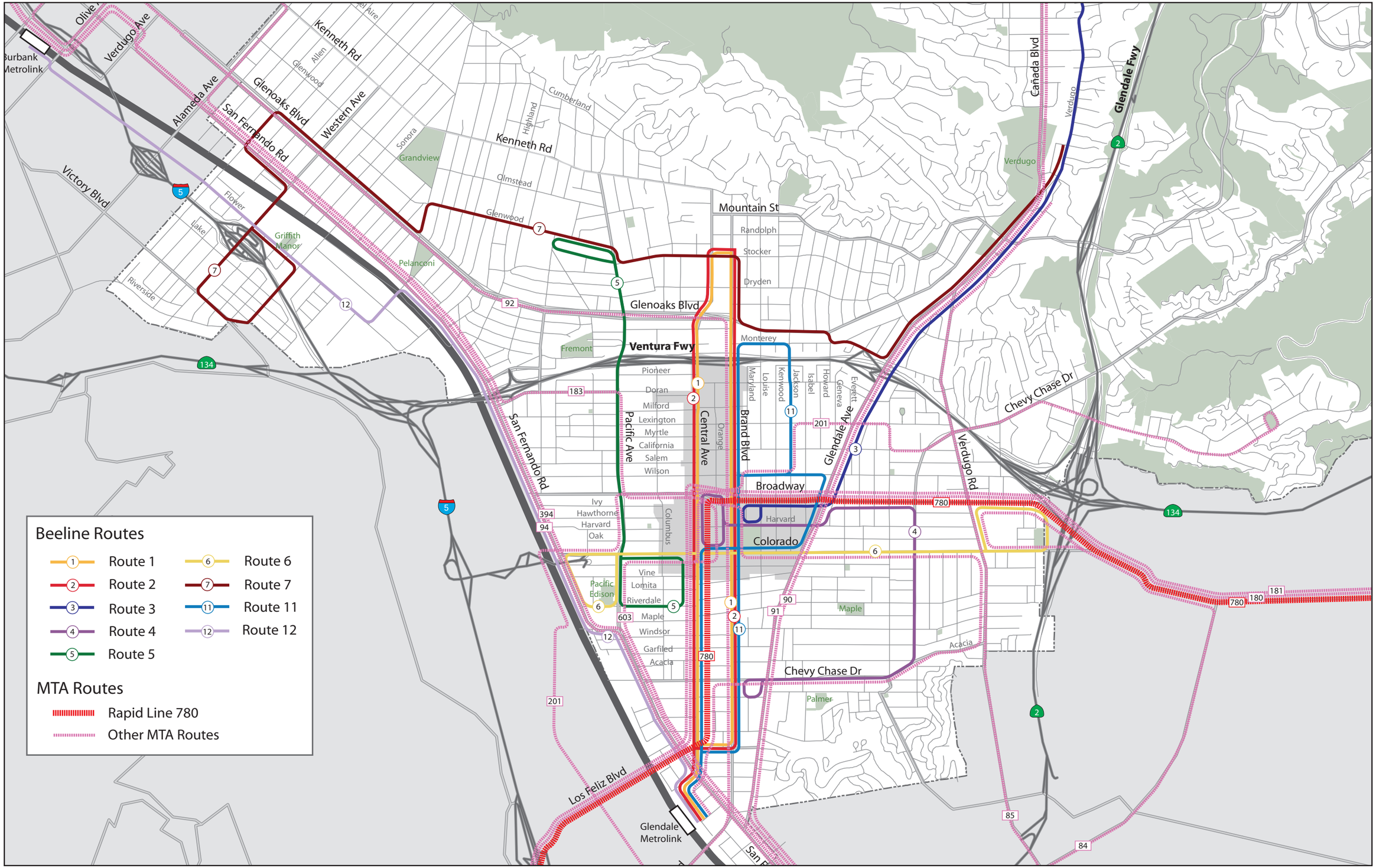
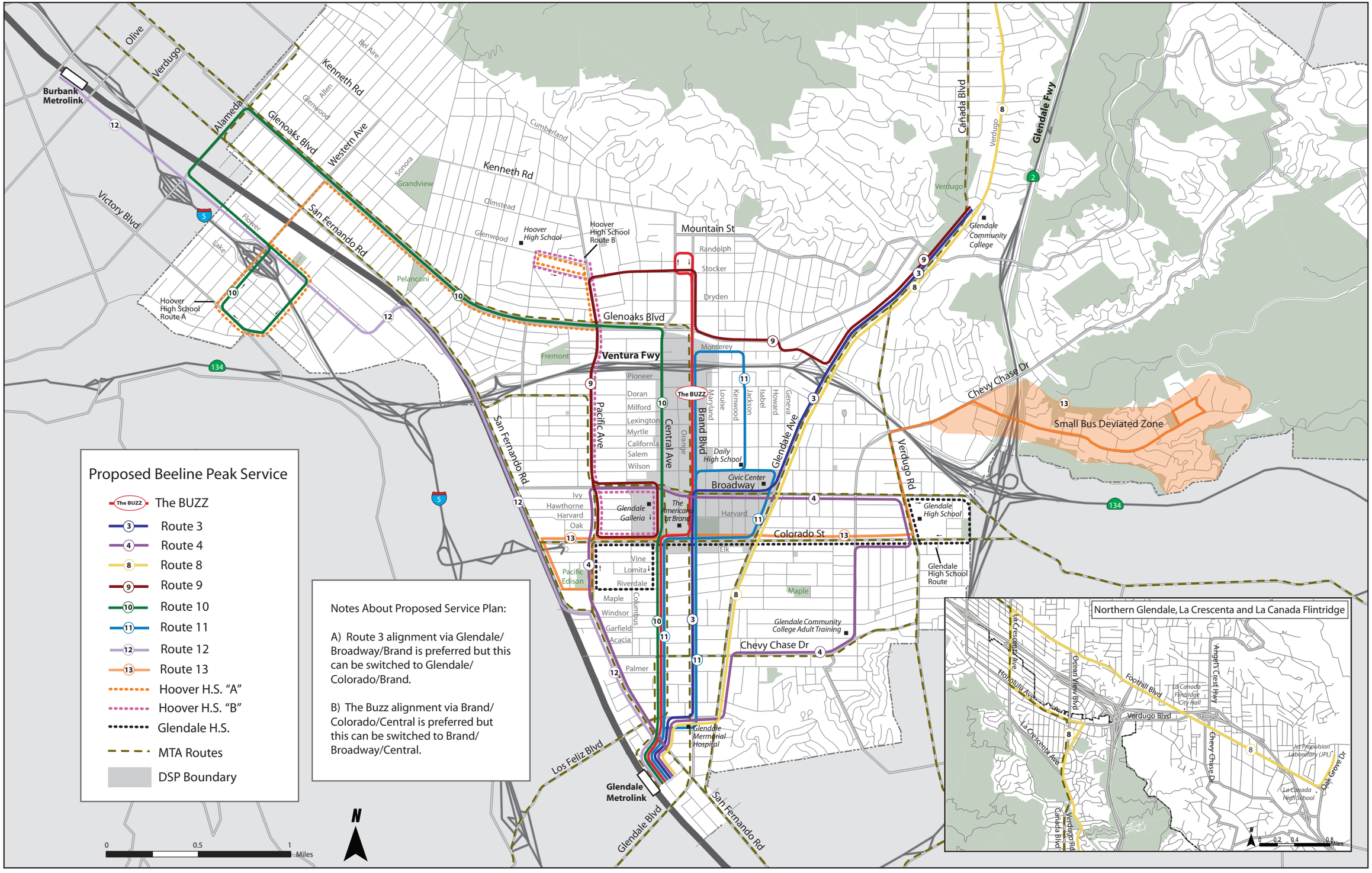


Figure 4-2 Glendale Beeline Proposed Peak Period Service



4.3.1 DEVELOPING A COORDINATED REGIONAL-LOCAL TRANSIT SYSTEM

Glendale's Beeline system is a critical local link in the overall transit system serving Glendale's residents and businesses. However, travel demand projections suggest that more than 50% of work trips, and a significant share of total trips made by Glendale residents, are made outside the City of Glendale. Therefore, it is essential that the Beeline system focus not only on providing excellent local service, but also on connecting to regional transit services.

Transit ridership on all transit systems will be enhanced to the extent that all transit services in Glendale can be seen as a single seamless network. To enhance the packaging of transit services, there are a number of potential cooperative projects that Glendale could work on with the MTA.

- Develop a single map showing all transit services in Glendale, emphasizing those corridors with very frequent service. This could be based on the "12-Minute Frequency" map that MTA has already developed. By adding the local and regional services together, Glendale will be able to show significant high frequency service and local-regional connectivity.
- Emphasize "try transit" options like the "Try One in Five" campaigns being run by many other cities. The objective is to get people to try transit at least one day in five. The campaign should focus on local-regional connectivity, so that potential transit riders can see how they might leave their cars at home.
- Implement Universal Transit Fares and Transit Passes. Currently, Beeline fares are $0.25 for local trips, while MTA routes – serving the same stops – cost $1.25 for local trips. This creates situations where passengers "pass up" an MTA trip and wait longer simply because Beeline service is less expensive. The fare recommendations in the *Short Range Transit Plan* call for increasing fares on the Beeline ride except on the shuttle which would be fare free. Ideally, MTA would agree to reduce its fare for local travel within Glendale to match Beeline local fares. Given that these trips are very short, a justification could be made for decreasing the local fare to match the Beeline fare. That would simplify riders' decisions when boarding a bus for a local trip – rather than waiting for the least expensive option, the rider could simply take whichever ever service comes first. Ridership on both systems is likely to improve long term if fares can be coordinated. Another way of coordinating fares is to emphasize universal fare instruments, such as the Metrocard being implemented by MTA and many of the municipal operators, including Beeline. With the universal farecard, passengers can ride any system and have the proper fare simply deducted from their card balance, similar to a debit card.

Recommendation 4.1
Market the transit resources in Glendale as a single system to show the richness of the transit network in and through Glendale.

Recommendation 4.5
Bring the price of all transit fares closer together, charging at least $0.50 per trip on the Beeline. Attempt to negotiate with MTA for a local Glendale fare that will match Beeline fares within the City limits.

Recommendation 4.12
Utilize the Universal Transit Pass to encourage transit ridership among new downtown residents by requiring passes be provided to new residents through condominium fees.

Recommendation 4.4
Implement the recommendations of the *Short Range Transit Plan* including service and capital improvements that affect downtown.

ABOVE: LAMTA's regional pass.

BELOW: Local Beeline routes serve many of the same streets as MTA routes travelling through Glendale.

Successful implementation of these recommendations is dependent on implementation of the capital and operating plan developed for the *Short Range Transit Plan* (SRTP). The SRTP identifies route re-structuring needs beyond the creation of the Buzz and also outlines critical capital requirements including the need for an expanded fleet and new maintenance and storage facility.

Connectivity Between Local and Regional Service

Today, Glendale is connected to the rest of the region via four transit services:

- MTA "Local Stop" Regional Services (e.g. Routes 90, 92, 180, etc.)
- MTA Rapid Bus Service (e.g. Route 780)
- LA Commuter Express Services (e.g. CE 409 and 549)
- Metrolink Regional Rail

Figure 4-3 shows critical transfer locations between the Beeline's proposed services and other regional services in central Glendale.

Streets with overlays of frequent and fast regional service and local distributor service provided by the Beeline are identified as Primary Transit Streets. These streets are identified in Chapter 2 (Street Typology) of this report, and are designed to maintain transit quality of service and overall transit system speeds even at the expense of other modes. Key streets include Brand between Lexington and Broadway, Broadway between Glendale and Central and Central south of Colorado.

MTA Bus Connections

Glendale, Pasadena, and Hollywood are already connected to each other via Metro Rapid Route 780, which operates on Colorado Boulevard in Pasadena and Broadway/Central in Glendale before heading into Hollywood.

The MTA's current Metro Rapid Program shows a new Rapid route connecting Burbank and Glendale via San Fernando Boulevard, Highway 134 and Brand Boulevard before heading into downtown Los Angeles. Implementation of this route would allow people to travel much faster between the three cities via a simple and easy transfer between routes in downtown Glendale. End to end travel times on transit could be reduced from 120 minutes to approximately 60 minutes. While still slower than auto travel, this new service would undoubtedly be much more competitive with the auto than the traditional local-stop service currently being operated by the MTA.

Joint Beeline/Metro Rapid stops on Broadway and Central and in the future on Brand are key transfer nodes in the system and

should receive special attention. High quality amenities, real-time information, and enhanced visibility of those stops are critical, as is timed transfer or very frequent connections so that local-regional transfers can be made seamlessly.

Key transfer locations are at Glenoaks and Brand, where the proposed Metro Rapid route will connect with the Beeline, and at locations along Brand. The Brand/Broadway stop is especially critical as it brings both rapid stops together with Beeline service. A new transfer point will be created at Highway 134 once east-west connector service is initiated.

Metro Rapid routes are supplemented by Commuter Express Routes which can be accessed only at park and ride facilities on the edge of downtown Glendale.

Metrolink Connections

Metrolink, Southern California's regional rail service, provides limited all-day service connecting Glendale with downtown Los Angeles, Burbank and the Antelope Valley. The sole station in Glendale is located just south of downtown near San Fernando Road and Central. Metrolink is designed primarily to serve north/south commute period travel patterns.

Metrolink services can only be accessed at the Glendale or Burbank Metrolink stations. The Glendale Metrolink station is an important node both for regional-local connections and because it brings together nearly all local Beeline routes into a single transit center. This stop has a high priority for amenity improvements, and could serve as a "transit store" location where passes and farecards could be sold, transit information would be provided, and other public activities could be completed. The train station facility, which has been remodeled and returned to its historic appearance, stands empty for much of the day. Opportunities for transit store activity and transit supervision should be evaluated to keep this location active and to keep the system operating on time.

Recommendation 4.8

Work with MTA to create an "east-west" connector service operating on the HOV infrastructure of Highway 134, and provide convenient connections between this new service and the downtown shuttle.

ABOVE: LAMTA's Orange Line provides a quality bus experience similar to rail.

Additional Regional Connectivity Needs

While Glendale is well served by Metro Rapid and other regional services, a critical east-west gap exists in the transit network. A high volume of trips travel between the Arroyo Verdugo cities of Glendale, Burbank, and Pasadena. High-capacity investments have been made on the Gold Line to Pasadena and the Red Line to North Hollywood, but the east-west gap leaves these systems unconnected, and more importantly, leaves Glendale unconnected to either system. The proposed east-west connector would take advantage of the high capacity "diamond lane" infrastructure that exists on Highway 134, creating a high speed busway connecting the three cities, and connecting Glendale to the "north-south" high-capacity investments in the area.

The MTA is currently studying options for serving this line, which could be implemented on a relatively fast timeline using quality bus technology similar to the MTA Orange Line, at least in the short term. Once such a system is operational, Glendale will need to provide local connectivity from the single stop at the 134/Central/Brand interchange. It is critical that, by the time the east-west connector becomes operational, the proposed Buzz Shuttle operates at least as frequently as the east-west service, preferably with timed transfer between systems.

Once operational, the interface between the Highway 134 service and Beeline service will be a critical gateway stop, which should be treated with high level amenities, real-time information, and unique architecture to the extent possible.

Figure 4-3 Key Transfer Opportunities from Local to Regional Services in Downtown Glendale

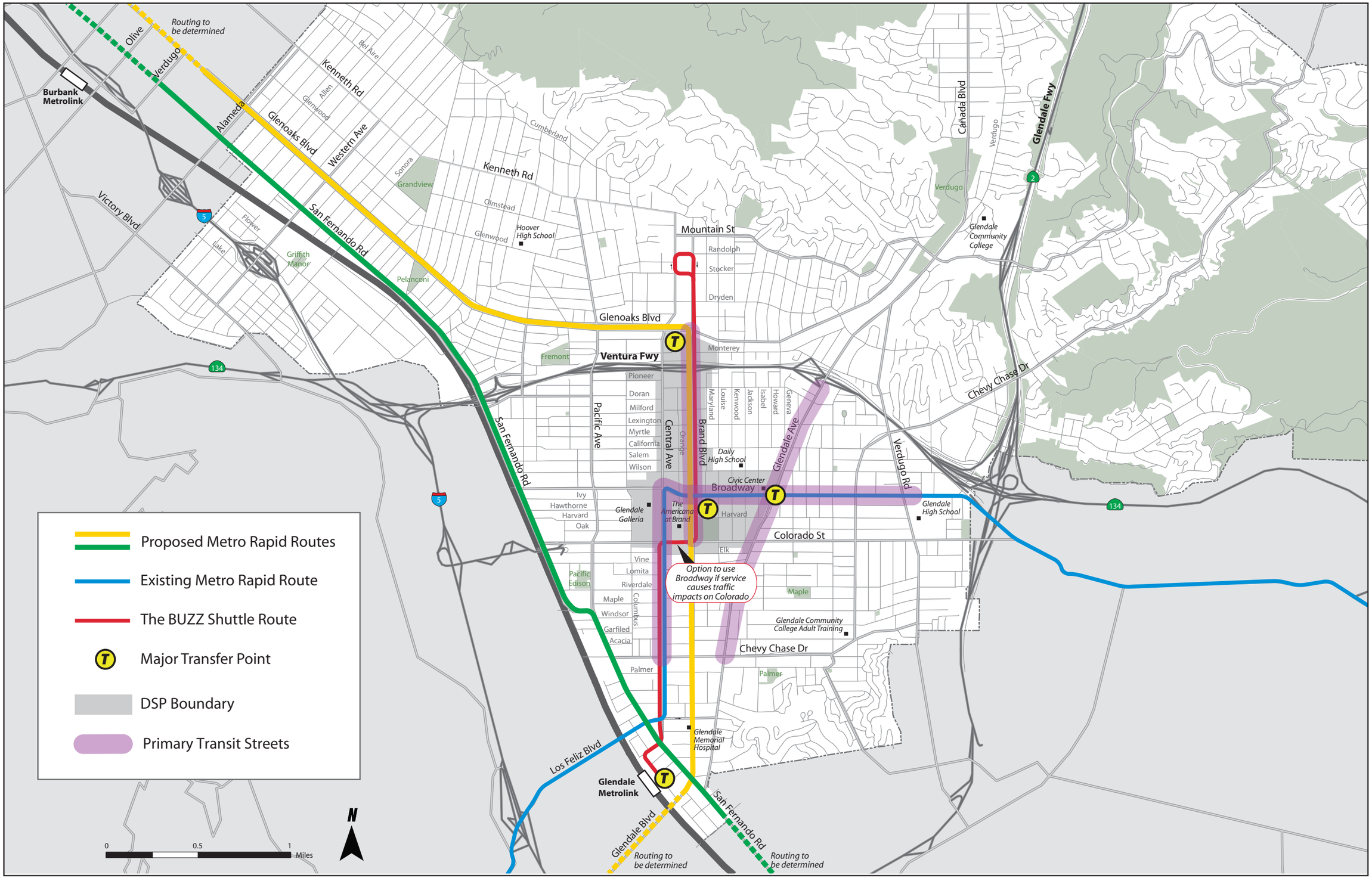
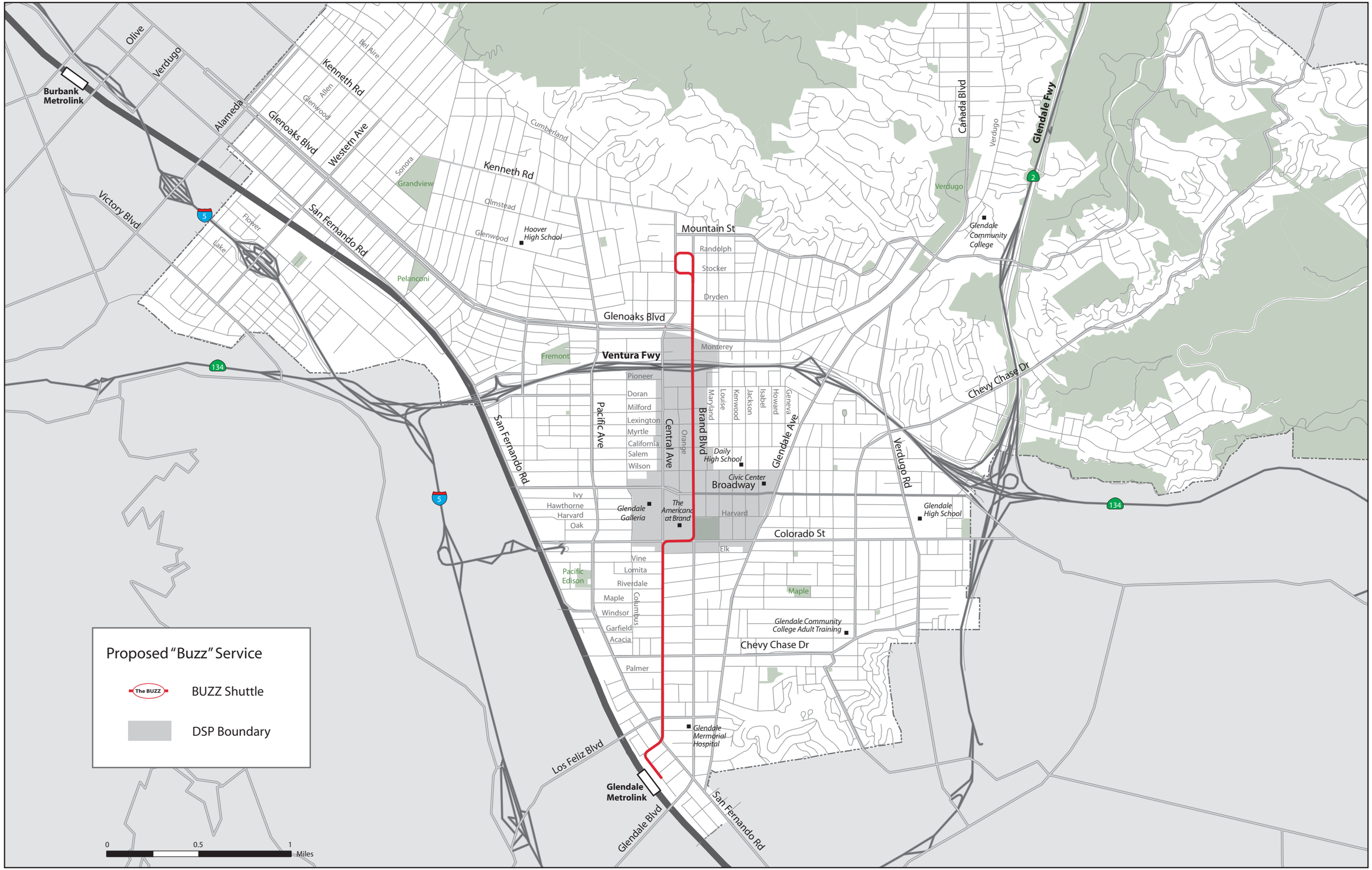


Figure 4-4 Glendale Beeline Proposed "Buzz" Shuttle Service



4.3.2 THE BUZZ SHUTTLE – IMPROVING DOWNTOWN SHUTTLE

While a high level of transit service already exists in central Glendale, a dedicated shuttle route that focuses on circulation within the downtown area would further improve circulation and would serve as an incentive for new downtown residents to leave their cars at home. A downtown circulator also reinforces the "park once" concept discussed in Chapter 5 (Parking Management). The proposed downtown Glendale "Buzz" shuttle is designed for flexibility – it can be initiated within existing resources, and can be expanded over time, to create a unique, frequent, and free shuttle that will attract new riders to transit, will reinforce the "park once" philosophy and will help new downtown residents to reduce their dependence on auto travel for local and regional trips.

The proposed Beeline "Buzz" free shuttle is shown on Figure 4-4 and is designed based on principles derived from the "best practices" in shuttle design, described on the next page and in the text box at the end of this chapter entitled "Best Practices Design Principles for a Successful Local Shuttle.".

Recommendation 4.2
Create a downtown shuttle to encourage non-auto circulation through the downtown. The route should connect regional transit, and key downtown destinations.

- **a. Begin service within existing resources.**
- **b. Change downtown shuttle to a hybrid bus or other unique vehicle.**
- **c. Implement a new technology for shuttle and other lines.**

Recommendation 4.3
Operate the shuttle as frequently as possible, with no fare collection and with a unique and attractive vehicle.

Recommendation 4.11
Consider utilizing new revenue generated by the Ddowntown Transportation and Parking Management District to enhance shuttle and other transit services.

ABOVE: Denver's Mall Shuttle.

BELOW: Santa Barbara's Electric Shuttle.

BOTTOM: A well designed transit service with quality amenities can add to the ambiance of the street environment. This photo of the Santa Monica Transit Mall shows how the unique street furniture adds to the quality of the pedestrian experience.

Shuttle Service Best Practices

Downtown shuttles are successful tools for increasing overall transit use in many other cities. In Denver for example, the 16th Street Shuttle "Mall Ride" links Denver's Union Station with regional rail service to shopping, entertainment and business locations downtown. The shuttle is operated with both conventional and hybrid electric equipment, making frequent stops along an approximately one mile route. The shuttle has very similar goals to the "Buzz" shuttle in Glendale, which would link regional rail service at the Metrolink station, future east-west service on Highway 134 and virtually all of the major destinations downtown with a single free shuttle. Similar to Glendale, the downtown business core in Denver is just beyond comfortable walking distance from regional rail service, requiring a shuttle to make a regional rail commute reasonable for employees coming to downtown Denver. The Denver Mall Ride carries over 60,000 people on a typical weekday, running very frequent service over a very long service span. While the "Buzz" shuttle envisioned for Glendale would offer less service and would carry far fewer passengers, there is no doubt that there is a market for a free, frequent circulator service connecting regional transit and local nodes.

Similar bus shuttles are operated in a number of cities, from Santa Barbara, California to Indianapolis, Indiana. Santa Barbara runs two very successful shuttles with electric vehicles, along State Street downtown, and along their waterfront. These shuttles operate every 15 minutes, cost $0.25 per rider (compared with $1.25 for other transit routes), carrying local riders and visitors. The availability of the shuttles has enabled the Tourism Bureau and other organizations to advertise "Car Free in Santa Barbara" itineraries for visitors, stressing Santa Barbara's commitment to the environment. The downtown parking authority publishes maps of parking garages that show shuttle routes, encouraging "park once" combined with shuttle or walking travel through the downtown.

The electric vehicles operated by Santa Barbara Transit on these routes are very popular, but have limited application in a city like Glendale. Current technology allows these vehicles to be in service for about 8 hours between charges, operating about 75 miles on a single charge. To operate over a 12 to 15 hour service day, twice as many vehicles would need to be procured as required for peak service demand. At $400,000 per vehicle, the capital costs of an all electric fleet may be prohibitive. However, new technology in alternative fuel vehicles may make other types of clean and quiet buses a reality in Glendale. The California Air Resources Board recently approved a hybrid-electric bus for

transit operators in California, and other technologies are also available.

Even closer to home, the Los Angeles DASH system, operated by the Los Angeles Department of Transportation is a major success story, turning less productive "big bus" routes operated by the MTA into local shuttles operated at less cost. The DASH system now includes over 400 buses and is far more extensive than would be operated in Glendale, but the concept is similar to a downtown DASH route – frequent, direct, and low-cost service in a vehicle that is identifiable as distinct from the regional service.

Bus transit shuttles have the advantage of maximum flexibility; routes and service levels can be changed easily, and buses can operate in the same lanes as general traffic. However, bus transit services often have a "stigma" of being impersonal and inefficient. Rail service, especially urban streetcar services, are returning to many cities, especially cities that, like Glendale, had a history of successful streetcar service. Urban streetcars can be designed to share a lane with auto traffic. They are less flexible than bus shuttles, but create an image that often spurs new development. Successful streetcar shuttles have been initiated in Portland, Oregon, Tampa, Florida and other cities.

Streetcar infrastructure costs about $20 million per track mile, and requires both in-street rails and overhead wires. Streetcar vehicles, which include rehabilitated historic cars, new "historic look" cars, and new modern cars cost between $1 million and $2 million per car. Given the costs and long lead time required to implement a streetcar shuttle, the initial "Buzz" service in Glendale is recommended as a bus shuttle, with a long-term vision for streetcar operations as the system develops.

ABOVE: Hybrid electric bus approved by CARB.

BELOW: Fuel Cell Bus shuttle in Luxembourg.

ABOVE: Transit wrap advertising the city of Toronto.

BELOW: Valley Metro contest winners.

Implementing the Glendale Buzz Shuttle

The proposed Glendale Buzz shuttle is designed for easy implementation in the short term, using existing equipment and resources. The shuttle is designed to be expanded to more frequent service with a unique vehicle type within a few years of operation, based on the availability of additional funds, through grant sources and transportation district support.

The service would initially operate from 7 am to 10 pm Monday through Friday with reduced service on the weekends. The proposed routing for the initial service is shown in Figure 4-4. This route is intended to run "fare-free" allowing boarding and alighting to occur at all doors, reducing dwell times at stops and increasing the attractiveness of the route.

Buzz stops will be identified with unique graphics that should be coordinated with the graphic scheme on the buses used for the service. Bus stops should include signage at all stops, with most stops having shelters with real-time information. Real-time information displays and shelters have already been purchased and can be deployed along the shuttle route without incurring additional costs.

Immediate Term Service Plan – Use Existing Resources

Initial implementation of the Buzz shuttle can be accomplished with the general Beeline restructuring recommended in the *Short Range Transit Plan*. Using existing resources, the route can operate every 15 minutes from 7 am to 10 pm.

Existing vehicles can be painted or wrapped in a unique scheme for relatively little cost. Full bus wraps can be accomplished for about $10,000 per vehicle. Wraps are done with a mesh fabric that allow for light to enter the bus through the windows, or graphics can be put on the body of the bus only. The examples at left show bus wraps currently in use. The photos from Valley Metro in Phoenix, Arizona reflect the results of a contest in which area students were asked to submit designs. Holding a contest, sponsored by the City and the business community, will help to form linkages between the transit system and the community at large. Wraps are designed to last from one to two years, which is about the length of time required to order new equipment.

For somewhat more capital investment, existing vehicles can be totally rebuilt as "trolleys." At least two companies in California do trolley rebuilds on 30' and 35' transit buses. An example of the work done by "Cable Car Classics" in northern California is shown at right.

Costs for conversions, which include full interior and exterior rebuilds, average between $50,000 and $70,000 per vehicle. Conversion details are guaranteed for the life of the vehicle. A total of three vehicles are needed for daily operations at 20 minute frequencies.

Stop improvements and passenger information are also critical to the success of the shuttle. Stop amenities are described in more detail in the following section. The proposed route should be implemented at the same time new shelters can be deployed. Shelters are already on order for the Beeline and could be targeted to the Buzz line stops as a priority implementation. Glendale has begun to receive an order of 16 Next Bus signs which can be deployed in the Buzz shelters. Should additional shelters or signs be required, these can be ordered for between $15,000 and $50,000 each. For installation of Next Bus signs, the largest cost is often extending conduit for electrical power to the shelter. Power conduit was installed on Brand Boulevard as part of the Brand Boulevard reconstruction project. For Next Bus installation in other locations, the cost of extending power should be considered.

Buzz Shuttle Phase II – Adding Frequency and New Equipment

Increasing frequency should be a primary goal of the shuttle once it has been initiated. By adding three vehicles, the shuttle could be operated every 7.5 minutes during peak times. Frequent service will be an inducement to people traveling within downtown Glendale to leave their car at home or to drive and park once while exploring downtown.

Increasing frequencies to 7.5 minutes will require three additional vehicles for a total of six vehicles for regular operation plus at least one spare vehicle. Going to 7.5 minute all day headways would require 15,000 additional revenue service hours per year, or a total of about $1 million dollars in new revenue. Service enhancements could be phased in, with additional frequency added only during certain hours at first; however, the full fleet investment will be needed to improve frequency. As new vehicles are ordered, Glendale should work towards obtaining a high quality vehicle with a unique look that will project the appropriate image for a dynamic downtown. Many types of vehicles are available.

ABOVE: Unconverted Gillig Phantom bus.

BELOW: Cable Car Classics conversion of a 30' low floor Gillig Phantom bus.

ABOVE: New Gillig low floor trolley bus.

BELOW: Gillig low floor hybrid electric 30' conventional bus.

Shuttle Vehicle Design Principles

The key principles for a shuttle vehicle should include:

- **Low-Floor Vehicle.** For easy boarding, and fast access and egress. Low floor vehicles also maximize accessibility for all types of users, and eliminates the need for costly and high maintenance lifts.
- **Large Door Areas.** Shuttle riders tend to make very short trips – end to end, the proposed shuttle is less than two miles. Riders should be able to enter and exit via all doors "hopping on and off" quickly.
- **Focus on Comfortable Standing Room.** Because most trips are short, many riders never sit down. Seating is important, but the vehicle should emphasize comfortable standing room, with straps that allow riders to stand comfortably and safely.
- **Large Window Areas for High Visibility.** Shuttle riders often need to be able to see where they are to get off at the store or restaurant of their choice. Because many shuttle riders are not "regular" riders who get off at the same stop every day, it is especially important that they "see" where they are going.
- **Project a Unique Image.** While the Buzz will be a Beeline route, it is important that riders not think of it as "just another bus route." A unique vehicle can project an image that this route is something different to both commuters and occasional riders. The vehicle should be included in all marketing material and should become part of the image of the service.
- **Clean Fueled.** In today's environment, riders respond as much or more to "being green" as the primary reason for riding transit. A successful promotion that suggests "Try one in five" – or one in five days on transit, promoting the impact on the environment could be very successful in Glendale. To be successful, the vehicle needs to be clean, and needs to be perceived as clean. While electric vehicles may not be appropriate due to limited range between charges, other alternatives should be explored.

Two types of initial shuttle vehicles are recommended as possibilities for Glendale. Either a "trolley-look" low-floor vehicle such as the Gillig low-floor trolley, or a more conventional vehicle with hybrid-electric power train, both shown at left, could be specified for the service.

Prices for 30-35 foot vehicles range from $400,000 to $600,000 depending on the power train and size. Assuming vehicles can be procured for $500,000 each, a seven vehicle fleet will cost approximately $3.5 million. If Glendale decides to "design" a unique vehicle, the cost per vehicle could double.

Long-Range Improvements in the Shuttle System

In the long term, an urban streetcar would be a welcome addition to downtown Glendale, creating a very clear "brand" for the downtown shuttle that would encourage visitors and local riders to ride.

Many North American cities were developed around their streetcar tracks, which carried more people than any other mode of transportation. Streetcars were historically a major influence in the City of Glendale, which was well served by the Red Car regional streetcar service. Remnants of the old Red Car system can be seen in the way neighborhoods and streets are laid out in Glendale.

Streetcars offer a number of key advantages over bus service. The primary advantages of streetcars are the ability to add a visible rail system with a capital cost that is less than higher capacity light rail, and the ability to create a circulator that connects into a high capacity transit network (such as light rail or commuter rail) without requiring additional extension or expansion of the more expensive high-capacity mode. Streetcars are also popular because they are a good fit for densely-developed, pedestrian-oriented, urban neighborhoods.

More than a dozen North American cities have streetcar systems that have either been expanded or begun operation in the past 15 years. At least twice as many other cities have new systems or new lines under active planning.

Some of the defining characteristics of modern streetcar systems include:

- **Streetcars generally attract at least 15-50% more riders than bus routes in the same area.** In many cases, the difference in ridership is much higher. Based on recent North American examples of streetcar implementation, there is a clear ridership boost that can be attributed directly to the implementation of streetcars replacing bus service in a given corridor. In Toronto, on routes where streetcar service replaced a nearly identical bus service, ridership increased between 15-25%.
- **Streetcars often attract private funding.** Property owners are often willing to financially contribute to a streetcar system because they realize the value that a streetcar brings to their property and to the neighborhood. In Portland and other cities, private owners were willing to "tax themselves" either through fees, benefit districts, or other forms of exactions to receive the benefits of a fixed-route streetcar system. Nearly half of the operating costs of Tampa's TECO streetcar line are paid through an endowment created by local business contributors.

ABOVE: Little Rock Arkansas' new River Rail streetcar offers a vintage vehicle primarily serving visitors.

BELOW: Portland's modern streetcar operates in mixed traffic.

BOTTOM: Red Car streetcar service historically connected Glendale to Los Angeles and neighboring cities.

ABOVE: Tampa's "TECO" streetcar uses historic look vehicles to complement its downtown.

BELOW: New streetcar service in Charlotte is already being expanded.

- **Similar to other street-running modes, streetcars are generally focused on serving a neighborhood, not just moving through it rapidly.** While streetcars can benefit from many of the same treatments that would be given to improve speed on other modes (such as signal preemption, queue jumps, longer stop spacing and exclusive right of way) modern streetcars typically have minimal priorities over other vehicles and are often designed to operate in mixed flow with vehicular traffic. Streetcar stops are generally spaced closer together than light rail or bus rapid transit because streetcar service is designed for local circulation and connections to higher capacity services rather than providing high-speed or high-capacity service themselves. Streetcars are not inherently faster than buses, and in fact, can be less reliable on streets with heavy congestion or other impediments, since streetcars cannot change lanes or maneuver around a problem.
- **Streetcars provide a visible and easy-to-understand routing which attracts new users.** Rail systems in general provide a physical presence on the street that is easy to comprehend. Riders can stand at a stop and literally see where the line comes from and where it is going. Streetcar routes generally make few deviations from a straight path, giving the user more confidence. Visitors and occasional users are more inclined to use them, since there is less confusion about the streetcar than about taking one of many possible bus routes.
- **Streetcars attract both a visitor market and a local user market to transit.** The fact that streetcars are easy to "understand" and often operate in areas with high visitor populations, helps attract visitors as well as local riders. Modern streetcar operations often use "vintage" looking vehicles, or may actually use rehabilitated historic vehicles. Some systems use very modern, but distinctive vehicles. All of these vehicle types help attract visitors, as well as local riders, to transit.
- **Streetcars catalyze and organize development.** Throughout their history, streetcar lines have been an organizing principle behind new development. Streetcars can help create dense pedestrian environments where access to local streetcar stops is possible by foot. Historically, bus routes are added once an area has developed and the demand is in place. Most of the modern streetcar applications in the United States have been catalyzed by the promise of new development, and in fact, have been championed by local developers who also partially funded the line.
- **Streetcar costs are higher than bus infrastructure, but lower than light rail.** The cost for streetcar construction is approximately $20-$40 million per mile and $2.5–$3 million is typical for each car. This price compares to $50–$75 million per mile for light rail implementation and between $3–4 million for a light rail vehicle. Standard 40-foot diesel buses typically cost around $400,000, while articulated 65-foot buses cost approximately $650,000 each. While lower in cost, bus lines do not typically attract private funding for capital costs.

A streetcar is not recommended in the short term for several reasons:

- **Streetcar infrastructure costs approximately $20 million per track mile,** based on recent cost experience in Portland, Oregon, with vehicles costing over $1 million each.
- **Streetcars are "permanent" infrastructure, with limited flexibility.** Given the amount of construction that could take place in Glendale over the next several years, it is possible that temporary or permanent rerouting could be required to deal with new development. Streetcars should not be implemented until a permanent route can be firmly established.
- **Brand Boulevard was recently rebuilt** and local merchants should not be asked to endure significant new construction for a significant period of time.
- **Federal funds are available for the construction of new urban streetcar infrastructure (Small Starts), but additional study is required to access those funds**.

While streetcar service cannot be recommended in the short term, steps could be taken in the short term to finalize a route and put the needed steps in place for an eventual streetcar line in Glendale. Ultimately, streetcar service has the potential to serve both the downtown shuttle corridor, and a second corridor, operating east-west on Glenoaks, utilizing the wide median in that street. The east-west route could connect Glendale with Burbank, and could ultimately be extended to serve the college.

An initial review of streetcar potential along the shuttle route is presented in Appendix 4A. The initial review does not identify any fatal flaws, but does identify areas where special engineering would be required. A key issue is the transition from Brand to Central. Streetcars generally have significantly wider turning requirements than buses. While a bus could easily transition from Brand to Central on either Broadway or Colorado, streetcars would have significant difficulty utilizing Broadway, and in fact, could not use Broadway without a separate signal phase for streetcar operations. Adding a new phase at the intersection of Broadway and Central would likely have a significant impact on traffic operations at that location. Streetcars could make a transition more easily on either Wilson or Colorado, however, high auto volumes, especially on Colorado may make those streets more complex to operate on. Alternatives include the development of a new transit way which could be considered as part of Galleria improvements.

Recommendation 4.6
Consolidate high frequency services to the extent possible on a limited number of transit priority streets, which will be optimized for transit operation.

Recommendation 4.7
Consider signal priority for all streets with combined service of at least 10 minutes during peak periods, including all streets with Metro Rapid service.

4.3.3 TRANSIT INFRASTRUCTURE IMPROVEMENTS

In addition to adding transit service, infrastructure improvements are required to enhance the customer experience and to ensure that transit travel times are maintained on Primary Transit Streets.

Operational Infrastructure Improvements

Transit streets are designed to optimize transit travel times. On average, transit vehicles operating on transit streets should be able to operate at 35% of the posted speed limit including all delays due to stops and boarding activities. Because local routes like the proposed shuttle have very frequent stops, transit travel times should be measured in the aggregate for all routes operating on the transit street. Some routes, like the shuttle, which are designed for frequent stops are likely to have slower overall travel speeds than routes like the Metro Rapid, which is designed for longer stop distances and faster travel times. By measuring travel speeds on all routes, it is possible to balance faster and slower routes.

Transit travel times should be measured regularly to determine the level of operational infrastructure required to speed travel. If transit travel times can not be maintained at 35% of the posted speed limit on transit streets (12.25 miles per hour on a street with 35 mile per hour speed limits) there are a number of tools that can be implemented to improve speed. These include:

- Reducing the number of stops on some routes
- Speeding boarding through all-door boarding options
- Changing signal priority
- Making other improvements such as turn pockets and other enhancements to minimize bus/auto conflicts, including adding transit lanes on the street

Speeds on the shuttle route are designed to be lower than speeds on the underlying Rapid routes that serve many of the same streets. Speeds on Rapid routes can be increased by reducing the number of stops, allowing the local shuttle route to serve intermediate stops.

Transit Signal Priority

Transit signal priority is a critical tool for increasing transit speed. The City of Pasadena is currently implementing a signal priority system for improving Metro Rapid speeds on Colorado Boulevard (Rapid Route 780). Because these same buses serve Glendale, it is important that signal priority be a consideration in maintaining speeds in Glendale. The MTA has provided grant funds to a number of jurisdictions who are willing to extend signal priorities

to Rapid routes. Should Glendale implement priority signals, all routes should be designed to take advantage of the technology. Studies made by the MTA indicate that priority signalization and other Rapid technologies increase transit speeds by 29%.

Dedicated Transit Lanes

Transit-only lanes can be designated as a last resort, to improve travel speed. Transit-only lanes would be designated only after other tools were implemented, because transit-only lanes would only be implemented at the expense of either on-street parking or mixed-flow travel lanes.

Recommendation 4.9
Create amenity standards for downtown transit stops based on the number of riders boarding at each location. Maximize amenities including enhanced signage, shelters and other amenities along the shuttle route and other transit priority streets.

Recommendation 4.10
Incorporate real time information in all high amenity bus shelters using Next Bus technology.

4.3.4 CUSTOMER EXPERIENCE

The *Short Range Transit Plan* includes a number of recommendations for locating transit stops and improving the level of amenities available at key stops. Improving curb-side amenities is important for transit systems because making stops safer, more comfortable, and more appealing can have an immediate, positive impact on ridership. The level of amenities at each stop should depend on the number of passengers boarding and alighting at the stop, and on special conditions, such as the willingness of local businesses to support a stop, or the number of seniors or persons with disabilities who might use a stop with a higher level of amenities. Amenities include:

- Signage
- System map and schedule
- Benches and shelters
- Gateway Stops at major transfer points and key nodes
- "Next Bus" real-time information

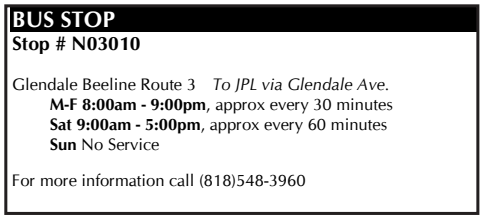
In general, bus stops need to be located, and designed, in a manner which:

- Provides passengers with protection from adjacent vehicular traffic
- Allows for easy access by people with disabilities
- Minimizes opportunities for passengers to slip and fall when boarding or alighting a bus
- Makes it easy for passengers to get to crosswalks and curb ramps
- Provides proximity to major trip generators
- Allows passengers to conveniently transfer between routes
- Places opposite direction stops in close proximity to each other
- Enhances safety by incorporating some source of overhead lighting (direct or indirect)

Signs

Every bus stop needs a visible and clearly readable sign marking the stop. A sign should be at least 12" by 18" and should be mounted at least six feet above the ground. The sign should be placed perpendicular to the street so that it is visible from both directions. Each transit operator that serves the stop should be listed on the sign. Space permitting, the sign should also indicate the bus stop ID number, route number(s), hours/days of operations, and a telephone number to call for more information.

Along the shuttle route, the signs should have a consistent and distinctive appearance. A special logo for "the Buzz" should be



ABOVE: An example of a sign with a reasonable amount of information.

plainly visible as should the words "FREE SHUTTLE" so that riders know they can board the free shuttle at that location.

System Map and Schedule

In theory, every bus stop should have a system map so that riders can be certain they are boarding the correct bus for their trip. System maps can help riders plan their trip efficiently, especially if it involves a transfer between two or more routes.

For shuttle stops, the shuttle route and major transfer nodes should be identified, at a minimum. Map canisters make it relatively easy to provide a route map at any location that has a sign pole. Schedules can also be provided in the canister, which goes around the sign pole. At locations where it is not possible to provide a canister, the bus stop sign should list the days, hours, and frequency of every route serving that stop.

Benches and Shelters

Benches and shelters represent two of the most frequently requested improvements listed by current and potential transit riders. Ideally passengers would like to have them installed at every stop, but this can be prohibitively expensive for most transit systems. For example - the purchase and installation of an "off-the-shelf" bus shelter for a single bus stop can cost a transit system as much as $15,000. In downtown Glendale, shelters should be placed at all shuttle stops, and at any other stop with more than 50 boardings per day.

Bus shelters were ordered for stops on the newly renovated Brand Boulevard. These shelters, costing approximately $45,000 each, are expected to arrive this year. The shelters have a unique design and would be appropriate as the stop design for all shuttle stops. In addition, Glendale acquired Next Bus signs that are waiting for installation at key stops. Additional "off-the-shelf" shelters can be purchased at lower cost, generally about $15,000 per shelter.

A key amenity for the success of the shuttle is the introduction of "Next Bus" passenger information at stops. By taking the uncertainty out of transit wait times, real-time passenger information has shown to increase ridership by as much as 5% with no additional changes in service being implemented. The City of Glendale uses Next Bus technology on its buses and in its control center. By providing real time information to passengers, via the internet, phone (including mobile phone), and at bus stops, passengers can be more comfortable counting on transit to meet their travel needs.

TOP: A sign from MTA's Metro Rapid Red Line showing a bus map and customer information similar to that recommended for the Buzz.

ABOVE: Star Shuttle bus stop sign in Hartford, Connecticut. As is recommended in Glendale, the "star" logo and the words "free ride" are continued on all vehicles and all material related to their downtown shuttle. Just below the sign shown in this photo, a route map and schedule is provided at every stop.

BELOW: Long Beach uses simple canisters to provide schedule and map information.

ABOVE: Next Bus information in Minneapolis.

BELOW: A simple "low profile" shelter on the Metro Rapid line provides weather protection in a minimum of space. *Photo courtesy of Suisman Urban Design.*

BOTTOM: A more substantial shelter provides a unique look for a neighborhood.

Because Glendale is already in the process of acquiring transit shelters and Next Bus technology, there will be no additional capital cost to deploying this order on the shuttle route. Additional stops can be implemented as capital funding becomes available. At a minimum, all stops should have similar signage, regardless of the other amenities available.

In addition to Next Bus, other types of passenger information devices include:

- **Information Kiosks** – These electronic kiosks, similar in size to a small Automated Teller Machine, have touch screens and can be used by passengers to call up information about schedules, transfers, fares, and route maps.
- **Fare Machines** – These machines give passengers the opportunity to buy tokens, tickets, and passes at a stop before they board a bus.

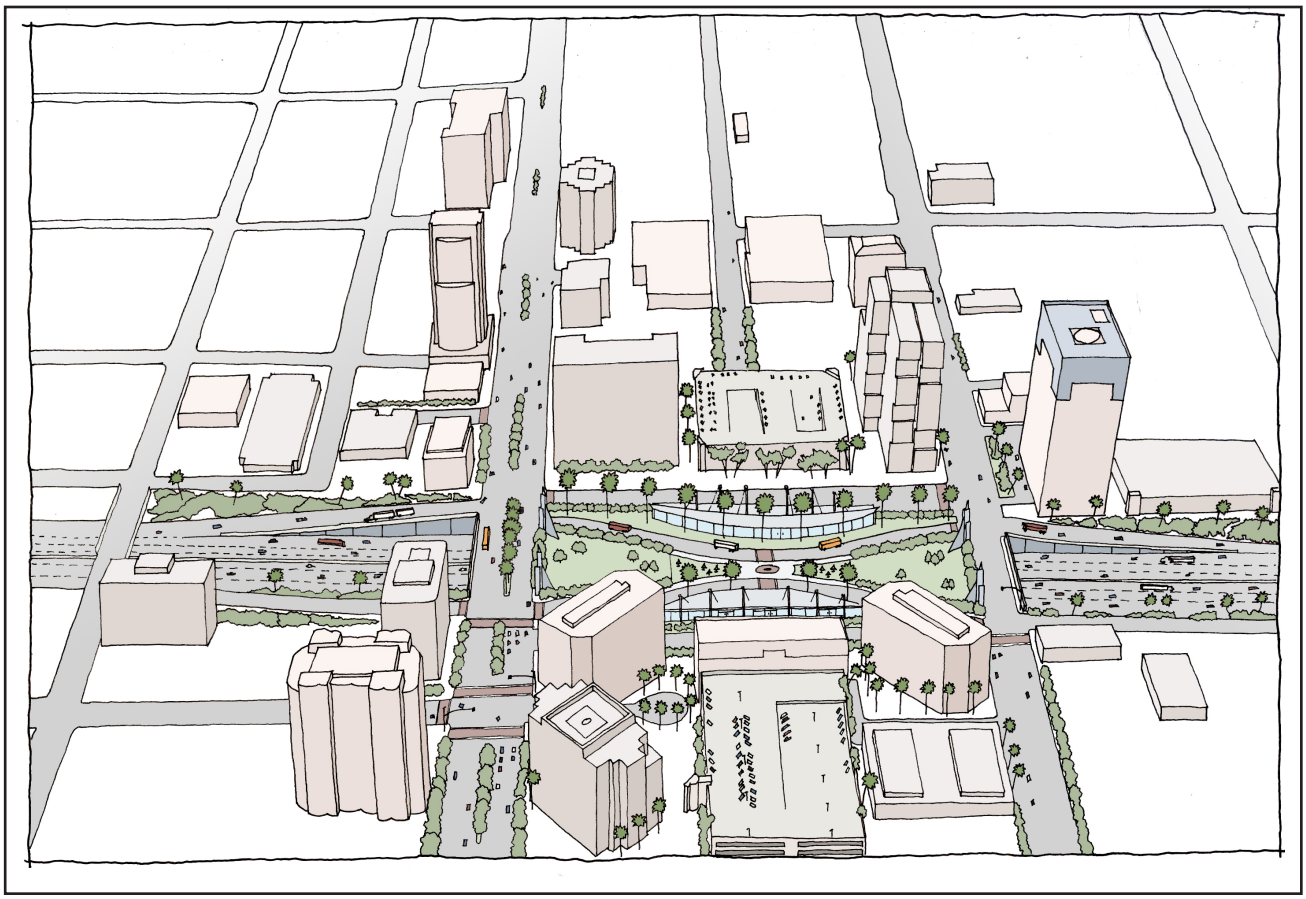
These systems can be expensive to purchase, install, and maintain and are not recommended in the short term.

Gateway Stops

While it is strongly recommended that bus stops along the shuttle route have a consistent look and design, the route serves several key transfer points which may warrant a more substantial shelter and enhanced passenger information. These stops include the Metrolink station, where many Beeline routes come together, and the proposed interface with the East-West Connector at Highway 134. Stops in these locations should be simple and easy to maintain, but have a higher quality of amenities, modeled against the Orange Line station stops.

ABOVE: Warner Center station on the MTA Orange Line can serve as a model for gateway stops in Glendale.

BELOW: This Metro Rapid idealized stop is another good model for a Glendale gateway stop at Highway 134. *Image courtesy of Suisman Urban Design.*



ABOVE: One long-term option for a Highway 134 station in Glendale would be to construct a "lid" over the freeway which becomes a bus plaza. The City's DSP consultants (Zimmer Gunsul Frasca) created the drawing above as a potential "freeway lid" station for Glendale. Creating a transit station in this manner opens up potential open space in an area that is currently impacted by the freeway. *Source: Zimmer Gunsul Frasca. Used with permission.*

Recommendation 4.13
Develop performance standards for transit streets that incorporate transit quality of service, and go beyond auto level of service.

4.3.5 MEASURING SUCCESS

Glendale's Beeline has established a number of goals for defining success on that system:

- Increase Beeline ridership and improve productivity and efficiency
- Reduce Dial-A-Ride costs by moving some Dial-A-Ride passengers to Beeline
- Improve Beeline connections between downtown and San Fernando Road
- Remove "big bus" service from narrow residential streets (e.g. Glenwood Avenue)
- Separate school-oriented services from regular fixed route services
- Improve Beeline on-time performance
- Provide faster and more frequent Beeline connections between downtown and Community College
- Provide Beeline service on Glendale Avenue below Colorado Street
- Create a new high frequency downtown circulator route to support the goals of the *Downtown Mobility Study*

The additional recommended measures for measuring Beeline performance are described in Chapter 2 and summarized on the opposite page. These are measures for all transit services operating in downtown Glendale, including both regional and local service. In some cases, standards are different for these two types of service, and these differences are indicated in the right column of the table on the opposite page

Goal	Standard
Mode Split – Increase the transit mode share for trips WITHIN downtown Glendale, and also between Glendale and neighboring cities.	Mode share for transit trips within downtown Glendale = 10% on all systems. Transit mode share between Glendale, Burbank, Pasadena and Los Angeles for work trips = 8%.
Productivity for Shuttle Service – Measured in "Passengers per Revenue Service Hour."	Buzz Shuttle productivity = 20 passengers per revenue service hour. Overall Beeline productivity = 15 passengers per revenue service hour.
Travel Speeds on Transit Priority Streets – Measured as % of posted speed limit.	Total transit speed greater than or equal to 35% of the posted speed limit for all services combined.
Connectivity – Transit ridership will increase to the extent that transit services can be packaged as a single system.	Create a joint transit map and schedule for central Glendale focusing on high frequency routes. Identify and protect transfer points. Provide highest level of amenities at key local-regional transfers.
Fares – Measured in farebox recovery.	Implement fare-free shuttle and adjust all other fares to recover at least 15% from farebox. Develop uniform regional fares for local trips.

Best Practices –
Design Principles for a Successful Local Shuttle

- **Provide a Legible Service.** Operate two ways on the same street, minimize turns and keep the route as simple and consistent as possible.
- **Maximize Connectivity.** Link local and regional transit with key downtown destinations including retail, entertainment, and employment sites.
- **Serve Multiple Trip Types.** Single purpose "shopper shuttles" generally are not as productive as shuttles that serve many types of trips including connections to work, shop and entertainment.
- **Stop Often and Quickly.** The shuttle should provide "front door service" to key downtown destinations. Stop dwell times should be reduced with all door boarding.
- **Operate "Fare Free".** Eliminating fares allows for all door boarding, and encourages riders to "hop on" for short trips that would seem "uneconomical" for even a low fare payment.
- **Operate Frequently and with a Long Service Span.** Service can be initiated within existing resources operating every 20 minutes, but a short term goal should be to operate every 10 minutes or more frequently during peak periods. Frequent service allows people to "hop on" and ride without needing a schedule. Operating over a long service day allows people to stay downtown after work, enjoying the theater, dinner or shopping without worrying about the end of the shuttle's service day. Weekend service is as important as weekday service.
- **Market Downtown, Not Just the Shuttle.** Using the shuttle is the means to an end – taking transit or parking once and taking full advantage of the opportunities available in downtown Glendale. Marketing the shuttle should not be done in isolation, but rather should be an element of marketing downtown.
- **Create an Image.** Even with little capital investment, buses can have a unique paint or wrap scheme, amenities can be improved and a unique image can be created for the shuttle which will be enhanced over time with a unique vehicle type.

Santa Barbara's electric shuttle attracts riders with its clean vehicle and low fares.

Denver's 16th Street Mall Shuttle provides free service every 2 minutes on low floor hybrid vehicles.

San Antonio's rubber tire trolleys serve tourist and local trips downtown without the high cost of rail transit.

PARKING MANAGEMENT

5

A comprehensive parking management plan is a key component to managing congestion and reducing the impacts of auto traffic in a vibrant multi-use downtown. The goal of the parking program is to manage parking supply and demand, ensure that a growing downtown does not impact residential neighborhoods, and secondarily, to generate revenue for downtown area improvements.

All the recommendations included in this chapter have been successfully tested in many communities similar to Glendale. Combined with strategies promoting alternative modes, they are a critical component to managing congestion downtown.

While on-street parking Downtown is often fully occupied (ABOVE), there are hundreds of empty spaces in public garages (BELOW).

5.1 PRINCIPLES

Historically, "solving the parking problem" almost always meant increasing supply. Unfortunately, constantly increasing parking supply simply encourages more auto use, as people are encouraged to drive to places that offer "plenty of free parking." While providing adequate parking is still important, it is only one tool available for managing both demand and supply. The goal of "parking demand management" is to provide the optimal amount of parking to meet parking needs while reducing traffic congestion and accommodating new development.

Managing parking has been shown to be the single most effective tool for managing congestion, even when densities are relatively low and major investments in other modes have not been made. Parking management can have a significant impact on commute mode choice, which translates directly to reductions in auto congestion and improved livability of downtown and downtown-adjacent neighborhoods.

Currently, Glendale has more than an adequate supply of parking downtown- the peak occupancy for all downtown public parking is 53%, meaning that even at the busiest times approximately 2,500 public parking spaces are available.[1] But while there's no shortage of parking in downtown Glendale, the current inverted price structure (in which the most convenient curb parking that short-term parkers value the most is free or low-priced while harder to find off-street parking is relatively costly) and limited wayfinding signage indicating where available parking is located creates the perception of a parking shortage. Downtown visitors drive along Brand and see that the curb parking is fully occupied throughout the day, and circle for a parking space either unwilling to pay for parking or not knowing that just a few blocks a way there are thousands of empty public parking spaces in underutilized garages and lots.

As Glendale continues to grow, its parking needs will change as well, and this *Downtown Mobility Study* recommends techniques to both address current needs and adjust to future needs. However, building too much parking, parking that is priced too low, or parking that is priced incorrectly (with on-street parking cheaper than off-street garages and lots) will attract more peak-hour automobile trips, as well as undermine the downtown's historic character, hamper mobility for transit, bicyclists, and pedestrians, and preclude more productive land uses.

1 Based on weekday 1-2 PM peak for all downtown parking. See Appendix 5A for more information.

In recognition of these considerations, the following principles informed the development of parking management recommendations for downtown Glendale:

- Set clear parking priorities based on downtown Glendale's strengths and vision for the future.
- Manage the entire parking supply as part of an integrated system.
- Manage parking facilities with a focus on maintaining availability, not simply increasing supply.
- Ensure that people know where to find available parking.
- Optimize investment in parking by making most efficient use of all public and private parking facilities, before constructing new parking.
- Implement demand-responsive pricing structures to meet different types of parking needs and promote parking goals.
- Use parking revenue to fund programs that increase transportation choices and reduce congestion, as well as maintaining adequate parking supply.
- Use residential parking benefit districts to address spillover concerns in neighborhoods adjacent to downtown, the Glendale Transportation Center, and other areas with higher-than-average parking demand.
- Encourage economic revitalization of downtown and remove barriers to development and adaptive reuse projects by adopting parking standards that are tailored to the unique parking demand of mixed-use, walkable downtowns.

5.2 SUMMARY OF RECOMMENDATIONS

COORDINATED MANAGEMENT OF TOTAL PUBLIC PARKING SUPPLY

Downtown On-Street and Off-Street Parking

Recommendation 5.1
Create a "Park Once" district in Downtown Glendale to manage all public parking as an integrated system.

Recommendation 5.2
Implement coordinated parking management policies for on- and off-street parking, using demand-responsive pricing to promote parking goals of 85% occupancy, matching demand with available supply, and promoting turnover of short-term spaces.

Glendale Transportation Center Parking

Recommendation 5.3
Implement parking pricing system for Glendale Transportation Center parking lots allowing Metrolink and Amtrak riders to park free all day but charging all other short-term and long-term parkers.

IMPROVE CUSTOMER-FRIENDLINESS FOR DOWNTOWN VISITORS

Recommendation 5.4
Implement a multi-modal transportation and parking wayfinding system, including information on parking location, pricing, and real-time parking occupancy.

Recommendation 5.5
Install networked multi-space pay stations and occupancy sensors to improve customer friendliness, revenue management, and occupancy monitoring of downtown parking.

Recommendation 5.6
Continue existing City protocols that dedicate adequate parking spaces throughout downtown for loading zones, taxi stands, and ADA-accessible parking.

CREATE TOOLS FOR FLEXIBLE AND EFFICIENT PARKING ADMINISTRATION

Recommendation 5.7

a. Create a Downtown Transportation and Parking Management District, managed by the Traffic and Transportation Administrator (or a newly-hired position to whom they may delegate this responsibility) in consultation with an advisory body of downtown merchants, property owners, and residents.

b. Dedicate all parking revenue to a Downtown Transportation Fund to be invested in transportation and streetscape improvements, including capacity enhancements, transit improvements, and pedestrian enhancements, as well as future parking needs.

Recommendation 5.8

Authorize Traffic and Transportation Administrator (or a newly-hired position to whom they may delegate this responsibility) to adjust downtown parking rates, hours, and time limits as needed to achieve 85% occupancy based on occupancy monitoring.[1]

Recommendation 5.9

Pursue a study of how the City could enter into contractual arrangements with one or more valet parking operators for all of downtown in order to improve parking management and customer-friendliness, streamline valet parking operations for private and public events with high parking demand, and increase City revenue for the private use of public right-of-way.[2]

[1] In order to provide the public and their elected representatives on City Councils assurance that prices will not increase indefinitely without any public discussion, the City Council can implement a price threshold at which time staff must return to Council for reauthorization of the authority to set prices based on demand. Within the same ordinance they can extend this authority up until a new price threshold is reached. This concept is discussed further in the discussion of Recommendation 5.8.

[2] In order to create a level playing field and not disadvantage smaller valet operators, such a study should be conducted with a full public process and in close consultation with businesses that currently offer (or would like to offer in the future) valet parking in downtown Glendale. This concept is discussed further in the discussion of Recommendation 5.9.

IMPLEMENT NEW PARKING STANDARDS FOR DOWNTOWN DEVELOPMENT

Recommendation 5.10

Require as a condition of approval for new downtown development that all non-residential parking be made available for public parking when not needed for its primary commercial use.

Recommendation 5.11

Require as a condition of approval for new downtown development that all non-residential parking be shared among other uses (as different parking demand patterns among these uses permit).

Recommendation 5.12

Consider implementing a "traffic congestion impact fee" based on downtown development projects' proposed number of parking spaces and/or estimated peak-hour vehicle trips. Use impact fee revenues to fund transportation programs and projects that benefit both the development project and downtown as a whole. Pursue a nexus study to determine most appropriate assessment methodology and fee structure.

Recommendation 5.13

Revise zoning code to legalize more efficient parking arrangements in new downtown development in order to facilitate better ground-floor urban design (i.e. allow development to reduce its "parking footprint" by right without reducing the total supply provided).

Recommendation 5.14

Expand existing provisions in zoning code that allow new downtown development to go below existing parking minimums by right, under very specific conditions.

IDENTIFY AND ADDRESS NEIGHBORHOOD PARKING PROBLEMS IMMEDIATELY

Recommendation 5.15

Prevent spillover parking in neighborhoods adjacent to downtown and the Glendale Transportation Center as needed by converting the City's existing neighborhood Preferential Parking Program into a Residential Parking Benefit Districts, where residents can park for free or at low annual permit costs but non-residents pay to park and the resulting revenue is invested in the neighborhood.

DEVELOP NEW PARKING SUPPLY AS NEEDED

Recommendation 5.16

If total downtown parking demand cannot be met with existing supply after *Downtown Mobility Study* recommendations have been fully implemented, build new public shared parking as needed.

5.3 DISCUSSION OF RECOMMENDATIONS

5.3.1 COORDINATED MANAGEMENT OF TOTAL PUBLIC PARKING SUPPLY

Downtown On-Street and Off-Street Parking

Park Once Policy

Glendale should officially adopt and implement a "Park Once" policy for Downtown Glendale, where all parking is managed as an integrated system. The key management strategies for a Park Once district will include:

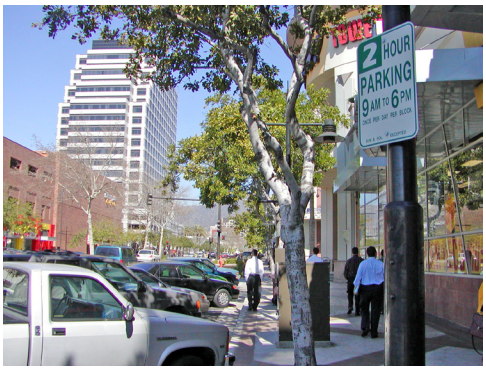
- Continue to encourage all existing and new private parking facilities to be made available to the public when not needed by its principal user (as discussed in Recommendation 5.10).
- Continue to encourage shared parking between uses in all existing and new private parking facilities wherever feasible (as discussed in Recommendation 5.11).
- Maximize the use of (and revenue from) existing public parking by new and existing development to ensure that existing supply is being used optimally before building additional supply (as discussed in Recommendation 5.13).
- If new parking supply is needed, first purchase or lease existing private parking lots or structures from willing sellers, and add this parking to the shared public supply before building expensive new garages (as discussed in Recommendation 5.16).

Key Park Once Strategies: Encourage Publicly-Available, Shared Parking to Maximize the Use of Private and Public Parking Supply

Key components of implementing the Park Once strategy will be to continue to maximize the utilization of the entire parking supply by encouraging existing and new private parking lots and garages to be made available to the public when they are not actively serving nearby commercial uses and to continue to encourage shared parking between different uses in all existing and new parking facilities. In downtown Glendale there are about 22,850 private off-street parking spaces, and many of these private lots and garages have significant surplus capacity in the evening and on weekends. However, some private lots and garages are currently unavailable for public parking. By adding these existing spaces to the public supply, the City will be able to inexpensively add a significant amount of parking capacity to the downtown.

In addition, the City should maximize use of and revenue from existing public parking for new and existing development. One way to do this is to expand provisions in the zoning code to legalize more efficient parking arrangements, so that new downtown development can lease empty parking spaces in downtown public parking garages rather than building dedicated on-site parking.

Recommendation 5.1
Create a "Park Once" district in Downtown Glendale to manage all public parking as an integrated system.



ABOVE: Parking on Brand Boulevard will be an integral part of Downtown Glendale's Park Once District.

These and other strategies discussed in Recommendation 5.13 will promote better urban design downtown (by allowing development to reduce its "parking footprint" without reducing the total supply provided) while also promoting fiscally-responsible management of taxpayer-funded public assets (by improving the utilization of and revenue from downtown public parking facilities).

By transforming motorists into pedestrians, who walk instead of drive to different downtown destinations, a "Park Once" strategy is an immediate generator of pedestrian life, creating crowds of people who animate public life on the streets and generate the patrons of street friendly retail businesses. In addition, a "Park Once" strategy will increase transit ridership downtown, especially on the free downtown circulator.

To support the "Park Once" strategy, implement the "Buzz," a free downtown bus circulator (transitioning to trolley as funding permits), so that downtown commuters and visitors can park where parking is available and conveniently get around downtown (as discussed in Chapter 4).

Recommendation 5.2
Implement coordinated parking management policies for on- and off-street parking, using demand-responsive pricing to promote parking goals of 85% occupancy, matching demand with available supply, and promoting turnover of short-term spaces.

Demand-Responsive Parking Prices

What is the right price for downtown parking? If prices are used to create vacancies and turnover in the prime parking spots, then what is the right price? An ideal occupancy rate is approximately 85%. At this level of occupancy, at even the busiest hour about one out of every seven spaces will be available, or approximately one empty space on each block face. This provides enough vacancies that visitors can easily find a spot near their destination when they first arrive. For each block and each parking lot in downtown, the right price is the price that will achieve this goal. This means that pricing need not be uniform: the most desirable spaces may need higher prices, while less convenient lots are less expensive. Prices should also vary by time of day and day of week: for example, higher at noon, and lower at midnight.

Ideally, parking occupancy for each block and lot should be monitored carefully, and prices adjusted regularly to keep enough spaces available. In short, prices should be set at market rate, according to demand, so that just enough spaces are always available. Professor Donald Shoup of UCLA advocates setting prices for parking according to the "Goldilocks Principle:"

> *The price is too high if many spaces are vacant, and too low if no spaces are vacant. Children learn that porridge shouldn't be too hot or too cold, and that beds shouldn't be too soft or too firm. Likewise, the price of curb parking shouldn't be too high or too low. When about 15*

percent of curb spaces are vacant, the price is just right. What alternative price could be better?[2]

If this principle is followed, then there need be no fear that pricing parking will drive customers away. After all, when the front-door parking spots at the curb are entirely full, under-pricing parking cannot create more curb parking spaces for customers. And, if the initial parking meter rate on a block is accidentally set too high, so that there are too many vacancies, then a policy goal of achieving an 85% occupancy rate will result in lowering the parking rate until the parking is once again well used (including making parking free, if need be).

For these reasons, the *second* key component of successfully implementing a Park Once district in downtown Glendale will be to transition to demand-responsive pricing to promote parking goals of:

- Achieving 85% occupancy at all on- and off-street public facilities.
- Matching demand with available supply.
- Promoting turnover of short-term spaces.

While time limits are sometimes necessary to encourage turnover, pricing – rather than simply limiting time – is key to achieving the desired 85% occupancy rate. As Figure 5-1 and Figure 5-2 show, peak parking occupancy rates vary considerably among different facilities downtown. For example, the public garages are never more than three-fourths occupied at peak demand periods (and usually much less so), while curb parking on Brand Boulevard is consistently over 90% full (a subsequent occupancy study of the Marketplace and Exchange garages found that many of the public garages were rarely over 50% full, even during the December 2006 holiday shopping season).[3] Rather than going into a nearby garage, drivers who don't find parking on Brand often circle around the block or double park waiting for someone to return to their car. While the garages are not overly expensive, it is difficult to justify going into a garage to pay for something that seems to be given away for free. For this reason, the following management policies that respond to the *actual* observed parking demand patterns in downtown Glendale are recommended:

- **Brand Boulevard:** From 7 am to 1 am, parking on Brand Blvd. should be metered at a rate of $1/hour and subject to 2-hour time limits from 7 am to 6 pm. Shorter time limits considered for blocks where high turnover is especially important, including a 30-minute limit on the east side of the 200 and 400 blocks of N. Brand Blvd. (there are health clubs at 240 and 450 N. Brand) and

2 Shoup, Donald. *The High Cost of Free Parking*. Chicago: APA Planners Press (2006).

3 City of Glendale Interdepartmental Communication, "Existing and Potential Near-Term Parking Utilization of the City's Marketplace Parking Garage and Exchange Parking Garage," 1/16/07.

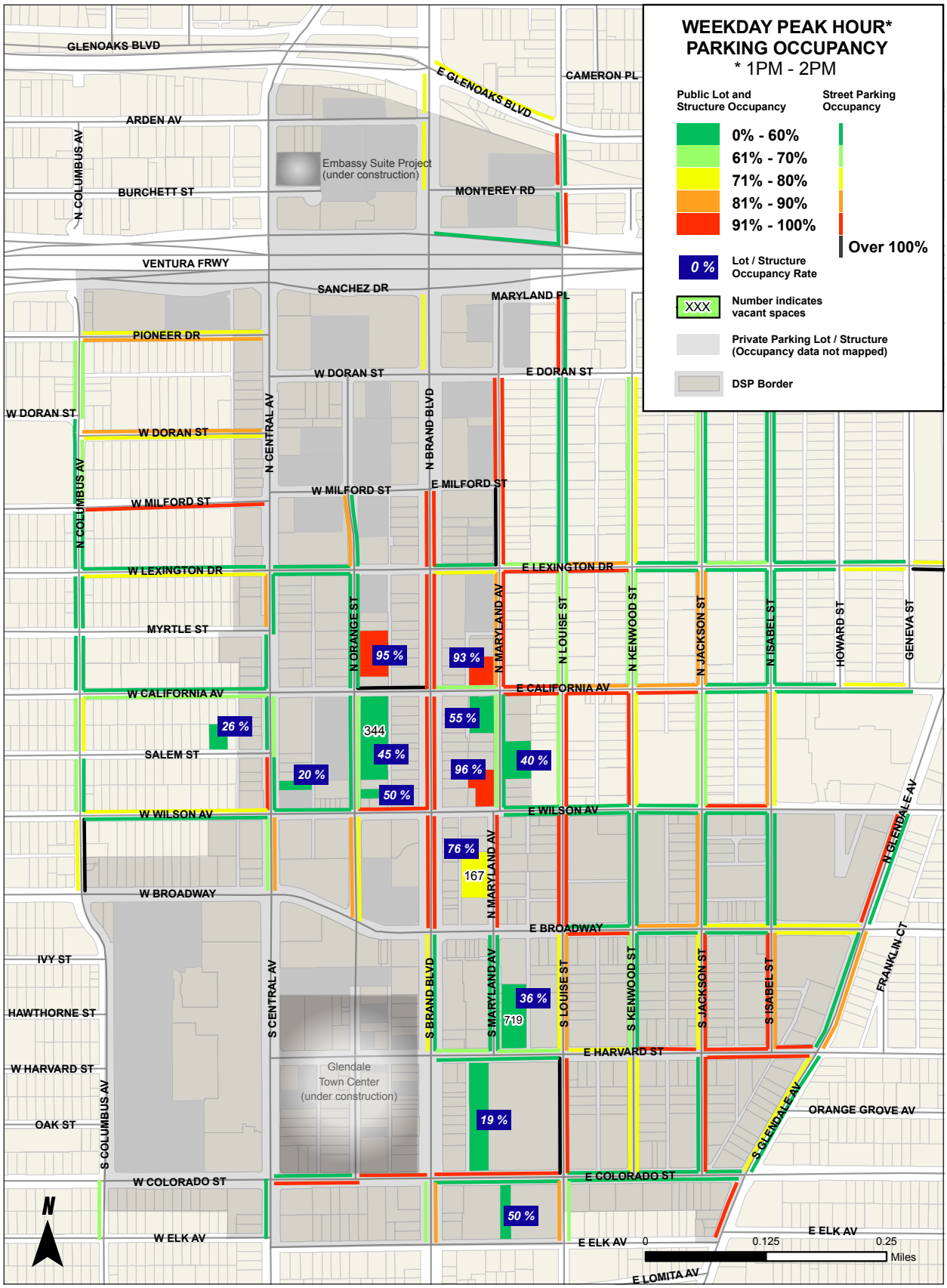
the west side of the 300 block of N. Brand Blvd. (Porto's Bakery is at 315 N Brand). After 6 pm, parking on Brand Blvd. will continue to be priced at $1/hour, but time limits will be eliminated. A "no parking" restriction from 3 am to 4 am should be implemented to prevent overnight parking (as is done in Pasadena).

- **All other streets:** Meter at $0.75/hour from 7 am to 10 pm with no time limits.
- **Lots:** Price at $0.75/hour from 7 am to 12 am with no time limits and no daily or monthly discount pricing offered. This *Downtown Mobility Study* recommends that time limits in all public parking lots be eliminated and demand-responsive prices be instituted. In rare cases (such as extremely high-demand lots), it may not be possible or desirable to implement demand-responsive prices immediately at high enough rates to promote adequate turnover. In these cases, time limits may be retained with the duration of time limits determined for each lot on a case-by-case basis. Even for those lots where time limits may be retained, parking rates should continue to be incrementally increased as needed to the point where prices alone are sufficient to promote adequate turnover, at which point the time limits may be removed. In order to encourage Glendale residents and employees to take transit for part of their trip, the City can offer a discounted monthly parking pass at any underutilized parking lots at the Glendale Transportation Center; such a pass would also allow for free shuttle connection to downtown.
- **Garages:** Offer the first 90 minutes free without validation. Thereafter price at $1.00/hour from 6 am to 1 am with no time limits. The price of a monthly parking pass should be increased slightly by $5 per month (to $50 to $60 per month depending on the facility) to account for the fact that there hasn't been an increase in monthly garage rates in 10 years and major maintenance needs are pending.[4] Even with this recommended increase, monthly rates in the City's public garages will be below-market rates charged by private parking facilities; for this reason, monthly rates at public facilities should be increased to market rates at any facilities where occupancy regularly exceeds 85%. Currently, occupancy in public garages is generally quite low, and in the interim the City should pursue implementation of program to provide downtown employees with discounted daily or monthly commuter parking passes on underutilized top floors of public garages.

Following the principle of using prices to manage parking demand will generally result in slight increases to parking prices in downtown Glendale; however, the City should reduce or waive parking prices during days and at facilities where parking

4 At current rates and occupancies, the City's public garages will soon be operating at a loss as pending maintenance needs become necessary (such as elevator replacement). In order for the garages to be self-sufficient, the City needs to optimize their use and revenue generation.

Figure 5-1 Downtown Glendale Parking: Weekday Peak Hour Parking Occupancy (1-2 PM)



Source: City of Glendale, Department of Transportation
Note: Occupancy data for lots and Brand Blvd. collected November 2004. Occupancy data for structures collected January - March 2005. Occupancy data for all other streets except Brand Blvd. collected August 2006 & November 2006. Hourly occupancy data was not available for lots 10 & 11, the occupancy mapped is an average. Those streets with no occupancy rate indicated are streets where curb parking is prohibited/restricted or streets where no occupancy data was provided.

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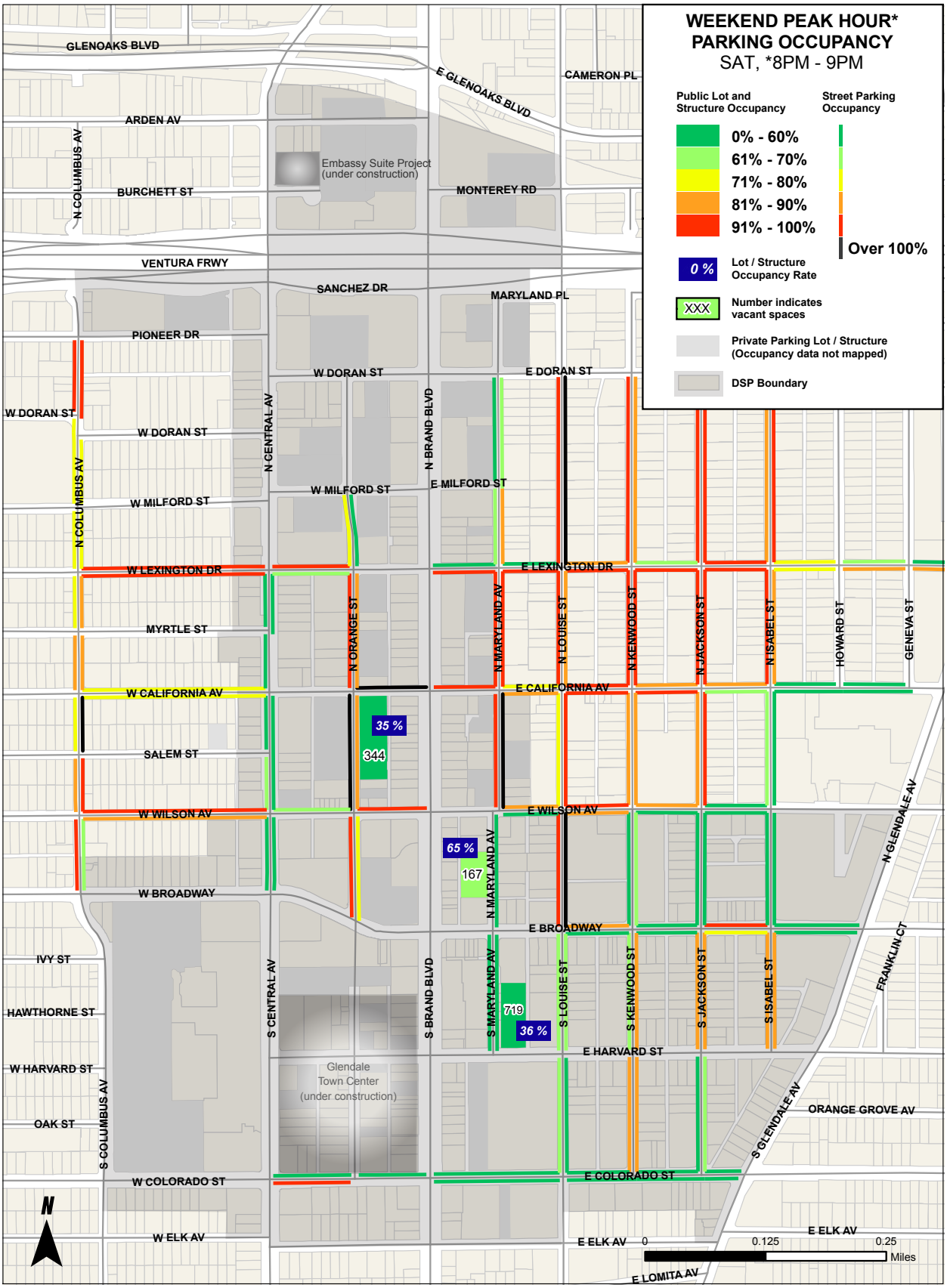
Figure 5-2 Downtown Glendale Parking: Weekend Peak Hour Parking Occupancy (8-9 PM)



***Source:** City of Glendale, Department of Transportation*

Note: Occupancy data for lots and Brand Blvd. collected November 2004. Occupancy data for structures collected January - March 2005. Occupancy data for all other streets except Brand Blvd. collected August 2006. Hourly occupancy data was not available for lots 10 & 11, the occupancy mapped is an average. Those streets with no occupancy rate indicated are streets where curb parking is prohibited/restricted or streets where no occupancy data was provided.

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demand is consistently and significantly lower than the ideal of 85%. For example, if occupancy surveys show that demand is consistently and significantly lower than 85% on Sundays, then the hourly price of parking can be reduced below the initial prices recommended here (or made free entirely if demand is so low to warrant it) until 85% occupancy is achieved. Or if demand is consistently and significantly lower than 85% on a particular block, parking prices can be reduced below the initial prices recommended here until 85% occupancy is achieved. As discussed in Recommendation 5.5, on-going monitoring of occupancy of all downtown and downtown-adjacent parking facilities (garages, lots, and on-street) will be necessary to guide the Traffic and Transportation Administrator (or their delegate) in making these pricing decisions.

As discussed in Recommendation 5.5, prior to and concurrent with the implementation of changes to downtown parking policies (such as priced parking, elimination of time limits at certain parking facilities, and installation of parking pay stations), the City should conduct extensive community outreach and education, install user-friendly signage to explain pay station operation, rates, and hours/days of operation, and deploy "Mobility Ambassadors" to assist with pay stations during first few weeks of implementation, and during peak visitor demand periods (these could either be existing City staff or temporary hires). A well-conceived and well-executed public outreach and media relations campaign is critical to ensuring the smooth implementation of the recommendations in this *Downtown Mobility Study.*

Time Limits

Without appropriate pricing policies, cities often rely on time limits to manage parking. Time limits, however, bring several disadvantages: enforcement of time limits is labor-intensive and difficult, and downtown employees, who quickly become familiar with enforcement patterns, often become adept at the "two hour shuffle," moving their cars regularly or swapping spaces with a co-worker several times during the workday. Even with strictly enforced time limits, if there is no price incentive to persuade employees to seek out less convenient, bargain-priced spots, employees will probably still park in prime spaces.

For customers, strict enforcement can bring "ticket anxiety," the fear of getting a ticket if one lingers a minute too long (for example, in order to have dessert after lunch). As Dan Zack, Downtown Development Manager for Redwood City (CA), puts it:

> *Even if a visitor is quick enough to avoid a ticket, they don't want to spend the evening watching the clock and moving their car around. If a customer is having a*

ABOVE: Ninety minutes of free parking would eliminate the need for the City of Glendale's parking validation program.

> *good time in a restaurant, and they are happy to pay the market price for their parking spot, do we want them to wrap up their evening early because their time limit wasn't long enough? Do we want them to skip dessert or that last cappuccino in order to avoid a ticket?*[5]

A recent report summarizes a survey that found similar results among visitors to downtown Burlingame (CA):

> *In a recent "intercept" survey, shoppers in downtown Burlingame were asked which factor made their parking experience less pleasant recently...The number one response was "difficulty in finding a space" followed by "chance of getting a ticket." "Need to carry change" was third, and the factor that least concerned the respondents was "cost of parking." It is interesting to note that Burlingame has the most expensive on-street parking on the [San Francisco] Peninsula ($0.75 per hour) and yet cost was the least troubling factor for most people.*[6]

This is not an isolated result. Repeatedly, surveys of downtown shoppers have shown that the availability of parking, rather than price, is of prime importance.

For these reasons, this *Downtown Mobility Study* recommends that – with the exception of Brand Boulevard where time limits will remain in place along with new metered parking – time limits be phased out in the DSP area once a policy goal of 85% is implemented and priced parking is implemented. This is because transportation research and practical experience shows that demand-responsive pricing is a far superior mechanism than time limits for promoting turnover of short-term spaces, optimizing efficient use of curb parking, and reducing enforcement costs.

Validation

Furthermore, this *Downtown Mobility Study* recommends that the City phase out its current validation program (when existing agreements expire). The current validation program results in the loss of $400,000 to $450,000 parking revenue annually.[7] This amounts to nearly a half-million dollar annual subsidy for driving downtown (with no subsidy provided to visitors who arrive downtown by other modes).[8] The validation program also carries with it an inherent administrative cost, and is counter to the City's goal for reducing the growth of traffic congestion as new downtown development moves forward. Offering 90

5 Zack, Dan. *Downtown Redwood City Parking Management Plan*, Community Development Department, Redevelopment Division (2005).

6 Ibid.

7 Data provided by the Jano Baghdanian, City of Glendale Traffic and Transportation Administrator, 1/17/07.

8 For example, motorists who drive downtown, park in a public garage, and attend a movie get $1 off their movie ticket with parking validation (in addition to 4 hours of parking for $1). Movie lovers who visit downtown theaters by transit, on-foot, or by bicycle receive no similar discount, providing financial incentive for people to drive downtown.

minutes free in the garages will accomplish the goal of incentivizing motorists to use the garages instead of cruising for on-street parking and will save the City the administrative costs of running the validation program. Combined with an improved signage and wayfinding system, people will be encouraged to go to the garage directly, avoiding congestion downtown.

Public Parking Leases

So long as peak occupancy in public parking facilities remains low, the City may continue its program of leasing surplus parking spaces at below-market rates. However, at any facility where total peak parking occupancy regularly exceeds 60% in the previous year and at any facility where peak parking occupancy ever exceeds 75% on any single occasion in the previous year, this plan recommends charging market rates for all parking lessees. Based on this recommendation, when current leases for public parking spaces expire, they should be renegotiated to be no less than market rates as needed. In fact, because the leases for auto storage are for assigned spaces that are typically used all day and all night, the City should consider negotiating leases for auto storage that charge a premium on market-rates. This premium is justified for two reasons:

1. Because the assigned parking is essentially a reserved and guaranteed space, and transient and monthly parkers paying market rates do not receive reserved guaranteed spaces.

2. Because any spaces assigned for auto storage become unavailable to the City for other parking uses, resulting in a potential loss of parking revenue to the City from multiple transient parkers that might have been able to use the space throughout the day.

The basic principle is that leases for public parking should never result in a loss of parking revenue for the City compared to the revenue potential if the leased spaces were sold to the public at hourly rates.

These prices are the initial recommendation that we believe will achieve 85% occupancy rate. After implementation, occupancy rates should be evaluated in 6 months (and thereafter annually), with prices readjusted to achieve the 85% occupancy rate. For example, parking prices should be increased and/or hours of paid parking operation should be expanded beyond current recommendation whenever and wherever demand exceeds 85%. To achieve the flexibility required to implement demand-responsive pricing, the City Council should authorize the Traffic and Transportation Administrator or their delegate to adjust downtown parking prices up to a certain price threshold, as discussed in Recommendation 5.8.

The Legal Basis for Setting Demand-responsive Parking Prices

The California Vehicle Code (CVC Sec. 200258) allows local jurisdictions to set parking meter prices at fair market rates necessary to achieve 85% occupancy (see Appendix 5B Redwood City Ordinance). California case law authorizes local jurisdictions to enact parking meter ordinances with fair market rates and that cities "may…justify a fee system intended and calculated to hasten the departure of parked vehicles in congested areas, as well as to defray the cost of installation and supervision." California case law also recognizes that parking meters ordinances are for the purpose of regulating and mitigating traffic and parking congestion in public rights-of-way, and not a tax for revenue purposes.

Hourly Meter Rates in Peer Downtowns	
$0.50	Culver City
	Hermosa Beach
	Oceanside
	Redwood City
	Seal Beach
$0.60	Glendale
$0.75	Arlington County, VA
	Berkeley
	Santa Monica
	Manhattan Beach
	Redondo Beach
$1.00	Boulder
	Laguna Beach
	Long Beach
	Newport Beach
	San Clemente
	West Hollywood
$1.25	Pasadena
$1.50	Del Mar
	Huntington Beach
$2.00	Long Beach Pike Area

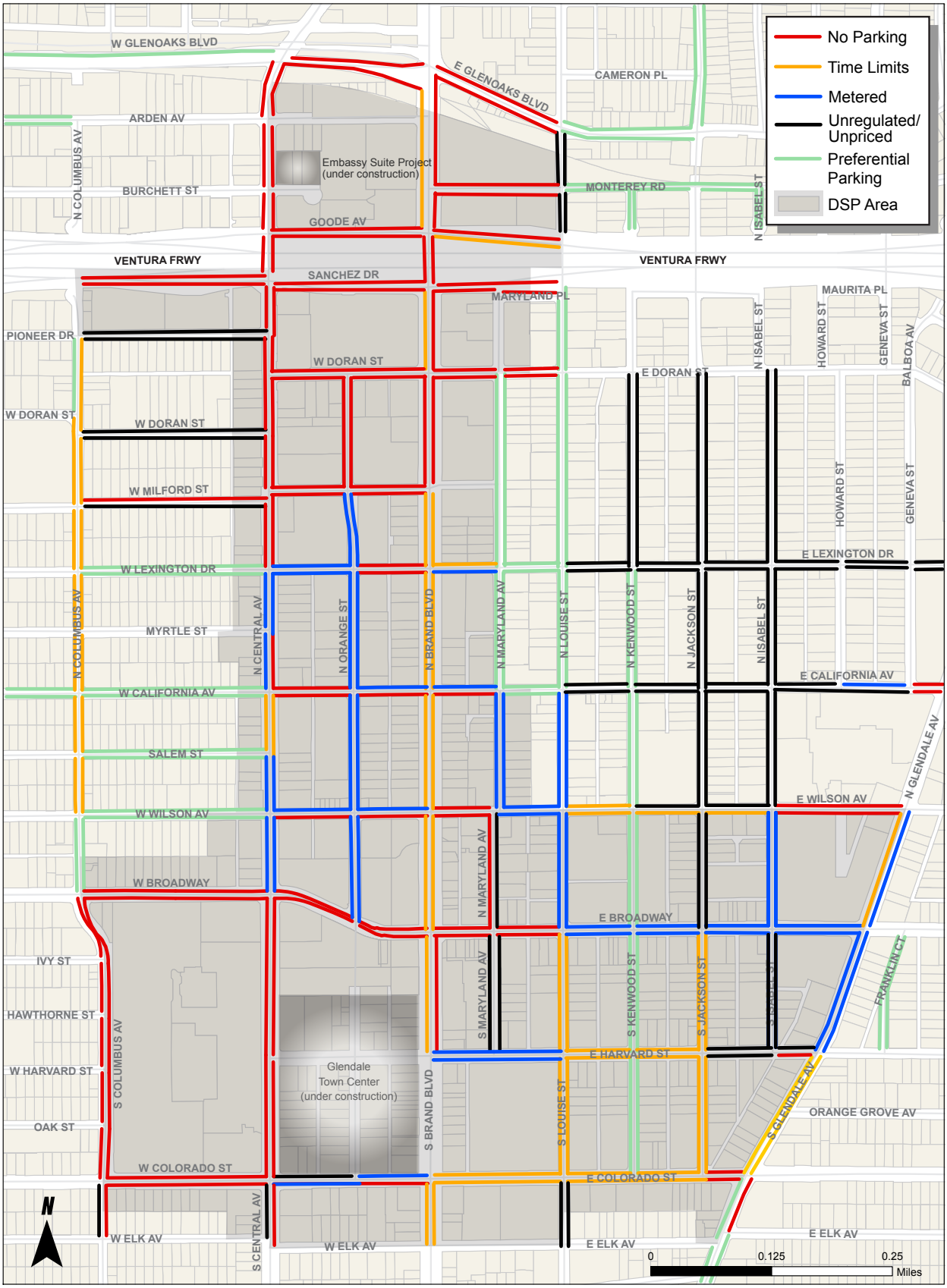
The recommended parking management policies and prices are summarized in Figures 5-3 through 5-6. Figure 5-4 is a map illustrating existing downtown parking regulations, which can be compared to the recommended regulations shown in Figure 5-5 and recommended prices shown in Figure 5-6. The table at left shows parking prices in select Glendale peer cities for comparison.

Recent advances in technology have made paying for parking and evaluation of parking occupancy rates more efficient, cost-effective, and customer-friendly, as discussed in Recommendation 5.5.

Figure 5-3 Initial Parking Policy Recommendations – Glendale *Downtown Mobility Study*

	Downtown On-Street Parking		Downtown Off-Street Parking		Transportation Center (GTC) Off-Street Parking
	Brand Boulevard	Non-Brand Boulevard	Lots	Garages	Lots
Price	$1/hour	$0.75/hour	$0.75/hour	1st 90 min. free $1.00/hr thereafter $50-$60/month	**Metrolink riders:** Free **All others:** $0.50/hour; $25/month
Hours of Operation	7am-1am	7am-10pm	7am-12am	6am-1am	24 hours
Time Limits	7am-6pm: 2 hours 6pm-1am: Unlimited	none	none	none	none

Figure 5-4 Downtown Glendale Parking Regulations - Existing



Nelson|Nygaard consulting associates

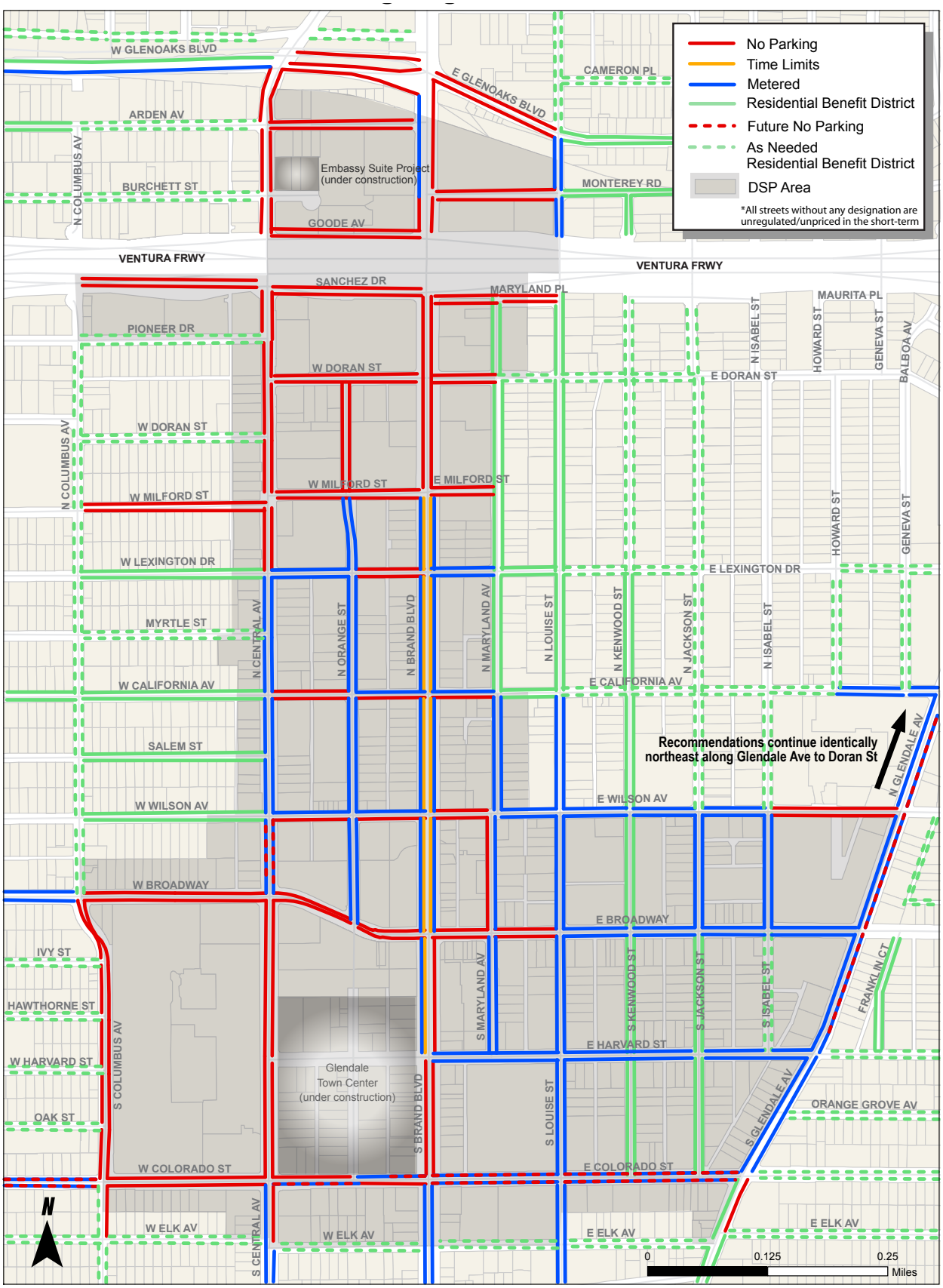
Source for No parking, time limits, metered: *(1) Summer 2006 "DSP Parking Occupancy Survey," provided by City of Glendale Aug & Nov 2006. (2) November 2004 "Brand Boulevard On-Street Parking Study," provided by City of Glendale Spring 2006. (3) Parking Regulations for South Glendale Avenue north of Harvard, and Harvard Street from Brand to Louise: "Glendale Parking Figures, January-December 2004: Downtown Area Metere [sic] Streets," provided by City of Glendale October 2006; and 2001 "Short Range Parking Plan," provided by City of Glendale Spring 2006, p.9*

Source for Preferential Parking: *Preferential Parking Master Location List" (undated), provided by City of Glendale Spring 2006*

Source for Unregulated / Unpriced: *Summer 2006 DSP Parking Occupancy Survey, provided by City of Glendale August & November 2006*

Note: *All streets with no designation are streets where no data was provided.*

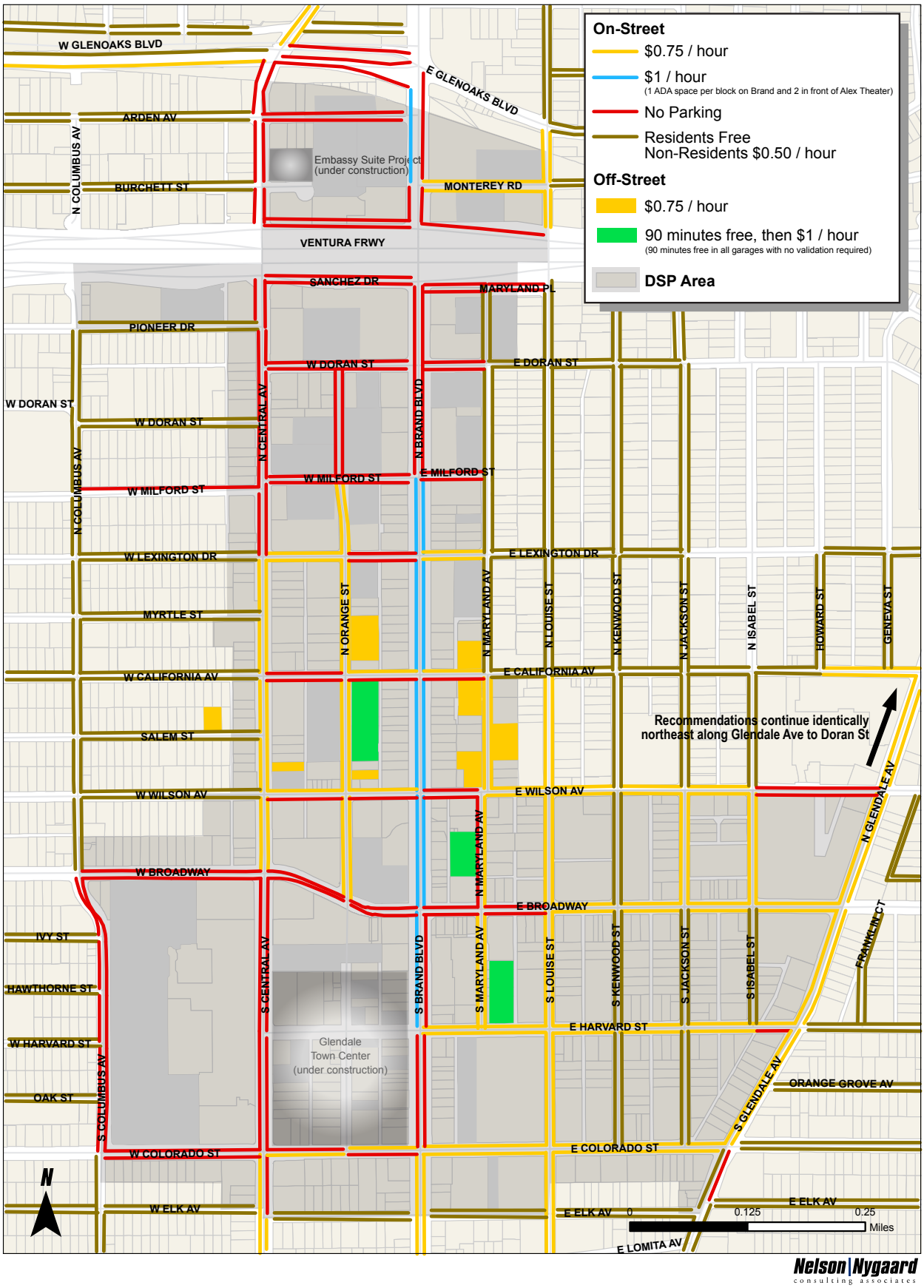
Figure 5-5 Downtown Glendale Parking Regulations - Recommended



Nelson|Nygaard consulting associates

Note: *See Parking Section of Mobility Plan for specific information on recommended meter prices and time limits.*

Figure 5-6 Downtown Glendale Parking Prices - Recommended



Glendale Transportation Center Parking

There are approximately 465 parking spaces in 3 off-street public lots at the Glendale Transportation Center/Metrolink station. Currently this parking is unpriced with no time limits. These parking management policies are in place in order to encourage commuters who live in Glendale and the nearby vicinity to drive to the Transportation Center and take the train for the rest of their commute, thereby reducing peak-hour freeway congestion.

However, because these spaces are free and allow all-day parking, many of these spaces are used by employees of nearby businesses. According to City staff, only about 25% of spaces are occupied by Metrolink riders. Recently, staff has signed the lots to discourage parking from non-train riders, but violations continue to be an issue. This leads to high occupancy rates in the Transportation Center lots that occasionally limit their availability by Metrolink/Amtrak commuters.[9] In order to ensure that the off-street parking spaces at the Glendale Transportation Center are available for their intended users, the management polices should be changed as follows:

- Install automated revenue control system to allow for validated and priced parking at these lots.
- Allow Metrolink/Amtrak riders to park free all day simply by validating their parking ticket at the existing train ticket vending machines on the station platform.[10] If necessary, until that technology becomes available, Metrolink riders can validate their parking space at a separate pay station on the platform.
- Allocate remainder of spaces not needed by Metrolink/Amtrak riders for short- and long-term parking and price as follows: short term parking at $0.50/hour, long-term commuter parking at $25/month.
- To protect neighborhoods in the areas adjacent from spillover parking from employees who wish to avoid paying for parking, the City should implement a Residential Parking Benefit District or a Commercial Transportation and Parking Management District in the areas immediately adjacent to Glendale Transportation Center, as discussed in Recommendation 5.15.

These recommendations are summarized in Figure 5-3.

Recommendation 5.3
Implement parking pricing system for Glendale Transportation Center parking lots allowing Metrolink and Amtrak riders to park free all day but charging all other short-term and long-term parkers.

9 No data on overall parking occupancy or parking occupancy by user type (e.g. Metrolink rider, short-term parking, employee parking, etc) was provided for the Glendale Transportation Center but anecdotal information that this parking is used by employees of nearby businesses was provided by City Department of Transportation staff and the City's private parking management contractor.

10 In order to reduce clutter on the station platform, incorporating parking validation system into the existing ticket vending machines is the preferred option. However this recommendation requires coordination with outside agencies of Metrolink and Amtrak. If implementation is not possible within a reasonable time frame, then the City should arrange to install free-standing parking validation machines.

Parking Validation for Transit Riders

Similar parking management policies/systems for transit station parking have been implemented in the BART system in the San Francisco Bay area. The BART system offers a parking validation program at three of its high-volume stations to guarantee space availability for BART riders. Riders parking at these stations are required to obtain validation on weekdays by entering their parking stall number into a machine located inside the fare gates. The machine records the rider's parking location and issues a receipt. Those failing to validate their parking are subject to citation.

5.3.2 IMPROVE CUSTOMER-FRIENDLINESS FOR DOWNTOWN VISITORS

Recommendation 5.4
Implement a multi-modal transportation and parking wayfinding system, including information on parking direction/location, pricing, and real-time parking occupancy.

Downtown Wayfinding System

As previously discussed, downtown Glendale does not currently suffer from an overall shortage of parking, as even when Brand Blvd. is fully-occupied during the weekday peak (1-2 pm), there are approximately 2,500 public spaces available in nearby parking lots and garages. Thus, downtown visitors arriving by car may perceive a *lack of parking*, but in reality there is a *lack of information* about where available parking is located (coupled with a pricing structure that provides an incentive to motorists to cruise for cheap or free on-street parking rather than pay to park in underutilized garages). For this reason, downtown Glendale should implement a parking wayfinding signage system to direct motorists to available parking.

The parking wayfinding signage system should integrate directional information (e.g., signs that convey the message that "Parking is this way"), locational information (i.e., signs that convey the message that "You've arrived at Parking Facility X"), pricing information (i.e., signs that convey the message that "Parking here costs this much"), and real-time occupancy information (i.e., signs that convey the message that "Parking Facility X is currently full, but Parking Facility Y currently has 287 available spaces"). Best practices in parking wayfinding signage are shown in the sidebar on the following page.

The wayfinding system should also provide directional information for pedestrians. Incorporating pedestrian wayfinding signage into the parking wayfinding system is critical for both pedestrians who walked *to* downtown and those who are walking *through* downtown after first arriving by car, transit, or bicycle. Even visitors who arrive by car must be provided with adequate pedestrian wayfinding systems, because no one drives downtown just to park their car, but rather to park and then walk to their ultimate destination. An integrated parking and pedestrian wayfinding signage system will help direct all visitors, and will benefit motorists so that when "feet hit the street" after parking their car, they will know where to go next.[11]

An additional benefit of a wayfinding signage program is that it will to help "brand" downtown as unique, distinctive, and memorable for visitors.

ABOVE: The entrance to the Orange Street parking garage is on a back street and therefore not clearly visible from main streets. In addition, pedestrians exit from the garage onto alleys that can be disorienting.

11 Signage in alleys is particularly important to make them less disorienting. For example, how does a motorist who has just parked in the Orange Street garage and descended the alley-side stairs to the street-level know which way to walk to get to the front door of their ultimate destination?

Best Practices in Parking and Wayfinding Signage

Recent advances in parking technologies allow parking wayfinding signs to be enhanced with electronic messages, occupancy tracking systems, and user interface devices to provide real-time pricing and occupancy data to motorists. This information can be conveyed to motorists once they are at their parking destination (via pole signs, wall signs, or on parking pay stations/facilities), when motorists are on their way to the parking destination (via cell phone or roadside signs), or even before the motorist has left the house (via the Internet).

Such "smart" signage systems can help reduce traffic congestion and improve traffic safety by reducing conflicts and collisions between autos and other modes. For example, transportation researchers have found that an average of 30% of traffic congestion (with a range of 8 to 78%) on urban streets is due to drivers "cruising" for on-street parking.[1] In addition, transportation researchers have found that 15% to 20% of all vehicle collisions (and 40% to 60% of mid-block collisions) are associated with on-street parking movements.[2]

1 Shoup, Donald. *The High Cost of Free Parking*. Chicago: APA Planners Press (2006), pp. 279-91 and 358-61.

2 Ibid., pp. 361-2.

For these reasons, the City should build upon the strengths of the existing downtown parking wayfinding system by implementing an integrated wayfinding signage system downtown, as follows:

- Provide signage to help motorists find available parking quickly in order to improve visitors' experience and make the most efficient use of parking supply.
- Create a pedestrian-friendly environment that is easily navigated by downtown residents, employees, and visitors (especially first-time visitors).
- Improve circulation and safety for all users of all modes (autos, transit, bicycling, and walking) and reduce modal conflicts.
- Prioritize good design by developing aesthetically-pleasing signage that integrates simple, clear, legible, visible signs, kiosks, maps, wall graphics and other "landmark" elements such as public art that can achieve both a wayfinding and placemaking function.
- Parking wayfinding signage should incorporate essential info such as direction/location, price, and real-time occupancy; to display real-time occupancy, signage should be integrated with automated occupancy sensor technologies such as "loops" or "motes" (remote sensors) as described in Recommendation 5.5.
- Encourage private parking facilities to be incorporated into the wayfinding system, so long as they adhere to the City's pricing strategy.
- Develop signage standards for new development and require new private and public development to incorporate appropriate signage elements into new development projects to support and complement the overall wayfinding system.
- Conduct periodic "post-implementation" analyses and surveys to determine any changes that may need to be made to signage system over time as context conditions change.

For additional information, specific technical recommendations, best practices, and a select list of potential technology vendors, see Appendix 5D.

Recent advances in parking technology have made automation of payment, occupancy monitoring, and enforcement of paid parking possible. Modern multi-space parking pay stations are capable of instantly transmitting current information on the number of spaces in paid use on each block where the pay stations are installed, giving the Traffic and Transportation Administrator (or their delegate) the ability to constantly monitor parking usage in the system.

Evaluating Different Payment System Options: Pay-and-Display vs. Pay-by-Space

As the city considers implementation of multi-space pay station technology, *it must also consider what type of parking payment* system it wants to implement with the new meters.

The two major payment system options are:

- Pay-and-display, in which a motorist parks their car, pays for parking at a designated pay station, gets a receipt, and then returns to their car to affix the receipt to their vehicle as proof of payment for enforcement personnel.
- Pay-by-space, in which a motorist parks their car, enters their space number into a designated pay station, and then continues to their ultimate destination without needing to return to their vehicle. The pay station indicates proof of payment to enforcement personnel (either by a panel display or via wireless transmission).

There are pros and cons of each of these payment systems, and these are highlighted briefly below by focusing on the comparative advantages and disadvantages of a pay-by-space system:

Pay-by-Space Advantages:

- Park, pay, and go: No need to return to car after paying.
- Multiple interfaces: Depending on the vendor/model, motorists can add additional time from any meter, website, or cell phone.
- Only pay for the time you use:
  - ✧ Depending on the vendor/model, motorists can purchase as much time as needed, and get a refund for unused time.
  - ✧ Depending on vendor/model, users can select "pay maximum" and get a refund for unused time.
- Customer-friendly: A grace period can be pre-programmed into the pay stations to provide a better customer experience.
- Ease of enforcement: Officers check one pay station instead of multiple meters (with single-space pay stations) or multiple vehicles (with pay-and-display systems).[1]
- Reduced litter: Does not require printing and display of receipts which can contribute to litter (although receipts can be issued for those that want them).

Pay-by-Space Disadvantages:

- Individual spaces have to be marked, resulting in a 10% to 15% loss of parking efficiency (and some corresponding loss in revenue) compared to pay-and-display.
- With no required receipt, it can be more difficult to resolve disputes over paid (or unpaid) time.
- Motorists sometimes forget their space, leading them to punch in the wrong space number or requiring them to return to their car.
- Inclement weather or vandalism can make it difficult to read space numbers.
- Pay-and-display systems allow motorists to pay once and move their car anywhere in the area covered by the meters, so long as their receipt is displayed (although this eliminates the ability of using remote sensors to assist with identifying and alerting enforcement personnel to parking violations).

The City's Traffic and Transportation Division has applied for a federal grant to conduct a pilot test of multi-space pay stations in downtown Glendale. If that grant application is successful, the City will issue an RFP to various pay station vendors, and will ask them to install pay stations with both types of payment systems so that City staff and downtown employees and visitors can evaluate the advantages and disadvantages of each system.

[1] Studies suggest that enforcement time, labor costs, and injuries are higher with manual enforcement required with a pay-and-display system, resulting in less robust enforcement regime at a higher cost.

Multi-Space Parking Pay Stations

The Traffic and Transportation Division is currently applying for a federal grant to conduct a pilot test of multi-space parking pay stations in downtown Glendale. There are several meter technologies and payment systems that Glendale could use (see sidebar on the previous page), but a review of best practices in cities comparable to Glendale and a review of the capabilities of existing metering technologies found that the preferred approach would balance the following goals:

- Maximize ease of use in order to increase customer convenience and reduce uncertainty and anxiety.
- Minimize capital and operations costs (administration, maintenance, and enforcement).
- Promote turnover of curb parking spaces (so that visitors can always find a space).
- Achieve other downtown revitalization goals (good urban design, cleanliness, etc.).

Benefits of implementing multi-space pay stations (along with pricing parking at fair market rates and eliminating time limits) include the following:

- Maximizes ease of use and customer convenience.
- Allows multiple payment options: Pay with cash, debit/credit cards, cell phone, so no need to carry exact meter change.
- Can reduce "ticket anxiety": Eliminating time limits and installing certain types of multi-space pay station can reduce or eliminate "ticket anxiety." The City of Glendale issues an extremely high number of parking citations every year (approximately 200,000), and most of these are for "overstay of time limits." Many of those ticketed – if not all – would likely be happy to have the option to purchase as much time as they need at fair-market rates rather than receive an expensive parking ticket. Depending on the pay station vendor/model the City selects and if the City chooses to implement a pay-by-space payment system (as discussed in the sidebar on the previous page, "Evaluating Different Payment System Options: Pay-and-Display vs. Pay-by-Space"), users who pay with a debit or credit card can add time at any pay station downtown, online, or even via their cell phone.
- Better user interface: Large, interactive display screens can convey more information (instructions, promotions for local businesses, etc.).
- Minimizes taxpayer costs: Multi-space meters can reduce administration, maintenance, and enforcement costs, as detailed below.
  - Reduced capital costs: One meter controls several spaces, so initial capital and ongoing replacement costs are reduced.

Recommendation 5.5
Install networked multi-space pay stations and occupancy sensors to improve customer friendliness, revenue management, and occupancy monitoring of downtown parking.

- ✧ Reduced operating costs: If the city chooses meters that are solar-powered with battery back-up, there will be no need for electrical hook-ups and no electricity costs.
- ✧ Reduced downtime and maintenance costs: Harder to vandalize; if failure occurs, service alerts sent wirelessly by e-mail, cell phone, or text message to multiple responsible parties (maintenance worker, parking enforcement dispatcher, etc) to reduce downtime and help resolve customer service issues.

◆ Automated audit trail, reduced revenue loss: Fully automated audit trail of all service actions, cash transactions, and parking purchases helps reduce operations costs and revenue loss.

◆ Enhanced data collection, better planning decisions: Depending on the vendor, many multi-space pay stations can provide real time data on parking occupancy and revenue collections transmitted wirelessly and available anytime from any internet connection for monitoring and auditing; allows City to make future changes to parking rates and hours of operations based on actual parking demand data.

◆ Allow parking managers to set parking prices at the lowest possible price necessary to manage demand and optimize parking revenue, as detailed below:

- ✧ Demand-responsive pricing: Prices can be easily adjusted from a central terminal, using the wireless network features, to promote turnover and 85% occupancy; higher rates can be charged in areas and times when demand is higher, so downtown visitors can always find a parking space.
- ✧ Tiered pricing: Allows "tiered" prices (e.g., $0.50 for the first two hours, $1 per hour thereafter) in various combinations, allowing rate structures that encourage long-term parkers to use off-street lots and garages while leaving more convenient "front door" curb spaces available for short-term parkers.
- ✧ No free lunch: Multi-space pay stations can collect more revenue per space even with no change in parking pricing, because they "zero out" after every use so that each motorist only pays for the amount of parking that they use.

◆ Achieve other downtown revitalization goals: Promotes better streetscape design, sidewalk cleanliness, etc.

◆ Better urban design: 1 or 2 pay stations per block instead of 10 or 20, so doesn't obstruct sidewalks with a "picket fence" of single-space meters.

While the "per unit" costs of modern multi-space pay stations are greater than the unit costs for traditional single-space meters, the "per space" costs are comparable, since each multi-space meter can cover multiple parking spaces (one meter for 10 spaces is recommended). These technologies will allow the City to optimize parking revenue and decrease parking enforcement costs, as better parking information leads to better parking management decisions.

Parking Occupancy Monitoring with Remote Sensors

There are several different technologies currently available for monitoring parking occupancy. These include:

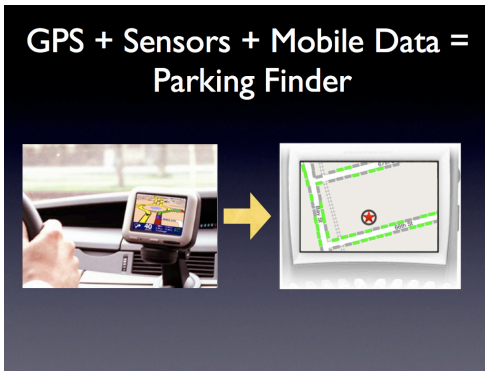
- Remote sensors that adhere to the pavement and electromagnetically sense a "parking event" and then wirelessly transmit real-time occupancy data to parking managers.
- Loop sensors embedded in the pavement that detect a vehicle electromagnetically but transmit this information through a wired connection.
- Automatic vehicle identification (AVI) cameras which photograph car's license plates and then identify unique parking events by detecting vehicles that have moved from one space to another within the same district.
- Traditional pen-and-clipboard surveys done manually.

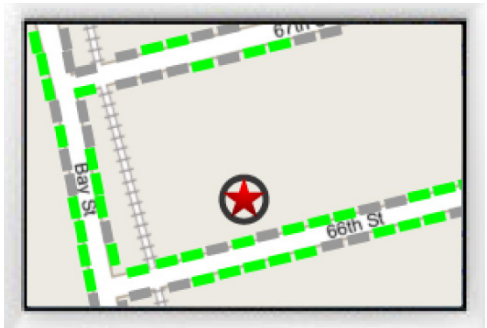
Each of the latter three has disadvantages compared to remote sensors that provide "always on" real-time occupancy data and adhere directly to the pavement. These relative disadvantages include:

- Loop sensors have the advantage of providing always-on occupancy monitoring like remote sensors, but must be embedded under the pavement, leading to higher implementation and maintenance costs.
- AVI cameras have lower upfront capital costs (especially newer, more portable "mobile" units) than remote sensors, but they have higher labor costs and only provide an occupancy "snap-shot" of one point in time (this can be improved with additional surveys, but repetition increases labor costs).
- Finally, traditional pen-and-clipboard surveys have extremely low capital costs, but very high labor costs (and error rates due to the "human factor"), and must be repeated frequently in order to provide up-to-date information necessary to allow parking managers to adjust parking policies to manage current demand patterns.

For these reasons, this *Downtown Mobility Study* recommend that the City implement a parking occupancy monitoring system using remote sensors. Remote sensors can be installed with or without multi-space pay stations discussed above. Remote sensors can monitor occupancy for all parking that is unmetered, such as off-street parking lots and garages and unpriced on-street parking. In addition, remote sensors can be installed if the City desires to supplement the "revenue-derived" occupancy information supplied by the pay stations with more accurate "use-derived" occupancy information, as illustrated in the images on the right.[12]

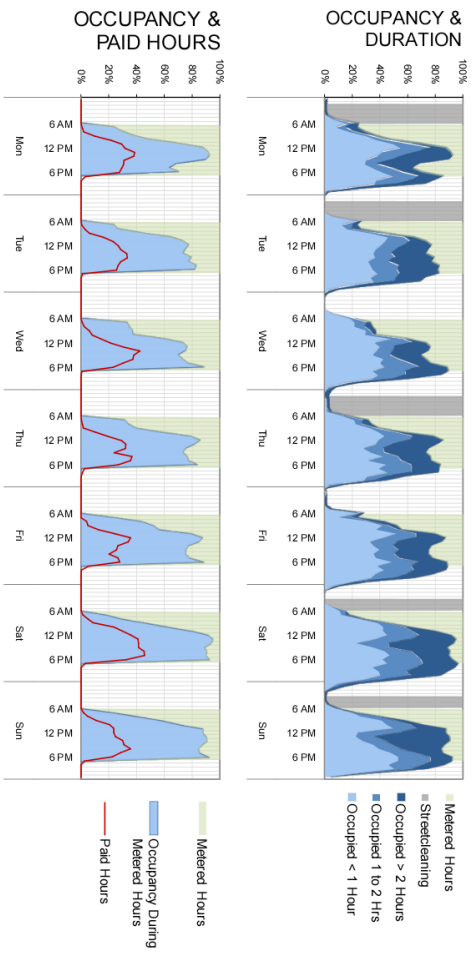
ABOVE: Remote sensors that adhere to the pavement and electromagnetically sense a "parking event" and then wirelessly transmit real-time occupancy data to parking managers. *Photos courtesy of Streetline Networks.*





ABOVE: Remote sensors can be programmed to communicate with end-user interfaces such as websites, cell phones, and GPS (Geographic Positioning System) units. *Photos courtesy of Spark Parking.*

12 Whereas current meter technology is only able to calculate a "revenue-based" occupancy of those who paid to park during those hours when parking is priced, remote sensors provide a more accurate and comprehensive occupancy data by recording each and every parking "event" whether paid or unpaid. In a metered environment, remote sensors would allow the City to capture more accurate occupancy rates during



ABOVE: Most vendors will set up a management interface (such as an online website capable of generating queries and reports) as part of a turn-key contract, or generate reports at the City's request as part of a build-operate-transfer contract. *Image courtesy of Streetline Networks.*

These sensor-based occupancy monitoring systems also allow reports to be generated to track occupancy by the hour over the course of a day, weeks, or months (such as the image at left).

In conjunction with implementation of the occupancy monitoring system, it is advisable that the City use solar-powered (with a battery back-up), wirelessly-networked pay stations in places that are not already designed to support electricity, to expedite the implementation process, decrease installation costs, and allow for more long-term flexibility in the placement of priced parking.[13] It should be noted that the recent Brand Boulevard improvements included installation of conduit that could provide electrical power if needed for a future parking management system on that street.

As discussed above, if the City's Traffic and Transportation Division federal grant application to do a pilot test of multi-space pay stations is successful, the City will issue an RFP to various pay station vendors, and will ask them to install pay stations with various capabilities (including different payment systems and potential compatibility with various occupancy monitoring systems). This pilot will allow the City to evaluate the advantages and disadvantages of different pay station vendors and models to determine the package of features that will help the City achieve its goals for downtown. At this time and based on best practices in parking management, this *Downtown Mobility Study* recommends the following:

- Install multi-space pay stations (not single-space meters) that:
  - Can control multiple parking spaces, resulting in just one or two pay stations per block face (10 spaces per pay station recommended in this *Study*).
  - Accept multiple forms of payment (coins, credit cards, pay by phone, etc.).
  - Allow the user to extend time without returning to their vehicle from any other pay station, online, or by cell phone, to provide ease of use (only a pay-by-space payment system can accomplish this recommendation).
  - Are centrally networked with wireless technology, to reduce operations costs and improve parking management and pricing decisions; in those locations where electrical conduits have

revenue hours by also counting cars who parked free, either legally (e.g. an ADA space) or illegally. In addition, remote sensors would allow the City to track occupancy during non-revenue hours. Remote sensors have the added advantage of being able to transmit a violation alert, allowing the City to dispatch parking enforcement personnel to the location of a parking violation (overstay of time limits, parking in a bus zone, etc.).

13 Meters that are not solar-powered must be connected to the electric grid; meters that are not networked wirelessly must be networked via fiber optic cable or copper-based (DSL or RS 485 long distance) cable. Both require overhead wires and/or underground conduits, thereby slowing implementation, increasing cost, and reducing locational flexibility.

not already been installed in anticipation of the multi-space pay stations, the City should consider specifying solar-powered meters to reduce capital and operation costs.

- Implement an automated parking occupancy monitoring system as follows:
  - Implement remote sensors to automate monitoring of parking occupancy.
  - Integrate payment and occupancy monitoring systems with new enforcement technologies to reduce enforcement costs and optimize violation "capture" rates.
  - Integrate payment and occupancy monitoring systems with parking wayfinding signage to provide real-time occupancy information to downtown visitors (as discussed in Recommendation 5.4).

Multi-space pay stations should initially be installed on Brand Blvd. where parking demand is highest and subsequently installed throughout downtown where ever peak occupancy for on-street parking regularly and consistently exceeds 85%.

Loop sensor systems can be more cost-effective for off-street parking facilities (especially larger facilities) than installation of remote sensor units for every single space. For parking lots and garages with limited ingress and egress points, loop sensors installed at the entrances and exits of the facility can provide real-time occupancy simply by tracking the number of cars coming and going relative to the total number of spaces in the facility. (See the sidebar at right, "Santa Monica's Online Real-Time Occupancy System," for an example of this type of system that provides benefits to both parking managers and parking users.) But for on-street parking, remote sensors provide the most cost-effective solution because they are currently the only technology that can provide "always-on" real-time parking occupancy information necessary for making improved parking management decisions.

Regardless of whether or not the City chooses to implement the occupancy monitoring system recommended in this *Downtown Mobility Study*, the City should monitor daytime and nighttime parking occupancy concurrent with implementation of any significant changes to parking management (e.g. rates, hours of operation, time limits, etc.) In addition, the City should monitor parking occupancy on downtown-adjacent and Glendale Transportation Center-adjacent residential neighborhoods, in order to identify and immediately address any spillover parking problems (per Recommendation 5.15).

Additional technical details and a select list of potential parking technology vendors are included in Appendix 5D.

Santa Monica's Online Real-Time Occupancy System

Recently, the City of Santa Monica launched a real-time parking occupancy website that lets visitors check on-line, and perhaps soon by Blackberry, to find out where parking spaces are available before venturing downtown. The site updates every 5 seconds to display the number of available parking spaces in garages and beach lots in Central Santa Monica. Sensors at the entrances and exits to every parking facility keep track of how many cars come and go, then send the data to a City server which posts the information online. In addition, the data is posted on electronic signs outside each facility. This technology, developed by Hitech Software Inc., takes existing, widely-used electronic occupancy sign technology to another level by posting the information online.

Through providing a faster, easier, more convenient visitor experience, this system is intended to improve the attractiveness of Santa Monica's downtown in a highly competitive Los Angeles shopping environment. It should also reduce traffic and air pollution caused by cars circling looking for parking. The City of Brea expects to have a similar system up and running by January.

Sources: Santa Monica's real-time parking occupancy website. Accessed at http://parkingspacenow.smgov.net in January 2007; Martha Groves, "Santa Monica revs up parking space website: Officials hope a website with updates on spaces will ease traffic problems," *Los Angeles Times*, 1/22/06.

Recommendation 5.6
Continue existing City protocols that dedicate adequate parking spaces throughout downtown for loading zones, taxi stands, and ADA-accessible parking.

ABOVE: Mechanically retractable bollards (either hydraulic or pneumatic) could be installed on alleyways that serve as major pedestrian thoroughfares to limit vehicle access during most times of days, with commercial delivery and life safety vehicles using an electronic transponder to lower the bollards as needed. Photo courtesy of Image Bollard.

BELOW: The City should expand upon its existing downtown taxi stand locations (such as the one at the Hilton Hotel) by developing a network of taxi stands dispersed throughout downtown.

Dedicated Parking Spaces

One critical component of improving the customer-friendliness for downtown visitors is to dedicate adequate parking spaces throughout downtown for loading zones, taxi stands, and ADA-accessible parking. This *Downtown Mobility Study* recommends that the City continue its existing City protocols to dedicate adequate parking spaces throughout downtown for the following critical users.

Loading Zones. Having an adequate number of loading zones downtown so that business can receive deliveries is critical for the operation of downtown business and the continued economic vitality of downtown as a whole. Currently, there are a limited number of dedicated on-street loading zones and some loading and unloading occurs in the alleys. In order to facilitate smooth operation of downtown business, reduce traffic congestion, and begin to improve the quality of the pedestrian environment in the alleys (particularly those that are major pedestrian thoroughfares to and from downtown parking lots and garages), this *Study* recommends that the City expand on the existing number of dedicated on-street loading zones and restrict both on-street and alleyway loading and unloading to the hours of 3 am and 11 am.

Mechanically retractable bollards (either hydraulic or pneumatic) could be installed on alleyways that serve as major pedestrian thoroughfares to limit vehicle access during most times of days, with commercial delivery and life safety vehicles using an electronic transponder to lower the bollards as needed (select vendors of mechanically-retractable bollards are listed in Appendix 5D). Additional recommendations to improve the pedestrian environment of downtown alleys - such as lighting, signage, and landscaping – are discussed in Chapter 2 (Street Typology).

Taxi Stands. Taxi stands are an important part of the downtown transportation network: they provide an alternative to renting a car for business and leisure travelers, a "second car" for single-car households, and a back-up option for transit riders. For this reason, the City should expand upon its existing downtown taxi stand locations (such as the one at the Hilton Hotel) by developing a network of taxi stands dispersed throughout downtown incorporated into appropriate land uses. One of the most feasible locations for expanding a taxi stand network is to incorporate on-street taxi stands into the plans for new downtown hotels. In addition, locations of taxi stands should be incorporated into future wayfinding signage system and visitor and transit maps.

ADA-accessible Parking. Providing adequate parking for persons with disabilities is important to ensure equal access for all to downtown and to comply with the federal Americans with Disabilities Act (ADA). The City is currently in full compliance with ADA guidelines for public and private parking, and will continue to remain in full compliance.[14] In all public and private parking lots and garages, ADA-accessible spaces shall continue to be provided in the ratios specified by the most current ADA guidelines.

ABOVE: This Downtown Mobility Study recommends the maintenance of one ADA-accessible parking space per block on Brand Blvd. (to be located mid-block wherever possible and at corners where mid-block locations are not feasible) and the maintenance of two ADA-accessible spaces in front of the Alex Theater (in order to accommodate their high number of guests with mobility impairments).

14 Essentially, ADA guidelines for parking require that a portion of the parking supply be accessible to the disabled. For example, if the parking supply for a typical facility has 401 to 500 parking spaces, the guidelines require that a minimum of nine of the spaces must be accessible to the disabled. ADA also requires accessible parking spaces serving a particular building to be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. Under state law, vehicles with state-issued disabled placards are exempt from parking meters (California Vehicle Code Section 22511.5), although all other parking regulations such as time limits still apply.

Recommendation 5.7

a. Create a Downtown Transportation and Parking Management District, managed by the Traffic and Transportation Administrator (or a newly-hired position to whom they may delegate this responsibility) in consultation with an advisory body of downtown merchants, property owners, and residents.

b, Dedicate all parking revenue to a Downtown Transportation Fund to be invested in transportation and streetscape improvements, including capacity enhancements, transit improvements, and pedestrian enhancements, as well as future parking needs.

5.3.3 CREATE TOOLS FOR FLEXIBLE AND EFFICIENT PARKING ADMINISTRATION

Downtown Transportation and Parking Management District

Revenues from paid parking in downtown should fund public improvements that benefit the *Downtown Specific Plan* area.[15] If downtown parking revenues seem to disappear into the General Fund or Parking Enterprise Fund, they may appear to produce no direct benefit for downtown, and there will be little support for installing parking pay stations, or for raising rates when needed to maintain decent vacancy rates. But when downtown merchants and property owners can clearly see that the monies collected are being spent for the benefit of their downtown blocks, on projects they help to choose, they become willing to support market rate pricing – and if experience from other cities is any guide, many will become active advocates for the concept.

For this reason, the City should create a Downtown Transportation and Parking Management District for the DSP area. The Downtown District would be similar in concept to the Parking Benefit District for neighborhoods adjacent to downtown (described in Recommendation 5.15), with demand-responsive prices being charged for all parking and all resulting revenues being used to fund investments in the area where the parking revenue was generated.

To ensure such continuing support for such a District, and for continuing to charge fair market rates for parking, it is crucial to give downtown stakeholders a strong voice in setting policies for the District, deciding how downtown parking revenues should be spent, and overseeing the operation of the District to ensure that the monies collected from their customers are spent wisely.

To accomplish this, the Traffic and Transportation Administrator or a newly-hired staff position acting as their delegate (see sidebar on the following page, "Creating a Single Point of Accountability: The Downtown Mobility Coordinator") should work with existing downtown resident and merchant organizations, or create a new parking advisory board similar to the City of Pasadena's Parking Meter Revenue Advisory Board, which advises the City on policies, rates and expenditures of meter revenue in the Old Pasadena Parking Meter Zone. While the public can advise the Traffic and Transportation Administrator and the City Council how the community would like the pay station revenue spent

15 "Revenues" means total parking revenues from the area, less revenue collection costs, such as purchase and operation of the meters, enforcement and the administration of the district.

Creating a Single Point of Accountability: The Downtown Mobility Coordinator

As discussed in this chapter and Chapter 6 (Transportation Demand Management), the City's Traffic and Transportation Administrator (or their delegate) would be responsible for coordinating the implementation of many of the parking and TDM recommendations in the *Downtown Mobility Study*. In addition, the Traffic and Transportation Coordinator would be responsible for coordinating with other City departments, partner regional and state agencies, the TMA, and the private sector to monitor and enforce compliance with many of the recommendations in the *Downtown Mobility Study*.

The Traffic and Transportation Administrator may choose to delegate some or all of these responsibilities to a newly-hired staff position. This staff position would directly report to the Traffic and Transportation Administrator. At this time, the Traffic and Transportation Division is in the hiring process to fill a new "Parking Manager" position and a new "Transit Manager" position. It is possible that one of these new hires will be tasked with these responsibilities. Alternately, these responsibilities may be divided between these two new hires. The Traffic and Transportation Administrator may also need to hire an additional position that fulfills the role of a "Downtown Mobility Coordinator," with a specific focus on downtown transportation and parking issues.

Regardless of the specific division of labor that is ultimately deemed appropriate, it is critical that there be a single person that is responsible for coordinating the implementation of the recommendations of the *Downtown Mobility Study*.

Parking Zone or Parking Benefit District Ordinances

Under State law, California Vehicle Code Section 22508, parking meter zones and parking meter rates can only be established by ordinance. In an ordinance to create a zone that will establish a parking benefit district, a city need only specify the boundaries of the zone, the rates within the zone, and how the funds will be used. This action could be implemented relatively quickly, as initial input on the parking zone is being gathered as part of the *Downtown Mobility Study*. Some cities, such as San Diego, have established ordinances that require a set percentage of revenues (45% in San Diego's case) to be returned to the zone. Others, like Redwood City and Pasadena, return all net revenue after city administration and enforcement costs.

in downtown, City Council should retain final approval over all expenditures.

Based on these considerations, the City should:

- Implement a Downtown Transportation and Parking Management District with metered on-street parking wherever peak occupancy regularly and consistently exceeds 85%.
- Task the Traffic and Transportation Administrator or a newly-hired staff position acting as their delegate with managing the District.
- Dedicate all parking revenue to a Downtown Transportation Fund to be invested in transportation and streetscape improvements.
- Conduct extensive community and media outreach and education prior to launch of pay stations in the District.
- Install user-friendly signage to explain pay station operation, rates, and hours/days of operation.
- Use "Mobility Ambassadors" to assist with pay stations during first few weeks/months of implementation & during peak visitor demand periods.
- Use existing (or create new) outreach mechanisms (such as regular advisory board meetings, surveys, etc.) for soliciting ongoing input from downtown businesses, visitors, and other key stakeholders and for resolving customer service issues and stakeholder concerns.

A review of best practices in cities comparable to Glendale, suggests that the boundaries of the Downtown Transportation and Parking Management District should initially be established in the areas shown in Figure 5-5, with recommended prices shown in Figure 5-6. This recommended pay station zone boundary closely mirrors stakeholder input on the appropriate areas for pay stations and closely corresponds to the current downtown parking enforcement area. In the future, as areas zoned for commercial use transition to their zoned uses, these initial boundaries should be extended where peak hour occupancy reaches 85% or higher. In predominantly residential areas, however, Residential Parking Benefit Districts should be implemented (see Recommendation 5.15 for more information).

Preliminary Estimate of Meter Revenue the District

To calculate a precise estimate or revenue from the District would require more current information on the timing of future downtown development and estimates of responsiveness to parking price changes (price elasticities) in Glendale. However, our preliminary estimate, based upon the proposed initial prices for the District, and the number of cars parked at various hours, suggests that it would be reasonable to expect gross revenues of approximately $3 million annually, which is about $1 million more than

the current parking revenue. See Appendix 7A for a full explanation of this revenue projection. This revenue estimate is conservative because it does not include potential additional revenue from the parking lots at the Glendale Transportation Center.[16] Bonding against future revenue (i.e. issuing revenue bonds) as was done in Pasadena, will enable the City to fund larger capital projects (including the cost of the pay stations) in the early stages of implementing the District.

Potential Uses of District Parking Revenue

In general, revenue from the District should be invested in:

1. A full spectrum of transportation demand management strategies for downtown employees and residents, including transit, carpool, vanpool, bicycle and pedestrian programs, as discussed in the Chapter 6 (Transportation Demand Management).
2. Transit improvements.
3. Streetscape improvements and other downtown beautification projects as prioritized by downtown stakeholders.

Specifically, District revenue could be used for any of the following, as established in the parking zone ordinance:

- Transit service improvements
- Landscaping and other streetscape greening
- More frequent trash collection
- More street cleaning, power-washing of sidewalks, and graffiti removal
- Pedestrian-scaled lighting
- Multi-modal wayfinding signage
- Transit, pedestrian, and bicycle infrastructure and amenities
- Additional oversight and management of downtown infrastructure and amenities
- Additional police patrols
- Additional parking enforcement
- Marketing and promotion of downtown
- Purchase and installation of pay stations (or use revenue bond or "build-operate-transfer" capital leasing financing with a vendor)
- Enhancing efficiency of existing parking facilities (through tandem and valet operations or via retrofit with mechanical stackers)
- Defraying costs for additional parking facilities as needed

16 No occupancy data was available for the Glendale Transportation Center parking lots. Therefore making a revenue estimate is not possible.

Summary of Benefits from All District Recommendations

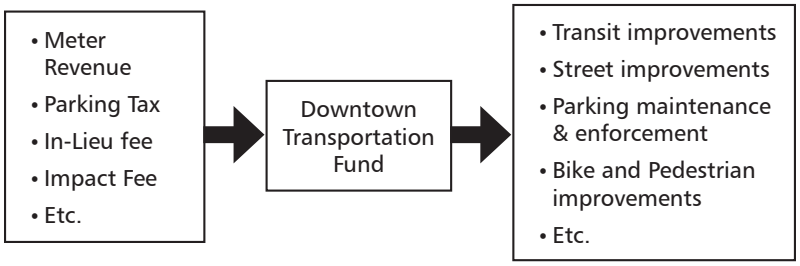
The recommendations for metered parking and the creation of a Downtown Transportation and Parking Management District will result in the following benefits:

- ✧ Ensure that there is always a short-term parking space available in high demand areas (such as Brand Boulevard). Approximately 1 in 7 spaces will always be available for customers and visitors.
- ✧ Eliminate "cruising" for parking, thereby reducing traffic congestion.
- ✧ Encourage long-term parkers and daily commuters to park in currently underused off-street garages and lots.
- ✧ Eliminate the "2-hour shuffle" of downtown employees moving cars from one curb parking space to another every few hours.
- ✧ Be more convenient to use than single-space meters (no need for a pocketful of quarters, etc.).
- ✧ Eliminate (if a pay-by-space system is implemented) "ticket anxiety" of short-term parkers worried about overstaying time limits.
- ✧ Reduce capital, operations, maintenance, and enforcement costs compared to single-space meters.
- ✧ Be easier to enforce and audit compared to single-space meters or time limits.
- ✧ Reduce downtime and revenue loss compared to single-space meters.
- ✧ Prevent rows of single-space meters from cluttering downtown streetscape (no parking meter "picket fences").
- ✧ Generate significant revenue to help pay for downtown improvements (for cleaning, security, pedestrian and bicycle infrastructure, lighting, etc.).

- Additional programs and projects as recommended by community and approved by City Council.

Figure 5-7 illustrates how parking revenue and other revenue sources discussed in this chapter and in Chapters 6 (Transportation Demand Management) and 7 (Funding and Finance) would be dedicated to a Downtown Transportation Fund to be used to implement the recommendations of this *Downtown Mobility Study*.

Figure 5-7 Sources and Uses of Downtown Transportation Fund



Recommendation 5.8
Authorize Traffic and Transportation Administrator (or a newly-hired position to whom they may delegate this responsibility) to adjust downtown parking rates, hours, and time limits as needed to achieve 85% occupancy based on occupancy monitoring.

Procedure for Adjusting Pay Station Prices and Policies

After an initial trial period, occupancy rates for each block in each parking facility (block, lot, or structure) should be reviewed and then adjusted down or up to achieve the 85% occupancy goal, as described earlier. To ensure that this happens on a regular schedule, promptly, and with clear assurance to policymakers, citizens, and the downtown community that the goal of parking prices is to achieve the desired vacancy rate, the following procedure for adjusting parking meter rates and hours is recommended:

- **Set policy:** By ordinance, City Council should establish that the primary goal in setting parking meter rates and hours for each block and each lot is to achieve an 85% occupancy rate. Additionally, the ordinance should both require and authorize the Traffic and Transportation Administrator (or their delegate) to raise or lower parking prices to meet this goal, without requiring further action by the City Council. Appendix 5B, the recently adopted Redwood City Downtown Parking Ordinance, provides an example of the recommended approach.
- **Monitor occupancy:** Use networked modern multi-space parking pay stations and remote parking occupancy sensors (as described in Recommendation 5.5) to monitor current and historical parking occupancy.
- **Adjust rates:** Armed with good information on recent parking occupancy rates and historic trends, the Traffic and Transportation Administrator (or their delegate) should adjust the rates (and hours of operation) up or down on each block, to achieve the

policy goal (an 85% occupancy rate) set by City Council. Rates should be adjusted based on occupancy rates within 5-8 weeks of implementing these pricing recommendations in this *Downtown Mobility Study*, and thereafter no more than quarterly (four times per year) and no less than annually. In the case of major changes in downtown (such as the opening of a new development) it may be advisable to adjust rates in response to particular events or peak demand periods like winter holidays. In order to provide the public and their elected representatives on City Councils assurance that prices will not increase indefinitely without any public discussion, the City Council – in the same ordinance previously described – can implement a price threshold (e.g. an upper limit on parking prices) at which time staff must return to Council for reauthorization of the authority to set prices based on demand, thereby giving the Traffic and Transportation Administrator (or their delegate) the authority needed to manage changing parking demand patterns in the best interest of downtown stakeholders. This *Downtown Mobility Study* recommends that the Traffic and Transportation Administrator be authorized to increase parking prices up or down in $0.25 increments up to a price threshold of $2.50 per hour. If and when the Traffic and Transportation Administrator deems that it is necessary to increase the price further on certain blocks or in certain parking facilities in order to manage higher parking demand in those locations, he or she must return to City Council to request authorization to do so, at which time a new price threshold (upper limit) on parking prices can be also be established by City Council based on the Traffic and Transportation Administrator's recommendation.

Single Valet Contract for Downtown

Downtown Glendale hosts numerous special events and banquets that generate peaks in parking demand. Currently, the sponsors of these events individually contract with valet parking operators. As the new development envisioned by the *Downtown Specific Plan* comes online, this arrangement may no longer be feasible for a number of reasons. First and foremost, the current valet operators are parking vehicles for free in curb parking spaces that this *Downtown Mobility Study* recommends will be priced parking in the future. In addition, the *Downtown Mobility Study* recommends that the City attempt to optimize the use of and revenue generated by the underutilized downtown parking garages.

In order to improve parking management and customer-friendliness, streamline valet parking operations for those private and public events with high parking demand, and increase City revenue for the private use of public right-of-way, the *Downtown Mobility Study* recommends that the City's current valet policies be modified in two phases:

Recommendation 5.9
Pursue a study of how the City could enter into contractual arrangements with one or more valet parking operators for all of downtown in order to improve parking management and customer-friendliness, streamline valet parking operations for private and public events with high parking demand, and increase City revenue for the private use of public right-of-way.

Case Study: Pasadena's "Universal Valet" Program

Pasadena currently has a Universal Valet program that could provide a model for Glendale. There are several "Unified Parking Validation Stands" located throughout Old Pasadena that participate in the universal valet parking program. Downtown visitors can drop their car off at any of the locations in Old Pasadena, and ask to have their car waiting for them at a different stand. The current cost is $10 without validation, and the City does not regulate the price of valet parking.

Source: Old Pasadena Visitor Information + Parking Website. Accessed at www.oldpasadena.org/info.asp#valet on 1/15/07.

Phase 1:

- Designate areas be set aside for valet operations in public garages.
- Require that all valet operators pay no less than market rates for the parking spaces.
- Establish standards for valet operators to be permitted to operate in the city of Glendale, such as maintaining adequate insurance and requiring attendants to wear recognizable uniforms.
- Maintain a single list of eligible valet operators that have met the City's permitting standards.

Phase 2:

- Initiate a study to determine the feasibility of the City pursuing a limited number of contracts with one or more valet operators to provide a universal valet service (which would allow anyone to drop off their car at any downtown valet stand and pick their car up at another downtown valet stand).[17]
- If a universal valet program is determined to be appropriate and desirable for downtown Glendale, issue a competitively-bid RFP for one or more contracts to provide valet service. For example, one operator could provide all valet services, or multiple operators could each be assigned designated locations (such as Marketplace, Exchange, Orange, and Brand Blvd.)
- Require consistent branding of the universal valet services so that it appears as a single, seamless operation to downtown motorists (including consistent signage and uniforms) and position the valet stands near key destinations (such as the Alex Theater, high-demand garages, and areas with concentrated nightlife, restaurants, and clubs).

The City of Pasadena has a universal valet program that could be a model for implementation in downtown Glendale in the long-term (see sidebar at left "Case Study: Pasadena's "Universal Valet" Program).

17 In order to create a level playing field and not disadvantage smaller valet operators, such a study should be conducted with a full public process and in close consultation with businesses that currently offer (or would like to offer in the future) valet parking in downtown Glendale.

5.3.4 IMPLEMENT NEW PARKING STANDARDS FOR DOWNTOWN DEVELOPMENT

Implementation of the recommendations in this section will fall under the purview of the Planning Department and Redevelopment Agency as part of their approvals process for new development, adaptive reuse, and redevelopment projects. However, implementation by these departments should be undertaken in close coordination with the Traffic and Transportation Administrator (or their delegate) in order to ensure that they are structured in such a way as to achieve the goals of the *Downtown Specific Plan* and this *Downtown Mobility Study.*

Encourage New and Existing Private Parking be made Publicly Available

As discussed in Recommendation 5.1, there is a significant amount of private parking in downtown Glendale. In order to add to the downtown parking supply in a cost-effective way, the City should:

- Work through the TMA to continue to encourage its members' private parking in existing development to be made available to the public when not needed for its primary commercial use.
- Work with the TMA and its membership of downtown employer members to develop mutually-agreeable operating and liability arrangements for public use of private parking facilities.
- Require as a condition of approval that private parking in new downtown development and adaptive reuse projects be made available to the public when not needed for its primary commercial use.

Recommendation 5.10
Require as a condition of approval for new downtown development that all non-residential parking be made available for public parking when not needed for its primary commercial use.

Require Shared Parking among Different Land Uses

Different land uses have different periods of parking demand. For example a bank adjacent to a night club can quite easily share a common parking facility. This principle is widely accepted in transportation planning, and in fact the City's existing zoning code allows parking to be shared among different uses but requires additional approvals, permits and public hearings to receive permission to share parking among compatible uses. In order to make the process of securing approval for shared parking less onerous for new downtown development and adaptive reuse projects, the City should:

- Allow parking to be shared among different uses within a single mixed-use building by right upon staff approval.
- Allow parking to be shared among different buildings or an off-site parking facility anywhere within the DSP area or within 1,000 feet of DSP boundaries by right upon staff approval.

Recommendation 5.11
Require as a condition of approval for new downtown development that all non-residential parking be shared among other uses (as different parking demand patterns among these uses permit).

- Off–site shared parking located further than 1,000 feet of the DSP boundaries should be allowed at the discretion of staff so long as there is documentation that reasonable provision has been made to allow off-site parkers to access the principal use (e.g. a shuttle bus, valet parking service, free Beeline passes, etc.).
- Allow parking for downtown development and adaptive reuse projects to be provided off-site anywhere within the DSP or within 1,000 feet of DSP boundaries by right upon staff approval.
- Shared on-site or off-site parking should be allowed to satisfy 100% of the minimum parking requirement for each use, so long as documentation can be provided that the existing or anticipated land use(s) will have different periods of peak parking demand, that the shared parking can accommodate the parking demand for both uses, and – for off-site parking – reasonable provision has been made to allow off-site parkers to access the principal use (e.g. shuttle bus, valet parking, free Beeline transit passes, etc..).
- When public parking is leased as shared and/or off-site parking for private development and adaptive reuse projects, the City should charge market rates. The City should monitor occupancy rates for individual facilities and increase parking rates when occupancy exceeds 85%.

Traffic Congestion Impact Fee

Recommendation 5.12
Consider implementing a "traffic congestion impact fee" based on downtown development projects' proposed number of parking spaces and/or estimated peak-hour vehicle trips. Use impact fee revenues to fund transportation programs and projects that benefit both the development project and downtown as a whole. Pursue a nexus study to determine most appropriate assessment methodology and fee structure.

Every new parking space constructed downtown will facilitate and accommodate new vehicle trips, and these vehicle trips have quantifiable impacts, such as increasing auto congestion (that requires expensive capacity enhancements), increased travel times and schedule variability for transit (increasing transit operating costs), and negative safety impacts of pedestrian and bike safety (increasing public safety and public health costs), among others.

The City may consider a broad array of development impact fees as part of the DSP. But in order to achieve the transportation goals of reducing the growth of congestion in the *Downtown Specific Plan* area, the City should prioritize implementation of a "traffic congestion impact fee," to be calculated and assessed based on the anticipated number of project parking spaces and/or peak-hour vehicle trips. This fee should be implemented as follows:

- Conduct a nexus study to determine fee structure and amount, in consultation with developers of major pipeline projects.
- Assess a fee on all new development downtown based on number of parking spaces proposed and/or estimated number of peak-hour auto trips.
- Provide developers the ability to reduce the impact fee amount in exchange for providing financial incentives and programs that reduce auto trips and parking demand.

- Dedicate impact fee revenues to the Downtown Transportation Fund to pay for project-specific or downtown-wide transportation programs that reduce parking demand.

By implementing such a "traffic congestion impact fee," the City will be creating a financial incentive for new development to reduce its traffic impacts on downtown streets. In addition, it will be giving developers the flexibility to implement a wide variety of transportation demand management programs (such as free universal transit-passes and car-sharing services) that will reduce the project's parking and traffic impacts.

For more information, on transportation-related development impact fees see Chapter 7 (Funding and Finance). For more information on the types of programs that the "traffic congestion impact fee" could fund to reduce traffic downtown, see Chapter 6 (Transportation Demand Management). Fee amounts of transportation-related development impact fees in several California cities and counties are illustrated in Appendix 7C.

Legalize Parking Efficiency

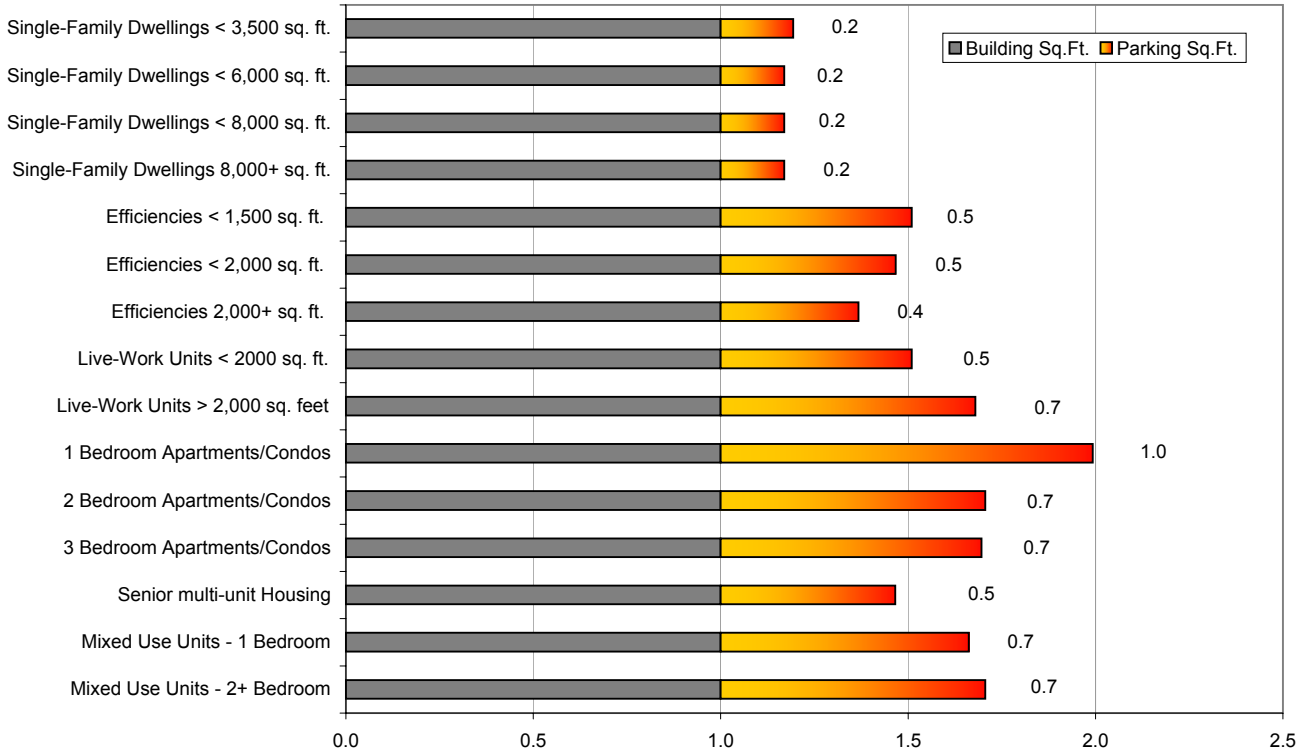
As illustrated in Figure 5-8 and Figure 5-9, Glendale's minimum (residential and commercial) parking requirements, coupled with the current code requirement that all parking be independently-accessible, means that often more than one square foot of parking area is required for every square foot of building. Figure 5-9 shows that this is especially true for uses that help create vibrancy and life downtown, such as restaurants, night clubs, etc.).

These requirements add significant additional expense to development – especially when parking is provided underground – and can act as a barrier to new development and adaptive reuse projects necessary to add vitality to downtown Glendale. In addition, when site conditions or financial constraints prompt developers to provide the required independently-available parking on-site, the result is often monolithic parking podiums that present a "blank wall" to the pedestrian realm.

To complement the *Downtown Specific Plan's* requirements that above-ground parking be "lined" or "wrapped" with active, pedestrian-friendly uses or design treatments, the City should change its parking-related development standards in order to facilitate better ground-floor urban design. To accomplish this goal, the City needs to legalize more efficient parking arrangements for new downtown development and adaptive reuse projects to allow future development projects to reduce their overall "parking footprint" without reducing the overall parking supply provided.

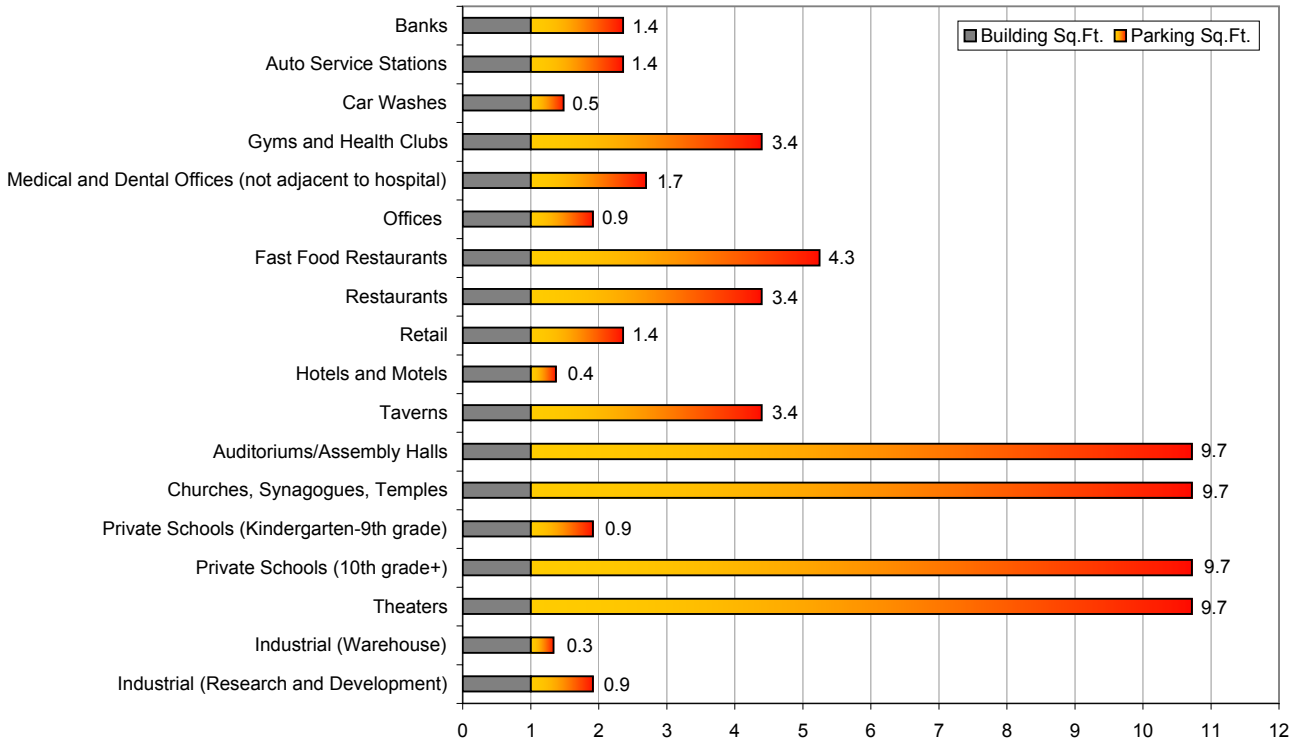
Recommendation 5.13
Revise zoning code to legalize more efficient parking arrangements in new downtown development and adaptive reuse projects in order to facilitate better ground-floor urban design (i.e. allow development to reduce its "parking footprint" by right without reducing the total supply provided).

Figure 5-8 Glendale's Existing Residential Minimum Parking Requirements



Source: Glendale Municipal Code- Title 30, Zoning Code, April 2005, Table 30-32 -- A

Figure 5-9 Glendale's Existing Commercial Minimum Parking Requirements



Source: Glendale Municipal Code- Title 30, Zoning Code, April 2005, Table 30-32 -- A

In essence, the City should revise its zoning code to allow parking requirements to be calculated on the basis of "total cars parked" rather than the current space-inefficient requirement of "total spaces marked." This can be accomplished as follows:

- Remove the current independently-accessible requirement, except for designated disabled parking spaces which are required by federal ADA law to be independently accessible.
- Allow tandem parking operations to satisfy parking requirements in all parking facilities by right.
- Allow valet parking to satisfy parking requirements in all parking facilities by right.
- Allow stacked parking to satisfy parking requirements in all parking facilities by right.
- Allow off-site parking arrangements to satisfy parking requirements by right within DSP area and within 1,000 feet of DSP boundaries (as discussed in Recommendation 5.11)

Tailor "One-Size-Fits-All" Parking Standards to Encourage Downtown Revitalization and High-Quality Development

Recommendation 5.14
Expand existing provisions in zoning code that allow new downtown development and adaptive reuse projects to go below existing parking minimums by right, under very specific conditions.

The City's existing parking standards for new downtown development and adaptive reuse projects already recognize that existing parking minimums are a "one-size-fits" all prescription that are not appropriate for all types of development.[18] Without changing existing parking minimums for downtown development at this time, the City should expand existing provisions in zoning code that allow new downtown development and adaptive reuse projects to go below existing parking minimums wherever appropriate, as follows:

- Increase existing exemption from parking requirements for adaptive reuse of existing buildings from uses up to 2,000 square feet to uses up to 5,000 square feet.
- Payment of an annual in-lieu of parking fee into the Downtown Transportation Fund. Set in-lieu fee as reasonably as possible to encourage its use and ensure the provision of only enough parking demanded by market. For more information on the recommended in-lieu fee program, see the sidebar "A New In-Lieu

18 Existing provisions that allow for exemptions include: Redevelopment Agency projects with findings, changes of use in a historic building, changes of use for buildings less than 2,000 square feet, intensification of an existing use with reasonable distance of an off-site parking facility, projects adjacent to transit corridors with documentation of transit usage, shared parking arrangements in a mixed-use building or amongst different buildings in a mixed-use district up to 1,000 feet (or greater with special approval), off-site parking up to 1,000 feet (or greater with special approval), and general reductions allowed through a Zoning Administrator finding that the parking requirements are not appropriate for the project's actual parking demand and that "sufficient" parking will be provided by other means.

Parking Fee Program to Support Downtown Revitalization" on the following page.

- Staff-level administrative approval of transportation programs and incentives to reduce parking demand in exchange for deeded commitment to monitor and report to City regarding the project's parking and transportation impacts.
- Staff-level administrative approval of transportation analysis proving lower parking demand than requirements mandate in exchange for deeded commitment to monitor and report to City regarding the project's parking and transportation impacts.
- Staff-level administrative authority to reduce or completely waive the number of parking spaces required based on quantitative information provided by the project applicant that documents the need for fewer parking spaces, such as:
  - A market profile of existing or anticipated project users documenting below average vehicle ownership rates (for residential development) or below average vehicle trip generation rates (for commercial development).
  - Documentation of the expected reduction of vehicle trips and/or car ownership rates associated with the project due to the incorporation of transportation and parking demand management strategies into the project.
  - Documentation that the proposed land use will operate exclusively when the existing public parking supply within the DSP area or 1,000 feet of DSP boundaries is adequate to accommodate the parking for the proposed use (e.g. a restaurant or club that operates only during evening hours).
  - Documentation of the experience of other cities comparable to Glendale that have a lower parking requirement for the proposed land use.

A New In-Lieu Parking Fee Program to Support Downtown Revitalization

As of this writing, several adaptive reuse redevelopment projects (including one that proposes to bring a new use to a long-vacant historic building) have been proposed for downtown that will not be financially or architecturally feasible if the project is forced to provide all the City's minimum parking standards on-site.

In order to encourage new development of the highest architectural and urban design quality as well as the redevelopment of vacant, underutilized, historic, and/or dilapidated buildings downtown, the City should create a new in-lieu parking fee program to allow current and future development and adaptive reuse projects to reduce or eliminate some of their on-site parking. Such a program should allow a fee to be paid "in-lieu" of each on-site parking space not constructed, either by:

> **Option A:** A fixed one-time fee per space of $10,000 PLUS charging market rate for any lost public parking revenue from leased replacement parking in City-owned parking facilities.
>
> **Option B:** A $500 annual fee per space PLUS charging market rate for any lost public parking revenue from leased replacement parking in City-owned parking facilities.

The amount of the in-lieu fee will differ based on which option is appropriate for each individual project and the variable market rates in public garages over time (for example, annual foregone revenue in one garage might be less than in another, and the revenue potential in both may change over time). For this reason, the City should regularly evaluate the equivalent costs of potential lost public parking revenue, and periodically update the in-lieu fee amounts for both options as needed.

With either option, the in-lieu fee should be assessed on a 1:1 replacement basis for each foregone on-site parking space. The only exception should be in those cases where the project sponsor can demonstrate (using any method discussed in Recommendations 5.13 and 5.14) that the project will generate fewer auto trips and parking demand than conventional projects of a similar nature, in which case the in-lieu fee can be based on the reduced number of parking spaces that will actually be demanded by the project occupants. The amount of off-site parking leased could be reviewed annually and would be based on demand, so that a successful TDM program could reduce the number of off-site parking spaces leased (and the amount of in-lieu fee paid).

Wherever possible, the in-lieu fee should also be assessed on an annual, rather than one-time basis. Such a fee structure provides an on-going funding source for necessary site-specific TDM programs or construction and maintenance of parking spaces in public parking facilities. It also provides both the project developer/owner and the City with maximum flexibility necessary to tailor funded programs or off-site parking leases over time in response to changing conditions. For an annual fee, the City should require that the commitment to pay the annual in-lieu fee (either by the current developer and/or future project owners) be deeded with the property as a condition of approval.

Examples of per-space in-lieu fees in California cities are shown below:

One-time fees:

- Hermosa Beach: $6,000
- Mill Valley: $6,751
- Davis: $8,000
- Concord: $8,500
- Claremont: $9,000
- Berkeley: $10,000

Per-year fees:

- Pasadena: $134.67

Recommendation 5.15

Prevent spillover parking in neighborhoods adjacent to downtown and the Glendale Transportation Center as needed by converting the City's existing neighborhood Preferential Parking Program into a Residential Parking Benefit Districts, where residents can park for free or at low annual permit costs but non-residents pay to park and the resulting revenue is invested in the neighborhood.

5.3.5 IDENTIFY AND ADDRESS NEIGHBORHOOD PARKING PROBLEMS IMMEDIATELY

Glendale has some residential neighborhoods very close to downtown and consequently, these residential streets sometimes experience parking spillover due to motorists looking for available parking near their downtown destinations. This is particularly a problem with part-time workers who may work a three- or four- hour shift and may be willing to "test" parking enforcement in the neighborhoods, or to do the "two-hour shuffle," moving their car when the time expires.

These problems could get worse as new parking management strategies are implemented downtown– such as pricing all on-street parking – and as new downtown development is fully occupied. But current parking spillover problems are occurring at the same time that hundreds of spaces in nearby public garages sit empty. Thus, any current or future spillover problems are not the result of too few spaces, but a lack of coordinated parking pricing and management.

Currently, the City of Glendale has a Preferential Parking Permit program[19] that is implemented by request in neighborhoods with a demonstrated problem of spillover parking (the City's current threshold is that at least 25% of cars parked on the street belong to non-residents). 75% of the residents on a street are required to "sign up" for neighborhood parking to implement the program.

Under this program, non-residents are allowed to park for free on residential streets, but are subject to time limits which vary by district. Residents are allowed to purchase permits for a nominal fee that allow them to park on streets within the same permit district for free and not subject to time limits.[20] In addition, residents are given up to 2 free guest permits for every car permitted in the household. There is no limit to the number of cars that can be permitted, either in a given household or neighborhood. In 2005 Glendale issued approximately 1,500 resident permits, in addition to multiple guest permits, which brings the total to 5,500. Locations of existing Preferential Parking Permit Districts are shown in Figure 5-10.

19 Glendale Municipal Code, Vehicles and Traffic, Section 10.36.030 "Preferential parking district program established."

20 The $6 annual permit fee is likely well below the market value of an on-street parking space in most areas of Glendale and certainly in the *Downtown Specific Plan* area and downtown-adjacent neighborhoods. The approximately $11,600 generated annually from the permit fees does not even cover the City's full costs for administering and enforcing the program.

The structure of Glendale's existing Preferential Parking Program contributes to parking management problems, rather than solving them:

- Allowing 2 hours free parking for non-residents results in overused parking in the neighborhoods while expensive downtown garages sit empty.
- Downtown employees can move their cars when they become concerned about enforcement, doing the "2- hour shuffle." Downtown visitors can park in the neighborhoods to avoid meters and garage fees.
- The City issues an unlimited number of resident permits for a limited number of spaces.
- With a mere $6 annual fee, demand exceeds supply, and the program does not cover costs as is required by City Code.

Residential Parking Benefit Districts are a tool to address parking spillover problems. Residential Parking Benefit Districts should be implemented in residential areas adjacent to downtown and the Glendale Transportation Center if parking spillover problems occur after the implementation of changes to parking management policies (e.g. rates, hours of paid operation, enforcement levels, time limits, and the like).

Residential Parking Benefit Districts are similar to the City's Preferential Parking Program districts. The main differences are that Residential Parking Benefit Districts:

- Link the number of parking permits issued to the actual on-street parking supply.
- If surplus capacity exists after residential permits are issues, allow for a limited number of non-residents to pay to use on-street parking spaces.
- Return parking revenues directly to the neighborhood where the revenue was generated to fund public improvements that residents want.[21]

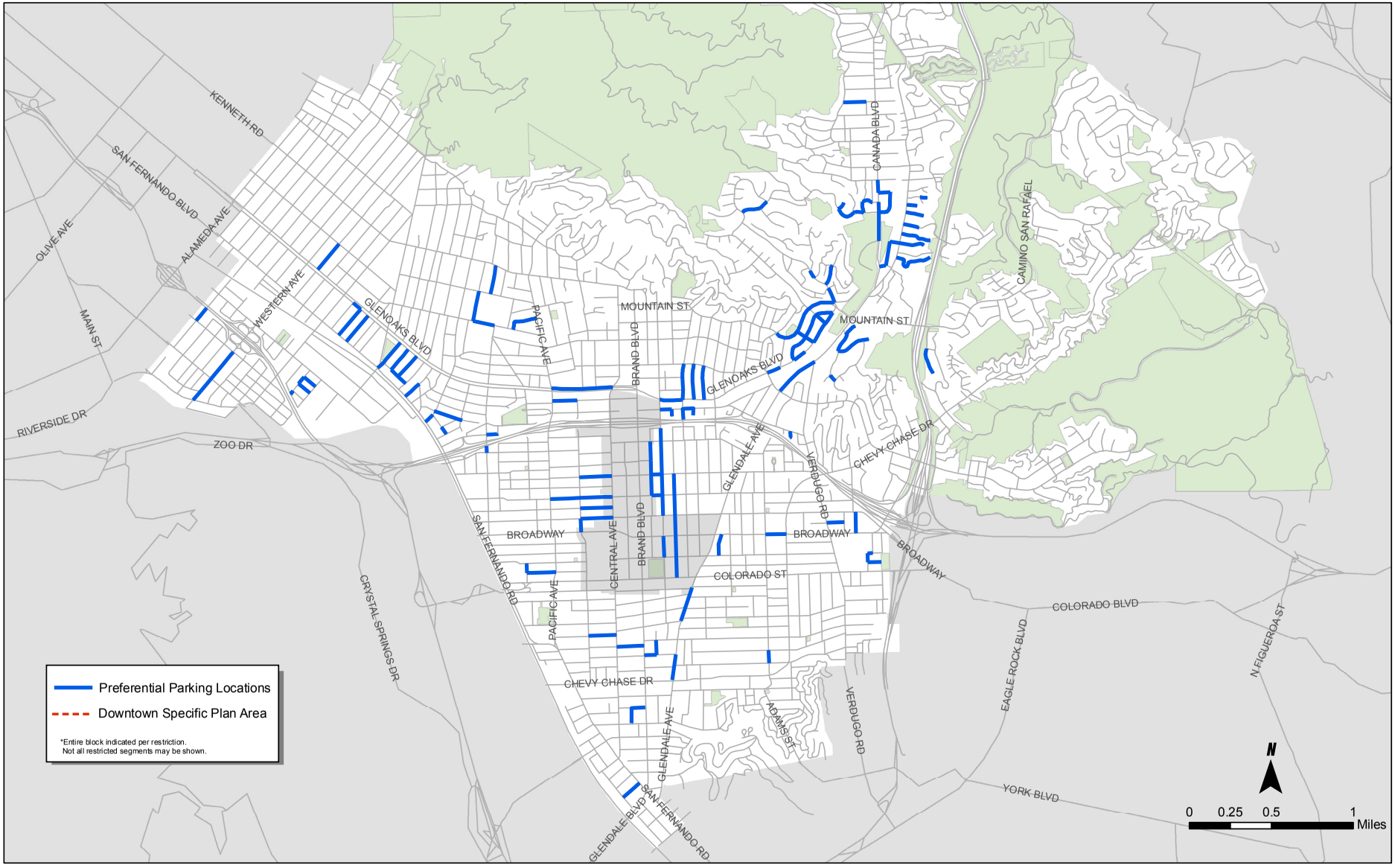
If spillover parking problems occur in residential neighborhoods adjacent to downtown and the Glendale Transportation Center, the City should address these problems immediately by converting its existing neighborhood Preferential Parking Program into a Residential Parking Benefit District, as follows:

Phase I: Revise pricing structure and rates of current Preferential Parking Program

- Lower approval threshold for implementation of Preferential Parking District from 75% of households to a simple majority (50% +1) of property owners on a block.

21 A similar concept to Parking Benefit Districts is also recommended for the *Downtown Specific Plan* Area itself, in the form of a Downtown Transportation and Parking Management District, as discussed in Recommendation 5.7.

Figure 5-10 Existing Preferential Parking Permit Districts



Nelson|Nygaard
consulting associates

Source: City of Glendale

- Residents receive 1 free annual permit for unrestricted/unpriced on-street parking; the permit is transferable and/or sellable.
- Subsequent resident permits are sold at tiered prices ($25 per year for the second permit, $50 per year for the third permit, and $100 per year for the fourth permit, etc.).
- On streets with mixed-uses (such as a street like Maryland that has a combination of residential and office uses) and that are slated for installation of multi-space pay stations, residents will be allowed to park for free at any space in the Preferential Parking District, even those that are controlled by pay stations.

Phase 2: Convert to partial Residential Parking Benefit District

- Install well-designed multi-space pay stations in neighborhoods experiencing parking spillover problems (about 1 or 2 per block).
- Residents' permits allow them to park for free at any space in the Residential Parking Benefit District, even those that are controlled by multi-space pay stations.
- Residents also receive a fixed number of hours allowing free guest parking; this is facilitated via a household-specific PIN number that is mailed to them with their permits; guests enter the PIN number into multi-space parking pay stations (the capabilities of multi-space pay stations are discussed in Recommendation 5.5).
- If available curb spaces remain after resident permits are issued, non-residents that are not using free guest parking will be allowed to pay $0.50/hour using multi-space pay stations, with no daily or monthly discount permits allowed. If occupancy exceeds 85%, hourly prices for non-residents should be increased until 85% occupancy is achieved.
- The resulting revenue should be invested in the neighborhoods where the revenue is generated to pay for increased services or transportation and streetscape improvements that residents' desire.
- Existing neighborhood organizations can advise the Traffic and Transportation Administrator (or their delegate) how the parking revenue from their district should be spent, who will then make a recommendation to City Council.

Phase 3: Convert to full Residential Parking Benefit District

If spillover parking continues to be a problem in areas that have partial Residential Parking Benefit Districts, the Traffic and Transportation Administrator, or their delegate, should take one or more of the following actions:

- Raise permit prices for residents, especially for multiple permits.

- Raise hourly parking prices for non-residents.
- Limit the total number of permits issued in a particular district based on one of the following:
  - The available number of curb spaces within the district boundaries.
  - A cap on number of permits issued per household in the district.
  - A cap on the number of permits issued per address in the district, based on property's curb frontage.

In neighborhoods that have not been able to secure the necessary approval threshold to implement a Residential Parking Benefit District, but where the Traffic and Transportation Administer (or their delegate) determine that parking spillover problems are severe enough to compromise neighborhood quality of life, traffic circulation, and/or public safety, the Traffic and Transportation Administrator (or their delegate) should be authorized to implement a mandatory Residential Parking Benefit District as described above.

The key to success of conversion to Residential Parking Benefit Districts is that net revenues above the cost of administering the program should be dedicated to pay for public improvements in the neighborhood where the revenue was generated. Once implemented, residents, property owners, and business owners in the district will continue to have a voice in advising City Council on how they want new parking revenue spent in their neighborhood. This could occur via existing neighborhood organizations or the Glendale Homeowners Council, mail-in surveys, or public workshops, and public hearings. In areas with Parking Benefit Districts where neighborhood organizations do not exist, another option is to appoint a Parking Benefit District Advisory Committee, tasked with advising City Council on how the surplus revenue should be spent in their neighborhood.

These recommendations will help Glendale prevent "spillover" parking in neighborhoods adjacent to Downtown and the Transportation Center. Additional benefits of implementing Residential Parking Benefit Districts in Glendale include the following:

- Excessive parking spillover into neighborhoods will be prevented.
- Scarce curb parking spaces are used as efficiently as possible.
- Residents will always be able to find a parking space at the curb.
- Non-residents can pay fair market prices for any spaces not needed by residents, and the revenues can fund neighborhood services and improvements.
- Residents will clean out garages now used for storage and park cars in them.

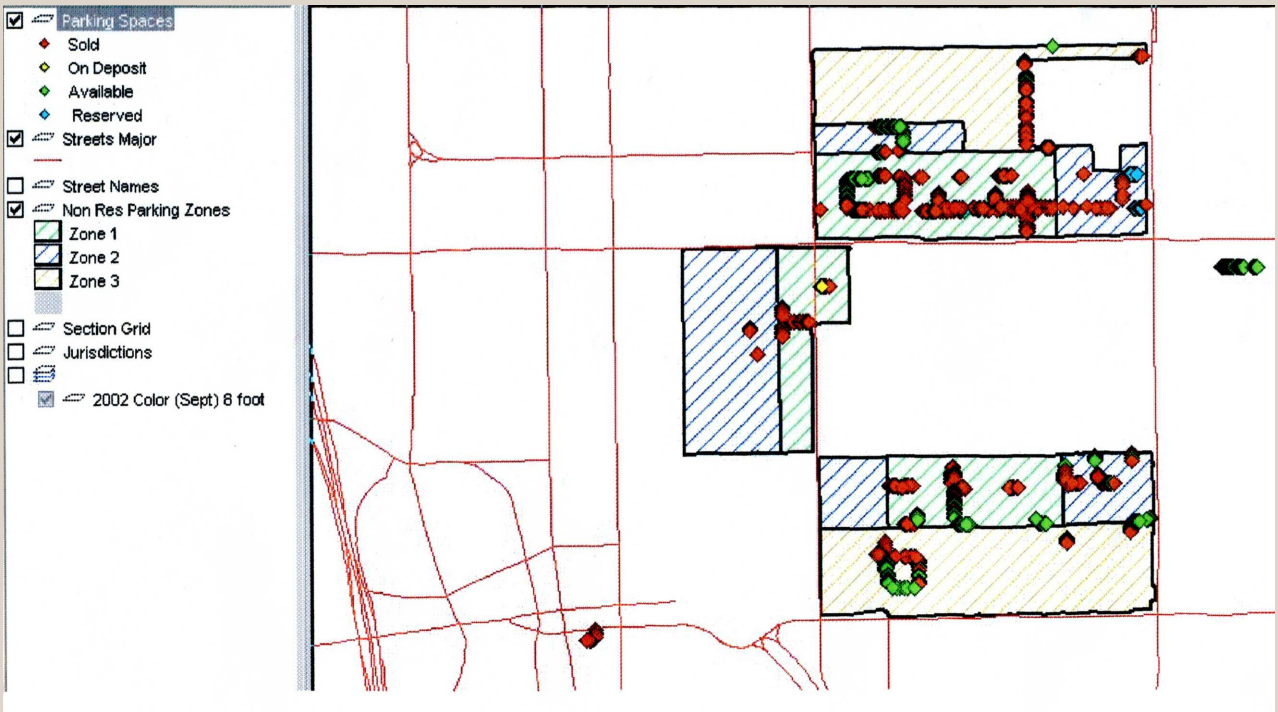
- Residents will sell clunkers now parked on the street, or store them at storage yards.
- Renters with many cars will choose apartments with ample off-street parking; renters with one or no car will choose apartments with little off-street parking.
- Residents will rent excess spaces in underused nearby garages if they need more spaces (e.g. Orange & Marketplace garages, office garages, modern apartment garages).
- Neighborhood quality of life and parking impacts will be improved.
- Program will provide additional revenue to fund neighborhood services and improvements.
- Program will support Glendale's goals for downtown by using parking in the DSP and environs more efficiently.

Recommended locations for conversion of existing Preferential Parking Districts to Residential Parking *Benefit* Districts as needed (as well as potential locations for new Districts as needed) are shown on Figure 5-5 ("Downtown Glendale Parking Regulations – Recommended"). Examples of select US cities that have implemented some version of a Residential Parking District are illustrated in the sidebar on the opposite page.

Cities with Parking Benefit Districts

Several cities have implemented some form of a Parking Benefit District, including:

- West Hollywood: Residents of neighborhoods near major commercial corridors or employment centers pay a low $9 annual permit rate, while non-residents can pay to park on streets with surplus capacity for the equivalent of $360 per year.
- Santa Cruz: Residents in downtown-adjacent neighborhoods pay $20 per year for a parking permit, while non-residents can pay to park on streets with surplus parking for the equivalent of $240 per year.
- Tucson: To manage demand, prices are graduated in three "zones" based on distance from the University of Arizona so that closer, more convenient spaces that are in higher demand cost more (see map of this system below).
- Several cities dedicate some or all of the parking revenue to pay for additional services and improvements in the neighborhood where the revenue was generated. These include cities such as San Diego (45% local return of parking meter revenue) and Pasadena (100% local return of parking meter revenue). Cities as diverse as Ventura, San Francisco, and Portland are all currently studying this concept.
- This *Downtown Mobility Study* recommends that the city of Glendale combine the ideas of limiting permits to the available supply of on-street parking, charging non-residents market rates to park in residential areas where surplus on-street parking capacity exists, and returning some or all the parking revenue to pay for neighborhood improvements that residents want.



ABOVE: Students, faculty, and staff at the University of Arizona can purchase permits in nearby residential neighborhoods with surplus on-street parking capacity. Source: University of Arizona.

5.3.6 DEVELOP NEW PARKING SUPPLY AS NEEDED

Recommendation 5.16
If total downtown parking demand cannot be met with existing supply after *Downtown Mobility Study* recommendations have been fully implemented, build new public shared parking as needed.

The costs of constructing new parking spaces in Glendale are significant when compared to investing in more cost-effective measures to reduce parking demand. As Figure 5-11 and the sidebar at the end of this chapter indicate, each net new, structured public parking space added in downtown Glendale costs approximately $43,985 (exclusive of debt service, operation and maintenance, insurance, and enforcement costs).

While costly, new public parking structures could be necessary to meet future parking demand once substantial new development has taken place, many existing surface lots have been redeveloped, and all of the lower-cost transportation demand management measures and shared parking strategies recommended in this *Downtown Mobility Study* have been exhausted. For this reason Glendale should:

- Pursue implementation of all cost-effective strategies to a) reduce parking demand and b) make the most efficient use of existing supply, while preparing for the future need to provide new downtown public parking garages as needed. It must be emphasized that it is prudent, from both a fiduciary and congestion management perspective, to optimize the use of existing public parking facilities before constructing costly new garages. For example, the City should take steps to maximize the use of existing public parking garages, through such measures as converting to valet operations to handle peak demand loads. The City's current contractual parking management firm – Parking Concepts International – has experience with valet operations in other jurisdictions and has expressed their willingness to convert to valet operations in downtown Glendale as needed if the City requests.[22]
- As discussed in Recommendation 5.1, if new public parking supply is needed, first purchase or lease existing private parking lots or structures from willing sellers, and add this parking to the shared public supply before building expensive new garages. For example, in Pasadena, a major engineering firm, Parsons, shares their parking spaces at their major employment site, located on the northern edge of old Pasadena. Valet parking firms have agreements with Parsons to store cars in the company's lots and garages. In addition, Parsons opens its lots in the evenings to the general public, and allows people to park for a fee.
- Identify one or more placeholder "opportunity" sites for locating new public garages when needed.
- Prioritize and aggressively implement all feasible strategies for reducing parking demand by shifting peak hour trips to other modes, especially those that are more cost-effective at accommo-

22 City of Glendale Interdepartmental Communication, "Existing and Potential Near-Term Parking Utilization of the City's Marketplace Parking Garage and Exchange Parking Garage," 1/16/07.

dating a new downtown trip (via carpool, transit, etc.) than the cost of adding a net new parking space in a public garage.

- Monitor the effectiveness of strategies to reduce parking demand and initiate pre-development process for new parking garage when overall downtown peak parking occupancy regularly and consistently exceeds 80%.

Figure 5-11 Estimated Costs for Each Net New Downtown Public Parking Space Added in Downtown Glendale

Capital Costs													
	Struc-tured Spaces Built	Surface Spaces Displaced	Net Spaces Gained	Year Completed	Land Cost / Value Current $	Direct Cost Current $	Project Cost (Land + Soft) Current $	Construc-tion Cost Inflation Adjusted $	Project Cost Inflation Adjusted $	Gross Cost Per Space		Cost Per Space Gained	
										Current $ Direct	Project	Current $ Direct	Project
New downtown garage ($0/sf land costs)	480	100	380	n/a	$0	$6,467,979	$8,214,333	n/a	n/a	$13,475	$17,113	$17,021	$21,617
New downtown garage ($250/sf land costs)	480	100	380	n/a	$8,500,000	$6,467,979	$16,714,333	n/a	n/a	$13,475	$34,822	$17,021	$43,985

Resulting Costs Per Space Per Year								
	Project Cost Per Space Gained	ANNUAL COSTS PER SPACE GAINED				TOTAL COST PER SPACE GAINED		
		Debt Service	Operation & Maintenance	Insurance	Enforcement	Per Year	Per Month	Per Workday
New downtown garage ($0/sf land costs)	$21,617	$1,320	$350	$43	$54	$1,767	$147	$6.58
New downtown garage ($250/sf land costs)	$43,985	$2,686	$350	$88	$54	$3,178	$265	$11.82

Note: All inputs, sources, and assumptions are listed in full in Appendix 5C.

How Much Does It Cost To Add A New Parking Space In Downtown Glendale?

An analysis of the annualized costs of building parking was conducted in order to provide a reference point for the cost-effectiveness of many of the transportation and parking management strategies recommended in this *Study*.

The assumptions made for this analysis were as follows (all inputs, sources, and assumptions are listed in full in Appendix 5C):

- A 5-story parking garage with 6 parking levels (parking on roof level)
- A structured garage displaces a 100-space surface parking lot on a 34,000 s.f. (0.78 acre) site
- 80 spaces on each parking level for a total of 480 spaces
- Parking space size 340 s.f. per space (or 128.1 spaces per acre)
- "Capacity loss" factor: 20% loss of spaces per level due to additional vehicle circulation, columns, stairwells/elevators needed for structures
- 5% interest (tax-free municipal bonds)
- 35-year useful life
- All costs are in 2005 dollars for the Los Angeles metropolitan region
- Operation/maintenance and enforcement costs are based on the City's current operation and maintenance costs for the Marketplace Garage

The analysis considered two scenarios:

- Land costs nothing (e.g. a hypothetical, conservative scenario that assumes land downtown has no value)
- Land costs $250 per s.f. (based on the current average assessed value of land in downtown)

Under this scenario, the total project costs if land costs $250 per square foot are $16.7 million or $43,985 per space gained (in 2005 $), as illustrated in Figure 5-11. This is in line with the cost per space added for several recent downtown public parking garages in California:

- UCLA (2001): $21,000
- Mountain View (2000): $26,000
- Walnut Creek (1994): $32,400
- Palo Alto (2002): $50,994
- San Jose (2002): $57,000

On an annualized basis, this results in a cost of $265 per space per month or $3,178 per space per year, as illustrated in Figure 5-11. It should be noted that this is a conservative estimate. Several costs are excluded, such as externalized public costs, which have been estimated at $117/space for traffic congestion and air pollution costs.[1]

The bottom line is that the costs of building new structured parking spaces can be significant, and it is often cheaper to reduce demand rather than increase supply. Considering the significant cost per new vehicle trip accommodated in a new parking space, it is important to exhaust all other cost-effective strategies to reduce parking demand.

Additional structured parking is eventually likely to be needed in downtown Glendale in the long-term, but given current occupancy rates for downtown public parking (53% occupancy at the weekday peak hour of 1-2 pm), and the availability of untapped transportation demand management strategies, parking pricing and shared parking opportunities, it is important to think carefully, and manage existing parking resources effectively, before simply building more.

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1 Externalized costs are those costs that accrue to the public as a result of a) the vehicle trips accommodated by the parking and b) the development of the parcels as parking vs. another use. External costs here are estimated as $117 per car per month (in 2001 dollars. Source: *The High Cost of Free Parking*, p194-199, 2005. This estimate only accounts for externalized congestion and emissions costs. Many other externalized costs that the City and taxpayers must pay for are not included in the estimate (e.g. greenhouse gases, noise, air and water pollution, public health and safety costs from traffic accidents).

TRANSPORTATION DEMAND MANAGEMENT

6

Transportation Demand Management (TDM) refers to a collection of strategies to manage the demand for scarce parking and roadway capacity. It gives people incentives to choose alternatives to driving alone by making those alternatives more attractive and convenient.

TDM strategies are particularly appropriate for Glendale because they are one of the most cost-effective ways to allow new development in moderately dense areas without increasing traffic and parking demand.

Glendale has an existing TDM program which needs to be expanded. By investing in the following strengthened package of parking and transportation demand management strategies, the City can cost-effectively reduce parking demand in downtown (and the resulting traffic loads) by as much as 15%.

6.1 PRINCIPLES

- Build on and strengthen Glendale's existing Transportation Demand Management programs and organization.
- Strengthen and clarify the relationship between the TMA, City of Glendale, and local businesses.
- Implement mandatory TDM requirements for both new and existing development to benefit all downtown employees and residents.
- Make the City of Glendale a model employer in TDM implementation to lead other employers and demonstrate success.

6.2 SUMMARY OF RECOMMENDATIONS

Recommendation 6.1
Adopt a new strengthened TDM Ordinance including mandatory TMA membership and TDM programs.

Recommendation 6.2
Require Beeline Universal Transit Passes to be provided to all downtown residents and employees as part of the new TDM Ordinance. Require MTA universal transit passes if feasible.

a. Create a Universal Transit Pass Program for the Glendale Beeline by negotiating a deep bulk discount for both residents and employees.

b. Require employers to provide Beeline passes to all new and existing downtown employees as part of TMA membership.

c. Require provision of Beeline passes to all residents in new downtown developments as a condition of approval for new development, funded through condominium fees and rents.

d. Negotiate with MTA for a deeper discount universal transit pass (deeper than currently exists) and depending on the outcome, require MTA passes to be provided to all downtown residents and employees as well.

Recommendation 6.3
Require parking cash-out for all employers as part of new TDM Ordinance:

a. Begin an education and enforcement program on the existing state parking cash-out law.

b. Adopt an expanded cash-out program in the new TDM Ordinance that applies to all downtown employers.

c. Formalize an annual compliance monitoring program and enforcement mechanism for state and local cash-out requirements.

Recommendation 6.4
Revise development standards to include bicycle facility requirements as part of new TDM Ordinance.

Recommendation 6.5
Glendale should encourage establishment of a car-sharing service in Glendale with one or more shared vehicles located in the DSP area by converting part of the City fleet to a car-sharing program and/or subsidizing initial operations of the car-sharing provider.

Recommendation 6.6
Establish a centralized Downtown Transportation Resource Center managed by the Traffic and Transportation Administrator or new staff person.

Recommendation 6.7
Strengthen the existing Glendale Transportation Management Associates (TMA) and define roles and responsibilities between the TMA and the City.

Recommendation 6.8
Monitor effectiveness of TDM programs and implement new measures as needed.

6.3 DISCUSSION OF RECOMMENDATIONS

TDM policies can be a more cost-effective way to increase the efficiency of the transportation system than costly supply-side methods, such as expanding roadway and parking capacity. In addition to financial savings, TDM programs can have other positive benefits when compared to supply-side strategies, including reduced traffic congestion and air pollution, increased safety, improved public health, and better urban design.

> *TDM…can be used to manage the transportation system better, getting more bang for the buck, increasing mobility, and reducing pollution. [TDM] offers planners another lever that can be used to mitigate the negative consequences of development, most particularly increased traffic congestion and air pollution, while perhaps also encouraging additional development to occur through the avoidance of traffic gridlock, if […] implemented properly.*[1]

The cost to construct new parking garages in downtown Glendale can be expected to be approximately $44,000 per space gained, resulting in a total cost to build, operate and maintain new spaces of approximately $265 per month per space, every month for the expected 35 year lifetime of the typical garage (see Appendix 5C for an explanation of these figures). These costs are far more than can be generated with current parking rates. These negative economics for parking garages lead to a simple principle: it can often be cheaper to reduce parking demand by switching auto trips to carpooling, transit, and other modes than to construct new parking.

As shown in Chapter 1, downtown residents already have lower drive alone rates than residents who live elsewhere in Glendale (70% compared to 75%) and commute by bike and on foot at twice the rate of employees commuting to other areas of Glendale. With a focused, coordinated TDM effort with direct financial incentives to downtown employees and residents, the growth in auto trips to and through downtown can be curtailed while new development occurs.

Therefore, Glendale's Downtown Transportation and Parking Management District should invest a portion of parking revenues (and other fees, grants, and/or transportation funds, when available) to establish a full menu of transportation programs to benefit all downtown residents and employers. (See Chapter 5 for details on Downtown Transportation and Parking Management District.)

1 Ferguson, Erik. *Transportation Demand Management*. Planning Advisory Service Report 477. American Planning Association (1998), page 3.

Existing TDM Policy Framework

Glendale adopted a TDM ordinance in March 1993. The "Trip Reduction and Travel Demand Measures Ordinance" is applicable to new non-residential development of 25,000 square feet or greater and was passed as part of the county-required Congestion Management Program. The stated purpose of this ordinance is to "minimize the number of peak period vehicle trips, promote use of alternative transportation, and improve air quality." Key requirements are listed below:

- Developments greater than 25,000 square feet: Display and distribution of transit, rideshare, and bicycling information to employees.
- Developments greater than 50,000 square feet: Dedication of preferential parking spaces for carpools and secure bicycle parking.
- Developments greater than 100,000 square feet: Designated carpool loading areas, pedestrian and bicycle connections, and transit facility improvements as needed.

Most project approvals have not been conditioned on meeting these requirements, however, and the TMA does not have any real power of monitoring and enforcement. Therefore, enforcement of this ordinance has been poor. Furthermore, in order to achieve the goals laid out in the DSP of a compact walkable downtown that is not plagued with traffic, the City must substantially strengthen its TDM Ordinance to include real financial incentives to take alternative modes, and strong monitoring and enforcement mechanisms to ensure compliance.

Best Practices: Models for Glendale to Consider

The consultant team looked at two existing TDM programs that could serve as viable models for Glendale to follow. They are examples of effective TDM programs as well as models of successful TMA-municipal partnerships. The two programs are:

Burbank has a mandatory trip-reduction program for all downtown employers with over 25 employees and requires membership in the non-profit **Burbank Transportation Management Organization (BTMO)**. As a neighboring peer that struggles with many of the same traffic problems that Glendale does, Burbank is a great model for Glendale to follow. Furthermore, City of Glendale and Glendale TMA staff are already familiar with the Burbank TMO and have admired its effectiveness, particularly the strength, success, and functionality of the partnership that exists between the City, the TMO, and the business community.

Portland, Oregon's Lloyd District Transportation Management Association (LDTMA). The Lloyd District is a shopping district located near downtown Portland. Widely recognized as a national example of success, the LDTMA has achieved significant results in reducing drive-alone rates and decreasing traffic congestion. It was created by interested businesses, has voluntary membership and mode split goals. Similar to Burbank, it was also highlighted in discussions with City and TMA staff as a good example for Glendale to follow.

Though wholly different in structure and requirements, both programs have achieved impressive results. The keys to success are:

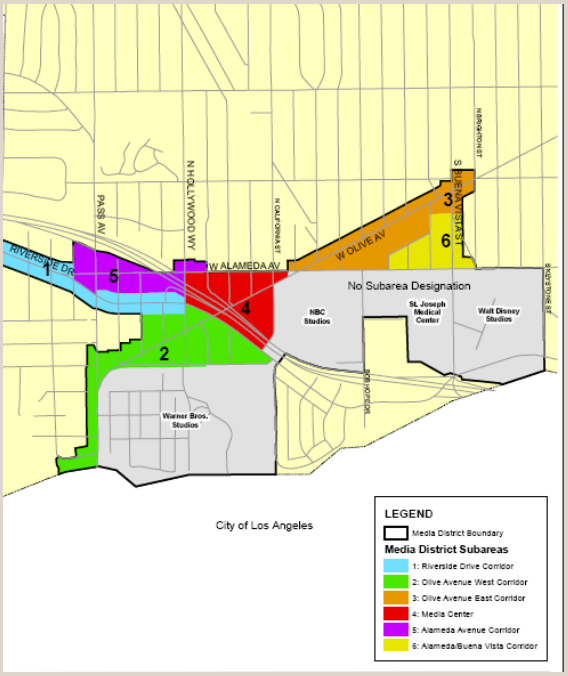
- Clear roles, lines of authority, and performance standards
- Commitment of the membership
- Mandatory TDM programs requirements
- A stable, dedicated funding source
- Systems for evaluation and accountability

These two programs are thoroughly outlined in the case studies beginning on page 6-7.

Burbank Transportation Management Organization

The Burbank TMO was created to help employers meet traffic reduction requirements passed by the City of Burbank as part of the Specific Plans for the Media District and Downtown.[1] All new and existing employers in these two geographical areas with 25 or more employees are required to reduce their PM peak-hour trips (4-6 pm) by 38% by 2010.[2] All employers subject to these requirements are required to join the Burbank TMO, to do an annual employee transportation survey, and to have a trained on-site transportation coordinator to implement their trip reduction strategies. No specific TDM strategies are required by the City, unless trip reduction goals are not met. As a whole, employers in both geographic areas have met the program goals every year since the program's inception.

The Burbank TMO is funded exclusively through member dues. Each employer pays $18/employee annually.



ABOVE: Map of Burbank Media District from Burbank's General Plan."

Role of the City

Staff attributed the overall success of the TMO to one primary factor: a healthy functioning partnership between the City, the TMO, and the private sector. The City of Burbank is not a member of the TMO (nor is it on the TMO's Board) and has no direct relationship with the member employers in creating their TDM programs, unless trip reduction goals are not met. Clearly defined roles and responsibilities have helped to avoid confusion and misunderstanding and keep communication open. This has resulted in a supportive, mutually trustful atmosphere and an effective program.[3] The partnership is as follows:

- The public sector (City) is the enforcement arm. They are in charge of calculating, monitoring, and enforcing trip reduction requirements. The City also plays a critical role in enforcing membership in the TMA. City staff reported that it does require a constant effort to keep all the employers participating, in particular smaller employers who have more difficulty meeting the trip reduction requirements.[4]
- The private sector partners (employers) choose the trip reduction strategies that will enable them to meet the requirements. They create the TMO, determine its structure, governance, budget and work plan, and pay dues and other mitigation fees.
- The nonprofit sector (TMO) creates the programming, facilitates the communications between the public and private sectors, and assists the private sector in addressing the policy and meeting the requirements. The Burbank TMO bills itself as a service organization to its members. It prides itself on good customer service, the breadth of services offered and the close relationship with its partners.

1 The Burbank Media District Specific Plan, adopted January 8, 1991. The Burbank Center Plan, adopted in 1998.
2 Any new development with 25 or more employees or 25,000 office equivalent gross square feet or more are subject to the same requirements. Any existing firms located on the property of firms employing 25 or more employees are also subject to requirements. New developments must meet the trip reduction percentage that has been achieved by all existing employers as of its date of occupancy, and must continue to reduce trips with existing employers to meet the 38% reduction goal by 2010.
3 Email correspondence with JJ Weston, August 30, 2006.
4 Normally, letters and informal reminders suffice to encourage participation, however, the existence of strict penalties, like a misdemeanor citation ensure compliance.

Burbank TMO *(continued)*

Key Lessons

- **Focus on goals rather than means**. This focus allows each partner to have the freedom to do its part in whatever way works best to achieve the necessary trip reduction.
- **Functioning partnership between critical parties.**
- **Local, market-driven program**. The ability of the employers to choose the strategies that work best for them, enabling their TDM programs to be local, tailored, site-specific, and market driven.
- **Mandatory trip-reduction requirements established by ordinance**. (It should be noted that state law has since made mandatory trip reduction requirements illegal.[5] Burbank has exemption from this law. Therefore this specific TDM tool is not currently available to Glendale, but state law does allow dozens of other types of TDM measures either as general ordinances or as part of specific development agreements.)

Accompanying programs

The *Media District Specific Plan* also called for establishment of a transportation mitigation fee levied on all new development and an Assessment District for existing development. The Assessment District was never implemented. The impact fee was established in 1994 and funds transit improvements, neighborhood protection programs, traffic calming, and street improvements including maintenance and capacity enhancements when needed. The fee ranges from $2.50 to $5.23 per office-equivalent square foot and may be changed by City Council via ordinance.[6]

5 SB437 (Lewis) was adopted by the California State Legislature in October, 1995, and is now enacted as Health and Safety Code Section 40717.9. SB437 declares that public agencies "shall not require an employer to implement an employee **trip reduction** program unless the program is expressly required by federal law…"

6 Primary sources for this section were: The Burbank Media District Specific Plan, adopted January 8, 1991; Interviews: JJ Weston, Burbank TMO Director, August 8, 2006; David Kriske, Burbank Community Development Department, August 8, 2006; Greg Hermann, Burbank Community Development Assistant Director, August 28, 2006.

Portland, Oregon (Lloyd District) Transportation Management Association[1]

The Lloyd District is a shopping District across the River from downtown Portland. The Lloyd District Transportation Management Association (LDTMA) is a non-profit business association representing large and small employers in the Lloyd District. These businesses invest over $1 million annually to commute trip reduction programs in the district. TMA programs include the Passport Annual Transit Pass, carpool matching services, and car-sharing. Part of the program's broader goal is to contribute to the City of Portland's development target of 17,000 new jobs and 4,000 new housing units, while minimizing the amount of traffic created by this new development.

ABOVE: Lloyd District, across the river from downtown Portland, OR.

Funding

Participating Lloyd TMA businesses pay no dues. Instead the association is funded through the following sources:

- A Business Improvement District (BID) that is a "fee/assessment" on property owners. The BID then provides membership to all businesses located in buildings paying the assessment. The BID generates 40% of the TMA's budget.
- Parking meter revenue which supplements the BID and is targeted toward programs that serve business and employee needs. This accounts for one-third of the budget.
- Commissions on the sales of transit passes. The TMA receives 3% on all transit passes sold to businesses through the TMA and/or its Transportation Store. In 2005, the TMA sold over $1.2 million in transit passes, and therefore received about $36,000 in commissions (comprising 16% of the TMA budget).
- A Business Energy Tax Credit passed from businesses to the District to fund additional improvements.[2]

Role of the City

There are two public sector agencies on the Board: the Portland Department of Transportation and Portland Development Commission. They chose to be ex-officio (non-voting) members to reduce conflicts between having to vote on decisions that are specific to the LDTMA mission and having to represent public interests that are larger than just the Lloyd District. Board membership still gives ex-officio Directors all rights of discussion, persuasion, and fiduciary responsibility in the oversight of the organization.

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1 Sources: www.lloydtma.com, accessed in September 2006; Lloyd TMA Annual Report 2006; Interview: Rick Williams, Lloyd TMA Representative, August 21-22, 2006.

2 The state of Oregon has a Business Energy Tax Credit (BETC) for investments businesses make in employee transportation programs which result in measurable reductions in single occupancy vehicle (SOV) trips. Businesses can receive a 35% business income tax credit for investments in transit subsidy programs. The Lloyd TMA works with member businesses to transfer credits to the association. The TMA then packages the combined credits and sells them on the open market to companies in Oregon that have made profits (thus receiving a tax credit, much like air quality credits). Over the past three years, Lloyd TMA has averaged about $200,000 a year in BETC credits. When a business transfers their BETC, they become a voting member of the "Transportation Opportunity Fund" which is a list of infrastructure improvements that the TMA then invests in (i.e., lighting, bus shelter improvements, transit trackers, streetscape art/amenities, pedestrian crossing improvements, etc.). All contributing members vote each year and infrastructure improvements are prioritized and funded annually. Essentially, businesses give their tax credits to the TMA, which subsequently uses them to provide additional transit, pedestrian and bike oriented infrastructure improvements throughout the district.

Portland, Oregon (Lloyd District) TMA

(continued)

Results

The Lloyd District has seen a remarkable decline in single occupancy vehicle (SOV) commute trips coupled with a rapid rise in bus and light rail use as shown in the Figure below. In the nine years since the baseline figures began in 1997,[3] drive alone trips among *all* Lloyd District employees (including non-TMA employers) have fallen almost 29%. Meanwhile, transit ridership among *all* employees has increased more than 86% over the same period. Employees of TMA-member companies have demonstrated even more remarkable results: some TMA-member businesses have achieved a transit and bike mode share of nearly 65%, while the overall TMA-member business average is 39-40% transit mode share. Non-TMA employees range between 20-25% transit mode share. Over the last 9 years, TMA programs account for a reduction of four million peak-hour vehicle miles traveled. **In today's terms, this represents 1,008 vehicles per day removed from peak-hour traffic.**

ABOVE: Portland MAX Light Rail Red Line

2005 Employee Commute Choice Survey Results*

2005 SURVEY RESULTS		1997	2005	
Commute Method	Total Trips	% of Trips	% of Trips	% Change
Drive Alone	10,754	60%	42.7%	-28.9%
Carpool/Vanpool	2,766	16%	11.0%	-31.4%
Bus/MAX	9,849	21%	39.1%	86.2%
Bicycle	822	3%	3.3%	8.8%
Walk	567	2%	2.3%	12.5%
Telecommute	198	0%	0.8%	NA
Compressed Work Week	237	1%	0.9%	-5.9%
Total Weekly Trips	25,193	100%	100%	

* Source: Lloyd TMA Annual Report 2006, www.lloydtma.com, accessed in September 2006.

3 The TMA baseline figures set in 1997, representing approximately 5,000 employees, were established as a way to implement performance measures.

Portland, Oregon (Lloyd District) TMA

(continued)

The primary impetus behind this surge in riders is the Passport Annual Transit Pass Program. The Passport program allows every employee in the Lloyd District TMA unrestricted access to all Portland buses and light rail, free taxi rides home in cases of emergency, and ten cents off Starbucks coffee purchases. Businesses purchasing the program for their employees receive a business tax credit for the purchase and a discount on the price of the pass from TriMet. Passes are purchased at a discounted bulk rate of $189 per employee whereas regular TriMet all-zone annual passes are $792, a 76% discount.

The Passport program grew out of an agreement to eliminate parking. In return for agreeing to eliminate free commuter parking in the Lloyd District (i.e., monthly rates and meters) the business community was given special consideration for fares, which led to the development of the Passport Annual Pass program. In addition, the District was given revenue sharing from the meter district and signed an agreement to establish a maximum parking ratio on all new parking development of 2 stalls per 1,000 square feet (previously unregulated) which led to an agreement to provide new and enhanced transit service in the district. After the District achieved certain pre-established goals for ridership, mode split, and funding, it was able to join the existing downtown "Fareless Square" program, extending fare-free downtown zone to the Lloyd District.

It is notable that the transit mode share nearly doubled while carpooling and vanpooling declined, and bicycling and walking gained less significantly. The single most important factor driving the increase in transit ridership was the widespread provision of free transit passes to Lloyd District employees under the Passport Annual Transit Pass Program. For these employees, a $792 per year transit pass suddenly became free. As described in the Universal Transit Pass section later in this chapter, these programs frequently result in a doubling or even tripling of transit commuting rates among those receiving free passes. By contrast, while the TMA and Lloyd District employers have marketing programs that encourage carpooling, vanpooling, walking and bicycling to work, and do offer some services and small benefits to these types of commuters, there is simply no financial incentive of equal power offered to commuters using these modes.

Key Lessons

The commute shift results that the LDTMA achieved make it clear that the key factor to success is the financial incentives facing the employee. In the Lloyd District, as can be seen in dozens of similar programs, employees shifted toward the commute mode that they were offered a substantial new financial incentive to use – toward transit, in the case of the Lloyd District. For the mode choices where financial incentives remained essentially the same, there was less change in behavior.

The four key reasons that the Lloyd District TMA structure has been successful are:

- **It is a free-standing organization with legal standing.** This gives the LDTMA the necessary autonomy and authority to carry out its programs successfully.
- **It has a clear mission and high investment of membership.**
- **There are clear standards and guidelines** for operating, policy development, and program delivery.
- **There are clear lines of authority** between Board, committees, and program delivery services.

Recommendation 6.1
Adopt a new strengthened TDM Ordinance including mandatory TMA membership and TDM programs.

6.3.1 NEW TDM ORDINANCE

Introduction

The new TDM Ordinance should have two primary components: mandatory membership in a Transportation Management Association and mandatory TDM programs. These two steps will give the City the necessary leverage, currently lacking, to compel downtown employers to do their part to reduce traffic downtown. Ultimately this will benefit all downtown stakeholders by ensuring the ongoing vitality and competitiveness of downtown Glendale.

Mandatory Membership in a Transportation Management Association

The first step the City of Glendale must take to create a strong, effective TDM program is to require membership in a Transportation Management organization such as the existing Glendale Transportation Management Associates (the current TMA is discussed in a later section of this chapter). This will provide ongoing funding and strength to a Glendale TMA, as well as give employers the tools they need to reduce trips in a meaningful way and meet the other requirements of the TDM ordinance. Notably, the existing Glendale TMA is currently the only voluntary TMA in Southern California.

Glendale should make membership in a TMA mandatory for all new and existing employers and new commercial development, regardless of size. Due to the similar circumstance and the notable successes of the Burbank TMO, Glendale should adopt similar membership requirements including: all member employers should be required to pay an annual fee, conduct an annual employee transportation survey, and have a trained on-site transportation coordinator to implement their TDM strategies.

The membership fees should be leveraged on either a per-employee or per-auto-trip basis. In the short term, Glendale could implement a per-employee fee to streamline immediate implementation (exact fee amount should be determined through further study – Burbank's annual fee is $18/employee). In the long term, a per-auto-trip fee would help achieve goals beyond merely programmatic funding by providing a financial incentive to employers to reduce trips, and would reward those employers who already have low auto trips to their workplace. In the latter approach, the City could also consider implementing a trip threshold, above which auto trip generation triggers the TDM requirements; this would further reward those developments that have very low auto use. In either case, employers would be required to submit employee transportation survey data which can be used for measuring success, monitoring, and enforcement.

TDM Requirements for New and Existing Development and Employers

Today, many California communities who seek to control traffic or want to revitalize their downtowns without increasing traffic choose to require mandatory transportation demand management actions, either as general ordinances or as part of specific development agreements. For example, Santa Monica requires employers to give cash payments to employees who do not drive; Menlo Park requires a cap on vehicle trips from some new developments; Mountain View has conditioned some new developments on the provision of free transit passes to employees; and Palo Alto requires bicycle facilities.

Glendale has a broad array of TDM measures it can require, all of which will help meet traffic reduction goals for downtown. (Mandating trip reductions specifically, as was done in Burbank when they initiated their TDM program, is a tool Glendale does not have at its disposal because this has since been prohibited by California law.[2]) To start, there are 3 primary TDM programs that Glendale should require at all new and existing development in downtown Glendale:

- Universal Transit Passes
- Parking Cash-out
- Bicycle Facility Requirements

These are each discussed in detail below. As Glendale's TDM program grows and matures, the City should monitor the effectiveness of these programs, expand those that are successful, and implement new measures as needed (as described more fully later in this chapter).

2 SB437 (Lewis) was adopted by the California State Legislature in October, 1995, and is now enacted as Health and Safety Code Section 40717.9. SB437 declares that public agencies "shall not require an employer to implement an employee **trip reduction** program unless the program is expressly required by federal law…" SB437 was enacted specifically in response to the repeal of the 1990 Amendments to the federal Clean Air Act "employee trip reduction programs" defined in (now repealed), and does not mention the much broader term "transportation demand management." It applies only to this one specific technique, not to all types of transportation demand management. To emphasize this point, SB437 includes this statement: "Nothing in this section shall preclude a public agency from regulating indirect sources in any manner that is not specifically prohibited by this section, where otherwise authorized by law." The term "indirect source" is not defined in state law but is broadly defined in federal law to mean "a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution . . . ."

Recommendation 6.2
Require Beeline Universal Transit Passes to be provided to all downtown residents and employees as part of the new TDM Ordinance. Require MTA universal transit passes if feasible.

- **a. Create a Universal Transit Pass Program for the Glendale Beeline by negotiating a deep bulk discount for both residents and employees.**
- **b. Require employers to provide Beeline passes to all new and existing downtown employees as part of their TMA membership.**
- **c. Require provision of Beeline passes to all residents in new downtown developments as a condition of approval for new development, funded through condominium fees and rents.**
- **d. Negotiate with MTA for a deeper discount universal transit pass (deeper than currently exists) and depending on the outcome, require MTA passes to be provided to all downtown residents and employees as well.**

Universal Transit Passes

The City of Glendale can increase transit ridership and reduce vehicle trips downtown by requiring employers and developments to provide free transit passes to all downtown residents and employees. This is the most basic form of financial incentive: making transit free for most of the regular users of downtown increases the likelihood that they will use it, especially if alternatives like driving continue to increase in cost. In recent years, growing numbers of cities and transit agencies have recognized the advantages of providing free transit passes and have teamed with universities, employers, or residential neighborhoods to implement "universal transit pass" programs.

Universal transit pass programs offer employers or residential developments the opportunity to purchase deeply discounted transit passes for their employees or residents on the condition that there is universal enrollment of all employees at a firm or all of the residences at an apartment complex. The principle of universal transit passes is similar to that of group insurance plans – transit agencies can offer deep bulk discounts when selling passes to a large group, with universal enrollment, on the basis that not all those offered the pass will actually use them regularly. Employers, schools, and developers, in turn, are willing to absorb the costs because it can lower other costs like parking construction. Overall, the program provides multiple benefits for all parties involved.

Benefits of Universal Transit Pass Programs

For transit riders:

- Free access to transit
- Rewards existing riders, attracts new ones
- For employees who drive, making existing transit free can effectively create convenient park-and-ride shuttles to existing underused remote parking areas

For transit operators:

- Provides a stable source of income
- Increases transit ridership, helping to meet agency ridership goals
- Can help improve cost recovery, reduce agency subsidy, and/or fund service improvements

For downtown districts:

- Reduces traffic congestion and increases transit ridership
- Reduces *existing* parking demand: Santa Clara County's (CA) Eco Pass program resulted in a 19% reduction in parking demand

- Reduces *unmet* parking demand: UCLA's BruinGo! program resulted in 1,300 fewer vehicle trips which in turn resulted in 1,331 fewer students on the wait list for parking permits (a 36% reduction)
- Reduces *future growth* in parking demand: University of Washington's U-Pass program helped avoid construction of 3,600 new spaces, saving $100 million (since 1983 the university population has increased by 8,000 while the number of parking spaces has decreased)

For developers:

- Universal transit pass programs can benefit developers if implemented concurrently with reduced parking requirements, which consequently lower construction costs
- Providing free cost transit passes for large developments provides an amenity that can help attract renters or home buyers as part of lifestyle-oriented marketing campaign appealing to those seeking a "downtown lifestyle"

For employees/employers:

- Reduces demand for parking on-site
- Provides a tax-advantaged transportation benefit that can help recruit and retain employees

As Figure 6-1 illustrates, free transit passes are usually an extremely effective means to reduce the number of car trips in an area; reductions in car mode share of 4% to 22% have been documented, with an average reduction of 11%. By removing any financial cost barrier to using transit and some of the inconvenience, including the need to search for spare change for each trip, people become much more likely to take transit to work or for non-work trips.

ABOVE: Requiring downtown development to provide universal transit passes to all employees and residents will increase ridership on the Beeline and gets cars off the road.

Figure 6-1 Mode Shifts Achieved With Free Transit Passes

Location	Drive to work		Transit to work	
	Before	After	Before	After
Municipalities				
Santa Clara (VTA)[a]	76%	60%	11%	27%
Bellevue, Washington[b]	81%	57%	13%	18%
Universities				
UCLA (faculty and staff)[c]	46%	42%	8%	13%
Univ. of Washington, Seattle[d]	33%	24%	21%	36%
Univ. of British Colombia[e]	68%	57%	26%	38%
Univ. of Wisconsin, Milwaukee[f]	54%	41%	12%	26%
Colorado Univ. Boulder (students)[g]	43%	33%	4%	7%

a Santa Clara Valley Transportation Authority, 1997.[b] 1990 to 2000; www.commuterchallenge.org/cc/newsmar01_flexpass.html.

b White et. al. "Impacts of an Employer-Based Transit Pass Program: The Go Pass in Ann Arbor, Michigan."

c Jeffrey Brown, et. al. "Fare-Free Public Transit at Universities." *Journal of Planning Education and Research* 23: 69-82, 2003.

d 1989 to 2002, weighted average of students, faculty, and staff; From Will Toor, et. al. *Transportation and Sustainable Campus Communities*, 2004.

e 2002 to 2003, the effect one year after U-Pass implementation; From Wu et. al, "Transportation Demand Management: UBC's U-Pass – a Case Study", April 2004.

f Mode shift one year after implementation in 1994; James Meyer et. al., "An Analysis of the Usage, Impacts and Benefits of an Innovative Transit Pass Program", January 14, 1998.

g Six years after program implementation; Francois Poinsatte et. al. "Finding a New Way Campus Transportation for the 21st Century", April, 1999.

A Cost-effective Transportation Investment

Many cities and institutions have found that trying to provide additional parking spaces costs much more than reducing parking demand by simply providing everyone with a free transit pass. For example, a study of UCLA's universal transit pass program found that a new parking space costs more than 3 times as much as a free transit pass ($223/month versus $71/month).

In addition, on-street parking spaces formerly taken by commuters' autos free up more spaces for short-term parkers. This can provide additional parking revenue to pay for improvements in the Downtown Transportation and Parking Management District. For example, the same study of UCLA's universal transit pass program mentioned above found that an hourly space on-campus generates 30% more revenue than a monthly space if used 50% of the time and 149% more revenue than a monthly space if used 100% of the time.

Other "Universal Transit Pass" Programs

The term Universal Transit Pass has been used to refer to a broad range of transit programs. It is sometimes used to refer to regional pass programs, such as Metro's EZ Pass program in the Los Angeles region, which allows transit riders to purchase a monthly pass that is good for passage on several different transit systems. It is also occasionally used to refer to electronic universal fare cards, such as the Translink program (under development for the San Francisco Bay Area) or the Transit Access Pass Program (currently being tested by LA MTA), which acts as an "electronic purse," deducting fares for many different transit systems as the rider uses each system. The programs described here (offering deeply discounted transit passes to employers or residential developments in exchange for universal enrollment) should not be confused with these other programs. For more information on the distinctions between these programs, see the "Additional Studies Needed" section of Chapter 8

Case Studies

Eco-Pass Program in Boulder, CO

An excellent example of a universal transit pass is the Eco-Pass program in downtown Boulder, which provides free transit on Denver's Regional Transportation District (RTD) light rail and buses to more than 8,300 employees, employed by 1,200 different businesses in downtown Boulder. To fund this program, Boulder's downtown parking benefit district, managed under the Central Area General Improvement District (CAGID),[3] pays a flat fee for each employee who is enrolled in the program, regardless of whether the employee actually rides transit. Because every single employee in the downtown is enrolled in the program, the Regional Transportation District (RTD) provides the transit passes at a deep bulk discount.

Figure 6-2 shows the rates that the RTD offers to downtown Boulder businesses to buy employees passes. The cost per employee per year varies from $86 to $118, which is only 6% to 8% of the cost of an equivalent annual ValuPass ($1,485 per year). Since CAGID has a special contract with RTD and encompasses more than 2,000 employees, all employers therein are treated as a single entity and passes are purchased at the rate of $83 per person. Other downtown employers outside CAGID boundaries purchase passes at the rates below.

Six years after the program implementation the Eco-Pass has reduced the drive-to-work mode share by 10%. The Eco-Pass program alone has also reduced commuter parking demand by 850 spaces, according to Boulder's Downtown Management Commission.

This program also extends to residential development. Both residential building managers and entire neighborhoods (even typical single-family areas) can purchase Eco-Passes for their residents. In the latter, neighborhood volunteers collect contributions on an annual basis, and once the minimum financial threshold is met, everyone living in the neighborhood is eligible for the transit pass. Alternatively, a neighborhood can elect to increase property taxes to purchase neighborhood-wide Eco-Passes.

3 The Central Area General Improvement District (CAGID) is a special district which was established in the 1970s. The Board of CAGID, which makes the final decisions on issues such as new parking construction, is comprised of the City Council. However, considerable power over decisions such as parking charges is held by the Downtown Management Commission (DMC), which is made up of local businesses and property owners, although its actions are subject to City Council review.

Figure 6-2 Boulder 2006 Eco-Pass Pricing

Employees	Contract Minimum Per Year	Per Employee/Per Year				
		1-24 Employees	25-249 Employees	250-999 Employees	1,000-1,999 Employees	2,000+ Employees
1-10	$1,188	$118	$106	$97	$90	$86
11-20	$2,376					
21+	$3,564					

King County, WA FlexPass Program

A King County Metro FlexPass costs $65 per year per employee for employers compared to the normal annual cost of $396-$1,584. The King County Metro, WA, notes that in downtown Bellevue, FlexPass is responsible in part for a 24% drop in drive alone commutes from 1990 to 2000 (81% to 57%).

Sillicon Valley's Eco Pass Program

Santa Clara Valley Transportation Authority (VTA) provides both employee and residential Eco Passes. The cost per pass varies depending on size of the company or residential area and proximity to high-quality transit service. Figure 6-3 shows the variable rates. The cost per annual Eco Pass varies between $7.50 and $120, which is only 0.6% and 9%, respectively, of an Adult Express Pass ($1,348 per year), which is comparable to an Eco Pass. The result has been a 19% decrease in parking demand at employers participating in the program.

Figure 6-3 Company Location/Service Level

	1 – 99 Employees	100 – 2,999 Employees	3,000-14,999 Employees	15,000 + Employees
Downtown San Jose	$120	$90	$60	$30
Areas served by bus & light rail	$90	$60	$30	$15
Areas served by bus only	$60	$30	$15	$7.50

Implementation Details for Universal Transit Pass Program in Glendale

These case studies provide models for the implementation of a Universal Transit Pass Program in Glendale. The program will take time to implement fully, and will include the following key steps.

The first step is to negotiate the cost for residential and employee universal transit passes on the Beeline. For the Beeline, the important thing is to create a price structure for the

universal transit pass that is at least revenue neutral. Since the mode share for the Beeline is low, the price for the passes can be quite low and should still create revenue for the Beeline. (If huge jumps in transit ridership occur as a result of the program, the pass price can be revisited. In fact, if this "problem" did in fact occur, it would probably create more benefits than downsides.) This negotiation can be led by a TMA and/or the Glendale Traffic and Transportation Division staff (perhaps the new Downtown Mobility Coordinator, a new recommended position under the Traffic and Transportation Division, described in Chapter 5).

This negotiation should be a top priority in Glendale's implementation of the *Downtown Mobility Study* recommendations, as other requirements hinge on negotiation of a bulk price.

The second key step is to require provision of Universal Transit Passes to all residents and employees in the DSP area as part of the new TDM Ordinance. This requirement can only go into effect *after* a bulk rate is negotiated with the Beeline. If the Ordinance passes before the price structure is determined, the Ordinance should include a clause to that effect. Implementation details such as how this requirement is enforced and how the passes should be paid for, vary for each type of development as described below.

Downtown Residents. All new multi-family residential developments should be required to provide universal transit passes to all residents as a condition of approval. For ownership units, on-going funding for this expense could be provided through:

- Condominium association dues;
- Homeowner's association dues; and/or
- Neighborhoods (as described in Boulder and Santa Clara examples above).

For rental units, the property owner or manager could be responsible, who could in turn collect money for the passes through rents. There are currently very few residents in the DSP, so implementation of this program should focus on new residents.

Downtown Employees. Administration of a universal transit pass program for all downtown employers could be managed by a TMA with compliance monitoring and enforcement handled by the City's Traffic and Transportation Division. The transit pass program could be paid for through some combination of the following funding sources:

- Employers managed through partnership with a TMA.
- Grants from environmental, public health, and transit sources (grants usually fund pilot projects). For example, the new transportation bond passed in November 2006 will provide

substantial funding to LA MTA, some of which is flexible and could be used for such a program (see Chapter 7 on Funding and Financing for further details).

A summary of implementation details for each type of pass-recipient (owners, renters, existing employees, and new employees) is included in Figure 6-4.

Implementation details and division of responsibilities between City Departments and a TMA will have to be worked out as implementation of the *Downtown Mobility Study* proceeds.

Coordination with LA MTA

The way to maximize the effect of a universal transit pass program in terms of increasing transit ridership and decreasing traffic would be to offer a single free transit pass usable on any bus in Glendale, including MTA and Beeline buses. This is a long term vision, and will require a few steps to implement.

LA MTA currently offers a discount universal business transit pass program, the "B-TAP" (see sidebar for more details). In the short term, the City could require businesses to purchase B-TAP passes in addition to the Beeline passes.

However, the cost of the annual B-TAP pass is 15-31% of a regular annual pass which is much higher than most other universal transit pass programs (Boulder's and Santa Clara VTA's universal transit passes, discussed above, cost less than 10% of a regular annual pass). So, requiring purchase of B-TAP passes at current prices, especially on top of a Beeline pass, could be infeasible, both politically and financially.

Glendale could attempt to negotiate with MTA for a lower bulk purchase price for the business transit pass program. Since transit mode share in Glendale is currently only 6%, the price for the passes could be quite cheap and still result in new revenue for MTA. This negotiation could go hand-in-hand with the other MTA negotiations recommended in Chapter 4 (Transit Service) of this *Downtown Mobility Study*, including more fare coordination and universal farecard instruments. Ultimately, perhaps a single universal transit pass could be negotiated, which could be used on Beeline and MTA buses and could be purchased at a deep bulk discount by downtown employers (and perhaps by residential developments as well). Notably, Metro *is* already investigating the possibility of including other LA-based transit agencies into its universal transit pass program (like their EZ Pass program which covers more than 20 transit agencies throughout the Greater Los Angeles Region).

It is important to keep in mind that there does not necessarily have to be any connection between creating a universal transit

LA MTA Business Transit Pass Program

B-TAP (Business Transit Pass) was designed exclusively for businesses wanting to offer annual transit passes as part of benefits packages. This pass is distributed to all full-time employees. However, the employer can get exemptions for vanpool riders and transit commuters who can not take Metro to work, but rely on another transit provider. Each business has the flexibility to choose how the passes are paid for, either by a full or partial subsidy or by allowing employees to pay the cost through payroll deductions. The cost of each employee pass is based on the service level of transit stopping within two blocks of each site. There are three levels of service:

- **High** (bus frequency of 20 minutes or less) with an annual cost of $194 per employee. This equals 31% of the cost of a regular annual pass.
- **Medium** with an annual cost of $138 per employee. This equals 22% of a regular annual pass.
- **Low** (only a few buses stopping per day) with an annual cost of $92 per employee. This equals 15% of the cost of a regular annual pass.

In addition, the fee is prorated for new employees or for a company who does not join in the beginning of the year.

The B-TAP program was introduced in August 2005, but was not marketed until November 2005. There are currently 25 B-TAP members, varying in size from a few employees to 220 employees (June, 2006).

ABOVE: Expanding Glendale's Universal Transit Pass program to include MTA buses as well would allow all downtown residents and employees to board any bus in downtown, including MTA Local (bottom photo) and Rapid buses (top photo).

pass program for the Glendale Beeline, and requiring employers to sign up for the MTA Business Transit Pass program. It will be important for Glendale to move ahead with the Beeline universal transit pass program regardless of the status of negotiations with MTA. For more information, see the "Additional Studies" section of Chapter 8.

Summary: Universal Transit Passes

Implementing a universal transit pass program for the DSP area in Glendale could have significant benefits in both reducing traffic and increasing transit ridership. The key steps are:

- Require Beeline Universal Transit Passes to be provided to all downtown residents and employees as part of the new TDM Ordinance. (If a price has not been negotiated as of passage of the ordinance, include a clause that describes when the requirement will go into effect).
- Create a Universal Transit Pass Program for the Glendale Beeline by negotiating a deep bulk discount for both residents and employees. Key elements to emphasize are:
  - Universal coverage for all residents and employees, which allows lower per rider costs and a deeper discount to be offered by the participating transit agencies.
  - Automatic opt-in, which lowers sign-up barriers and encourages greater participation and transit ridership gains.
- Require employers to provide Beeline passes to all new and existing downtown employees as part of their TMA membership.
- Require provision of Beeline passes to all residents in new downtown developments as a condition of approval for new development, funded through condominium fees and rents.
- Plan for targeted service improvements to further encourage usage of the universal transit pass and/or to respond to increased ridership after the program is launched (See Chapter 4 for further recommendations on transit service improvements).
- If feasible, require MTA universal transit passes to be provided to all downtown residents and employees. First, negotiate with MTA for a deep discount universal transit pass (deeper than currently exists).

Figure 6-4 Summary of Universal Transit Pass Requirements

Development Type		Regulatory Mechanism	Programmatic/ Administrative Responsibility	Potential Funding Mechanisms	Compliance Monitoring/ Enforcement Responsibility
New Residents/ Residential Development[a]	Ownership Units	Condition of Approval/Proof of compliance prior to issuing occupancy permits/ CC&R[b]	Developer/ Homeowners Association contracts with TMA or City's Traffic and Transportation Division	Developer impact fees, and/or Homeowner's Association dues	City's Traffic and Transportation Division, with support from the Planning Department
	Rental Units	Condition of Approval		Developer impact fees, and/or property owner/ manager	
New Employees/ Commercial Development		Mandatory TMA membership as condition of approval: proof of compliance submitted with annual dues payment	TMA and/or City's Traffic and Transportation Division	Employers, TMA membership dues, assessment district	City's Traffic and Transportation Division, with support from the Planning Department
Existing Employees/ Commercial Development		Mandatory TMA membership via new TDM Ordinance: proof of compliance submitted with annual dues payment	TMA and/or City's Traffic and Transportation Division		

a Upon redevelopment, renovation, or expansion of existing development, TDM requirements for new development are triggered and applied as part of the entitlement process.

b "In contemporary practice in the USA, a covenant typically refers to restrictions set on contracts like deeds of sale. "Covenants, Conditions, and Restrictions," abbreviated "CC&Rs," is a common term for covenants attached to a contract of sale for a house, condominium, or cooperative, particularly in the tens of millions of American homes governed by a Homeowners' Association (HOA) or condominium association." Source: http://en.wikipedia.org/wiki/Covenant, accessed on November 9, 2006.

Recommendation 6.3

Require Parking cash-out for all employers as part of new TDM Ordinance:

a. Begin an education and enforcement program on the existing state parking cash-out law.

b. Adopt an expanded cash-out program in the new TDM Ordinance that applies to all downtown employers.

c. Formalize an annual compliance monitoring program and enforcement mechanism for state and local cash-out requirements.

Parking Cash-out

Parking cash-out programs ensure that all employee commute modes are subsidized equally and create incentives for commuters to carpool, take transit, and bike or walk to work. Parking cash-out is a program by which employers who offer free or reduced price parking to their employees are required to offer an equal "transportation fringe benefit" to employees who use modes other than driving alone to get to work. These employees could use this money to purchase transit passes, cover carpooling expenses, or simply take the cash as additional take-home salary (if they walked to work for example).

Many employers in Glendale (including the City) provide free or reduced price parking (e.g. a subsidized price usually below lease costs and well below the full costs to build, operate, and maintain the parking) for their employees as a fringe benefit. Under a parking cash-out program, employers could:

- Subsidize all modes equally by continuing to offer subsidized parking on the condition that they offer the cash value of the parking subsidy to any employee who does not drive to work, ideally in one of the following two forms:
  - ✧ A transit/vanpool subsidy equal to the value of the parking subsidy (of which up to $105 is tax-free for both employer and employee)
  - ✧ A taxable carpool/walk/bike subsidy equal to the value of the parking subsidy
- Discontinue all subsidies by charging employees market rates to park.

Employees who opted to cash out their parking subsidies would not be eligible to receive free parking from their employer, but could still drive to work sometimes if they paid the market-rate parking charges on those days when they drove.

Parking cash-out is already required under California's existing "Parking Cash-Out" law for employers with 50 or more employees who lease their parking, but it is not enforced at the state level and thus is up to local jurisdictions to enforce the program (see Appendix 6A for a summary and full legal citation of the state's parking cash-out law).

The administrative costs to employers of complying with state or local parking cash-out requirements are minimal. The actual out-of-pocket costs for employers can be minimal as well. If an employer complies with parking cash-out by eliminating parking subsidies for employees who drive, then they simply charge daily market-value rates (e.g. the current per-space lease rate) or daily cost-recovery rates (e.g. the cost to build, operate, and maintain the parking) with no monthly discount rate, which puts no ad-

ditional financial burden on the employer and in fact saves them the money they currently spend on employee parking. For those employers who wish to continue to provide a parking subsidy to their employees, parking cash-out requirements would simply require an equivalent subsidy be offered to all employees.

This latter option is more costly for employers in terms of out-of-pocket costs, but initial start-up costs could be reduced by using revenues from mandatory TMA membership dues (the per employee-based dues paid by employers to the TMA), City parking revenues, or other City or TMA funds. This cross-subsidy should only occur during a pre-defined and limited initial start-up period, at which point employers who choose to continue offering employees free parking at work would be responsible for providing an equivalent transportation benefit to employees who don't drive, or instituting employee parking fees to subsidize a general transportation fringe benefit for all employees.

Developers and employers are generally comfortable complying with rules that improve the quality of life and regional competitiveness of the jurisdiction they are considering doing business in, so long as: a) they are provided some certainty as to what the rules are, b) the regulations are equal and fair, and c) any revenues generated are used to improve the business environment. As cities such as Santa Monica and Los Angeles have already implemented or are in the process of implementing expanded parking cash-out programs, Glendale's competitiveness in the regional office market will not be significantly disadvantaged by implementing parking cash-out. In fact, most employers will prefer to locate in a jurisdiction that is being proactive in addressing traffic congestion problems and investing in commute alternatives for their employees because it increases their ability to attract and retain employees.

Benefits of Parking Cash-out

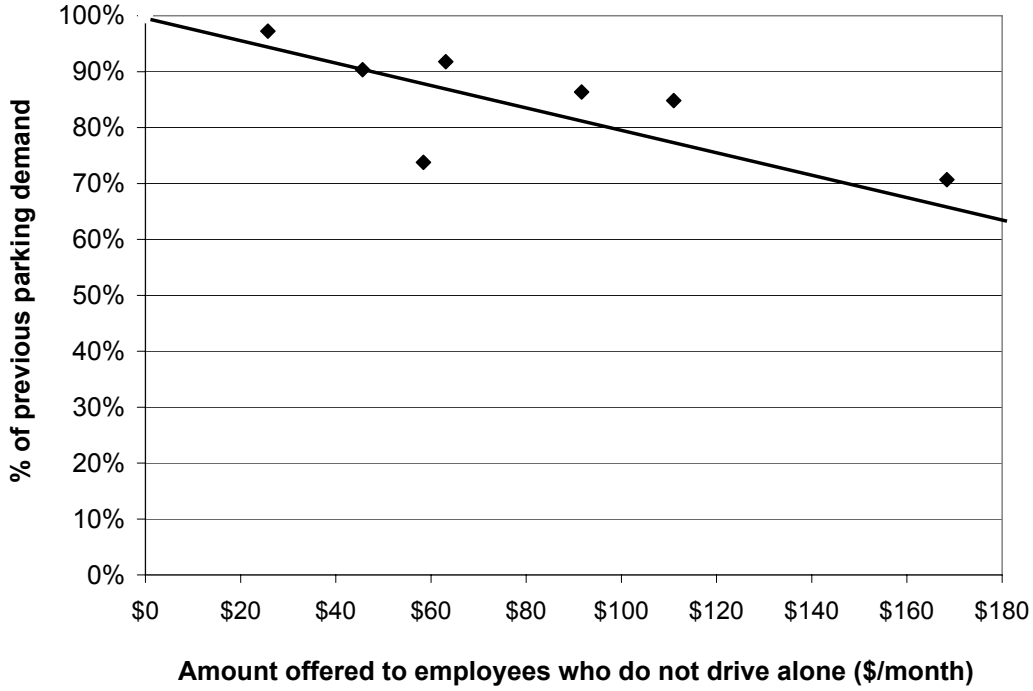
The benefits of parking cash-out are numerous, and include:

- Provides an equal transportation subsidy to employees who ride transit, carpool, vanpool, walk or bicycle to work. The benefit is particularly valuable to low-income employees, who are less likely to drive to work alone.
- Provides a low-cost fringe benefit that can help individual businesses recruit and retain employees.
- Employers report that parking cash-out requirements are simple to administer and enforce, typically requiring just one to two minutes per employee per month to administer.

In addition to these benefits, the primary benefit of parking cash-out programs for downtown as a whole is their proven effect on reducing auto congestion and parking demand. Figure 6-5 illus-

trates the effect of parking cash-out at seven different employers located in and around Los Angeles. It should be noted most of the case study employers are located in areas that do not have good access to transit service, so that a large part of the reduced parking demand that occurred with these parking cash-out programs resulted when former solo drivers began carpooling.

Figure 6-5 Effects of Parking Cash-out on Parking Demand*



* Source: Derived from Donald Shoup, "Evaluating the Effects of Parking Cash-Out: Eight Case Studies," 1997. Based on the cost in 2005 dollars.

Figure 6-6 outlines key research on commuter responsiveness to financial incentive programs implemented throughout the United States. The studies illustrate programs implemented in cities, colleges, and by individual employers, covering tens of thousands of employees and hundreds of firms. The findings show that, even in suburban locations with little or no transit, financial incentives can substantially reduce parking demand. On average, a financial incentive of $70 per month reduced parking demand by over one-quarter. At the University of Washington, a financial incentive of just $18 per month reduced parking demand by 24%.

Figure 6-6 Effect of Financial Incentives on Parking Demand

Location	Scope of Study	Financial Incentive per Month (1995 $)	Decrease in Parking Demand
Group A: Areas with little public transportation			
Century City, CA[a]	3,500 employees at 100+ firms	$81	15%
Cornell University, NY[b]	9,000 faculty and staff	$34	26%
San Fernando Valley, CA[c]	1 large employer (850 employees)	$37	30%
Bellevue, WA[d]	1 medium-size firm (430 employees)	$54	39%
Costa Mesa, CA[e]	State Farm Insurance employees	$37	22%
Average		**$49**	**26%**
Group B: Areas with fair public transportation			
Los Angeles Civic Center[f]	10,000+ employees, several firms	$125	36%
Mid-Wilshire Blvd, LA[g]	1 mid-sized firm	$89	38%
Washington DC suburbs[h]	5,500 employees at 3 worksites	$68	26%
Downtown Los Angeles[i]	5,000 employees at 118 firms	$126	25%
Average		**$102**	**31%**
Group C: Areas with good public transportation			
University of Washington[j]	50,000 faculty, staff and students	$18	24%
Downtown Ottawa[k]	3500+ government staff	$72	18%
Average		**$102**	**31%**
Overall Average		**$67**	**27%**

a Willson, Richard W. and Donald C. Shoup. "Parking Subsidies and Travel Choices: Assessing the Evidence." *Transportation*, 1990, Vol. 17b, 141-157 (p145).

b Cornell University Office of Transportation Services. "Summary of Transportation Demand Management Program." Unpublished, 1992.

c Willson (1990).

d United States Department of Transportation. "Proceedings of the Commuter Parking Symposium," USDOT Report No. DOT-T-91-14, 1990.

e *Employers Manage Transportation*. State Farm Insurance Company and Surface Transportation Policy Project, 1994.

f Willson (1990).

g Ibid.

h Miller, Gerald K. "The Impacts of Parking Prices on Commuter Travel," Metropolitan Washington Council of Governments, 1991.

i Shoup, Donald and Richard W. Wilson. "Employer-paid Parking: The Problem and Proposed Solutions," *Transportation Quarterly*, 1992, Vol. 46, No. 2, pp169-192 (p189).

j Williams, Michael E. and Kathleen L Petrait. "U-PASS: A Model Transportation Management Program That Works," *Transportation Research Record*, 1994, No.1404, p73-81.

k Willson (1990).

ABOVE: High-rise office towers in Glendale are large trip generators in downtown Glendale and therefore are great candidates for implementation of parking cash-out.

Implementation Details for Parking Cash-Out in Glendale

State Parking Cash-Out Law

As a first step, Glendale should begin an education and enforcement program on the existing state parking cash-out law for downtown commercial employers. California's existing "Parking Cash-Out" law applies to those employers with 50 or more employees who lease their parking. (Appendix 6A has more information on the state parking cash-out law). The two most likely avenues for the education program are:

- The Transportation Resource Center (see recommendation later in this chapter)
- TMA communications with its membership

Local Parking Cash-out Legislation

To achieve the full potential of parking cash-out, Glendale should adopt local legislation that extends the state parking cash-out requirements to all employers in the *Downtown Specific Plan* area who provide free or reduced price parking to their employees, including both those who own or lease their parking.

Such an ordinance would simply require that any downtown employers that provide subsidized parking to one or more of their employees must provide all their employees with the option to "cash out" their employee parking by taking the cash value or partial cash value of the parking subsidy. To establish the value of parking, the ordinance should define the market value of parking downtown using the most recent estimate of the cost to add additional parking spaces to downtown, including both the opportunity costs of land, and the cost to build, operate and maintain parking itself. As described earlier, for downtown Glendale this figure currently stands at approximately $265 per month.

In order to protect residential neighborhoods adjacent to major downtown employers from potential parking spillover problems (caused by employees who may take the parking cash-out option but then drive to work and park on residential streets), the City should implement the recommendations for residential parking districts discussed in Chapter 5.

Local enforcement measures to ensure compliance

Several local jurisdictions have developed enforcement mechanisms to enforce parking cash-out requirements. For example, Santa Monica requires proof of compliance with the State's parking cash-out law before issuing occupancy permits for new commercial development. (See Appendix 6B for a full explanation of Santa Monica's parking cash-out enforcement mechanism and samples of their forms). Los Angeles is currently developing

a parking cash-out program including an ordinance that would allow the City Council to enforce parking cash-out, and revision of the 2007 City tax forms to gather employer-leased parking information through annual tax submittal.

Another enforcement mechanism available to Glendale would be to require employers to provide proof of compliance (via an affidavit signed by a company officer) at the same time that they receive/renew their business license or pay their annual business taxes. This method ensures that *all* employers are in compliance with parking cash-out requirements on an ongoing basis, rather than limiting proof of compliance to a one-time enforcement for employers occupying new or renovated commercial buildings.

Summary: Parking Cash-out Program

The parking cash-out recommendations for downtown Glendale are:

- Begin an education and enforcement program on the existing state parking cash-out law for all downtown commercial employers that the law applies to, as follows:
  - Education program can be run through the Transportation Resource Center (see recommendation later in this chapter) and through TMA communications with its membership.
  - Enforcement will be done by the Traffic and Transportation Division
- Consider passage of an expanded program that applies to all downtown employers via local ordinance.
- Formalize an annual compliance reporting, monitoring, and enforcement mechanism for state/local cash-out requirements, as other Southern California cities such as Santa Monica and Los Angeles have done.

Recommendation 6.4
Revise development standards to include bicycle facility requirements as part of new TDM Ordinance.

Bicycle Facility Requirements

Bicycling is an underutilized form of transportation in Glendale. Given its temperate climate and flat streets, the City has a lot of potential to raise the use of bicycling as a primary mode of transportation for both residents and employees. In fact, the *Bikeway Master Plan*,[4] adopted in 1995, set a goal of 10% bike mode share. Currently the bike and walk mode share combined is only 6% for downtown residents.[5]

The *Bikeway Master Plan* called for investigating the usefulness of a revision of development standards to require provision of bicycle storage, showers, and lockers as part of their development agreements to meet the following adopted goals:

- Ensure the provision of an adequate and secure supply of bicycle parking facilities at likely destinations such as transportation centers, park-and-ride lots, public institutions and major community facilities, multi-family housing, and employment centers.
- Encourage the provision of showers, lockers, and other storage facilities at destinations where practical and economically feasible.
- Promote the use of bicycles for recreation, commuting, shopping and other purposes through education, enforcement, and incentive programs.

Glendale does have minimal bicycle requirements already in place. The TDM ordinance (March 1993) requires non-residential development to have varying levels of bicycle support facilities and/or educational information based on building square footage:

- 25,000 square feet or more: must have bicycle bulletin board with local and regional route and facility information.
- 50,000 square feet or more: must also have secure bicycle parking- 4 spaces for the first 50,000 sq. ft. and one spot per additional 50,000 sq. ft.
- 100,000 square feet or more: must also provide safe convenient access from the external circulation system to bicycle parking facilities on site.

While this is a good start and shows Glendale's commitment to increasing bicycle mode share, simply providing a bicycle bulletin board without real incentives and facilities that support bicycling will not encourage bicycle use sufficiently to meet DSP goals. For example, the requirements for a 50,000 square-foot building result in construction of 4 bike parking spaces per 200 auto parking spots. This does not support the goal of a 10% bike mode share as called for in the 1995 *Bikeway Master Plan*.[6]

4 Bikeway Master Plan, City of Glendale, December 1995.
5 2000 US Census.
6 The first goal in the Bikeway Master Plan is: "Plan and provide a bicycle network in order to increase the modal share of bicycle travel to at least 10% over the next 20 years."

Implementation Details for Bicycle Facility Requirements in Glendale

Glendale should revise development standards to include bicycle facility requirements. Specifically, the following facilities should be required for the following types of development as a condition of approval:

- **New residential developments**: secure, well-lit, visible, indoor ground-floor or below-grade bicycle parking for residents, as well as secure bicycle parking for guests.
- **New non-residential development**: secure, well-lit, visible, indoor ground-floor or below-grade bicycle parking for employees, ground-floor or below-grade commuter change room with showers and lockers; secure bicycle parking for visitors; prohibit building restrictions on bringing bicycles into buildings.

Bike parking should be provided at a rate that accommodates a 10% mode share for the building according to adopted City policy. General guidelines for bicycle parking requirements, as established by the American Planning Association in their "Bicycle Facility Planning Report"[7] include:

- Office and government building are recommended to provide 10% of the number of automobile spaces.
- Movie theaters, restaurants, and many other uses are recommended to provide 5-10% of the number of automobile spaces.

A few samples of existing bicycle parking requirements from peer cities across the country:

- Cambridge, MA: One space for every 10 automobile spaces for most uses. In multifamily residential buildings, one space or locker per unit must be provided.
- Santa Cruz, CA: For commercial, industrial, office, retail, service, two spaces + 15% of auto parking requirement.

Other bicycling-related development requirements can include parking cash-out or other subsidies for bicycling, showers, lockers, bicycle safety classes, TDM programs, performance measures and timelines. In conjunction with completing the citywide bike network, as called for in the 1995 plan, requiring all employers to provide bicycle parking, showers, lockers and incentives can increase bicycle mode share significantly and should be seriously considered as Glendale seeks to limit its peak-hour car trips and achieve its goals for downtown.

Summary: Bicycle Facility Requirements

As part of the new TDM Ordinance, Glendale should revise its development standards to include requirements for bicycle facilities and programs including some or all of the following:

- Bicycle parking to accommodate 10% mode share
- Subsidies for bicycling

7 American Planning Association, Planners Advisory Service Report 459.

- Showers & lockers
- Bicycle safety classes and other bicycle programs

Summary: New TDM Ordinance

Glendale's new TDM Ordinance should include the following provisions:

- Mandatory membership in a Transportation Management Association, like current TMA, for all new and existing employers and new commercial development. Membership requirements should include the following components:
  - Annual per-employee or per-auto-trip dues
  - Annual employee transportation survey
  - Trained on-site coordinator to implement trip reduction strategies
  - TDM programs (as described below)

- Mandatory provision of transportation demand management programs for all new and existing development, including universal transit passes, parking cash-out, and bicycle facility requirements (Figure 6-7 provides a summary of recommended requirements).
  - All TDM program requirements for commercial development and employers can be a part of their membership in a TMA. A TMA will provide programmatic support to help developers and employers provide TDM programs. Documentation of compliance can be submitted as part of their annual survey and dues payment. Documentation will be collected by a TMA, however ultimate enforcement of compliance will be the job of the City's Traffic and Transportation Division.
  - TDM program requirements for residential development will be managed by the City's Traffic and Transportation Division, with support from the Planning Department and a TMA. Fulfilling the requirements could be done by the developer, property manager, and/or homeowners association contracting with a TMA or done through the Traffic and Transportation Coordinator (who is the City's liaison with a TMA). Enforcement mechanisms include the permitting process (proof of compliance as a condition of approval, prior to issuing occupancy permits, and/or as a CC&R).[8] The details of the relationship between the City's Traffic and Transportation Division, a TMA, and developers will have to be refined by the City as part of implementation.

8 "In contemporary practice in the USA, a covenant typically refers to restrictions set on contracts like deeds of sale. "Covenants, Conditions, and Restrictions," abbreviated "CC&Rs," is a common term for covenants attached to a contract of sale for a house, condominium, or cooperative, particularly in the tens of millions of American homes governed by a Homeowners' Association (HOA) or condominium association." Source: http://en.wikipedia.org/wiki/Covenant, accessed on November 9, 2006.

Figure 6-7 TDM Ordinance Summary

	Summary of TDM Ordinance Requirements for New and Existing Development
Commercial Development	Membership in a TMA Provide Universal Transit Passes to all employees (once bulk rate has been negotiated) Parking Cash-out Bicycle Facilities (for new development)
Residential Development	Universal Transit Passes for all new residential development, paid through HOA dues or rents (once bulk rate has been negotiated) Bicycle Facilities
Employers	Membership in a TMA Provide Universal Transit Passes to all employees Parking Cash-out

Recommendation 6.5
Glendale should encourage establishment of a car-sharing service in Glendale with one or more shared vehicles located in the DSP area by converting part of the City fleet to a car-sharing program and/or subsidizing initial operations of the car-sharing provider.

6.3.2 ESTABLISH A CAR-SHARING PROGRAM

Car-sharing is a hassle-free way to rent cars by the hour. Rather than being concentrated at a central location like a rental car company, car-sharing cars are dispersed throughout an urban area at convenient centralized locations, such as residential or commercial developments, civic buildings, or central parking facilities. Car-share operators use telephone and Internet-based reservation systems that are totally self-service. Members are charged hourly and sometimes mileage-based fees for their use and receive a single bill at the end of the month for all their usage. Special membership plans for businesses and organizations enable easy access for all employees, which can augment or replace fleet cars or use of personal vehicles for work trips. Car-sharing operators generally have a diverse fleet so that members have access to anything from a compact sedan to a pick-up truck.

Currently, there are over 30 car-sharing organizations in North America operating in 36 metropolitan areas.[9] As of this writing, the two national car-sharing operators are FlexCar (www.flexcar.com; currently operating in the Los Angeles area) and ZipCar (www.zipcar.com).

Benefits of Car-sharing

Car-sharing can have environmental, economic, and social benefits for both the individual user and for the transportation system and community as a whole. For individuals it can provide cost savings, greater mobility, and convenience. For the community, car-sharing can reduce car ownership and vehicle travel, thereby reducing parking demand, supporting more compact development, and reducing emissions. Car-sharing fleets also tend to be low-emission and fuel-efficient which augments the environmental benefits of reduced driving. Some of these potential benefits are described more fully below.

Vehicle Ownership

Car-sharing has proven successful in reducing both household vehicle ownership and the percentage of employees who drive alone to work because of the need to have a car for errands during the workday. For residents, car-sharing reduces the need to own a vehicle, particularly a second or third car. Recent surveys have shown that 50% of car-share members are able to give up a vehicle after joining and that 70% of members are able to avoid buying a car by joining a car-share program.[10] As a result, car-sharing can be an important tool to reduce parking demand.

9 FlexCar website, www.flexcar.com, accessed on January 8, 2007.
10 "Car-sharing: Where and How it Succeeds." Transit Cooperative Research Program Report 108, Transportation Research Board, 2005.

Car-sharing can also allow public agencies to reduce the size of their vehicle fleets. Often agencies maintain a fleet large enough to serve their base load and use a car-sharing provider for extra vehicles, rather than paying to maintain a fleet large enough to serve occasional peaks in demand. Flexcar reports that savings of 25% to 60% are typical for public agencies that replace all or some of their fleet with car-sharing vehicles.[11] For example, the National Highway Traffic Safety Administration Pacific Northwest Region opted to use Flexcar and get rid of a $350/month fleet car, and its $175 parking space. As a result, they saved over $1,300 (84% of their former cost) in 3 months.

ABOVE: The City of Seattle, WA grants parking spaces for "car-sharing vehicles," but not for a specific company.

BELOW: Portland, OR installs high-profile orange poles at dedicated on-street carsharing spaces to promote their carsharing program.

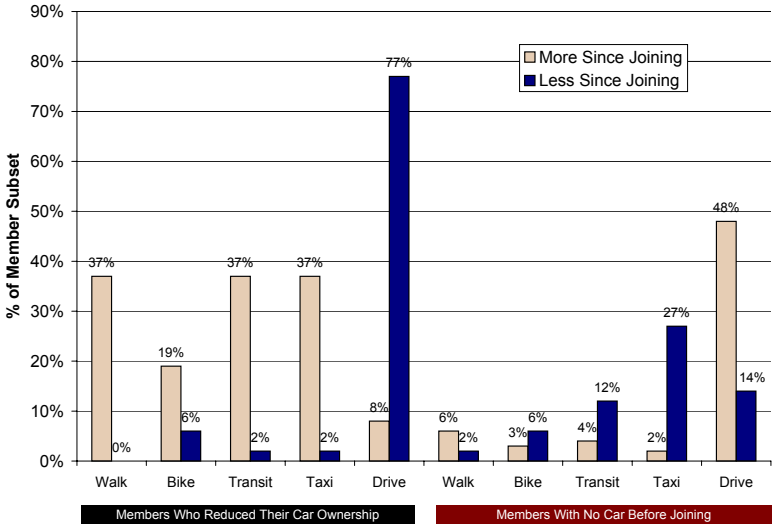
Travel Behavior

Car-sharing can greatly reduce both the number and length of vehicle trips because the variable cost of each trip is much higher. Unlike owning a car, where around 80% of the costs are sunk costs and therefore not perceived on a trip-by-trip basis, car-sharing makes almost all costs of driving visible for every trip. If you own a car, the only costs you consider when deciding whether to make a trip are gasoline and parking, and perhaps tolls. Car-sharing operators charge for miles driven and/or time used and these costs include all the costs of owning and maintaining that vehicle. Car-sharing can also reduce vehicle trips by reducing the need for employees to drive to work because they need their car for errands during the day. Study results vary considerably in the magnitude of change that car-sharing makes in vehicle trips, but all studies have shown a decline in vehicle miles traveled by car-sharing members.

Car-sharing makes the car no longer the default mode for all trips and therefore makes members weigh the benefits and costs of each mode of travel for every trip. A survey done in Philadelphia showed that members who previously owned vehicles, used transit, biked, and walked more after joining Philly Car-Share (see Figure 6-8 for their results).

11 FlexCar website, www.flexcar.com/default.aspx?tabid=344, accessed on November 13, 2006.

Figure 6-8 Self-Reported Changes in Travel Behavior, Philly Car-Share Members



Car-sharing in Glendale

Car-sharing will enable more downtown commuters in Glendale to carpool, take transit, bike, or walk to work by ensuring that a shared car will be available for work trips when needed. In addition, an expanded program would enable existing and new downtown residents to reduce the number of private vehicles they own by ensuring that a shared car will be available for household trips when needed. Lastly, the City of Glendale currently has around 900 cars in their fleet, which are likely a substantial cost to the City. Contracting out existing fleet operations to a car-sharing provider can offer significant cost savings over existing fleet capital and maintenance costs.

With the pending and proposed development of several new mixed use housing units in downtown Glendale and the implementation of other TDM strategies recommended in this *Study* (such as requiring that employers offer the option to employees to cash-out parking at work), car-sharing becomes much more viable. If employee parking remains free with no cash-out program, then the prospects for successful car-sharing program will be considerably diminished.

Several cities, including the City of Berkeley and Portland (OR), have helped establish a car-sharing program in their communities and reduced their own fleet costs by contracting out some portion of their vehicle fleet to a car-sharing provider. In this arrangement, the City serves as an "anchor subscriber," which increases the feasibility of entering a new market or expanding opportunities in an existing one for the car-sharing operator. This approach also creates the necessary scale at start-up so that more

vehicles can be made available to the public, especially on evening and weekend hours when usage by city employees is low.

Implementation Details for Car-sharing Program in Glendale

The City of Glendale should encourage the establishment of a car-sharing service in Glendale with one or more shared vehicle "pods" strategically located in the *Downtown Specific Plan* area. In order to help establish a car-sharing service in Glendale, the City should begin negotiations with an existing car-sharing provider and consider the following strategies:

- Recruit an existing car-sharing service provider to expand into the Glendale market.
- Replace some existing city-owned fleet vehicles with car-sharing vehicles; City Departments pay usage-based costs.
- Partially or fully subsidize operation costs for a specified term. Funding mechanisms include:
  - Using per-usage fees
  - Conversion savings
  - Direct City subsidy
  - Revenues from Downtown Transportation and Parking Management District or assessment district
- Require developers to pay into a car-share start-up fund (through impact fees on new development).
- Provide other incentives as appropriate, such as:
  - Offering convenient and visible spaces in downtown parking facilities to car-sharing providers for locating car-sharing "pods" (see photo from Portland on page 6-35).
  - Requiring developers of large downtown projects to offer car-sharing operators the right of first refusal for a limited number of parking spaces (such as one car share space per 100 private parking spaces).
  - Offering city employees discounted annual car-sharing memberships. If the City uses car-sharing for some or all of its fleet vehicles, City employees will have to be members of the car-sharing company to use them. Once this is established, the City could enable employees to also use car-share cars for personal trips as an employee "perk." Many organizations who have "business" memberships with a car-share vendor offer this to employees because it is an easy way to enhance your employee benefit package. All it requires is for employees to indicate on their reservation that it is a personal trip and then it is just an accounting procedure to deduct this amount from employee paychecks.

Implementation of a universal transit pass (free transit pass for all downtown residents and employees) may also spur increased usage of the City's existing vehicle fleet by existing city employees

ABOVE: BART, a rail system in the San Francisco Bay Area, provides valuable marketing assistance to help car-sharing to grow. Glendale could provide similar marketing help to a new car-sharing vendor.

(who begin taking transit but occasionally need a car for work trips). Therefore it is advisable that the City immediately begin negotiations with an existing car-sharing operator in order to be able to establish a car-sharing program concurrent with the launch of the recommended transit pass program.

6.3.3 TRANSPORTATION RESOURCE CENTER

Recommendation 6.6
Establish a centralized Downtown Transportation Resource Center managed by the Traffic and Transportation Administrator or new staff person.

The Downtown Transportation Resource Center would be a storefront office that provides personalized travel information, carpool matching, transit routes and schedules, marketing pre–tax transit passes, bicycle routes, and other transportation options. The Downtown Transportation Resource Center would first and foremost provide "one-stop shopping" for new and existing downtown employees and residents to get information on transportation options and services available to them.

Establishing a Transportation Resource Center that provides a wide array of individualized transportation resources to employees, residents, and visitors will be a key component to help Glendale reduce auto congestion in downtown. This kind of personalized transportation planning has shown significant results in shifting trips from driving alone to other modes. For example, one outreach pilot program in Alameda County (CA) called TravelChoice, is working with households on a one-to-one basis to help them learn about and analyze their range of travel choices and shift some of their daily trips away from single passenger automobile trips. TravelChoice staff contacts residents via phone or door-to-door visits. Preliminary results show that TravelChoice has decreased the number of single-passenger vehicle trips made by surveyed participants by 14%.[12]

Implementation Details for the Glendale Transportation Resource Center

The City Traffic and Transportation Division should establish the Transportation Resource Center in a storefront along Brand or in another high visibility location downtown. It could be in an existing City building, such as in shared space with the Central Public Library. Most importantly, it must be in a high-visibility, convenient location to ensure its use. The City's Traffic and Transportation Division would manage the public interface working out of the Transportation Resource Center.

The Center could also house the Transportation and Parking Management District staff, and could take responsibility for administering and actively marketing all demand management programs. The TMA could also remain the administrator of most TDM programs depending on the arrangement reached between the City and the current TMA for implementation of the new TDM Ordinance. Parking operations and administration could be housed here as well.

12 Transportation and Land Use Coalition, http://transcoalition.org, accessed on November 7, 2006. Funding for TravelChoice is provided by the Alameda County Congestion Management Agency, The Transportation Fund for Clean Air, AC Transit, BART, Alameda County's Public Health Department, and the cities of Alameda and Oakland.

Recommendation 6.7
Strengthen the existing Glendale Transportation Management Associates (TMA) and define roles and responsibilities for the TMA and the City.

6.3.4 GLENDALE TRANSPORTATION MANAGEMENT ASSOCIATES

The City of Glendale already has an active transportation management association that operates several demand management programs. This association, known as the Glendale Transportation Management Associates Inc. ("TMA") is a non-profit organization formed in 1989 by a number of businesses, building owners, developers, and downtown community organizations with the full support and participation of the City of Glendale. The TMA's membership currently consists of approximately 17 major downtown employers and building owners in addition to the City of Glendale. The TMA's activities are largely funded by membership dues (with the City itself being a major financial partner) and supplemented by grant funding.

In spite of being a well-established organization, there are many ways in which the Glendale TMA's programs could be strengthened and its effectiveness improved. The TMA will be the primary partner of the City of Glendale in the implementation of the new TDM Ordinance. Therefore, strengthening the existing Glendale TMA and clarifying its relationship with the City is a crucial step in Glendale's new TDM program.

A review of the current TMA organization, including interviews with TMA and City staff, identified the following needs:

- Measurable goals and expectations for the TMA and its programs that are agreed upon by all partners (City and TMA staff and board).
- A functioning, supportive, and trusting partnership between the TMA, the City, and Glendale employers consisting of a revitalized management structure with clear delineation of roles and responsibilities, stronger communication, and management protocols.
- The Board of the TMA should consist of key decision makers to ensure the commitment of the TMA and the major employers in downtown Glendale to the policies recommended in the *Downtown Mobility Study*.
- An enhanced TDM Ordinance requiring provision of TDM programs by Glendale businesses and development to employees and residents, and mandatory membership in the TMA.
- Evaluation, monitoring, and enforcement of these requirements by the City. Glendale must require and fund ongoing evaluation of existing and new TDM programs in order to expand effective programs and discontinue or change less successful programs.
- Stable, dedicated funding sources for TDM programs.

Implementation Details for Strengthening the TMA

Through an assessment of conditions in Glendale and an evaluation of other TMA structures – in particular the Burbank and Lloyd District examples (see Appendix 6C for a review of other TMAs) – the consultant team recommends the following actions to strengthen the TMA, clarify the relationship between the TMA and the City, and ensure the future success of Glendale's TDM programs.

- Create a self-funding, independent TMA.
  - Better enforcement mechanisms, mandatory membership, dedicated, stable funding sources, as well as required participation of members in TDM programs should all help strengthen the existing TMA.
  - Membership dues, combined with grant opportunities should enable the TMA to be self-sustaining
- The City of Glendale must work with the TMA to evaluate their structure and to define the best way to fulfill the new TDM Ordinance.
- Establish clear goals, roles and responsibilities for the TMA and a strong system of accountability.
- The new TDM Ordinance shall allow the City to have a greater role if the independent TMA fails to meet goals.
- The City of Glendale should remain on the Board of the TMA, but should become an ex-officio board member when the City is no longer a major funding source. Similar to the LDTMA model, this means the City representative cannot vote, but does retain all rights of discussion, persuasion, and fiduciary responsibility in the oversight of the organization. This structure would recognize that the City (1) is a major downtown employer, (2) is a founding member, (3) has a successful TDM program than can serve as an example, but also (4) that they are the enforcement arm for employers in the TMA, and therefore should not be a full voting member in order to balance their responsibilities.
- The City of Glendale must remain involved as a member of the TMA because it is one of the major employers in downtown Glendale, unlike both the Lloyd District and Burbank models. The City should continue to seek to be a model employer for other TMA members.
- The City of Glendale must be the enforcement arm- in charge of enforcing membership requirements, dues payment, annual surveys, etc. There must be penalties for employers who do not comply. This enables the TMA to establish itself as a trusted partner with local businesses, a service organization they see as helping them meet their goals.

Recommendation 6.8
Monitor effectiveness of TDM programs and implement new measures as needed.

6.3.5 COORDINATION, MONITORING, COMPLIANCE, AND ENFORCEMENT

Implementation of these TDM recommendations will require participation of and close coordination between three city departments: the Public Works Department's Traffic and Transportation Division, the Planning Department, and the Redevelopment Agency, as well as the Glendale Transportation Management Associates.

As described in Chapter 5 (Parking Management), this study recommends that the City hire a new full-time Downtown Mobility Coordinator position to manage implementation, monitoring, and enforcement of all *Downtown Mobility Study* recommendations. The Downtown Mobility Coordinator will be accountable to the City Traffic and Transportation Administration and City Council for achieving transportation-related goals envisioned for downtown by this *Downtown Mobility Study*. In particular, this person will be in charge of implementation of parking recommendations and the above TDM recommendations.

Regardless of the status or timing of hiring a new Downtown Mobility Coordinator, the Traffic and Transportation Division staff will be in charge of coordination between the three City Departments and will be the primary liaison to TMA Board and staff and downtown merchants' and residents' groups. They will be responsible for monitoring effectiveness of all the TDM programs described here and will compile an annual report including: mode choice of employees and residents in downtown, and recommendations for funding priority (e.g. which programs should be expanded and which should be altered or discontinued).

As the City's liaison to the TMA, the Traffic and Transportation Division staff will be in charge of getting results from the annual employee transportation surveys from a TMA. In addition, they should administer a similar survey for residential development. They will then compile and analyze results for the annual report. Traffic and Transportation Division staff will also be in charge of monitoring compliance and enforcing the requirements of the new TDM Ordinance including TMA membership, dues payment, annual surveys, and TDM programs (as described in the first section of this chapter).

The responsibilities of City staff versus those of a TMA are outlined in Figure 6-9. These may change over time, especially as the existing Glendale TMA and City determine the most appropriate structure for the TMA and re-evaluate their relationship as described in the previous section.

Figure 6-9 Summary of Responsibilities of TMA and the City of Glendale

TDM Recommendation	City's Traffic and Transportation Division	TMA
TDM Ordinance: TMA Membership	Pass TDM Ordinance to require TDM programs and TMA membership.	Provide programmatic support to assist member businesses to meet requirements of TDM Ordinance.
	In the case of non-payment, the City will enforce fee requirement and levy a penalty if necessary.	Collect annual dues from member businesses.
	In the case of non-compliance, the City will enforce requirements.	Help businesses acquire and train an on-site transportation coordinator.
	Administer annual residential transportation survey for residential development.	Administer annual employee transportation survey to downtown Glendale employers.
	Compile an annual report based on compilation and analysis of results of downtown transportation surveys. Report will include: effectiveness of TDM programs, mode choice of employees and residents in downtown, and recommendations for future funding priority.	
TDM Ordinance: Universal Transit Passes	*TBD who has programmatic and administrative responsibility for negotiating the price and managing the purchase and distribution of universal transit passes (see Figure 6-5 for potential options).*	
	Responsible for compliance monitoring and enforcement of pass program with support from the Planning Department.	Provides resources to employers, may purchase passes in bulk for resale or distribution.
TDM Ordinance: Parking Cash-Out	Education on both local and state parking cash-out laws through Transportation Resource Center.	Educate member employers on both local and state parking cash-out laws. Provide programmatic support to members to implement parking cash-out.
	Develop new local parking cash-out program.	
	Formalize and administer an annual reporting, compliance monitoring, and enforcement mechanism for state and local cash-out requirements (with support of other City Departments depending on the enforcement mechanism).	
TDM Ordinance: Bicycle Facility Requirements	Enforce new bicycle facility requirements at new development (work with Planning Department to enforce as condition of approval).	Assist members to procure, install, and maintain bicycle facilities at their sites. Assist members to effectively promote bicycling to their employees.
Establish Car-sharing Program in Glendale	Lead City initiative to attract a car-sharing vendor to expand into the Glendale market. Coordinate with other City Departments as necessary.	Encourage members to join car-sharing program if/when established, provide programmatic support as needed.
	Once established, work with City Departments to replace some or all City fleet vehicles with car-sharing and manage City contract with car-share operator.	
Downtown Transportation Resource Center	Manage Downtown Transportation Resource Center. Administer and market TDM programs in coordination with the TMA.	Work with City on personalized transportation information and services offered through Center. Administer and market TDM programs pending agreement reached with City.
Strengthen TMA	Support TMA's application for new grant funds.	Apply for new grant funding opportunities.
	Evaluate TMA structure and define roles for implementation of new TDM Ordinance: establish clear goals, roles, and responsibilities for TMA.	

Boulder, Colorado

Boulder's downtown business district, having recovered from near-death in the 1970s, today comprises some 700 businesses and more than 7,500 employees. Faced with a shortage of parking for customers, the city developed a program that combines restrictions on downtown parking with aggressive demand management. These initiatives have been introduced through a special district – the Central Area General Improvement District (CAGID), which was established in the 1970s. The program was set up in conjunction with the design of the Pearl Street pedestrian mall. The intention was to provide parking on a district-wide basis on the periphery of the mall, avoiding the need to provide on-site parking for each business. It was seen as a tool for economic revitalization and promoting a good pedestrian environment, with the two going hand in hand.

ABOVE: Boulder's public shared parking garage wrapped in retail and office space.

Key characteristics include a desire to create a walkable, vibrant community, with a focus on a high quality of life. In addition, Boulder (at least at present) is dependent on bus transit to meet its public transportation needs. It should be noted that Boulder had very little transit at the time that CAGID was established; bus service improvements have arrived subsequently. The City of Boulder has a population of around 96,000 people.

BELOW The downtown pedestrian-oriented "Pearl Street Mall" has tripled in length in the past decade, largely as a result of the package of parking and TDM measures Boulder has implemented.

CAGID's transportation demand management programs and incentives include:

- Analyzing most cost-effective mix of new parking or transportation alternatives
- Management and construction of all public parking downtown
- Provide a broad array of transportation demand management programs and incentives including the following commuter benefits:
  - Free universal transit pass (Eco-Pass)
  - Guaranteed Ride Home
  - Ride-matching services
  - Bicycle parking rentals

All of these programs are funded by a $325,000/year budget, funded by $1 million in meter revenue that is transferred to CAGID via a Parking Benefit District mechanism. Boulder's efforts are achieving results: carpooling increased from 35% in 1993 to 47% in 1997 and the Eco-Pass program (the free universal transit pass program) has reduced commuter parking demand by 850 spaces. Overall, Boulder has found that in many cases, it is cheaper to provide free transit and strong ridesharing programs to all downtown employees, than to provide them with parking. (Appendix 6D provides additional detail on Boulder's programs.)

CAGID also funds a successful Transportation Resource Center that implements a variety of transportation alternatives. The "Transportation Resource Center" is in a downtown storefront and its responsibilities include the following:

- Provide personalized advice and information on transit, bike, and pedestrian travel to downtown
- Provide personalized ride–matching services for employees
- Oversee regular marketing of transportation programs and incentives
- Coordinate events to highlight transportation choices (Bike-to-Work Day, etc.)
- Manage rentals of bike lockers throughout downtown
- Outreach to individual businesses to identify transportation needs of their employees and customers

FUNDING AND FINANCING

7

The *Downtown Mobility Study* envisions many capital improvements to the street network for all modes of transportation. In addition, the *Downtown Mobility Study* recommends new and expanded demand management programs to help reduce the growth of peak-hour vehicle trips and improve transportation choices for downtown residents and employees.

Some small projects/programs may be fundable through existing funding streams that are already available to the City. However, for larger projects and programs, the City will have to use both existing funding options and access new funds at the local, state, and/or federal level. The purpose of this chapter is not to match specific funding to specific projects, but rather to identify and provide an overview of potential revenue sources, with particular attention paid to new and innovative revenue sources.

7.1 PRINCIPLES

- Prioritize those funding tools that not only provide revenue to pay for *Downtown Mobility Study* improvements, but also promote long-term policy goals for downtown (such as congestion management, improving transportation choices, reducing pedestrian and bicycle safety, etc.).
- Particularly for on-going demand management programs, prioritize funding instruments that are: under local control, dedicated to specific programs, have predictable annual revenue yields, and, where possible, produce "counter/cyclical" revenue during economic downturns.
- Assess fees equitably for all stakeholders, with assessments based on the "positive benefits received" by the payees from the downtown improvement being funded (e.g. better transit service) and/or "negative impacts caused" by the payees' activity in downtown (e.g. increased traffic congestion).
- Develop a diverse package of funding instruments so that new development pays its fair share of costs for new infrastructure based on the specific impacts of new development.
- Work closely with stakeholders and especially potential payees to facilitate buy-in and improve chances of successful implementation of funding instruments.

7.2 SUMMARY OF RECOMMENDATIONS

Recommendation 7.1

Maximize utilization of new parking revenue that will come from parking management and pricing changes to fund *Downtown Mobility Study* recommendations. Manage parking funds through a Downtown Transportation and Parking Management District as described in the Parking Chapter (Chapter 5). Broaden eligible uses of parking funds to include a broad range of *Downtown Mobility Study* recommendations such as transit improvements and TDM programs.

Recommendation 7.2

Dedicate Redevelopment Agency investments from downtown tax increment revenue to implement *Downtown Mobility Study* recommendations for streetscape, pedestrian, and bicycle improvement projects in the *Downtown Specific Plan* area.

Recommendation 7.3

Pursue implementation of a parking tax on commercial parking.

Recommendation 7.4

a. Work with downtown merchants and property owners to investigate formation of either a downtown Business Improvement District (BID) or a Mello-Roos District.

b. Depending on the outcome of negotiations, implement a BID or a Mello-Roos District. Once established, work with the District to advance public/private funding of significant streetscape capital projects (such as a downtown wayfinding signage system), or to provide the local match funding for long-term transit capital projects (such as a downtown streetcar circulator).

Recommendation 7.5

a. Initiate a transportation impact fee nexus study to mitigate auto trips and congestion impacts of new development.

b. Once completed, if a reasonable nexus is found, implement a new impact fee for the downtown that is assessed according to number of new peak-hour vehicle trips generated by the development. Dedicate revenues to a Downtown Transportation Fund to pay for *Downtown Mobility Study* recommendations.

Recommendation 7.6

Implement a program to share costs of new transit service with schools through: a cost-share arrangement between the City and the School District and/or a Universal Transit Pass program for high school and college students.

Recommendation 7.7

Maximize utilization of existing grant sources by having "funding-ready" projects that fit existing grant criteria. Position new projects to receive federal, state, and regional grant funds. Consider changes in budgeting that recognize grant funds as revenue, relieving the cash flow burden on transit and other departments that are heavily dependent on grant sources.

Recommendation 7.8

Work with local and regional transportation leaders to position transportation projects recommended by the *Downtown Mobility Study* to be eligible for funding under the state transportation bond package.

Recommendation 7.9

Work with state transportation leaders and planning agencies to identify state funding opportunities for *Downtown Mobility Study* projects, such as the new Safe Routes to School grant funding program.

Recommendation 7.10

Work with local and regional transportation leaders and planning agencies to make sure that *Downtown Mobility Study* projects, especially those that involve other jurisdictions such as an east-west busway, are prioritized within the next update of the *Regional Transportation Plan*.

Recommendation 7.11

Work with Congressional delegation attempt to secure federal funding of high priority large-scale capital projects in the next transportation bill (2009), such as a streetcar circulator.

7.3 DISCUSSION OF RECOMMENDATIONS

Overall, the City should approach funding the *Downtown Mobility Study* recommendations in the following fashion:

- In the immediate term, the City should focus on a) implementing the parking management and pricing recommendations of the *Downtown Mobility Study* and b) creating a Transportation and Parking Management District that manages parking supply (both of these recommendations are described in detail in Chapter 5). Getting parking policies right can optimize parking revenue and play a critical role in reducing peak-hour vehicle trips downtown.
- In the immediate to short term, beyond the implementation of new parking management and pricing policies, the City should also lay the groundwork for future funding options such as initiating a nexus study for a transportation impact fee on new development and begin negotiating with downtown merchants to form a Business Improvement District and/or a Mello-Roos District. In addition, the city should investigate all grant options and begin to position projects to receive federal, state, and regional grant funds.
- In the short to medium term, we recommend that the city focus on accessing state and federal funds, as well as implementing the new fees and taxes on existing and future development to ensure that beneficiaries of downtown improvements assist in paying for them.
- In financing the *Downtown Mobility Study,* Glendale must ensure that all new fees and taxes are assessed equitably and in direct relation to the positive benefit received and/or the negative impact caused. Both existing and new development will benefit from mobility improvements (and conversely, each contributes to overall traffic, parking, and mobility challenges in downtown) and therefore both must contribute to funding the improvements. Two keys to the success of these partnerships are:
  - Staff must inform and involve businesses from the start.
  - Staff must ensure a clear and visible link between the payment of taxes and fees and the improvements to downtown and its transportation system.

All these steps are discussed in detail in the coming pages.

7.3.1 EXISTING FUNDING SOURCES

Funds for transportation come from a variety of sources at the federal, state, and local levels. This section describes the most important existing funding sources available to Glendale for implementation of the *Downtown Mobility Study* recommendations. They are summarized in Figure 7-2 on page 7-10.

Federal Funds

Federal transportation funds, which may fund transportation projects in Glendale, include funds from the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA).

FTA and FHWA capital funds are available to fund transportation projects in Glendale largely through the regional planning process overseen by the Southern California Association of Governments (SCAG), known as the *Regional Transportation Plan* (RTP). The Regional Transportation Improvement Program (RTIP) is a capital listing of all transportation projects proposed over a six-year period for the SCAG region. The projects include highway improvements, transit, rail and bus facilities, high occupancy vehicle lanes, signal synchronization, intersection improvements, freeway ramps, etc. The RTIP is prepared to implement projects and programs listed in the RTP.

SCAG assembles the RTIP in part from local priorities submitted by cities and local agencies, including the City of Glendale via the Los Angeles County Metropolitan Transportation Authority (LACMTA). SCAG develops the RTIP based on consistency with the current RTP, inter-county connectivity, and availability of resources. FTA funds distributed via this process include Section 5307 Urbanized Area Formula Grant funds for transit capital. FHWA funds include Surface Transportation Program (STP) funds, which are flexible for either highway or transit projects, as well as Congestion Mitigation Air Quality (CMAQ) funds, which may provide funds for clean fuel bus purchases. The amount of capital funds received for Glendale projects varies greatly on a yearly basis depending on whether Glendale's projects rate highly in the RTP.

Recommendation 7.10

Work with local and regional transportation leaders and planning agencies to make sure that *Downtown Mobility Study* projects, especially those that involve other jurisdictions such as an east-west busway, are prioritized within the next update of the *Regional Transportation Plan*.

State Funds

Gas Tax

State funds available to fund transportation projects in Glendale are largely state gas tax revenues, which currently fund street-and traffic-related infrastructure maintenance and improvements. State gas tax monies go primarily into the Public Transportation Account (PTA) and the State Highway Account (SHA) which are

allocated to specific projects or by formula to counties throughout the state.[1] These funds currently total approximately $4.8 million annually for Glendale. With the passage of Proposition 1A in November 2006, it is more difficult for state government to channel gas tax monies away from transportation projects as has occurred in recent years (despite the 2002 passage of Proposition 42 which directed that gas tax revenues be used solely for transportation purposes). The result is that Glendale should receive more gas tax funds to use for transportation purposes beginning in FY 2008-09, when cities and counties will begin receiving approximately double their prior gas tax allocations.[2]

Gas Tax Spillover

In addition, periodic gas tax spillover revenues are often available to fund transit operating costs for potential expansions to Beeline service.[3] Gas tax spillover is the only state-wide funds dedicated exclusively to transit operations. The money is channeled through the state Public Transportation Account (PTA), and is split 50/50 between regional Metropolitan Planning Organizations (MPOs) such as SCAG and county governments. The regional funds are distributed to regional MPOs by formula, and then apportioned regionally to local public transit agencies for transit operating costs, while the revenues distributed to counties can be used for transit capital improvements.

As with gas tax revenues, the gas tax spillover revenues have in recent years been diverted by the State Legislature and Governor to other General Fund priorities. Since 2000, $1.7 billion in gas tax spillover revenue has been diverted, and gas tax spillover was not included in Proposition 1A "firewall" protections that protected other transportation funding sources (such as the gas tax itself). As of this writing, Governor Schwarzenegger's FY 2007-08 state budget currently proposes to divert next fiscal year's estimated $617 million in spillover revenue from the PTA in order to

1 Half of the Public Transportation Account (PTA) funds go to the State Transit Assistance (STA) Fund. Half of the STA funds are allocated to counties based on the ratio of each county's population to the State's population. The other half are allocated based on the ratio of each county's total transit operators' revenues to total revenues of transit operators in the State.

2 "Pursuant to current law, cities and counties do not receive any local streets and roads funds from Proposition 42 next fiscal year due to an obligation to pay back the STIP for funds received in earlier years. Cities and counties will begin receiving their Proposition 42 allocations again in 2008-09." California State Association of Counties, "Highlights of the 2007-08 State Budget," 1/10/07. Accessed at www.csac.counties.org/images/public/Advocacy/budget/Governors%20Proposed%2007%2008%20Budget%20Summary.pdf on 1/22/07. California League of Cities, "State Budget Positive for California Cities," 1/12/07. Accessed at www.cacities.org/index.jsp?displaytype=11&zone=locc&section=&sub_sec=&tert=&story=26139 on 1/22/07.

3 When the gas tax was first established in 1972, it was determined that when collections from the sales tax on gasoline increase at a faster rate than revenues on all other taxable items, the increment would "spillover" to the PTA to fund transit operations.

pay down the state debt, including the recently-approved transportation infrastructure bonds (discussed in Section 7.3.2).[4]

However, the 2006 state legislative session enacted a bill to prohibit diversion of spillover funds for the 2006-2007 fiscal year, and there will likely be legislation proposed in the next legislative cycle that would either temporarily or permanently prevent gas tax spillover funds from future diversion.[5] If this bill is enacted and/or diversions of gas tax spillover funds cease, this transit-operations revenue source could represent a good opportunity in future years to fund Beeline service expansions, as well as expanded LA MTA Metro Rapid or dedicated right-of-way Bus Rapid Transit to Glendale.[6] For example, the California Transit Association (CTA) estimates that assuming no diversion for FY 2007-08, SCAG would receive $95.7 million in spillover funds for distribution to local transit agencies to pay for transit operating costs, and Los Angeles County MTA would receive $95.7 million in spillover funds for transit capital improvements.[7]

Grant Opportunities

Glendale should also pursue state grant opportunities for bus replacement, service expansion, and other transit improvements. Most state transportation grants are channeled through regional transportation planning agencies (such as MTA). Three current grant opportunities are summarized in Figure 7-1. As these examples indicate, it is generally easier to get capital grants (usually with a local match required) than operating grants (which are less common, oversubscribed, and highly-competitive).

Recommendation 7.7

Maximize utilization of existing grant sources by having "funding-ready" projects that fit existing grant criteria. Position new projects to receive federal, state, and regional grant funds. Consider changes in budgeting that recognize grant funds as revenue, relieving the cash flow burden on transit and other departments that are heavily dependent on grant sources.

4 Up to $340 million in proposed gas tax spillover would be dedicated to pay off transportation bond debt. The rest of the proposed spillover diversion would be used to pay for transportation expenditures that are typically paid for out of the General Fund, thereby freeing up General Fund dollars to pay off transportation bond debt and other smaller infrastructure bonds.

5 Information on pending gas tax spillover legislation from Transportation and Land Use Coalition. Accessed at www.transcoalition.org/c/sus_spill/index.html on 1/15/06.

6 Because retail gas prices will continue to increase faster than the annual inflation rate into the foreseeable future, state gas sales tax revenues will likely increase faster than sales tax revenues on all other taxable items, resulting in "spillover."

7 California Transit Association spillover allocation figures provided by the Transportation and Land Use Coalition, 1/22/07. Assumes same allocation percentages for FY 2007-08 as were used in FY 2006-07. As of this writing, the spillover proposed in the Governor's current FY 2007-08 budget is $57.3 million ($38.4 million less than potential) for SCAG and $57.3 million ($38.4 million less than potential) for LA County.

Figure 7-1 Grant Opportunities for Transit Improvements

Grant Source	Grant Category	Grant Application Period	Grant Amount
MTA Mini-Call for Projects	Bus Replacement	December 2006 to March 2007	$1.4 million for 4 buses
MTA Supplemental Call for Projects	Facility Construction	September 2006 to March 2007	$2.225 million
MTA Call for Projects	Service Expansion & New Service	January 2007 to June 2007	$2.3 million
SAFETEA-LU	Transit	January 2009	$80,000

Local Funds

Local funds provide the bulk of funding for construction, maintenance, and operation of Glendale's transportation system. The General Fund is the resource that provides for most street and traffic system operations and maintenance. Most of these funds are raised through local property taxes, sales taxes, and other local taxes and fees.

Glendale also receives funding specifically dedicated to local transit: Countywide sales tax Propositions A and C provide $6.5 million in annual funding for the operation of the Beeline, Glendale's municipal transit operation.[8] As discussed in section 7.3.3 (new and enhanced local funding sources), Glendale is currently pursuing a partnership with Pasadena and Burbank to become an "eligible operator," which has the potential to result in an additional $4 million of LA County transit money to the Arroyo-Verdugo region, to be distributed between the 3 cities.[9]

Recommendation 7.2
Dedicate Redevelopment Agency investments from downtown tax increment revenue to implement *Downtown Mobility Study* recommendations for streetscape, pedestrian, and bicycle improvement projects in the *Downtown Specific Plan* area.

The Parking Enterprise Fund is an enterprise fund in the City, and collects income from parking tickets, parking meters, and parking garage revenue. This income totals approximately $7 million per year. However, while this covers operating expenses, it does not allow for new capital expenses, and the fund runs an annual deficit of nearly one million dollars.

The City of Glendale also has an established Redevelopment Project Area for Central Glendale. Tax increment (the increased tax revenues that result from redevelopment based on increased property value and new investment) from downtown flows to the

8 Rebecca Granite-Johnson, City TDM Coordinator, City of Glendale. Transit Fund Analysis spreadsheet (entitled "Fund250Transit Analysis02-28-06FINALPURCHASEBUSES").

9 Jano Baghdanian, City Traffic and Transportation Administrator, City of Glendale.

Redevelopment Agency to fund improvements, including economic and housing development. The Redevelopment Agency contributed $1.5 million towards the funding of the Brand Boulevard improvements. In addition, Redevelopment Agency funds were used for the construction of parking structures. The Redevelopment Agency collects approximately $10 million per year in property tax and other income for the Central Glendale Redevelopment Project Area. It should be noted that taking a loan from the San Fernando Redevelopment District is being considered as a potential source of funding for a transit maintenance facility. Loans could be repaid from parking revenues and grant sources.

Summary: Potential of Existing Funds to Fund Transportation Improvements

For the most part, existing funds cover the operations and maintenance of existing service, and for the regular capital improvements that are required for existing infrastructure. As such, they are generally marginal sources for funding the new projects forecast in this *Downtown Mobility Study*. However, existing funding sources may provide partial funding for the following kinds of projects:

- Transit expansion, such as development of shuttles and streetcars, can be programmed into the RTP and RTIP through a lengthy regional process. Existing federal sources to the region may support the capital cost of these projects. As each RTIP is a six-year document, and is fully subscribed, new projects must normally "wait in line" to receive funding from federal funding sources programmed in the RTIP. Operations funding would need to come from existing sources (that are also used to run the Beeline). The likelihood of getting substantial funding from this source is low because MTA has a $100 million structural deficit.
- Projects proposing changes to highways and highway approaches would also need to work through the regional funding process, and could be funded through federal funds flowing to the region if these projects are competitive regionally.
- Given that federal transportation funds will be reauthorized after the FY 2009, large projects may also be positioned to receive "earmarks" in the next funding cycle if they have regional support.
- Redevelopment money is a significant source of funding that is already focused on downtown, and can be used to implement the *Downtown Mobility Study*. As downtown continues to develop and the Redevelopment Project Area throws off more tax increment to the city, this source of funding should increase substantially.

Figure 7-2 provides a summary of existing funding sources discussed in the previous section, including current uses and potential availability for funding *Downtown Mobility Study* recommendations.

Figure 7-2 Existing Funding Sources

Funding Source	Current Use	Available for *Downtown Mobility Study*	Current Funding Amount	Comments
Federal				
FTA Section 5307	Transit capital projects	Yes, for transit capital projects	Variable locally	Access to federal funds requires regional priority of projects in *Downtown Mobility Study*; generally long-term strategy as funds are programmed years in advance.
FHWA STP	Highway projects / flex to transit	Yes, for highway or transit projects	Variable locally	
CMAQ	Purchase of clean fuel buses	Limited to bus purchases	Variable locally	
State				
Gas Tax	Ongoing capital investment in streets	Yes, but not available at expense of other citywide priorities	$4.8 million	With passage of Proposition 1A in November 2006, more gas tax revenue should come to local governments.
State Grants	Bus replacement, facility construction, service expansion, & new service	Yes, if application successful	$1-4 million	Applications due by March or June 2007.
Gas Tax Spillover	Transit agencies: Transit operations; Counties: Transit capital improvements	Yes, City-controlled funds limited to transit operations	Uncertain: assuming no diversion in FY 2007-08, $95.7 million to SCAG for local transit operating costs and $95.7 million to LA MTA for transit capital improvements	Ongoing certainty of these funds depends on status of ongoing budget negotiations and potential state legislation as described above.
Local				
General Fund	Operation and maintenance (Public Works)	No	$20 million/year (Public Works budget)	General Fund is generally limited to ongoing maintenance and improvements.
Transportation Sales Tax (Proposition A and Proposition C)	Beeline transit operating costs	Limited	$6 million per year	Possible that discretionary portions of Propositions A and C could be increased for local projects, especially if Glendale becomes an "eligible operator."
MTA TDA Local Return Funds	Beeline transit operating costs	Yes, for transit operations and capital	Unknown at this time	This source could increase if Glendale becomes an "eligible operator."
Parking Enterprise Fund	Operations and maintenance of public parking	Not currently	$7 million per year	Currently runs at a $1 million deficit after all expenses.
Redevelopment Agency Funds	Economic development, housing, transportation improvements	Yes	$10 million per year	Growing source well suited to *Downtown Mobility Study* objectives.
Gas Tax (TDA / Article 3 / SB 821)	Beeline transit operating costs	Yes	$100,000	Fluctuates with tax amounts.
NTD Incentive Funds	Dial-a-Ride operations	Yes	$300,000	Fluctuates with revenue service hours for Dial-a-Ride.

7.3.2 NEW AND ENHANCED FEDERAL AND STATE FUNDING SOURCES

This section discusses new and enhanced federal and state funding sources that could be used to implement *Downtown Mobility Study* recommendations. A summary of new funding sources can be found in Figure 7-7, "Potential Sources of New and Enhanced Funding" at the end of this chapter.

New Federal Funds

For large-scale capital projects, such as a new streetcar or improvements to highway access, the City should begin now to position specific projects to receive funding in the next round of federal transportation funding, after the current SAFETEA-LU is completed in FY 2009-2010. To do so, projects should be part of the *Regional Transportation Plan*, and political support should be developed to push for their early funding. In the last transportation bill, many projects were "earmarked" by federal legislators for funding. If the next bill proceeds accordingly, Glendale should seek support from their congressional delegation for such an earmark for high priority projects of the *Downtown Mobility Study*.

Recommendation 7.11
Work with Congressional delegation attempt to secure federal funding of high priority large-scale capital projects in the next transportation bill (2009), such as a streetcar circulator.

New State Funds

Infrastructure Bonds

The infrastructure bond package recently approved by voters includes $19.9 billion for transportation purposes under Proposition 1B (the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006), with local governments receiving $7.1 billion in the next five years. As of this writing, the Governor's budget proposes the following allocations to cities and counties for FY 2007-08:[10]

- $600 million for local streets and roads, split evenly between cities and counties in FY 2007-08, $300 million split evenly for FY 2008-09, and $150 million split each year beyond that (until the total $2 billion in this category is completely spent).
- $600 million for local transit
- $170 million for state and local partnerships
- $340 million for State Transportation Improvement Projects (STIP)
- $55 million for grade separations
- $9 million for seismic bridge retrofitting

Recommendation 7.8
Work with local and regional transportation leaders to position transportation projects recommended by the *Downtown Mobility Study* to be eligible for funding under the state transportation bond package.

10 California League of Cities, "State Budget Positive for California Cities," 1/12/07. Accessed at www.cacities.org/index.jsp?displaytype=11&zone=locc&section=&subsec=&tert=&story=26139 on 1/22/07.

As of this writing, Glendale is projected to receive approximately $1.65 million by formula in FY 2007-08 and approximately $6.8 million over the 5-year life of the bond from the $2 billion Local Street and Road Improvement, Congestion Relief, and Traffic Safety Account (allocated directly to and split evenly between cities and counties for traffic congestion relief, traffic safety, transit, storm damage, maintenance, construction and other projects to improve the local street and road system).[11] As the list above illustrates, the additional funds will be split in several pots targeting such regional issues as highway corridor congestion relief, intercity transit, and the like. Sixty percent of all Proposition 1B funding is targeted towards thirteen southern California Counties. Projects to receive funding will be nominated via the regional transportation planning process in 2007, and must be able to begin construction by 2012.

Glendale can target formula funds from Proposition 1B to *Downtown Mobility Study* projects. Their use is very flexible, and could include both street and transit projects. For larger projects, such as the freeway access improvements or changing technologies for the Buzz shuttle, Glendale could propose that these projects be included in the *Regional Transportation Plan* and Glendale could then advocate for funding from one or more sources in the bond program, including funds flowing by formula to the County or funds targeting corridor mobility improvements. For example, $3.6 billion in bond monies will be split by formula between transportation planning agencies and county transportation commissions.[12] According to the language from Proposition 1B, these will be used to fund:

> *Intercity rail projects and commuter or urban rail operators, bus operators, waterborne transit operators, and other transit operators in California for rehabilitation, safety or modernization improvements, capital service enhancements or expansions, new capital projects, bus*

11 LA MTA Metro Programming and Policy Analysis, "Proposition 1B - State Infrastructure Bond for Transportation $2 Billion for Local Streets and Roads ($1 B Counties, $1B Cities) Estimate for LA County and Cities in LA County," 7/20/06. Accessed at www.mta.net/about_us/govtrela/images/Counties_and_Cities_Share.pdf on 1/22/07. League of California Cities, "Proposition 1B - Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006: Potential Funds for Local Governments," 11/14/06. Accessed at www.cacities.org/resource_files/25168.Prop%201B%20Fund%20Updates--%20final.pdf on 1/22/07.

12 Half based on the total revenue of all the operators in the area and the other half based on population. California Public Utilities Code online. Accessed at www.aroundthecapitol.com/code/code.html?sec=puc&codesection=99310 in November 2006.

rapid transit improvements, or for rolling stock procurement, rehabilitation, or replacement.[13]

This is an opportunity for Glendale to join with local and regional transportation leaders to position the downtown multi-modal transportation projects recommended by the *Downtown Mobility Study* to be eligible for funding under this bond package.

Two other "accounts" that were created under the bond initiative that Glendale might pursue to fund downtown mobility improvements are: [14]

The "Corridor Mobility Improvement Account" has $4.5 billion to be allocated by the California Transportation Commission, for:

…performance improvements on highly congested travel corridors in California. Funds in the account shall be used for performance improvements on the state highway system, or major access routes to the state highway system on the local road system that relieve congestion by expanding capacity, enhancing operations, or otherwise improving travel times within these high-congestion travel corridors.[15]

The California Transportation Commission developed and adopted guidelines, including regional programming targets, by December 1, 2006 and project nominations were required to be made no later than January 15, 2007. The inclusion of a project in the program will be based on all of the following criteria:

- The project is a high-priority project to improve mobility in the corridor as demonstrated by either:
  1) Its inclusion in the list of nominated projects by both the implementing local agency and the regional transportation planning agency or county transportation commission or authority; and

13 California Secretary of State website. Accessed at www.ss.ca.gov in November 2006.

14 California Secretary of State website. Accessed at www.ss.ca.gov/elections/vig_06/general_06/pdf/proposition_1b/entire_prop1b.pdf in November 2006.

15 Project nominations for these funds can be submitted by the following agencies: Department of Transportation, regional transportation planning agencies (RTPAs) or county transportation commissions or authorities responsible for preparing a regional transportation improvement plan (RTIP). All nominated projects must be included in a regional transportation plan. Nominations must include a fairly accurate cost estimate and timetable for construction, as well as an explanation of each project's consistency with the policy objectives developed by the CTC. The CTC will adopt a funding plan by March 1, 2007. This plan can be updated every two years in conjunction with the adoption of the state transportation improvement program (STIP).

2) If needed to fully fund the project, the identification and commitment of supplemental funding to the project from other state, local, or federal funds.

- Able to commence construction or implementation no later than December 31, 2012.
- Improves mobility in a high-congestion corridor by improving travel times or reducing the number of daily vehicle hours of delay, improves the connectivity of the state highway system between rural, suburban, and urban areas, or improves the operation or safety of a highway or road segment.
- Improves access to jobs, housing, markets, and commerce.

The State-Local Partnership Program Account has $1 billion to be allocated by the California Transportation Commission over a five-year period to eligible transportation projects nominated by an applicant transportation agency. A dollar-for-dollar match of local funds shall be required for an applicant transportation agency to receive state funds under this program.

See Figure 7-3 for a summary of potential funding for *Downtown Mobility Study* recommendations from the state transportation bond.

Recommendation 7.9
Work with state transportation leaders and planning agencies to identify state funding opportunities for *Downtown Mobility Study* projects, such as the new Safe Routes to School grant funding program.

Safe Routes to Schools

Safe Routes to Schools (SR2S) is a national and state grant program that provides funding to projects that increase the number and safety of children reaching school by walking and biking. SR2S is a construction program to fund projects such as: sidewalk improvements, traffic calming and speed reduction, pedestrian/bicycle crossing improvements, on-street bicycle facilities, off-street bicycle/pedestrian facilities, and traffic diversion improvements. Glendale could apply for a Safe Routes to School grant to fund mobility improvements in downtown that provide access to schools located in downtown-adjacent neighborhoods (this will benefit both school-aged children that live in the multi-family units downtown, and kids coming from other neighborhoods). Costs for education, enforcement, or incentive programs are also eligible for reimbursement if these costs are related to the construction and incidental to the overall cost of the project. This means that, in addition to physical improvements, these funds could go towards TDM programs as well.

These funds are administered at the state level. SAFETEA-LU, the federal transportation bill passed in August 2005, included a five-year grant program to distribute $612 million. This funding is targeted at improving conditions for children in kindergarten through eighth grade, and improvements must be located within a two-mile radius of a school. Requests should be less than $500,000 and the federal reimbursement ratio for all projects will

Figure 7-3: Potential Proposition 1B Funding for *Downtown Mobility Study* Recommendations

Category	Purpose	State-wide Allocation	Glendale Allocation	Allocation Process
Local Street and Road Improvement, Congestion Relief, and Traffic Safety Account	Repair and rehabilitate local streets and roads, reduce local traffic congestion, improve traffic flow, or increase traffic safety	$2 billion (to be split evenly between cities and counties)	$1.65 million FY 07-08; $6.8 million over 5 years	Direct allocation by formula in bond language
Corridor Mobility Improvement Account	Relieve congestion by expanding capacity, enhancing operations, and improving travel times on highly-congested corridors	$4.5 billion	unknown at this time	CTC submission by 1/16/07; CTC program adoption by 3/1/07
State Transportation Improvement Program (STIP)	Same as existing STIP program	$2 billion	unknown at this time	Appropriated to CTC upon approval by Legislature; allocated by current STIP formula
State-Local Partnership Program	Will vary depending on guidelines developed by CTC	$1 billion	unknown at this time	Appropriated to CTC upon approval by Legislature; requires 1:1 local match
Public Transportation Modernization, Improvement, and Service Enhancement Account	Transit capital improvements and fleet enhancements	$4 billion	unknown at this time	Appropriated to Caltrans upon approval by Legislature, then directly to transit operators under current STA formula
Transit System Safety, Security, and Disaster Response Account	Capital projects that provide increased transit security and safety and increase transit operations in preparation for and in the aftermath of a disaster	$1 billion	unknown at this time	Appropriated upon approval by Legislature; specific allocation process to be determined by legislative statutes
Local Bridge Seismic Retrofit Account	Local agencies can use these funds for required 11.5% local match for federal funds for seismic repair or retrofit of bridges, ramps, and overpasses	$125 million	unknown at this time	Appropriated to Caltrans upon approval by Legislature; local agencies apply for funding from Caltrans
Highway Safety, Rehabilitation, and Preservation Account (SHOPP)	$250 million of this category for traffic light synchronization projects or other technology-based projects to improve safety operations and capacity of local streets and roads	$750 million, including $250 million for traffic light synchronization and other technology-based safety and capacity enhancements	unknown at this time	Appropriated upon approval by the Legislature; Caltrans to develop program to fund technology-based projects; allocated by current SHOPP process
Total Known 5-Year Funding Allocations	n/a	Approximately $14.9 billion	Approximately $6.8 million	n/a

Source: League of California Cities, "Proposition 1B - Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006: Potential Funds For Local Governments," 11/14/06. Accessed at www.cacities.org/resource_files/25168.Prop%201B%20Fund%20Updates--%20final.pdf on 1/22/07.

be 90%. This program is highly competitive and stakeholder participation is key for getting an allocation. The deadline for 2007 was January 2. Grant applications are supposed to demonstrate the following outcomes:[16]

- Increased bicycle, pedestrian, and traffic safety around schools.
- More children walking and bicycling to and from schools.
- Decreased traffic congestion around schools.
- Reduced childhood obesity.
- Improved air quality, community safety and security, community involvement.
- Improved partnerships among schools, local agencies, parents, community groups, non-profit organizations.

Information on how to apply for the funds can be found on the Caltrans Safe Routes to School website.[17]

16 Sources: Transportation Policy Project: www.transact.org/ca/saferoutes.htm, State Department of Transportation: www.dot.ca.gov/hq/LocalPrograms/saferoute2.htm, the Federal Highway Administration: http://safety.fhwa.dot.gov/saferoutes/index.htm, the National Center for Safe Routes to School www.saferoutesinfo.org/index.cfm, State Safe Routes to Schools website: www.dhs.ca.gov/routes2school/, Marin's model Safe Routes program website: www.saferoutestoschools.org/index.html, "Other Federal And State Transportation Funding," Metro Funding Sources Guide 2004, LACMTA.

17 Caltrans Safe Routes to School website. Accessed at www.dot.ca.gov/hq/LocalPrograms/saferoute2.htm in November 2006.

7.3.3 NEW AND ENHANCED LOCAL FUNDING SOURCES

This section discusses new and enhanced local funding sources that could be used to implement *Downtown Mobility Study* recommendations. A summary of new funding sources can be found in Figure 7-7, "Potential Sources of New and Enhanced Funding" on page 7-30.

Recommendation 7.6
Implement a program to share costs of new transit service with schools through: a cost-share arrangement between the City and the School District and/or a Universal Transit Pass program for high school and college students.

Attain "Eligible Operator" Status

Glendale is currently pursuing a partnership with Pasadena and Burbank to become an "eligible operator" under state and LA MTA guidelines.[18] City staff reports that this could bring an additional $4 million of STA, TDA, and local Proposition A revenue to fund transit operations in the Arroyo-Verdugo region. These funds would be allocated by formula between the 3 cities.[19]

Transit Funding for Service to Schools

There are two potential sources for securing revenue to provide additional transit service to schools above and beyond existing Beeline fixed-route service. These are a) cost share arrangements between the City and the School District and b) universal transit pass program.

Cost Share Arrangements

The City could approach the School District to identify what the District's mobility needs are for their service population and service area. The City could then estimate what the cost would be to address any mobility deficits by supplementing existing Beeline fixed-route service. Cost-sharing arrangements would then need to be mutually agreed upon depending on resources available to both parties.

Universal Transit Pass Program

As discussed in the TDM Chapter (Chapter 6), universal transit pass programs are a great tool to encourage transit use and decrease congestion. Universal transit pass programs at educational institutions are not free transit, but a new way of paying for transit that provides "fare-free" transit passes to school populations (usually high school and college students). Educational institutions or school districts purchase transit passes in bulk from the local transit operator which are good for unlimited rides of the transit system. The educational institution/district benefits

18 See "Formula Allocation Procedure," LA MTA Library, undated. Accessed at www.mta.net/about_us/library/Formula%20Allocation%20Procedure.pdf on 1/22/07.

19 Jano Baghdanian, City Traffic and Transportation Administrator, City of Glendale.

by improving access for their service population in a cost-effective manner. The transit operator benefits through increased ridership and a new source of guaranteed revenue, as the parties typically enter into multi-year contracts for these programs.

The *Beeline Short-Range Transit Plan*, currently being finalized, recommends supplemental school service which would be an ideal service enhancement to be funded with revenues from a universal transit pass program. This type of program enhances Beeline revenues in the following ways:

- Bulk pass sales are a stable source of income.
- Increases ridership; helps meet goals which can qualify the Beeline for regional funding.
- Because there is usually excess capacity on transit systems, extra income can be absorbed with little additional cost of adding service (low marginal costs).
- Transit passes reduce fare collection costs, a significant cost for bus operations.
- Reduces dwell times (through elimination of cash fare payments) thereby reducing operating costs (less time spent waiting means more time en route, meaning more service provided at same operating cost).

While the specific revenue potential of a program like this in Glendale will depend on numerous factors, a few examples of the revenue generated by existing universal transit pass programs in other jurisdictions are outlined in Figure 7-4.

Recommendation 7.1
Maximize utilization of new parking revenue that will come from parking management and pricing changes to fund *Downtown Mobility Study* recommendations. Manage parking funds through a Downtown Transportation and Parking Management District as described in the Parking Chapter (Chapter 5). Broaden eligible uses of parking funds to include a broad range of *Downtown Mobility Study* recommendations such as transit improvements and TDM programs.

Revenues from Priced Parking

Enhancing revenue from downtown parking is a critical method to provide funding for implementing the recommendations of the *Downtown Mobility Study*. If revenue raised through downtown parking is also dedicated to implementing aspects of the *Downtown Mobility Study* that improve the experience of downtown customers and visitors and that are desired by downtown merchants, then any parking price increases can also create a virtuous cycle: improvements attract more customers, which in turn produces more parking revenue. For that reason, we recommend creation of a Transportation and Parking Management District, as well as additional steps to increase revenues from the existing resources as discussed in the Parking Chapter (Chapter 5).

The parking management and pricing recommendations of this *Downtown Mobility Study* are discussed in detail in Chapter 5. A conservative estimate of the *additional new* revenue that could be generated by implementing these parking recommendations in full is approximately $1 million (see Appendix 7A for a full explanation of this revenue calculation).

Figure 7-4 Revenue Increases from Universal Transit Pass Programs

Buyer/Population	Seller/Operator	Before ($/month)	After ($/month)	Increase (total $ and %)
UC Berkeley	Alameda County (CA) Transit	$84,500	$125,100	$40,600 or 40%
City of Berkeley	Alameda County (CA) Transit	$2,410	$6,650	$4,240 or 175%
Various institutions and agencies	Denver Regional Transit District	No universal transit pass programs	Pass programs yield higher $/boarding than system-wide average	3 biggest pass programs yield twice the $/boarding than system-wide average

Source: "Discounting Transit Passes," Conelius Nuworsoo, *Access*, Spring 2005.

Commercial Parking Tax

Recommendation 7.3
Pursue implementation of a parking tax on commercial parking.

The implementation of a parking tax or fee in downtown Glendale is not only a tool to raise revenues for implementation of *Downtown Mobility Study* recommendations, it is also a congestion management strategy. It can help decrease auto use, enable more compact development, and increase use of alternative modes, thereby reducing congestion. While some commuter parking is necessary as part of a balanced multimodal transportation system, too much parking that is priced too low encourages excess peak-hour trips.

For this reason, increasing the marginal cost of each car trip by raising the cost of parking can have significant effects on reducing auto trips and congestion downtown. This is especially true when combined with a simultaneous decrease in the marginal cost of using other modes through implementation of financial incentives to use improved transit, bike, and pedestrian networks.

For example, Seattle is currently considering a commercial parking tax based on the reasoning that, "in addition to generating revenue for transportation system maintenance and improvements, the fee is also expected to help Seattle reduce its greenhouse gas emissions…[and] the city's dependence on cars." Examples of parking tax rates for several cities is shown in Figure 7-5.

Figure 7-5 Survey of Cities with Parking Taxes (Rates Range between 6-50% Assessed on Parking Revenues)

City	Tax Amount / Structure
Anaheim, California	7.75% of revenues.
Bainbridge Island, Washington	12% of revenues for public and private parking facilities.
Baltimore, Maryland	$14 flat fee on monthly parking transactions, 11% on daily and weekly parking.
Berkeley, California[a]	10% of gross receipts of private garages.
Bremerton, Washington	6% of commercial operator revenues.
Burbank, California[b]	10% of revenues.
Burien and SeaTac, Washington	$1.00 per parking transaction. Exemptions for people with disabilities, government vehicles, and carpools.
Cleveland, Ohio	8% tax to fund a new football stadium.
Detroit, Michigan	30% tax on airport commercial parking.
Los Angeles, California	10% of parking revenues.
Miami, Florida	27.8% of revenues.
New York, New York	18.5%, or 10.5% for Manhattan residents.
New Orleans, Louisiana	12% of revenues.
Oakland, California	10% of revenues.
Philadelphia, Pennsylvania	50% of revenues.
Pittsburgh, Pennsylvania	31% of revenues.
San Francisco, California	25% of revenues.
Santa Monica, California	10% of revenues.
Seattle, Washington (under consideration currently)[c]	5%, 7.5%, 10% of revenues, increasing over 3 years.

Notes and Sources:

a City of San Francisco Parking Tax Fact Sheet. Accessed at www.sfgov.org/site/uploadedfiles/controller/budget_information/taxrev/PkgTax.pdf in November of 2006.

b City of Burbank City Code, Chapter 14 (Finance), Article 19 (Transient Parking Tax). Accessed at www.ci.burbank.ca.us/cityclerk/bmc/CHAPTER%2014%20-%20NEW.pdf in November of 2006.

c This tax has been voted out of a committee of the whole City Council. The proposed tax is to begin in July 2007.

How are Parking Taxes Implemented?

A commercial parking tax in Glendale dedicated to specific downtown purposes would require two-thirds voter approval, under State Proposition 13 passed in 1978. For this reason, if the City decides to pursue implementation of this recommendation, it should begin to outreach to stakeholders early on and contract with professional assistance to help develop an outreach and campaign strategy. This outreach effort should educate Glendale voters on how the parking tax revenues will be used for specific improvements that will directly benefit their lives and will tangibly improve quality of life downtown and in the City as a whole.

Who Pays?

Parking taxes and fees have been described as one of the few taxes that people can "opt-out" of, since people can adjust their commute behavior to reduce their parking tax burden, either by carpooling, taking public transit, biking, walking to work, or by parking at satellite lots and walking or taking a shuttle/circulator into downtown. In addition, parking taxes impact commuters most and impact short-term parkers the least, thereby reducing peak-hour trips that strain downtown streets' existing auto capacity most. All of these changes in travel behavior reduce traffic into the DSP area.

Where Can the Revenue be Spent?

Cities have a great deal of flexibility in allocation of revenue from this tax. Revenue can go to fund the general activities of the Transportation and Parking Management District, or can be exclusively allocated to a particular program, such as transit enhancements or streetscape improvements.

Types of Parking Taxes

The most basic type of parking tax is a commercial parking tax, a tax levied on any parking transaction when a user/occupant pays a fee or rent to use a parking space for any length of time. This functions essentially as a gross receipts tax for parking. To users, if the vendor passes on the fee, it functions like a sales tax on each parking transaction. A commercial parking tax can be graduated or applied selectively depending on the intended goals. For example, commuter-oriented, all-day parking can be taxed at a higher rate than retail-oriented short-term parking. Best practices suggest that parking taxes should also be levied on valet parking transactions.

Challenges to be Addressed

One problem with commercial parking taxes is that they are only levied on paid parking which may provide an incentive to provide *free* parking. For example, a parking tax provides an incentive for

developers not to charge for employee parking or to unbundle residential parking costs from housing lease/sales costs. This problem can be addressed by exempting certain types of parking, such as private residential or employee parking, thereby limiting the application of the tax to commercial transactions for parking that is available to the public.

In addition, since the commercial parking tax requires the parking operator to keep track of revenues and transactions, many jurisdictions have experienced difficulty collecting the full amount of this tax due to underreporting. Auditing private parking facilities can be challenging, time consuming, and expensive. However, revenue control technologies have advanced in recent years to facilitate collection and auditing of parking taxes. In addition, parking audit consultants can help the City develop reporting and enforcement protocols to minimize parking tax evasion, and can provide spot audits on a contract basis. This typically results in a significant increase in parking tax revenues to provide a positive return on investment.

It is optimal if parking operators pass on the cost to users. If they do not, the tax simply functions as gross receipts tax on a particular industry, and the congestion reduction benefits of the tax are diminished or eliminated. In a parking market with a large supply of parking, where competition for users is at a premium (for example in a suburban setting with ample free parking), increased parking costs are often not passed on. This is usually not a problem in a Central Business District like downtown Glendale. Currently in Glendale there is an ample supply of vacant parking, however with the implementation of the *Downtown Mobility Study* recommendations, downtown parking should be better utilized.

As discussed above, any parking tax requires extensive stakeholder consultation prior to implementation in order to be successful. Without proper outreach, it can elicit strong private opposition from parking vendors and businesses.

While commercial parking tax could be a significant source of revenue for implementation of *Downtown Mobility Study* recommendations, it is difficult to make precise revenue predictions for a hypothetical parking tax.

Recommendation 7.4

a. **Work with downtown merchants and property owners to investigate formation of either a downtown Business Improvement District (BID) or a Mello-Roos District.**

b. **Depending on the outcome of negotiations, implement a BID or a Mello-Roos District. Once established, work with the District to advance public/private funding of significant streetscape capital projects (such as a downtown wayfinding signage system), or to provide the local match funding for long-term transit capital projects (such as a downtown streetcar circulator).**

Business Improvement Districts

Business Improvement Districts (BIDs) are a useful local funding mechanism for commercial district economic development and improvement. These types of districts exist in some form in most states. In California, BIDs were first created by the California Legislature in 1965, when the California Legislature passed AB

103 in response to declining economic activity in central business districts. It provided a means for businesses to assess themselves to improve downtowns. A more recent bill enabled a property-based improvement district (PBID), which collects money from property owners rather than business owners. Over 200 BIDs exist in California cities today.

Business owners often initiate the process to establish a BID. However, BIDs must be authorized by a City Council resolution that establishes the intent and activities of the BID and its proposed boundaries. Public notice to all potential BID members follows, which names a public hearing date. If a majority of potential BID members object to the BID, formation is tabled for at least a year. If no majority process is filed, then the City Council passes a BID ordinance which establishes:

- Purpose of the BID.
- BID boundaries.
- Make-up of its Advisory Board.
- Method and basis for levying fees.
- Time and manner of collecting the fees.

Traditionally the money collected by BIDs is used to fund marketing, streetscape improvements (like street cleaning, street furniture, public art, and landscaping), commercial tenant recruitment and retention programs, and transportation improvements. Normally BIDs do not fund substantial infrastructure like parking construction because BIDs are reluctant to tax themselves adequately to undertake such large projects. Emeryville, CA and Portland, OR are examples of BIDs that have more aggressive programs to help fund downtown transit service (see sidebar "Public/Private Partnerships for Transit Improvements" at the end of this chapter for more information).

BID Potential in Glendale

Although downtown Glendale does not currently have a BID, the city has an established BID in Montrose and in Adams Square, and downtown has an active merchants association which could instigate a BID if desired. A BID could easily supplement efforts to improve streetscapes and provide maintenance and operations assistance to the City, in line with traditional BID activities.

Scaling up to fund a downtown shuttle (as in Emeryville), or even more aggressively raising millions to construct a streetcar may be several years away. Both Emeryville and Portland benefited from having large property owners who saw the real estate development potential of enhanced transit connections. With an already established downtown, there may be more property owner opposition to such an ambitious program. However, with such signifi-

Case Study: Beverly Hills

The City of Beverly Hills' Mello-Roos experience is an interesting case study for Glendale. It raised $16 million in Mello-Roos bonds to finance infrastructure projects known as the Urban Design Program in Beverly Hills' premier shopping district "the Golden Triangle." The program funds street fixtures, sidewalk, landscape, and street improvements. The seventy-acre district had fewer than 12 residents and thus the existing property owners voted. There were 111 property owner votes, and 79% of cast votes approved the CFD. The City, which was one of the largest property owners itself, spent months working closely with consultants and meeting with both property owners and tenants of this primarily commercial district to craft the measure which reflected their priorities, and equitably apportioned the cost of the improvements to the properties that would benefit.

ABOVE: The streetscape improvements funded by the Beverly Hills Mello-Roos District create a clean, well-maintained, attractive pedestrian environment that is clearly well-used by visitors and residents.

cant development potential in downtown Glendale, formation of a BID should be pursued and the attitudes of downtown property owners and merchants assessed.

Mello-Roos Community Facilities District Act

The Mello-Roos Community Facilities District Act authorized local governments and developers to create Community Facility Districts (CFDs) for the purpose of selling tax-exempt bonds to fund public improvements. Subsequently, property owners that participate in the CFDs pay a "special tax" to repay the bonds. The services and facilities Mello-Roos Districts can provide include streets, police protection, fire protection, medical transport, elementary schools, parks, libraries, museums, cultural facilities, and water facilities. A requisite for the Mello-Roos districts' establishment is that it be approved by two-thirds margin of qualified voters in the district. If there are fewer than twelve registered voters within the proposed district, the vote may be passed by current landowners.

Property owners in Mello-Roos Districts are responsible for payment of the "special tax." The amount of the "special tax" is not directly based on the value of the property. Special taxes are based on mathematical formulas that take into account property characteristics such as square footage and parcel size.

While Mello-Roos Districts are most often used to fund public infrastructure in "greenfield" development, they have also been used successfully in urban, developed settings for such diverse activities as seismic rehabilitation (West Hollywood), park improvement (Los Angeles), and urban design improvements (Beverly Hills; for more information, see sidebar to the left). What unites these projects is that they are usually quite specific, with obvious benefits to landowners within the project area. This is because the requirement to receive a two-thirds margin by either residents or property owners is a difficult hurdle.

Any Mello-Roos program for Glendale would need to be similarly structured to target investments property owners broadly agree are needed, and the area geography should be crafted to limit the number of current property owners who might object to the goals of the program. It is possible that a program to fund streetscape improvements could be passed, with the potential to raise up to $10 million. Of course, the political reality of success is highly speculative at this time, and it would take significant effort to craft a saleable program. The effort takes an extended amount of time, at least 120 days, just to form the CFD. The process also requires an extraordinary amount of preparatory work to secure the agreement of so many property owners, ultimately

the future taxpayers. But this is a resource that is worthy of further investigation.

Development Impact Fees

Development impact fees are assessed by city, county, or regional governments on new development in order to pay for the increased services and new infrastructure necessary to serve the residents and/or employees of the new development. Similar to community facility fees funding such things as parks, libraries, and fire stations, transportation-related development impact fees are very common: a 1997 survey of 264 California cities and counties (including all 58 counties and 206 of the 469 cities in the state) found that 150 impose some form of transportation-related development impact fee, including 34 (59%) of the counties and 116 (56%) of the cities.[20] A 1999 study found that 80% of the 87 California jurisdictions surveyed (including 93% of the 76 cities and 64% of the 11 counties) assessed some form of local traffic mitigation fee.[21] A 2001 survey of 42 California cities of all sizes found that 29 (69%) had some form of transportation-related impact fees.[22]

The most innovative transportation impact fees base the fee on the number of vehicle trips projected by new development. For example, of the jurisdictions surveyed in the 1997 study mentioned above, 65% based the amount of the traffic impact fee on either the project's estimated number of *daily* (42%) or *peak-hour* (23%) vehicle trips. This fee structure also provides an incentive to reduce a development project's vehicle trips.

Furthermore, the benefits of the impact fee on traffic reduction can be enhanced by using fee revenues to fund *Downtown Mobility Study* recommendations that will reduce vehicle trips. Increasingly, cities and counties of all sizes are implementing transportation impact fees and investing some (or all) of the resulting revenue stream in multimodal improvements, including increased transit service, completion of bicycle networks, and better pedestrian infrastructure and amenities (for examples, see Figure 7-6).

Recommendation 7.5

a. Initiate a transportation impact fee nexus study to mitigate auto trips and congestion impacts of new development.

b. Once completed, if a reasonable nexus is found, implement a new impact fee for the downtown that is assessed according to number of new peak-hour vehicle trips generated by the development. Dedicate revenues to a Downtown Transportation Fund to pay for *Downtown Mobility Study* recommendations.

20 Ann Lawler and Michael Powers. "Traffic Impact Fees -- Survey Results," CalAPA *Planner*, 11/22/04. Accessed at www.impactfees.com/newsarticles/Traffic%20Impact%20Fees%20--%20Survey%20Results.pdf on 1/22/07.

21 John Landis et. al. "Pay to Play: Residential Development Fees in California Cities and Counties - 1999," California Department of Housing and Community Development, August 2001. Accessed at www.hcd.ca.gov/hpd/pay2play/fee_rpt.pdf on 1/22/07.

22 Ken Born. "Development Impact / Capacity Fee Study," Monterey County Environmental Resource Policy Dept., October 2001. Accessed at www.co.monterey.ca.us/gpu/reports/Impact%20Fees%20-%20FINAL.pdf on 1/22/07.

The fee area is usually defined to a specific area, but may also be city-wide. The fee must demonstrate a "rational nexus" between the impact of the project and the fee charged. A nexus study completed before the fee is imposed determines the proportional impact of new growth on existing resources and assigns appropriate fee levels. It takes six months to a year to scope and complete a study, and then gain political approval of the fee by the City Council. A transportation impact fee for downtown Glendale focused on funding the projects of the *Downtown Mobility Study* would first need to find that new development creates impacts which must be mitigated, and secondly find that the *Downtown Mobility Study* provides suitable mitigations. Cities must segregate funds collected through an impact fee program, and use them within a reasonable period of time for projects described in the fee study.

It is important to stress that development impact fees may only be imposed on new development; existing development is exempted, even if it contributes to the need for new facilities. Thus, only developments permitted AFTER passage of the fee must pay, anything that is already entitled is exempt. As Glendale has a large volume of projects already in the approvals "pipeline," many projects could potentially get entitled prior to imposition of a fee.

The assessed level of the impact fee should be adjusted periodically in order to ensure that the fee is keeping up with actual mitigation costs. Rather than conduct a comprehensive nexus study on a regular basis, it is much easier to conduct an initial nexus study for a particular development impact to be mitigated (such as PM peak-hour vehicle trips) and then index the fee level to the Consumer Price Index for programmatic costs (such as additional transit service) and the Construction Cost Index for capital costs (such as pedestrian and bicycle safety infrastructure).

It should be noted that one limitation of development impact fees is that their revenue yield is linked to cycles associated with real estate development markets and the overall health of the regional economy. In other words, the revenue generated by these fees can sometimes be sporadic: when the jurisdiction experiences significant new development, impact fees can generate substantial new revenue, but when the rate of new development cools, impact fees do not yield as much revenue. For this reason, development impact fees should generally be used to supplement other funds, or fund smaller, phase-able projects, rather than large capital projects that require a revenue bond or significant ongoing program costs. In downtown Glendale, streetscape and transit improvements would be an appropriate use for impact fee proceeds.

Total funding available through an impact fee will depend greatly on the findings of the nexus study and the pace of downtown development. While transportation-related development impact fees in California vary widely by jurisdiction, region, and housing type, fees of several thousand dollars per residential unit are not unusual in California cities and counties. For example, a 1997 study of transportation-related impact fees in California found that fees on residential development ranged from $550 per peak-hour residential trip to $16,000 per single-family residential unit and non residential fees ranged from $550 to $4,564 per peak-hour trip.[23] A 1999 survey of 89 cities and counties found considerable variation in transportation-related development impact fees; amounts varied from no fee in 48 jurisdictions, to less than $1,000 per unit in 9 jurisdictions, to greater than $5,000 per unit in 5 jurisdictions.[24] A 2001 survey of 42 California cities of all sizes found that of the 29 that had transportation-related impact fees, the fees ranged from a low of $85 for a 1,500 square foot single family residence in Marina (Monterey County) to a high of $9,075 for a 2,000 square foot single-family residence in Santa Barbara. The complete range of all known transportation-related development assessed impact fees in California is illustrated in Appendix 7C.

A good model for Glendale could be the City of Pasadena's Traffic Reduction and Transportation Improvement Fee, passed by City Council in July 2006. A full description of this fee is included in Appendix 7B. More details on assessing a traffic impact fee based on number of peak-hour auto trip generated by new development is discussed in the Parking Chapter (Chapter 5).

23 Ann Lawler and Michael Powers. "Traffic Impact Fees Survey," Santa Barbara County Association of Governments, May 1997. Accessed at www.impactfees.com/newsarticles/Traffic%20Impact%20Fees%20--%20Survey%20Results.pdf on 1/22/07.

24 Data from John Landis et. al. "Pay to Play: Residential Development Fees in California Cities and Counties - 1999," California Department of Housing and Community Development. August 2001. Accessed at www.hcd.ca.gov/hpd/pay2play/fee_rpt.pdf on 1/22/07. Reported in "Taxing Development: The Law and Economics of Traffic Impact Fees," Independent Institute Working Paper Number 65, 12/13/06. Benjamin Powell, Dr. Stringham, and Jack Estill. Accessed at www.independent.org/pdf/working_papers/65_taxing.pdf on 1/22/07.

Figure 7-6 California Cities Using Impact Fee Revenues for Alternative Transportation Improvements

Jurisdiction	% for Alternative Modes	Comment / Usage
Tahoe Regional Planning Agency	100%	Used for transit or air quality projects other than development mitigation.
San Francisco	100%	Transit impact fee used for both capital improvements and operating costs.
Santa Cruz County	50%	Allocated among pedestrian amenities (78%), existing bike facilities (10%), new Class II bike facilities (6%), bicycle signage (4%), and bus pullouts (2%).
Sacramento County	25-30%	Used for buses, park-and-ride lots and light rail station. 7 Districts with fee schedules.
City of Long Beach	27%	Allocated to transit (23%) and a Parking Management Program (4%).
Redwood City	25%	Used for bicycle paths, shuttle services, TDM coordinator, and other miscellaneous alternative mode improvements
City of San Luis Obispo	20%	Allocated to bicycle facilities (75%) and transit capital improvements (25%).
Coachella Valley Association of Governments	10%	Used for bus replacement and additional transit service, commuter buses, carpools/vanpools, and discount senior/disabled fares.
South Placer Regional Transportation Authority	6%	Used for rail and bus transit.
City of Dublin	6%	Allocated among Class I bikeways (19%), transit (57.5%), P&R (23.5%).
City of Fillmore (Ventura County)	5%	Used for Class I bikeways.
San Joaquin County	5%	Projects needed accommodate growth at Comprehensive Plan build out.
City of Bakersfield	4%	Used for transit capital improvements.
City of Petaluma	3%	9 alternative modes projects include Class II bike lanes, Class I trails, pedestrian projects, a park and ride lot and a transit center.
City of Vacaville	2%	Used for Class I bike trails along 3 creeks.
City of Woodland (Yolo County)	2%	Used for new bicycle facilities.
Monterey County	1%	Used to maintain Class II bike lanes along arterials.
City of San Diego	n/a	Fees and use vary based on 49 Community Plans. Used for bike and pedestrian facilities and park and ride lots.
City of Irvine	n/a	Uses $3 million of fee revenue for alternative transportation.
Walnut Creek	n/a	A variable percentage is apportioned to alternative modes.
Santa Barbara County Association of Governments	n/a	Detail unavailable at time of writing.

Source: "Traffic Impact Fee Survey," Santa Barbara County Association of Governments, May 1997, and follow-up interviews.

Parking In-lieu Fees

As discussed in the Parking Chapter (Chapter 5), this *Downtown Mobility Study* recommends that the City implement an "in-lieu of parking" fee for all new development downtown. This in-lieu fee program would allow developers to pay a pro-rata fee in exchange for permission from the City to forgo construction of some portion of their required parking. The fee would be used to provide funding for programs that reduce parking demand such as the transit service improvements recommended in Chapter 4 and the TDM programs recommended in Chapter 6. In order to be effective at managing downtown congestion and providing on-going funding for *Downtown Mobility Study* recommendations, the in-lieu fee program must adhere to three conditions:

- Payment of the fee must be on an annual basis rather than a one-time payment.
- All proceeds from the fee must go into the Downtown Transportation Fund and be dedicated for implementation of *Downtown Mobility Study* recommendations.
- The in-lieu fee should be set as low as possible to encourage its use and ensure the provision of only enough parking demanded by market.

As these recommendations make clear, the in-lieu of parking fee is not recommended for use to build additional parking downtown, and for this reason the fee level should not be based on the costs of building a new public parking space. Instead it is recommended that the fee revenues be used for programs that reduce the need for parking by downtown commuters, residents, and visitors. To accomplish this, the fee level should be based on the average per-person programmatic costs of shifting one downtown peak hour auto trip to another other mode (carpooling, transit, bike, or walk).

Implementation of an in-lieu parking fee as recommended will not be a large revenue generator for building new public parking garages, but will instead be a supplemental revenue source for implementing *Downtown Mobility Study* recommendations.

As referenced throughout this chapter, a summary of all known new funding sources can be found in Figure 7-7, "Potential Sources of New and Enhanced Funding."

Figure 7-7 Potential Sources of New and Enhanced Funding

Funding Source	Fundable Projects	Likelihood	Timing	Type of Development to which this applies	Scale of resource
Attain "eligible operator" status	Transit operations and service enhancements.	High	1 year	n/a	Up to $4 million in additional STA, TDA, and Prop A revenue, allocated by formula between Glendale, Burbank, and Pasadena.
Business Improvement District	Flexible, allocated based on District member input.	High for traditional BID activities, moderate for more aggressive transit infrastructure	Establishment of BID within a year	Existing	Probably modest initially, could scale up to several million per year.
Mello-Roos District	Streetscape, infrastructure, special projects.	Moderate	1-2 years	Existing	$5-10 million
Development Impact Fees	Flexible as long as nexus exists.	Moderate	1-2 years, collections very gradual	New	$5-10 million (depends on nexus study)
Federal Earmarks	Large capital projects.	Low	Post-2009	n/a	Tens of millions
State Infrastructure Bond (1B, Nov. 2006)	Streets, highway, transit, mobility improvement, congestion relief, safety enhancements.	High	1 year	n/a	$1.6 million direct to city, other possible.
State Safe Routes to School Grants	Pedestrian and Bicycle improvements.	Moderate	Apply by January 2 for 2007 funds	n/a	$50,000-$500,00
Priced Parking Revenue	Flexible, allocated based on stakeholder input.	High	Immediate	Both new and existing	Estimated to be approximately $1 million more than current parking revenue each year.
Commercial Parking Tax	Flexible, but higher voter approved threshold if dedicated.	Moderate	1 year	Both new and existing	Varies depending on tax amount and structure.

7.3.4 OTHER SOURCES CONSIDERED AND REJECTED

Assessment Districts

An assessment district can fund the construction of public infrastructure, and also can pay for the maintenance and operation of infrastructure. Unlike impact fees, assessments affect all property owners, not only new development. Property owners pay in proportion to the benefit they receive. With the passage of Proposition 218, the use of assessment districts was greatly restricted by the requirement that the district must be approved by voters, and also may be repealed by voters at any time, thereby restricting the ability to affordably bond infrastructure projects with projected assessment district revenue streams. For those reasons, an assessment district is not a good vehicle to fund the *Downtown Mobility Study* recommendations.

General Obligation Bonds

A general obligation bond requires a two-thirds vote of city residents. Historically, this is a quite difficult test to pass. Given the significant financial and personnel resources necessary to run a successful ballot campaign, the unpredictable nature of election trends, and the need to market a package of improvements that would be particularly compelling to two-thirds of city-wide voters, the consultant team determined that other financing mechanisms would be more cost-effective and provide more certainty.

Local Sales Tax Increase

Glendale residents already pay for two half-cent sales taxes that benefit local transit and transportation projects. This is the maximum allowed under state legislation. The state legislature has recently considered a bill that would increase this cap, in order to allow local jurisdictions to impose additional transportation-related sales taxes (AB 1020, Migden).[25] If this bill were to pass, Glendale may consider a transportation sales tax.

25 California State Legislature "Bill Info" website., Accessed at www.leginfo.ca.gov/bilinfo.html in November 2006.

Public/Private Partnerships for Transit Improvements

Emeryville, CA[1]

Emeryville set up a city-wide property-based Business Improvement District in 1998 to fund the Emery-Go-Round, a free shuttle that provides service from major nearby regional transit stops (BART, AC Transit, and Amtrak). It is one of the only free shuttles in the region and is funded entirely by commercial property owners in Emeryville.

Emery-Go-Round is a private service, run by Emeryville Transportation Management Association, a non-profit organization made up of local business. The TMA Board of Directors determines the annual tax assessment rate and shuttle service levels. A high level of service is provided, with weekday service from 6 am-10 pm, and weekend service from 9 am-10 pm on Saturday and 10 am-7 pm on Sunday. It operates every 10-12 minutes during commute hours and every 15-20 minutes the rest of the day.

Portland, Oregon[2]

The Portland Streetcar is another example of a successful public/private partnership to improve transportation choices and spur local development. The Portland Streetcar provides transportation service on a 6-mile roundtrip loop with stops every 3-4 blocks. It operates every 13 minutes daily from 5:30 am-11:30 pm, with slightly shorter service on weekends. The Streetcar was built and is operated by a non-profit corporation, Portland Streetcar, Inc (PSI). PSI is governed by a Board of Directors; members come from both the public and private sectors and represent institutions, businesses and other stakeholders along the Streetcar route.

Streetcar investment has contributed to a significant shift in density and location of new development in Portland's CBD:

- Over $2.28 billion has been invested within 2 blocks of the Streetcar alignment;
- 7,248 new housing units and 4.6 million square feet of office, institutional, retail, and hotel construction have been constructed within 2 blocks of the alignment;
- 55% of all CBD development since 1997 has occurred within 1-block of the Streetcar, compared with 19% previously;
- Developers are building new residential buildings with lower parking ratios than anywhere else in the region.

A Local Improvement District (LID) provided $14.6 million (16%) of the capital costs of the completed Streetcar sections. Generally, LIDs in Portland fund street paving, sidewalk construction, and storm water management system installation. Like a Business Improvement District (BID), a LID is a mechanism by which property owners can share the expense of improvements. Unlike a BID, a LID is formed for a specific project, essentially a one-time payment. Once the project is complete and the final assessment is made, it ceases to exist.

Other funds used to construct the Streetcar included tax increment financing from the city's urban renewal agency, bonds backed by a $0.20 short-term parking rate increase in city owned garages, regional transportation funds, reallocated transit funds from TriMet (the regional transportation agency and transit operator), public land sales, and the city general fund.

Local businesses also help with ongoing operations financing. The Streetcar Sponsorship Program is designed to leverage business financial support of Streetcar operations while helping businesses benefit from the Streetcar system. Different packages are available for different costs, each includes varying levels of advertising. Sponsorships are voluntary and provide between 8-13% of the ongoing operations costs of the Streetcar operations.

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1 Emery-Go-Round websites. Accessed at www.emerygoround.com/about.htm and www.bwc.gov/about/dist_list.htm#emeryville in November 2006.

2 Portland Streetcar website. Accessed at www.portlandstreetcar.org/sponslist.php in November 2006.

IMPLEMENTATION PLAN

8

This chapter is an Implementation Plan that provides a prioritized work plan of all "critical path" actions that the City of Glendale and its partners must take to implement the *Downtown Mobility Study* recommendations. This chapter includes the following:

- A phased implementation timeline for all downtown transportation improvements, policies, and programs recommended in this *Downtown Mobility Study*, including:
  - Immediate-term actions (within 1 year)
  - Short-term actions (within the next 5 years)
  - Medium-term actions (by 2020)
  - Long-term actions (by 2030)
- A capital improvement program, including planning-level cost estimates for capital, operations, and maintenance costs.
- Additional studies needed in order to implement certain *Downtown Mobility Study* recommendations.

8.1 PHASED RECOMMENDATIONS

IMMEDIATE-TERM ACTIONS (WITHIN 1 YEAR)

Street Typology

Recommendation 2.1a
Support and promote programs and projects that enhance downtown's access via regional transit (i.e. Rapid Bus, Busways, Light Rail). (See Recommendation 4.8.)

Recommendation 2.1b
Implement a program for adjusting the local and regional transit services to meet the recommended performance criteria for transit frequency, hours of operation, speed, reliability, and passenger loads on the Primary Transit Network (see Recommendation 4.6 and 4.4)

Recommendation 2.3
Adopt the recommended Downtown Street Typology to provide clearer policy guidance for future decisions on street design and operation.

Recommendation 2.4a
Use auto performance measures as a guide for the design and operation of downtown streets to focus on optimizing the person-carrying capacity of streets rather than vehicle-carrying capacity.

Recommendation 2.4b
Use transit performance measures as a guide for the design and operation of downtown streets, including a new performance indicator – Transit Quality and Level of Service – that complements existing transit performance indicators (see Recommendation 4.13)

Recommendation 2.4c
Use pedestrian and bicycle performance measures as a guide for the design and operation of downtown streets.

Street Capacity Enhancements

Recommendation 3.1a
Develop and submit to Council a plan to implement street capacity enhancement improvements not requiring the acquisition of rights-of-way (as identified in Appendix A of the *Downtown Specific Plan*) no later than July 1, 2007.

Transit Service

Recommendation 4.1
Market the transit resources in Glendale as a single system to show the richness of the transit network in and through Glendale.

Recommendation 4.2a
Create a downtown shuttle to encourage non-auto circulation through the downtown. The route should connect regional transit, and key downtown destinations. Begin service on the shuttle within existing resources.

Recommendation 4.3
Operate the shuttle as frequently as possible, with no fare collection and with a unique and attractive vehicle.

Recommendation 4.4
Implement the recommendations of the *Short Range Transit Plan* including service and capital improvements that affect downtown.

Recommendation 4.6
Consolidate high frequency services to the extent possible on a limited number of transit priority streets, which will be optimized for transit operation (see Recommendation 2.1 and 2.3).

Recommendation 4.9
Create amenity standards for downtown transit stops based on the number of riders boarding at each location. Maximize amenities including enhanced signage, shelters and other amenities along the shuttle route and other transit priority streets. (See Recommendation 4.4.)

Recommendation 4.11
Consider utilizing new revenue generated by the Downtown Transportation and Parking Management District to enhance shuttle and other transit services. (See Recommendations 5.2, 5.7, and 7.1)

Recommendation 4.13
Develop performance standards for transit streets (see Recommendation 2.4b).

IMMEDIATE-TERM ACTIONS (WITHIN 1 YEAR)

Parking Management

Recommendation 5.1
Create a "Park Once" district in downtown Glendale, by managing all public parking as an integrated system.

Recommendation 5.2
Implement coordinated parking management policies for on- and off-street parking, using demand-responsive pricing to promote parking goals of 85% occupancy, matching demand with available supply, and promoting turnover of short-term spaces. (See Recommendations 5.1, 5.7, 5.8, and 5.15.)

Recommendation 5.4
Implement a multi-modal transportation and parking wayfinding system, including information on parking direction location, pricing, and real-time parking occupancy.

Recommendation 5.5
Install networked multi-space pay stations and occupancy sensors to improve customer friendliness, revenue management, and occupancy monitoring of downtown parking.

Recommendation 5.7a
Create a Downtown Transportation and Parking Management District, managed by the Traffic and Transportation Administrator (or a newly-hired position to whom they may delegate this responsibility) in consultation with an advisory body of downtown merchants, property owners, and residents.

Recommendation 5.7b
Dedicate all parking revenue to a Downtown Transportation Fund to be invested in transportation and streetscape improvements, including capacity enhancements, transit improvements, and pedestrian enhancements, as well as future parking needs. (See Recommendation 7.5.)

Recommendation 5.10
Require as a condition of approval for new downtown development that all non-residential parking be made available for public parking when not needed for its primary commercial use.

Recommendation 5.11
Require as a condition of approval for new downtown development that all non-residential parking be shared among other uses (as different parking demand patterns among these uses permit).

Recommendation 5.12
Consider implementing a "traffic congestion impact fee" based on downtown development projects' proposed number of parking spaces and/or estimated peak-hour vehicle trips. Use impact fee revenues to fund transportation programs and projects that benefit both the development project and downtown as a whole. Pursue a nexus study to determine most appropriate assessment methodology and fee structure. (See Recommendation 7.5.)

Recommendation 5.13
Revise zoning code to legalize more efficient parking arrangements in new downtown development in order to facilitate better ground-floor urban design (i.e. allow development to reduce its "parking footprint" by right without reducing the total supply provided).

Recommendation 5.14
Expand existing provisions in zoning code that allow new downtown development to go below existing parking minimums by right, under very specific conditions.

IMMEDIATE-TERM ACTIONS (WITHIN 1 YEAR)

Parking Management (continued)

Recommendation 5.15

Prevent spillover parking in neighborhoods adjacent to downtown and the Glendale Transportation Center as needed by converting the City's existing neighborhood Preferential Parking Program into a Residential Parking Benefit Districts, where residents can park for free or at low annual permit costs but non-residents pay to park and the resulting revenue is invested in the neighborhood.

Transportation Demand Management

Recommendation 6.1

Adopt a new strengthened TDM ordinance including mandatory TMA membership and required implementation of TDM programs. (See Recommendations 6.2-6.4.)

Recommendation 6.7

Strengthen the existing Glendale Transportation Management Associates (TMA) and define roles and responsibilities between the TMA and the City.

Funding and Finance

Recommendation 7.1

Maximize utilization of new parking revenue that will come from parking management and pricing changes to fund *Downtown Mobility Study* recommendations. Manage parking funds through a Downtown Transportation and Parking Management District as described in the Parking Chapter (Chapter 5). Broaden eligible uses of parking funds to include a broad range of *Downtown Mobility Study* recommendations such as transit improvements and TDM programs. (See Recommendations 4.11 and 5.7b.)

Recommendation 7.4a

Work with downtown merchants and property owners to investigate formation of either a downtown Business Improvement District (BID) or a Mello-Roos District.

Recommendation 7.5a

Initiate a transportation impact fee nexus study to mitigate auto trips and congestion impacts of new development. (See Recommendation 5.12.)

Recommendation 7.8

Work with local and regional transportation leaders to position transportation projects recommended by the *Downtown Mobility Study* to be eligible for funding under the state transportation bond package.

SHORT-TERM ACTIONS (WITHIN THE NEXT 5 YEARS)

Street Typology

Recommendation 2.2

Create a *Downtown Streetscape Plan*, consistent with this *Downtown Mobility Study*, to guide improvements such as enhanced lighting, street landscaping, crosswalks, and signage.

Street Capacity Enhancements

Recommendation 3.1b

Implement a capacity enhancement and freeway access improvement program for improvements not requiring acquisition of rights-of-way no later than Dec. 31, 2010 (as identified in Appendix A of the DSP).

Transit Service

Recommendation 4.5

Bring the price of all transit fares closer together, charging at least $0.50 per trip on the Beeline. Attempt to negotiate with MTA for a local Glendale fare that will match Beeline fares within the City limits.

Recommendation 4.7

Consider signal priority for and other operational enhancements on all streets with combined service of at least 10 minutes during peak periods, including all streets with Metro Rapid service.

Recommendation 4.8

Work with MTA to create an "east-west" connector service operating on the HOV infrastructure of Highway 134, and provide convenient connections between this new service and the downtown shuttle.

Recommendation 4.10

Incorporate real time information in all high amenity bus shelters using Next Bus technology.

Recommendation 4.12

Utilize the Universal Transit Pass to encourage transit ridership among new downtown residents by requiring passes be provided to new residents through condominium fees (see Recommendation 6.2c).

Parking Management

Recommendation 5.3

Implement parking pricing system for Glendale Transportation Center parking lots allowing Metrolink and Amtrak riders to park free all day but charging all other short-term and long-term parkers.

Recommendation 5.6

Continue existing City protocols that dedicate adequate parking spaces throughout downtown for loading zones, taxi stands, and ADA-accessible parking.

Recommendation 5.8

Authorize Traffic and Transportation Administrator (or their delegate) to adjust downtown parking rates, hours, and time limits as needed to achieve 85% occupancy based on occupancy monitoring.

Recommendation 5.9

Pursue a study of how the City could enter into contractual arrangements with one or more valet parking operators for all of downtown in order to improve parking management and customer-friendliness, streamline valet parking operations for private and public events with high parking demand, and increase City revenue for the private use of public right-of-way.

SHORT-TERM ACTIONS (WITHIN THE NEXT 5 YEARS)

Transportation Demand Management

Recommendation 6.2

Require Beeline Universal Transit Passes to be provided to all downtown residents and employees as part of the new TDM Ordinance. Require MTA universal transit passes if feasible. (See Recommendation 6.1.)

Recommendation 6.2a

Create a Universal Transit Pass Program for the Glendale Beeline by negotiating a deep bulk discount for both residents and employees.

Recommendation 6.2b

Require employers to provide Beeline passes to all new and existing downtown employees as part of TMA membership.

Recommendation 6.2c

Require provision of Beeline passes to all residents in new downtown developments as a condition of approval for new development, funded through condominium fees and rents (see Recommendation 4.12).

Recommendation 6.2d

Negotiate with MTA for a deeper discount universal transit pass (deeper than currently exists) and depending on the outcome, require MTA passes to be provided to all downtown residents and employees as well.

Recommendation 6.3

Require parking cash-out for all employers as part of new TDM Ordinance. (See Recommendation 6.1.)

Recommendation 6.3a

Begin an education and enforcement program on the existing state parking cash-out law.

Recommendation 6.3b

Adopt an expanded parking cash-out program in the new TDM Ordinance that applies to all downtown employers.

Recommendation 6.3c

Formalize an annual compliance monitoring program and enforcement mechanism for state and local cash-out requirements.

Recommendation 6.4

Revise development standards to include bicycle facility requirements as part of new TDM Ordinance. (See Recommendation 6.1.)

Recommendation 6.5

Glendale should encourage establishment of a car-sharing service in Glendale with one or more shared vehicles located in the DSP area by converting part of the City fleet to a car-sharing program and/or subsidizing initial operations of the car-sharing provider.

Recommendation 6.6

Establish a centralized Downtown Transportation Resource Center managed by the Traffic and Transportation Administrator or new staff person.

SHORT-TERM ACTIONS (WITHIN THE NEXT 5 YEARS)

Funding and Finance

Recommendation 7.2

Dedicate Redevelopment Agency investments from downtown tax increment revenue to implement *Downtown Mobility Study* recommendations for streetscape, pedestrian, and bicycle improvement projects in the *Downtown Specific Plan* area.

Recommendation 7.3

Pursue implementation of a gross receipts parking tax on commercial parking.

Recommendation 7.4b

Depending on the outcome of negotiations with downtown merchants and property owners, implement a Business Improvement District (BID) or a Mello-Roos District. Once established, work with the District to advance public/private funding of significant streetscape capital projects (such as a downtown wayfinding signage system) or to provide the local match funding for long-term transit capital projects (such as a downtown streetcar circulator).

Recommendation 7.5b

Once traffic impact fee nexus study is complete (per Recommendation 7.5a), and assuming a reasonable nexus is found, implement an impact fee for new downtown development that is assessed according to estimated number of new peak-hour vehicle trips generated by the development. Dedicate fee revenues to a Downtown Transportation Fund to pay for *Downtown Mobility Study* recommendations.

Recommendation 7.6

Implement a program to share costs of new transit service with schools through: a cost-share arrangement between the City and the School District and/or a Universal Transit Pass program for high school and college students.

Recommendation 7.7

Maximize utilization of existing grant sources by having "funding-ready" projects that fit existing grant criteria. Position new projects to receive federal, state, and regional grant funds. Consider changes in budgeting that recognize grant funds as revenue, relieving the cash flow burden on transit and other departments that are heavily dependent on grant sources.

Recommendation 7.9

Work with state transportation leaders and planning agencies to identify state funding opportunities for *Downtown Mobility Study* projects, such as the new Safe Routes to School grant funding program.

Recommendation 7.11

Work with Congressional delegation attempt to secure federal funding of high priority large-scale capital projects in the next transportation bill (2009), such as a streetcar circulator.

MEDIUM TERM ACTIONS (BY 2020)

Street Capacity Enhancements

Recommendation 3.1c

Implement street capacity enhancement improvements that do require the acquisition of rights-of-way (as identified in Appendix A of the *Downtown Specific Plan*) as opportunities develop and funding allows.

Transit Service

Recommendation 4.2b

Change the vehicle used for the downtown shuttle to a hybrid bus or other unique vehicle and increase frequency to at least every 10 minutes.

Parking Management

Recommendation 5.16

If total downtown parking demand cannot be met with existing supply after *Downtown Mobility Study* recommendations have been fully implemented build new public shared parking as needed.

Transportation Demand Management

Recommendation 6.8

Monitor effectiveness of TDM programs and implement new measures as needed.

Funding and Finance

Recommendation 7.10

Work with local and regional transportation leaders and planning agencies to make sure that *Downtown Mobility Study* projects, especially those that involve other jurisdictions such as an east-west busway, are prioritized within the next update of the *Regional Transportation Plan*.

LONG TERM ACTIONS (BY 2030)

Transit Service

Recommendation 4.2c

Implement a new technology for the shuttle and other lines.

8.2 ACTION PLAN FOR ALL RECOMMENDATIONS

Figure 8-1, at the end of this chapter, is an "Action Plan" for the *Downtown Mobility Study*. It is intended to function as a phased implementation timeline for reference by all City implementers for all the downtown improvements, policies, and programs recommended in the *Downtown Mobility Study*. The Action Plan contains the following information:

- **Recommended Actions:** A list of recommendations grouped by topic area (such as Transit Service, Parking Management, etc.).
- **Next Steps:** Immediate next steps that should be pursued in order to begin implementation.
- **Lead Implementer(s):** The key City agencies or non-governmental organizations (such as the TMA) that are the logical implementation lead.
- **Necessary New / Changed Ordinances:** Local legal changes needed to proceed, where applicable.
- **Estimated Public Capital and Operations and Maintenance Costs:** Estimated planning-level implementation costs to the City, including capital, operations, and maintenance costs.[1]
- **Note(s):** Additional explanatory comments as needed.
- **Timeline:** Recommended implementation phasing (Immediate, Short-Term, etc.).

Not every recommendation listed in the Action Plan contains all of the above information. However, information was provided if it was currently known or could be reasonably surmised (for example, not every recommendation requires new or changed ordinances and specific cost information for longer-term recommendations is inherently less definitive than for more near-term recommendations). For this reason the Action Plan should be considered a work in progress that should be periodically updated over time as early action items are implemented. Finally, it should be emphasized that all costs shown are "order of magnitude" estimates for planning purposes only, and are provided in order to illustrate the relative implementation costs of selected recommendations. Therefore, all cost estimates should be refined in more detail before moving forward with implementation.

1 Labor costs assume a planning-level estimate of $150,000 and $100,000 per year for 1 full-time equivalent (FTE) managerial and staff-level position respectively.

IMMEDIATE-TERM ACTION PACKAGE

Many of the Immediate Term Recommendations necessitate immediate City Council action in order to take effect within one year. City staff is currently preparing the package of ordinances to implement the most pressing recommendations. These will be presented for City Council consideration in parallel with the finalization and approval of the *Downtown Mobility Study*. They include:

- Parking policy and pricing changes (e.g., installing meters on Brand, changing the parking pricing structure, and changing the residential parking policies)
- Service design and route structure changes in the SRTP (pending availability of new vehicles)
- New wayfinding signage

Not all of the immediate term recommendations will be included in this first City Council action package. City Council should expect to consider subsequent ordinances and follow-up actions throughout the coming year. City staff can prepare all the necessary ordinances according to the Action Plan and timeline laid out in Figure 8-1.

8.3 ADDITIONAL STUDIES NEEDED

This section lists additional studies that are recommended in order to implement certain *Downtown Mobility Study* recommendations.

Street Typology

- Create a *Downtown Streetscape Plan* to guide improvements such as enhanced lighting, street landscaping, crosswalks, and signage. This plan should include a *Pedestrian Plan* that contains pedestrian performance measures.
- Update the *1995 Bikeway Master Plan*, including bicycle performance measures.
- Initiate a *Transit Signal Priority Coordination Study* with MTA to figure out the details on how to roll out transit signal priority for both Beeline and MTA routes through downtown.

Transit Service

- *Streetcar Feasibility and Conceptual Engineering Study*. In the short term, the initial "Buzz" service in Glendale is recommended as a bus shuttle, with a long term vision for streetcar operations as the system develops (for details see the "Long-Range Improvements in the Shuttle System" section of Chapter 4). City transportation staff have done preliminary forecasting analysis for a downtown trolley, and the City has applied for and received an $800,000 federal grant to undertake a trolley feasibility study beginning in 2008. This study should lay out all the necessary planning, design, and engineering tasks, as well as identify any obstacles for implementation of a streetcar line in Glendale in the long term. The study should also lay out funding options for the streetcar. For example, the steps required to access federal funds that are available for the construction of new urban streetcar infrastructure (a program called "Small Starts"), as well as eligibility requirements should be included in the study. Such a study could then serve as the basis for environmental impact analysis, to be undertaken at the appropriate time. A brief initial review of streetcar potential along the recommended shuttle route is presented in Appendix 4A.
- *East-west Connector Study.* MTA is currently studying options for serving the east-west connector to create a high speed busway connecting Glendale, Burbank, and Pasadena, and connecting Glendale to the north-south high-capacity investments in the area. Once such a system is operational, Glendale will need to provide local connectivity from the single stop at the 134/Central/Brand interchange which could require additional study.

Parking Management

- *Downtown Valet Operations Study.* Pursue a feasibility study of how the City could enter into contractual arrangements with one

or more valet parking operators for all of downtown in order to improve parking management and customer-friendliness, streamline valet parking operations for private and public events with high parking demand, and increase city revenue for the private use of public right-of-way.

- *Wayfinding Signage Post-Implementation Analysis.* After implementation of the multimodal wayfinding signage program, conduct a "post-implementation" analysis (similar to a "post-occupancy analysis conducted by architects) of the effectiveness of the signage program. (See Chapter 5, Recommendation 5.4 for more information).
- *Transportation Impact Fee Nexus Study.* Before implementation of a transportation impact fee for downtown, Glendale must complete a nexus study to determine first that new development creates impacts which must be mitigated, and second, that the *Downtown Mobility Study* provides suitable mitigations ("rational nexus" test). If a reasonable nexus is found, the study will determine the proportional impact of new growth on existing resources and will assign appropriate fee levels ("rough proportionality" test). It generally takes six months to a year to scope and complete a nexus study, and then gain political approval of the fee by the City Council. It is recommended that the fee be structured to ensure that the mitigation fee amount is keeping up with actual mitigation costs. This requires either that the City conduct ongoing periodic nexus studies, or that the City can conduct an initial nexus study for a particular development impact to be mitigated (such as PM peak hour vehicle trips) and then index the fee level to the Consumer Price Index for programmatic costs (such as additional transit service) and the Construction Cost Index for capital costs (such as pedestrian and bicycle safety infrastructure). We recommend the latter to avoid the necessity for ongoing studies. (See Chapter 5, Recommendation 5.12, and Chapter 7, Recommendation 7.5, for additional information).
- *Downtown Development Parking Utilization Study.* Conduct a comprehensive study of actual parking occupancy rates for private residential and commercial development and parking facilities in downtown Glendale. Based on results of that study, consider implementation of:
  - Revised methodology for calculating minimum parking requirements to reflect use patterns and avoid creating barriers to downtown development.
  - A single blended parking requirement for all downtown commercial uses, with provisions made to manage peak parking demands generated by special events and banquets.
  - If necessary, parking maximum requirements to help control growth in traffic congestion while still providing adequate parking for new development. Maximum requirements would be calibrated based on downtown street capacity and desired

reductions in peak-hour auto trips (e.g. achieving performance measures on key corridors and intersections).

- Undertake a *Downtown Goods Movement Study* to develop detailed recommendations for freight routing, locations for loading and unloading, and hours of operation.

Transportation Demand Management

- *TMA Employer Membership Fee Study.* In order to determine the appropriate amount for mandatory TMA membership fees for all downtown employers, the City should partner with the TMA to conduct a study to determine the appropriate methodology for calculating the membership fee. Potential methodologies for calculating the fee could be on a per PM peak hour trip, per employee, and/or per square foot basis. (See Chapter 6, Recommendation 6.1 for additional information).
- *Ongoing Coordination Efforts with LA MTA for Beeline Universal Transit Pass*. This *Downtown Mobility Study* recommends that the City of Glendale implement a universal transit pass program for the Beeline in the short term. As discussed in Chapters 4 and 6, the City should also attempt to coordinate the Beeline universal transit pass program with the three MTA fare payment programs described below. Inclusion of the Beeline in each of these programs will require subsequent cost-benefit analysis and negotiations with the MTA by City staff:
  - **B-TAP (Business Transit Pass):** The MTA currently has a "universal transit pass" program marketed exclusively to businesses call B-TAP. The City could leverage the benefits of the recommended Beeline universal transit pass program by negotiating with the MTA for an appropriate bulk discount price for the B-TAP program, and then require Glendale employers to purchase B-TAP passes in addition to the Beeline passes for their employees in support of the City's goals to reduce the rate of growth in peak hour auto trips downtown.
  - **EZ Pass:** The MTA's "EZ pass" program provides paper transit passes that riders can purchase for a monthly flat fee allowing them unlimited rides on 20 regional transit agencies throughout Los Angeles County. The MTA is already investigating the possibility of including other regional transit agencies in the EZ Pass program, and the City should pursue this opportunity to include the Beeline.
  - **TAP Smart Card:** The MTA currently offers a universal fare payment "smart card" called the TAP (Transit Access Pass) card. This small plastic card is similar to the MTA's regional EZ Pass in the sense that it allows for cashless fare payment. The advantage of the TAP card over the paper EZ Pass is that the TAP card embedded with a small "smart chip" that increases rider convenience (by allowing users to add value to the card online, by phone, or via automatic deduction form the rider's bank account). In addition, if the TAP card is lost or stolen,

users can call the MTA to deactivate the old card and issue a new card for a nominal fee (less than the full replacement cost users would pay to replace a lost or stolen paper transit pass). The TAP card also provides up-to-date ridership data (by automatically tracking boarding and alightings by travel route and travel time) allowing for better service planning decisions. Since the MTA already has a TAP smart card, it would likely be more cost-effective (and more convenient for riders) for the Beeline to be included in the MTA's program, rather than Glendale rolling-out a separate smart card fare payment system.

Coordination of a Beeline universal transit pass with these programs offers an opportunity for Glendale to leverage the benefits of its universal transit pass for riders and the City in support of the *Downtown Mobility Study* recommendations.[2] The ultimate goal of these negotiations with the MTA should be for the Beeline to utilize a single transit "smart card" fare payment system that allows riders cashless fare payment and automatic 'recharging,' and that can be used on the Beeline, MTA, and multiple other regional transit services.

2 While coordination with the MTA's B-TAP, EZ Pass, or TAP smart card programs would leverage the benefits of the Beeline universal transit pass, it is important to note that implementation of a universal transit program of the Beeline should move forward in the short term regardless of the status of negotiations of with the MTA to include the Beeline in these programs.

Figure 8-1 Action Plan of All *Downtown Mobility Study* Recommendations

	Mobility Study Chapter	Rec. No.	Recommended Actions	Next Steps	Lead Implementer(s)	Necessary New / Changed Ordinances	Est. Public Capital Costs	Est. Public O&M Costs	Note(s)	Timeline							
										Immediate (within 1 yr.)	Short Term (within next 5 yrs.)					Med. Term (by 2020)	Long Term (by 2030)
										2007	2008	2009	2010	2011	2012	2013-2020	2021-2030
IMMEDIATE TERM (Within 1 Year)	Street Typology	2.1a	Support and promote programs and projects that enhance Downtown's access via regional transit.	Work with MTA to fund and complete east-west connector study (also see Rec. 4.8)	MTA/Arroyo Verdugo Cities	n/a	n/a	n/a	Study costs to be funded by MTA								
	Street Typology	2.1b	Implement program for adjusting local/ regional transit services to meet performance criteria for the Primary Transit Network.	Detailed recommendations in transit section. Adopt and implement *SRTP* recommendations (also see Rec. 4.6 and 4.4).	Traffic & Transportation Division; Beeline	n/a	n/a	n/a	Costs included in transit recommendations								
	Street Typology	2.3	Adopt the recommended Downtown Street Typology to provide clearer policy guidance for future decisions on street design and operation.	Develop legislative language to operationalize Street Typology recommended in *Downtown Mobility Study*.	Traffic & Transportation Division; Planning Department	Legislate new multi-modal Street Typology.	n/a	Existing City staffing.									
	Street Typology	2.4a	Use auto performance measures as a guide for Downtown streets to focus on optimizing the person-carrying capacity of streets rather than vehicle-carrying capacity.	Develop legislative language to adjust auto performance measures for person-carrying focus.	Traffic & Transportation Division; Planning Department	Legislate new auto performance measures if necessary.	n/a	Existing City staffing.									
	Street Typology	2.4b	Use transit performance measures as a guide for Downtown streets, with new indicator: Transit Quality and Level of Service.	Develop legislative language to operationalize transit performance measures in *Downtown Mobility Study* (Rec. 4.13).	Traffic & Transportation Division; Planning Department	Legislate new transit performance measures.	n/a	Existing City staffing.									
	Street Typology	2.4c	Use pedestrian and bicycle performance measures as a guide for the design and operation of Downtown streets.	Develop legislative language to operationalize pedestrian and bicycle performance measures in *Downtown Mobility Study*.	Traffic & Transportation Division; Planning Department	Legislate new pedestrian and bicycle performance measures.	n/a	Existing City staffing.									
	Street Capacity Enhancements	3.1a	Develop and submit to Council a plan to implement the street capacity enhancement improvements not requiring the acquisition of rights-of-way identified in Appendix A of the DSP no later than July 1, 2007.	Develop *Capacity Enhancement Plan*.	Traffic & Transportation Division	Adopt street Capacity Enhancement Plan.	n/a	Existing City staffing.	For other capacity enhancements, see Rec. 3.2b and 3.2c.								
	Transit Service	4.1	Market the transit resources in Glendale as a single system.	Coordinate with MTA to create combined marketing material.	Traffic & Transportation Division - Beeline	n/a	n/a	$50,000	Costs are for marketing materials and staff.								
	Transit Service	4.2a & 4.3	Create a free downtown shuttle; should connect regional transit and key downtown destinations. Begin service within existing resources. Operate shuttle as frequently as possible with unique and attractive vehicle.	Start up with existing vehicles.	Traffic & Transportation Division - Beeline	n/a	$50,000	Included in Beeline budget.	Costs are for upgrade of existing vehicles; placement of shelters already purchased.								
	Transit Service	4.4	Implement recommendations of *Short Range Transit Plan* including service and capital improvements that affect downtown.	Requires additional vehicles and commitment to new bus facility.	Traffic & Transportation Division - Beeline	n/a	$1-$15 M	n/a	Can be implemented within existing Beeline operating budget. Capital costs are for buses, facility and amenity infrastructure.								
	Transit Service	4.6	Consolidate high frequency services transit on a limited number of transit priority streets; optimize these for transit operation.	Route structure included in *SRTP* (also see Rec. 2.1b and 2.3).	Traffic & Transportation Division - Beeline	n/a	n/a	n/a	Implements SRTP route structure.								
	Transit Service	4.9	Create amenity standards for downtown transit stops. Maximize amenities including signage and other amenities along shuttle route and other transit priority streets.	Adopt standards in *SRTP*. Place shelters and Next Bus equipment already acquired (also see Rec. 4.4).	Traffic & Transportation Division - Beeline	n/a	n/a	n/a	Shelters and Next Bus equipment already acquired.								

Action target date. Action pre- or post-development

Figure 8-1 Action Plan of all *Downtown Mobility Study* Recommendations (continued)

	Mobility Study Chapter	Rec. No.	Recommended Actions	Next Steps	Lead Implementer(s)	Necessary New / Changed Ordinances	Est. Public Capital Costs	Est. Public O&M Costs	Note(s)	Timeline: Immediate (within 1 yr.) 2007	Short Term (within next 5 yrs.) 2008	2009	2010	2011	2012	Med. Term (by 2020) 2013-2020	Long Term (by 2030) 2021-2030
	Transit Service	4.11	Consider utilizing new parking revenue to enhance shuttle and other transit services.	Requires formation of Transportation and Parking District (also see Rec. 5.7).	Traffic & Transportation Division - Beeline	Legislate broader allowable use of Parking Enterprise Fund (Rec. 7.1).	n/a	n/a	Requires implementation of parking pricing recommendations (Rec. 5.2).								
	Transit Service	4.13	Develop performance standards for transit streets that incorporate transit quality of service, and go beyond auto level of service.	*(See Street Typology Recommendation 2.4b above)*													
IMMEDIATE TERM (Within 1 Year)	Parking Management	5.1	Create a "Park Once" district in Downtown Glendale by managing public parking as an integrated system.	Develop legislative language for "Park Once" policy.	Planning Department; Traffic & Transportation Division	Legislate "Park Once" policy and boundaries for downtown.	n/a	Existing City staffing.									
	Parking Management	5.2	Implement coordinated parking management policies for on- and off-street parking using demand-responsive pricing to promote parking goals of 85% occupancy and turnover of short term spaces.	Implement recommended parking management and pricing policies in Mobility Study.	Traffic & Transportation Division	See Rec. 5.1, Rec. 5.7, Rec. 5.8, Rec. 5.15.	unknown / varies	Existing City staffing.	Capital costs for signage and parking payment and occupancy equipment.								
	Parking Management	5.4	Implement a multi-modal transportation and parking wayfinding system, including information on parking direction location, pricing, and real-time parking occupancy.	Secure line item funding allocation in Planning Department FY 2010-11 budget, issue RFP.	Planning Department; Traffic & Transportation Division	Adopt Wayfinding Plan.	unknown / varies	Included in Rec. 5.7a	Capital costs for signage.								
	Parking Management	5.5	Install networked multi-space pay stations and occupancy sensors.	Analyze results of current / pending multi-space meter pilot; issue RFP.	Traffic & Transportation Division	n/a	Varies - stations on Brand approx. $300,000	Included in Rec. 5.7a	Capital costs for signage and parking payment and occupancy equipment.								
	Parking Management	5.7a	Create a Downtown Transportation and Parking Management District managed by the Traffic and Transportation Administor or their delegate in a newly-hired Downtown Mobility Coordinator.	Begin discussions with stakeholders of potential district boundaries and funded projects / programs.	Traffic & Transportation Division	Legislate district boundaries, prices, and funded projects / programs.	n/a	$150,000									
	Parking Management	5.7b	Dedicate all parking revenue to a Downtown Transportation Fund to be invested in transportation and streetscape improvements.	Develop legislative language to convert Parking Enterprise Fund into Downtown Transportation Fund (also see Rec 7.1).	Traffic & Transportation Division	Legislate Downtown Transportation Fund.	n/a	Included in Rec. 5.7a									
	Parking Management	5.10	Require as a condition of approval for new development, parking in new development to be available for public parking when not in use.	Develop revised standards and initiate public hearings / legislative approvals process.	Planning Department	Revise zoning code.	n/a	Existing City staffing.									
	Parking Management	5.11	Require as a condition of approval parking in new development to be shared amongst uses with different demands.	Develop revised standards and initiate public hearings / legislative approvals process.	Planning Department	Revise zoning code.	n/a	Existing City staffing.									
	Parking Management	5.12	Consider implementing a traffic congestion development impact fee based on estimated number of PM peak hour auto trips.	*(See Funding and Finance Recommendations 7.5a - 7.5c below)*													
	Parking Management	5.13	Allow new downtown development to reduce its "parking footprint" by legalizing more efficient parking arrangements in order to facilitate better ground-floor urban design.	Develop revised standards and initiate public hearings / legislative approvals process.	Planning Department	Revise zoning code.	n/a	Existing City staffing.									
	Parking Management	5.14	Expand existing provisions in zoning code that allow new development to go below existing parking minimums, under very specific conditions.	Develop revised standards and initiate public hearings / legislative approvals process.	Planning Department	Revise zoning code.	n/a	Existing City staffing.									

Action target date. Action pre- or post-development

Figure 8-1 Action Plan of all *Downtown Mobility Study* Recommendations (continued)

	Mobility Study Chapter	Rec. No.	Recommended Actions	Next Steps	Lead Implementer(s)	Necessary New / Changed Ordinances	Est. Public Capital Costs	Est. Public O&M Costs	Note(s)	Timeline							
										Immediate (within 1 yr.)	Short Term (within next 5 yrs.)					Med. Term (by 2020)	Long Term (by 2030)
										2007	2008	2009	2010	2011	2012	2013-2020	2021-2030
IMMEDIATE TERM (Within 1 Year)	Parking Management	5.15	Prevent spillover parking as needed reforming existing Parking Preferential Program and converting into Residential Parking Benefit Districts.	Initiate parking utilization study of areas subject to spillover parking problems; begin discussions with stakeholders of potential district boundaries and funded projects / programs.	Traffic & Transportation Division	Legislate district boundaries, prices, and funded projects / programs.	unknown / varies	Included in Rec. 5.7a	Capital costs for signage and parking payment and occupancy equipment.								
	Transportation Demand Management	6.1	Adopt a new strengthened TDM ordinance including mandatory TMA membership and TDM programs.	Draft legislative language and introduce to council (also see Recs. 6.2-6.4).	TMA; Planning Department; Traffic & Transportation Division	TDM ordinance.	n/a	Existing City staffing.									
	Transportation Demand Management	6.7	Strengthen the existing Glendale Transportation Management Associates (TMA) and define roles and responsibilities between the TMA and the City.	Start discussions with the TMA to evaluate current structure and determine best way to administer new TDM Ordinance. Establish regular coordination meetings with TMA to identify mutual goals and implement shared vision.	TMA; Planning Department; Traffic & Transportation Division	n/a	n/a	Existing City staffing.									
	Funding & Finance	7.1	Maximize utilization of new parking revenue to fund Downtown Mobility Study recommendations by boradening eligible uses of parking funds to include a broad range of *Downtown Mobility Study* recommendations.	Develop legislative language to allow broader use of Parking Enterprise Fund (also see Rec, 4.11 and 5.7b).	Traffic & Transportation Division	Legislate broader allowable use of Parking Enterprise Fund.	n/a	Included in Rec. 5.7a									
	Funding & Finance	7.4a	Work with dowtown stakeholders to investigate formation of a downtown Business Improvement District (BID) or a Mello-Roos District.	Initiate conversations with affected stakeholders to gauge interest.	Planning Department	n/a	n/a	n/a									
	Funding & Finance	7.5a	Initiate a transportation impact fee nexus study to mitigate auto trips and congestion impacts of new development.	Issue an RFP and begin nexus study (Rec. 5.12).	Traffic & Transportation Division; Planning Department	Legislate Traffic Impact Fee.	n/a	Existing City staffing									
	Funding & Finance	7.8	Work with local and regional transportation leaders to position transportation projects recommended by the *Downtown Mobility Study* to be eligible for funding under the state transportation bond package.	Immediately begin conversations with MTA and other local & regional transportation agency leaders.	Traffic & Transportation Division	n/a	n/a	n/a									
SHORT TERM (Within 5 Years)	Street Typology	2.2	Create a *Downtown Streetscape Plan*, consistent with this *Downtown Mobility Study* to guide improvements such as enhanced lighting, street landscaping, crosswalks, and signage.	Secure line item funding allocation in Planning Department FY 2007-08 budget, issue RFP.	Planning Department	Adopt Streetscape Plan.	n/a	Existing City staffing.									
	Street Capacity Enhancements	3.1b	Implement a street capacity enhancement and freeway access improvement program for improvements not requiring acquisition of rights-of-way no later than Dec. 31, 2010 .	Implement currently approved/required capacity enhancements as part of Americana at Brand project.	Traffic & Transportation Division	n/a	unknown / varies	unknown / varies	Other capacity enhancements to be implemented as necessary and as right-of-way acquisition and funding permits (see Rec. 3.2c).								
	Transit Service	4.5	Bring transit fares closer together: ≥ $0.50 on Beeline. Negotiate with MTA for a local Glendale fare.	Beeline fare changes included in SRTP.	Traffic & Transportation Division - Beeline and MTA	n/a	n/a	n/a	Requires negotiation with MTA on local fares.								
	Transit Service	4.7	Signal priority and operational enhancements on streets with 10 minute frequency at peak periods.	Expand signal priority and improve amenities on transit streets.	Traffic & Transportation Division - Beeline	n/a	$1 M	n/a	Costs are for signal and amenity enhancements.								
	Transit Service	4.8	Work with MTA for "east-west" connector service with convenient connections to downtown shuttle.	East-West Connector study.	Traffic & Transportation Division - Beeline and MTA	n/a	unknown	unknown	MTA study scheduled for 2007.								
	Transit Service	4.10	Incorporate real time information in all high amenity bus shelters using Next Bus technology.	Install next bus signs that have already been purchased.	Traffic & Transportation Division - Beeline	n/a	n/a	n/a	16 Next Bus signs have already been purchased.								

Action target date. Action pre- or post-development

Figure 8-1 Action Plan of all *Downtown Mobility Study* Recommendations (continued)

	Mobility Study Chapter	Rec. No.	Recommended Actions	Next Steps	Lead Implementer(s)	Necessary New / Changed Ordinances	Est. Public Capital Costs	Est. Public O&M Costs	Note(s)	Timeline: Immediate (within 1 yr.)	Short Term (within next 5 yrs.)					Med. Term (by 2020)	Long Term (by 2030)
										2007	2008	2009	2010	2011	2012	2013-2020	2021-2030
SHORT TERM (Within 5 Years)	Transit Service	4.12	Provide Universal Transit Passes to residents of all new downtown development.	*(See TDM Recommendation 6.2c)*													
	Parking Management	5.3	Implement parking pricing system for Glendale Transportation Center (train riders park free all day, all others pay).	Initiate parking utilization study of GTC; begin discussions with Metrolink re platform parking validation.	Traffic & Transportation Division	None needed once Rec. 5.8 implemented.	unknown / varies	Included in Rec. 5.7a	Capital costs for signage and parking payment, occupancy, and validation equipment.		■						
	Parking Management	5.6	Continue protocals that dedicate adequate parking spaces throughout downtown for loading zones, taxi stands, and ADA-accessible parking.	Survey existing dedicated spaces and identify deficits (if any).	Traffic & Transportation Division	Legislate location, type, number of dedicated spaces.	n/a	Included in Rec. 5.7a			■						
	Parking Management	5.8	Authorize Traffic and Transportation Administrator to adjust parking rates, hours, and time limits over time to achieve 85% occupancy.	Survey best practices and draft legislative language.	Traffic & Transportation Division	Legislate parking management responsibility to Traffic and Transportation Administrator of their delegate.	n/a	Included in Rec. 5.7a			■						
	Parking Management	5.9	Pursue study of single valet parking operator for all of downtown valet parking events.	Survey best practices and issue RFP.	Traffic & Transportation Division	Approval of unified valet contract.	n/a	Included in Rec. 5.7a	Likely revenue positive over existing multi-party contracts.		■						
	Transportation Demand Management	6.2a	Create a Universal Transit Pass Program for the Glendale Beeline by negotiating a deep bulk discount for both residents and employees.	Begin to negotiate bulk rate purchase price for Beeline.	Traffic and Transportation Division	n/a	n/a	Included in Rec. 5.7a				■	▒				
	Transportation Demand Management	6.2b	Require employers to provide Beeline passes to all new and existing downtown employees as part of TMA membership.	Pass new TDM Ordinance and negotiate adminstration of Transit pass program with TMA (see Rec. 6.1).	Traffic and Transportation Division	TDM ordinance	n/a	Included in Rec. 5.7a				■	▒				
	Transportation Demand Management	6.2c	Require provision of Beeline passes to all residents in new downtown developments as a condition of approval for new development, funded through condominium fees and rents.	Pass new TDM Ordinance and negotiate adminstration of Transit pass program with TMA (see Rec 6.1)	Traffic and Transportation Division; Planning Department; MTA	Legislate pass program as a condition of approval.	n/a	Included in Rec. 5.7a	Possibly funded through condominium home owner association (HOA) fees.			■	▒				
	Transportation Demand Management	6.2d	Negotiate with the MTA for a deeper discount on universal transit pass cost. Require MTA passes to be provided to all downtown employees and residents, funded by the same mechanisms described above for Beeline passes.	Begin negotiatiions with MTA for package of changes as described in Chapters 4 and 6.	Traffic and Transportation Division	n/a	n/a	Included in Rec. 5.7a				■	▒				
	Transportation Demand Management	6.3a	Begin an education/ enforcement program for existing state parking cash-out law.	Determine administration of Parking Cash-out with TMA.	Traffic and Transportation Division; Planning Department; TMA	Legislate compliance mechanisms.	n/a	Included in Rec. 5.7a				■					
	Transportation Demand Management	6.3b	Adopt an expanded parking cash-out law for all downtown employers.	Begin conversations with stakeholders (see Rec. 6.1).	Traffic and Transportation Division; Planning Department; TMA	Legislate compliance mechanisms.	n/a	Included in Rec. 5.7a				■					
	Transportation Demand Management	6.3c	Formalize annual compliance reporting, monitoring, and enforcement program for local cash-out requirements	Begin conversations with stakeholders.	Traffic and Transportation Division; Planning Department; TMA	Legislate compliance mechanisms.	n/a	Included in Rec. 5.7a			■						
	Transportation Demand Management	6.4	Revise development standards to include bicycle facility requirements for new downtown development.	Draft new development standards based on best practices (see Rec. 6.1).	Planning Department	Legislate bicycle facility requirements.	n/a	Existing City staffing			■	▒	▒	▒			
	Transportation Demand Management	6.5	Encourage car-sharing by converting city fleet to car-sharing program and/or directly subsidize start-up costs of an existing car share provider.	Calculate potential cost-savings for conversion of city fleet; begin negotiations with existing carshare provider to expand into Glendale market.	Traffic & Transportation Division	n/a	unknown	Unknown - could be revenue neutral or positive.	Conversion of City fleet will likely save the City money (savings of 25-60% are typical).		■	▒					

■ Action target date. ▒ Action pre- or post-development

Figure 8-1 Action Plan of all *Downtown Mobility Study* Recommendations (continued)

	Mobility Study Chapter	Rec. No.	Recommended Actions	Next Steps	Lead Implementer(s)	Necessary New / Changed Ordinances	Est. Public Capital Costs	Est. Public O&M Costs	Note(s)	Timeline							
										Immediate (within 1 yr.)	Short Term (within next 5 yrs.)					Med. Term (by 2020)	Long Term (by 2030)
										2007	2008	2009	2010	2011	2012	2013-2020	2021-2030
SHORT TERM (Within 5 Years)	Transportation Demand Management	6.6	Establish Downtown Transportation Resource Center managed by Traffic and Transportation or their delegate.	Locate a high-visibility, convenient downtown location; possible joint-use facility.	Traffic & Transportation Division	n/a	unknown	unknown	Costs are reduced if Center is located in existing City facility.								
	Funding & Finance	7.2	Dedicate Redevelopment Agency downtown tax increment revenue to implement Mobility Study projects.	Work with Redevelopment Agency to identify available funds and potential recipient projects / programs.	Redevelopment Agency; Planning Department; Traffic & Transportation Division	n/a	n/a	n/a									
	Funding & Finance	7.3	Pursue implementation of a gross receipts parking tax on commercial parking.	Begin to outreach to stakeholders and general public with goal of placing on 2010 ballot.	Traffic & Transportation Division	City Council places on the ballot; must pass with 2/3 voter approval.		Existing City staffing.	Contract with professional assistance to help develop campaign messages.								
	Funding & Finance	7.4b	Implement Business Improvement District (BID) or Mello-Roos District. Once implemented, work with the District to advance public/private funding of significant streetscape capital projects or long-term transit capital projects.	Develop legislative language to establish district boundaries, assessments, and funded projects / programs.	Traffic & Transportation Division; Planning Department	Legislate district boundaries, assessments, and funded projects / programs.	n/a	Existing City staffing.									
	Funding & Finance	7.5b	If traffic impact fee nexus study finds a nexus, (per Rec. 7.5a), implement an impact fee for new downtown development. Dedicate fee revenues to a Downtown Transportation Fund.	Initiate nexus study (Rec. 7.5a).	Traffic & Transportation Division; Planning Department	Legislate Traffic Impact Fee.	n/a	Existing City staffing.									
	Funding & Finance	7.6	Increase transit service to schools via a cost-share arrangement between City and School District and/or a Universal School Transit Pass program.	Begin negotiations with School District re unmet mobility needs, cost shares, and Universal Transit Pass program.	Traffic & Transportation Division; School District	n/a	unknown	Unknown									
	Funding & Finance	7.7	Position new projects to receive federal, state, and regional grant funds and change budget process to recognize grant funds as revenue.	Work with TMA to develop grant calendar and criteria for all relevant grants.	Traffic & Transportation Division	Legislate new grant accounting methods.	unknown	Included in Rec. 5.7a	May require local match.								
	Funding & Finance	7.9	Apply for state grants like Safe Routes to Schools.	Work with TMA to develop grant calendar and criteria for all relevant grants.	Traffic & Transportation Division; TMA	n/a	unknown	Included in Rec. 5.7a	May require local match.								
	Funding & Finance	7.11	Work with Congressional delegation to secure federal funding for large-scale capital projects in the next transportation bill (2009).	Develop coordinated lobbying effort for federal legislators.	Local / Regional Transportation Decision makers	n/a	unknown	unknown	May require local match.								

Action target date. Action pre- or post-development

Figure 8-1 Action Plan of all *Downtown Mobility Study* Recommendations (continued)

	Mobility Study Chapter	Rec. No.	Recommended Actions	Next Steps	Lead Implementer(s)	Necessary New / Changed Ordinances	Est. Public Capital Costs	Est. Public O&M Costs	Note(s)	Timeline: Immediate (within 1 yr.) 2007	Short Term (within next 5 yrs.) 2008	2009	2010	2011	2012	Med. Term (by 2020) 2013-2020	Long Term (by 2030) 2021-2030
MEDIUM TERM (By 2020)	Street Capacity Enhancements	3.1c	Implement street capacity enhancement improvements that do require the acquisition of rights-of-way identified in Appendix A of the DSP as opportunities develop.	Develop/update Capacity Enhancement Plan.	Traffic & Transportation Division	Adopt updates to Capacity Enhancement Plan.	n/a	Existing City staffing.									
	Transit	4.2b	Change downtown shuttle to a hybrid bus or other unique vehicle; increase frequency ≤10 minutes to maximize ridership.	Decide on vehicle type; locate funding for vehicles.	Traffic & Transportation Division - Beeline	n/a	$4M	$1 M	Costs are for vehicles and additional frequency.								
	Parking Management	5.16	If and when total demand cannot be met with existing supply, build new public shared parking.	Monitor parking occupancy; identify potential opportunity sites when total downtown peak occupancy regularly exceeds 80%.	Traffic & Transportation Division; Community Redevelopment Agency	n/a	unknown	unknown	Total capital cost per new space gained in 2005$ is $43,985.								
	Transportation Demand Management	6.8	Monitor effectiveness of existing and new TDM programs; implement new measures as needed.	Develop TDM performance goals.	Traffic & Transportation Division; TMA	n/a	n/a	Included in Rec. 5.7a	Ongoing once near-term TDM programs are implemented.								
	Funding & Finance	7.1	Work to make Mobility Study projects a priority in the next update of the Regional Transportation Plan.	Begin to coordinate with local/regional transportation leaders and agencies.	Traffic & Transportation Division	n/a	n/a	n/a	Ongoing as part of RTP update process.								
LONG TERM (By 2030)	Transit Service	4.2c	Implement a new technology for shuttle and other lines.	Complete series of studies necessary for streetcar feasibility and implementation.	Traffic & Transportation Division - Beeline	n/a	unknown	unknown	Likely to be upwards of $25M for full implementation.								

Action target date. Action pre- or post-development

CREDITS

CREDITS

DOWNTOWN SPECIFIC PLAN ADVISORY GROUP

The DSP Advisory Group was convened by Planning and Development Services staff on March 27, 2006 and met an additional eight times during the drafting of the *Downtown Specific Plan*. Three of the Advisory Group meetings were focused on the *Downtown Mobility Study*, including a joint meeting with the Transportation and Parking Commission.

Comprised of a cross section of downtown interests (Business Owners/Representatives, Brokers/Developers/Architects, Current and Past Commissioners, and Neighborhood & Historic Associations), the Advisory Group participated in a series of staff-led workshops to "fine-tune" the DSP proposals and framework through advice, comment and criticism.

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