



Carson City Downtown Parking Strategy

April 2007



Prepared by



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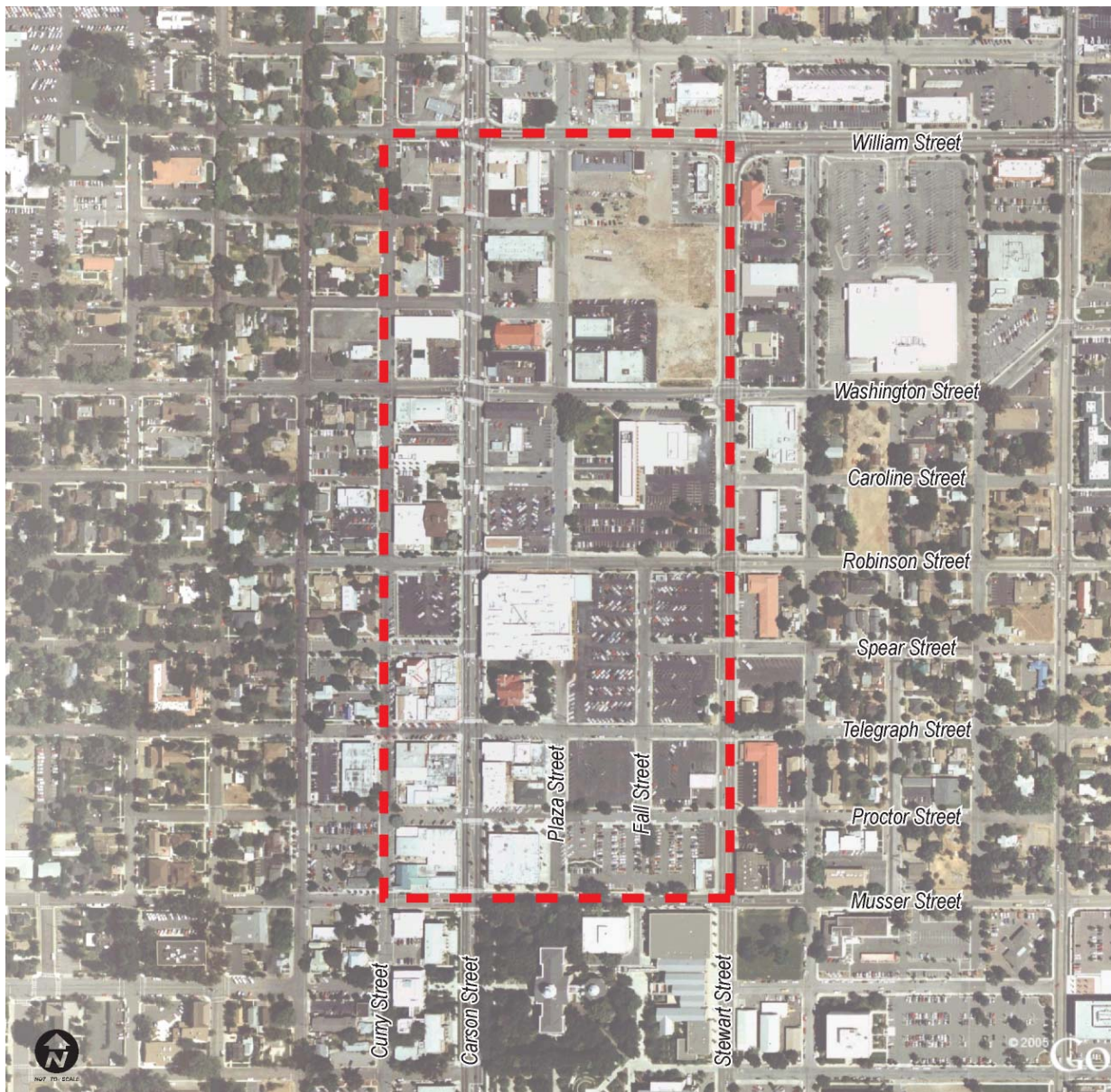
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1. INTRODUCTION

STUDY AREA

The study area for the Carson City Downtown Parking Strategy is shown on **Figure 1**. The study area is bounded by William Street to the north, Stewart Street to the east, Musser Street to the south and Curry Street to the west. It encompasses approximately 36 blocks of Downtown Carson City.

Figure 1 Study Area



Redevelopment of the study area is proposed over the next 10 years, with the completion of the Carson City Freeway, to create a more pedestrian-friendly environment downtown. With the completion of the Carson City Freeway, a reduction of through traffic in downtown is expected. In conjunction with the redevelopment, a strategy for managing the parking in the area is desired.

There are many land uses in Downtown Carson City. Several government institutions have facilities throughout downtown including: the State Capitol, Federal Building, Carson City Hall, Museum Complex, the Nevada Tourism building, and the Secretary of State's offices. Other uses in downtown include retail, restaurant, casino, and lodging (motels). Off-street parking facilities occupy approximately 12 of the 26 blocks in the study area. In addition, many of the streets within the study area provide on-street parking. Existing land uses within the study area are shown on Figure 2.

Figure 2 Existing Land Use



ROADWAY NETWORK

The roadway network within the study area is a grid of blocks that are approximately 200 feet by 200 feet. The grid is comprised predominantly of two-lane streets with on-street parking. The on-street parking is a mixture of parallel and angled parking. Select roadway segments within the study area are one-way streets.

Three major (arterial) roadways that provide north-south circulation within the study area include:

Carson Street is the portion of US 395 and US 50 that passes through downtown Carson City. The roadway has two travel lanes in each direction as well as left turn lanes at each intersection. There is no on-street parking on Carson Street. There are several marked crosswalks on Carson Street.

Stewart Street is located three blocks east of Carson Street. The roadway has two travel lanes in each direction and no exclusive turn lanes at intersections. There is no on-street parking on Stewart Street.

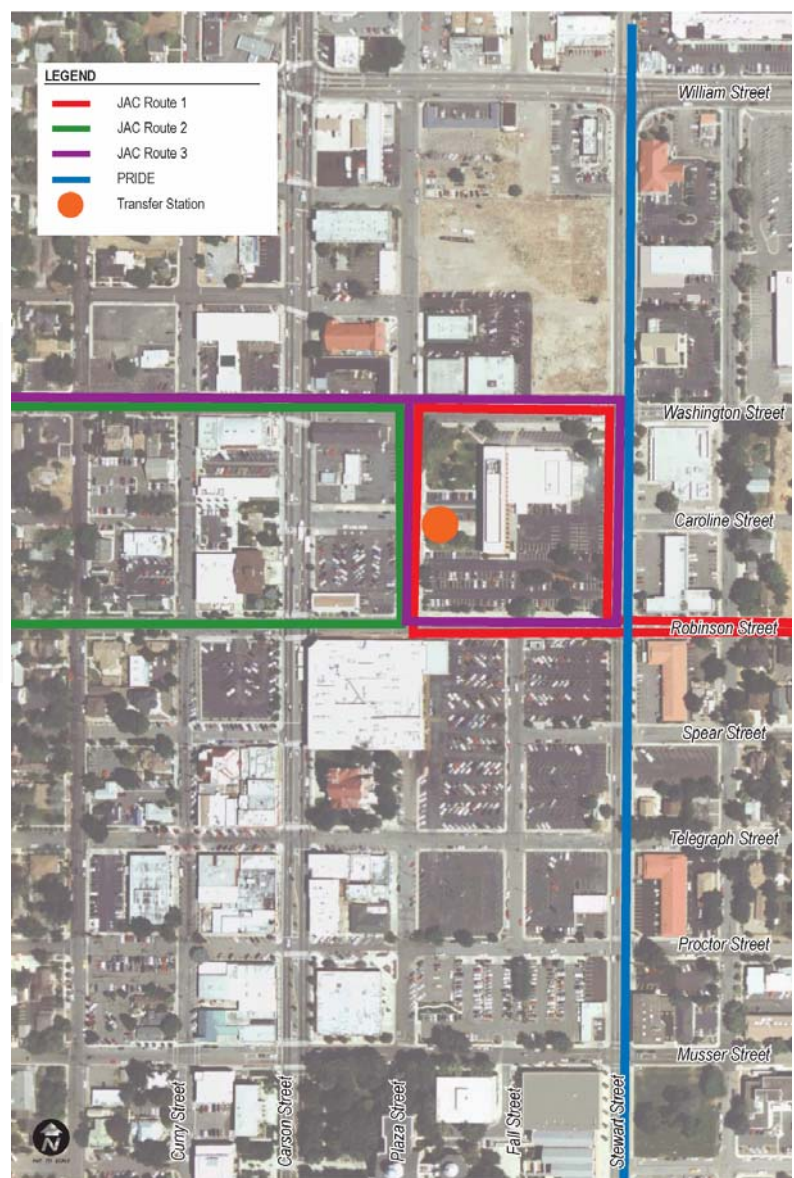
William Street is the portion of US 50 that borders the northern edge of the study area. The roadway has two travel lanes in each direction as well as a continuous left turn lane east of Carson Street. This segment does not provide on-street parking. West of Carson Street the roadway has one travel lane in each direction, on-street parking, and does not have exclusive turn lanes.

Robinson Street and **Washington Street** are collector roadways that provide east-west circulation within the study area.

EXISTING TRANSIT

Jump around Carson (JAC) is the transit provider within Carson City. JAC provides three routes within the city. Route 1 provides service between the new Carson Tahoe Hospital on the north side of the city and the Federal Building in downtown. Route 2 provides service in both clockwise and counter-clockwise directions between the Federal Building, Western Nevada Community College, and the Carson Airport. Route 3 provides service between the Federal Building and Carson Valley Plaza on the south edge of town. The major transfer point between all routes is at the Federal Center, which is centrally located in the study area and within one quarter mile of the Downtown Carson City land uses within the study area. An additional route – RTC Intercity (formerly known as PRIDE) – is the Washoe County Regional Transportation Commission's intercity bus route serving Reno and Carson City. The route has stops along Stewart Street within the study area. All of the transit routes are within one quarter mile of the Downtown Carson City land uses within the study area. Figure 3 shows the routes within Downtown Carson City.

Figure 3 Existing Transit Service



2. FUTURE DEVELOPMENT

Future land uses in Downtown Carson City are expected to include mixed use retail, residential, conference/meeting space, and hotel. Typically, the retail will be located at ground level with residential units on the upper floors. Several uses will remain unchanged including many of the government uses.

PARKING DEMAND

We analyzed the number of additional parking spaces that would be required by a reasonable amount of future development and mix of land uses in the Downtown study area at “buildout” based upon the Master Plan land use description for the Downtown. Potential land uses that may be constructed in downtown area include approximately:

- 130,000 square feet of mixed retail and restaurant
- 200,000 square feet of major retail
- 200 room motel
- 30,000 square feet of conference/meeting space
- 200 apartments and condos

Table 1 shows the parking demand for each of the new uses. The demand is based on the Institute of Transportation Engineers’ (ITE) published parking rates.

TABLE 1 – FUTURE ADDITIONAL PARKING DEMAND				
Land Use	Amount	Parking Demand Rate	Demand	Opportunity for Shared Parking?
Mixed Retail/Restaurant	130 ksf	3.0/1,000 sf	390	Yes
Major Retail	200 ksf	3.0/1,000 sf	600	Yes
Motel	200 rooms	0.9/room	180	Yes
Conference Center	30 ksf	1.8/1,000 sf	54	Yes
Apartments/Condos	200 units	1.5/unit	300	Yes
<i>Total</i>			<i>1,524</i>	
Source: Fehr & Peers, 2006				

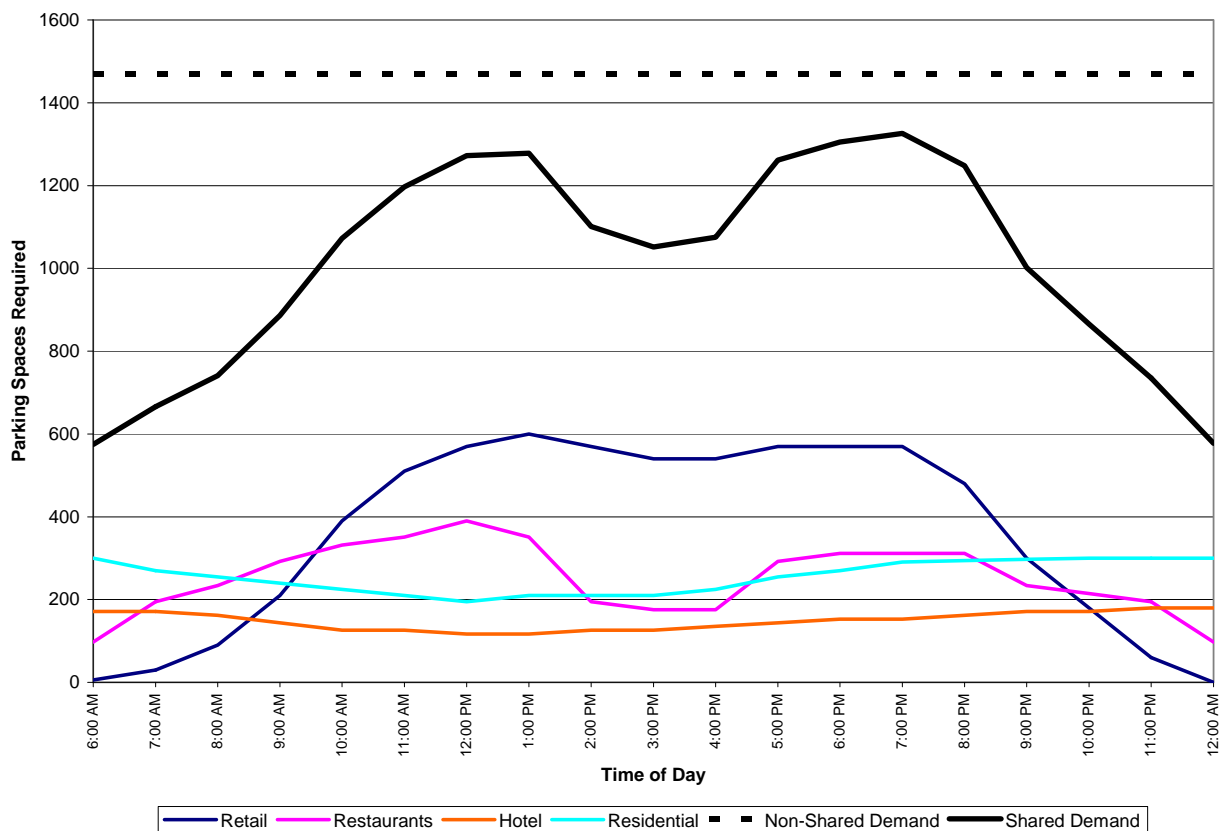
The calculated parking demand shows the peak demand for each land use. It is important to note that these peak demand periods usually do not occur at the same time. This phenomenon allows for the opportunity for shared parking facilities allowing different uses to use the same parking area during different times of the day. The ability to share parking reduces the number of parking spaces that are needed for the additional development.

Each of the potential land uses has the ability to share parking with other uses at different periods of the day. The parking demand for each land use was calculated between the hours of 6:00 AM and 12:00 Midnight based on the information provided for each land use in *Shared Parking* by the Urban Land Institute (ULI). The following guidelines were used to determine parking demands for these time periods.

Table 2 shows a sample of parking demand at different times of day for the proposed new developments. The demand generated for the full range of hours is shown on Figure 4.

TABLE 2 – PARKING DEMANDS AT VARIOUS TIMES OF DAY					
Land Use	7:00 AM	1:00 PM	3:00 PM	7:00 PM	10:00 PM
Retail	30	600	540	570	180
Restaurants	195	351	176	312	215
Hotel	171	117	126	153	171
Residential	270	210	210	291	300
<i>Total</i>	<i>666</i>	<i>1278</i>	<i>1052</i>	<i>1326</i>	<i>866</i>

Figure 4 Future Shared Parking Demand



PARKING DEMAND CONCLUSIONS

The anticipated peak parking demand for future uses within the study area at buildout is approximately 1,326 spaces (see Table 2). This peak demand occurs in the evening, around 7:00 PM, with noon-hour demand also approaching peak demand. A total of 1,470 parking spaces are required to accommodate this peak parking demand while maintaining a 10 percent vacancy rate (90 percent occupancy rate) to ensure the availability of spaces.

Based on the recent parking inventory, there are 705 public on-street parking spaces and 420 public parking lot spaces available within the study area, for a total of 1,125 public spaces. Private parking lots account for an additional 648 spaces, with the Nugget alone providing 510 spaces. This inventory excludes parking lots for the federal building and some smaller private lots serving adjacent businesses.

Parking utilization surveys conducted in June 2005 when legislature was in session indicated that at peak utilization, approximately 66 percent of the existing public spaces available were occupied. When this utilization rate reaches 90 percent, additional parking should be provided. The existing parking supply in Downtown Carson City can accommodate demand for approximately 267 more parking spaces before additional supply is required.

This parking analysis is not intended to imply that additional parking will not be provided and available beyond the minimum amounts identified. Under the proposed Mixed-Use Downtown Code, new development will be required to provide on-site parking and/or pay an in-lieu fee to the City to help fund additional future parking structures to meet future parking demand for new uses.

With the public spaces and on-site private and shared spaces provided with future private development, an adequate supply of parking should be maintained. As the Downtown develops, the City should continue to monitor the supply of parking based on actual demand and make appropriate adjustments to parking requirements and/or provide additional public parking to ensure a continued supply of parking to serve the Downtown.

The parking analysis also showed localized areas where public parking demand currently approaches or exceeds the desired 90 percent occupancy rate at peak demand under current conditions. This primarily occurs between Carson Street and Fall Street from E. Musser Street to E. Caroline Street, and between Carson Street and Nevada Street around W. Spear and W. Telegraph Streets. Short-term recommended actions include better signage to direct drivers to public parking areas that are currently underutilized. This should also be a continued long-term strategy as part of the overall parking demand monitoring program.

3. PARKING MANAGEMENT GOALS

We coordinated with Carson City staff to develop a set of principles to guide the evolution of parking management in Downtown Carson City.

PARKING

Create a pedestrian-friendly environment through proper siting of parking.

Location of parking structures and lots is a key aspect of achieving this goal. Locating structures and lots near major destination land uses will minimize conflicts with pedestrians. Integrate pedestrian access needs into planning, programming, design and construction of all parking and facility projects. Design the pedestrian environment to be safe, convenient, attractive and accessible for all users. Provide landscaping, pedestrian-scale lighting, and benches to enhance the pedestrian environment. Provide pedestrian access to all existing and planned parking lots and structures.

Emphasize convenient parking locations.

Increase the parking supply in high demand areas. Locating structures and lots is a key aspect of achieving this goal.

Emphasize cost effectiveness or optimum land use (structures vs. surface lots).

Decisions to build structures are based on land value and surface constraints imposed by site planning and surrounding uses. Structured parking costs more; however, takes up less space and minimizes the visual impact of parked cars. Surface lots cost less; however, take up more land area.

Encourage alternative modes of transportation.

Provide safe and convenient bicycle parking in parking structures and lots, including providing the physical elements in structures for sheltered bicycle parking. Provide a continuous network of safe and convenient bikeways connecting bicycle parking to other transportation modes and local bikeway systems.

Provide parking at a level that serves the identified need.

Provide parking based on an analysis of current and future needs. Incorporate the expectation that transit, bicycling and walking will be competitive alternatives to auto use in the future.

Explore shared parking opportunities.

Provide for opportunities for shared parking for private development and in private-public partnerships.

Reduce the visual impact of parking structures with creative siting.

Reduce the visual impact of parking structures by incorporating them into buildings, constructing artificial facades, etc.

Create a “Park Once” environment.

Centralized, shared parking encourages people to park and walk to various destinations as opposed to driving and parking at each destination.

Utilize Intelligent Transportation Systems (ITS) for parking facilities.

ITS applications are intended to inform drivers regarding parking activities. These applications provide real-time information for a variety of applications: directional signing to parking destinations, parking availability at individual garages, directional signing within garages to available parking spaces. Centralized pay facilities are also part of the ITS environment to speed payment transactions at garage exits and at parking meters.

CIRCULATION

Provide a balanced transportation system.

Provide a high level of access and mobility for all travel modes, and provide linkages between travel modes to form a seamless circulation network. Modifications and system improvements for transit, walking and bicycles can complement transportation demand management efforts in reducing trips and congestion.

Improve the transit system.

Encourage transit providers to expand existing transit routes, frequency, and level of service commensurate with Downtown growth. Continue to provide and expand transit service that is convenient to Downtown land uses.

Provide well-designed intersections and crossing locations.

Adequately serve pedestrian flows across roadways during peak periods.

Increase bicycle circulation.

Provide a continuous, comprehensive network of bike routes. Improve bicycle routes and access to and between major community destinations. Incorporate bicycle parking in parking structures and with new land uses.

Increase pedestrian circulation.

Emphasize pedestrian circulation throughout the Downtown core. Provide a convenient, continuous and interconnected pedestrian circulation system utilizing sidewalks, paths, adequate lighting and amenities. Ensure safe pedestrian access between all parking areas and destinations.

Reduce Through Traffic on Carson Street.

Convert Carson Street to a two-lane roadway with on-street parking and enhanced sidewalks. Reducing vehicular lanes on Carson Street provides an enhanced pedestrian environment and encourages pedestrian circulation. Discourage the use of Carson Street as the primary north-south through-traffic route through Downtown. This must be done in conjunction with other street improvements to accommodate anticipated local vehicular trips.

Enhance the Street Environment.

Enhance the street environment for pedestrians and improve safety by calming and controlling traffic.

Increase pedestrian safety.

Minimize conflicts between pedestrians and vehicles; where conflicts cannot be avoided, channel pedestrians to safe and convenient crossing locations.

Provide way-finding/signage.

Provide a graphics and signage program for the Downtown core, including parking and directional signs, pedestrian orientation, and safety and accessibility signage.

4. PARKING MANAGEMENT STRATEGIES

Two types of parking management strategies were explored to address the principles developed by the City of Carson City. The two types of strategies are:

- **Type 1** – Increase parking facility efficiency
- **Type 2** – Reduce parking demand

Table 3 provides a list of strategies and descriptions for each type of parking management.

TABLE 3 – PARKING MANAGEMENT STRATEGIES	
Strategy	Description
1. Strategies That Increase Parking Facility Efficiency	
Shared Parking	Provide parking spaces that serve multiple users or destinations.
Regulate Parking	Establish regulations that encourage more efficient use of parking facilities.
Establish more accurate and flexible standards	Adjust parking standards to more accurately reflect demand in a particular situation.
Establish parking maximums	Establish maximum parking supply regulations.
Provide remote parking and shuttle services	Provide off-site or urban fringe parking facilities and encourage their use.
Implement smart growth policies	Incorporate land-use policies that encourage more compact, mixed, multimodal development.
Improve walking and cycling conditions	Improve walking and cycling conditions to expand the range of destinations serviced by a parking facility and reduce vehicle trips.
Increase capacity of existing parking facilities	Increase the level of parking supply by using otherwise wasted space, smaller stalls, car stackers, and valet parking.
2. Strategies that Reduce Parking Demand	
Implement mobility management	Encourage more efficient travel patterns, including changes in mode, timing, destination, and vehicle trip frequency.
Price Parking	Charge motorists directly for using parking facilities.
Improve pricing methods	Use better charging techniques to make pricing more convenient and cost effective.
Provide financial incentives	Provide financial incentives to shift mode, such as parking cash-out and transit benefits.
Unbundle parking	Rent or sell parking facilities separately from building space, so occupants pay for parking they use.
Reform parking taxes	Implement various tax policy changes that support parking management objectives.
Provide bicycle facilities	Provide bicycle storage and changing facilities.
Source: <i>Parking Management Best Practices</i> Litman, Todd, p 201.	

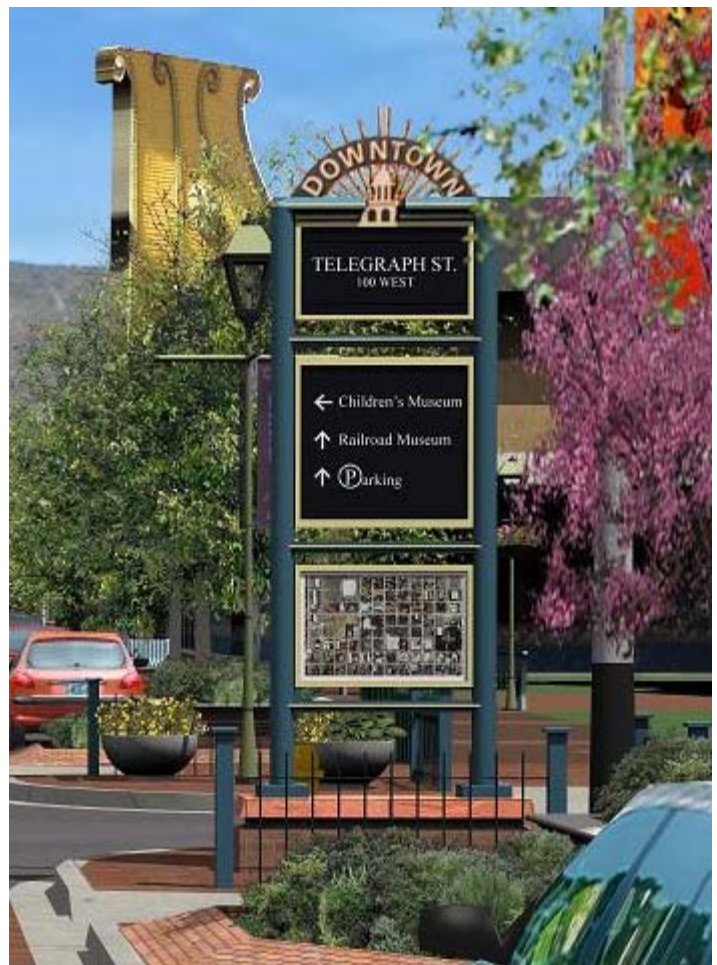
SHORT TERM PARKING MANAGEMENT STRATEGIES

Wayfinding signage

Wayfinding signage directs visitors to various destinations including, but not limited to, parking, government buildings, and tourist destinations. The key to a successful wayfinding signage program is to use consistent labeling on signs throughout the area, make labels clear and concise, and locate signs appropriately depending on the intended user.

Two types of wayfinding signage should be considered for use in Downtown Carson City: signage for use by motorists and signage for use by pedestrians. Signage for motorists should be located at the gateways to Downtown Carson City for example on southbound Carson Street at William Street, on William Street at Stewart Street, on northbound Carson Street at Stewart Street, and on northbound Carson Street at 5th Street. These signs should provide basic information directing motorists to parking and major destinations (i.e. Capitol Building, Carson City Hall, casinos, etc.). We recommend that parking for various uses is color coded on the wayfinding signs and on the signs at the parking lot. For example casino parking could be coded purple, public parking could be coded green, and public parking that is available on evenings and weekends coded orange.

Signage for pedestrians can more detailed information about various uses and is often provided on kiosks. In addition, the kiosk can also provide hard copies of maps and other Downtown Carson City information for pedestrians to take with them. Pedestrian level wayfinding signage should be located throughout the downtown area and at entrances/exits to major destinations.



Time Restrictions

Time restrictions can be used to effectively manage convenient parking areas. Since the number of on-street parking spaces is limited, time restrictions help maximize their usage to benefit the greatest number of users. Time restrictions encourage turnover of each parking space. The restrictions help discourage employee and other long term parkers from using spaces that are most convenient for customers and other patrons. Within a given area time restrictions could range from no restrictions to as short as 5 to 15 minutes. Very short time limits are used at high turnover places such as banks, post offices, transit stations and other busy locations. Locations such as supermarkets, bakeries, and drug stores usually can accommodate parking of one hour or less. Time limits of two to three hours are useful in areas surrounding the Central Business District (CBD).

To manage the convenient parking, a fee could be charged (via parking meters or a similar fee collection system). Parking that is most convenient is priced higher than parking that is further away. A patron who requires short-term parking is typically willing to pay a higher price for a convenient space, if they do not have to search for parking. The pricing should be adjusted to achieve an 85% occupancy rate. The benefits to pricing convenient parking include a more efficient parking system, less vehicles circulating (searching for a parking space), higher parking turnover, and patrons not using convenient, premium parking for longer stays.



Reserve Convenient Parking Spaces for Customers

Reserving convenient parking spaces for patrons of Downtown businesses enhances their shopping and dining experience by making getting to and from the businesses easy. Owners and employees of Downtown businesses could be required to park outside of the core downtown business district by parking permits. Owners and employees that violate the parking requirement would be fined (i.e. \$25.00 for the first offense and \$50.00 every time thereafter).

To further ease the parking experience, patrons of downtown businesses that overstay parking time limits could receive a minor fine of only \$5.00 that is voided by validation by any downtown business with a \$10.00 purchase. Along with the parking ticket, the patron could receive a welcome packet with information on downtown businesses from the Downtown Merchant Association.

On-Street Accessible Parking Spaces

On-street accessible parking should comply with the American Disability Act (ADA) guidelines. Recently, the ADA Guidelines for Accessible Public Right-of-Ways (Draft 2 November 2005) has been updated, and includes guidance on on-street accessible parking spaces. The Accessible Public Right-of-Ways guidelines are in the second draft stage; however, alterations performed in a public right-of-way should comply with these guidelines. An alteration refers to any physical change to a public space. For example, if a new sidewalk was being constructed the design of the sidewalk would need to comply with the ADA guidelines. The guidelines do not require an agency to retrofit existing facilities to meet the guidelines.

The number of on-street accessible parking spaces is based on the total number of parking spaces on the block perimeter as shown in Table 4.

TABLE 4 – ACCESSIBLE PARKING SPACES	
Total Number of Marked or Metered Parking Spaces on the Block Perimeter	Minimum Required Number of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 and over	4% of total
Source: Access Board, ADA Revised Draft Guidelines for Accessible Rights-of-Way, November 2005	

The ADA guidelines also provide guidance for placement and design of accessible parking spaces. The guidelines advise that on-street parallel accessible parking is “placed where the street has the least crown and grade and is close to key destinations. Adjacent sidewalk space should be free of obstructions (including curb ramps) to permit deployment of a van side-lift.” Parallel parking that is adjacent to a wide walkway (walkways that are greater than 14 feet) shall have a 5-foot wide access aisle at the street level that extends along the full length of the parking space. The access aisle shall connect to a pedestrian access route and shall not encroach on the travel lane. For narrow sidewalks (less than 14-feet wide) an access aisle is not required. “When an access aisle is not provided, the parking space shall be located at either end of the block face.”

Perpendicular or angled accessible on-street parking spaces shall have a 8-foot minimum access aisle at street level that extends along the full length of the parking space and shall connect to a pedestrian access route. A curb ramp shall connect the parking access route to the sidewalk.

In-lieu Parking Fee Strategy

An in-lieu parking fee program provides a mechanism for a jurisdiction to collect fees from developments that are unable to provide the code required on-site parking. The parking fees that are collected can be used to construct additional public parking facilities. Several jurisdictions throughout the United States have in-lieu parking fee programs including, but not limited to: Jackson, Wyoming; Bend, Oregon; Vancouver, Washington; and Davis, California.

An in-lieu fee parking fee program is an attractive option for Downtown Carson City because it would allow development of constrained sites or additions to existing buildings without requiring on-site parking. There are several strategies for determining the type of fee and amount. Options that could be utilized for Downtown Carson City include:

- **Flat Fee Per Parking Space:** Many jurisdictions charge a flat fee per space. There is a wide range in the fee amount that is charged by various jurisdictions from \$1,000 per space to \$30,000 per space. Based on coordination with city staff, an appropriate flat fee for Downtown Carson City would be \$7,000.00.

- **Graduated Fee Schedule:** Another option for an in-lieu parking fee program is a graduated based on the number of spaces required. For example developers that need one to five off-site spaces could pay \$3,000 per space, developers that want five to ten off-site spaces could pay \$6,000 per space, and so on. This encourages larger developments to construct on-site parking.
- **Parking Impact Fee:** A third option is to charge a parking impact fee per square foot of a development. For example if a fee of \$15.00 per square foot were charged and the parking requirement is 2 spaces per thousand square feet, the cost per space would be approximately \$7,500.00.

Shared Parking with the State Capitol Complex

Shared parking is the use of a parking space to serve two or more different land uses without conflict. Two basic conditions allow for the possibility of shared parking:

- Variations in peak parking usage at different land uses
- Proximity to many land uses such that one parking space is used for many trips.

The key goal in shared parking is to find a balance between providing adequate parking for proposed uses while minimizing excessive land area for that parking. Shared parking can result in greater mixed-use development densities, better pedestrian connectivity and reduction in vehicle dependency.

There is an existing opportunity in Downtown Carson City to share parking with the State Capitol Complex. Parking for the Capitol Complex is currently only utilized Monday through Friday during typical business hours (8:00 AM to 5:00 PM). Public parking could be provided in the Capitol Complex lots Monday through Friday during evening hours and all day on weekends.

Enhance Bicycle Facilities

Bicycle travel to and from Downtown Carson City should be encouraged by providing a system of bicycle facilities (routes, lanes, and paths). Division Street, Curry Street, and Roop Street could provide north-south bicycle circulation to and from Downtown Carson City while 5th Street and Washington Street could provide east-west circulation. We do not recommend bicycle facilities on Carson Street to preserve space for the walking environment. As with motorized vehicles, bicyclists should be encouraged to park once and walk in Downtown Carson City. To facilitate this, bicycle amenities such as racks and lockers should be provided in public parking facilities. For example, bicycle

Parking Program Revenue

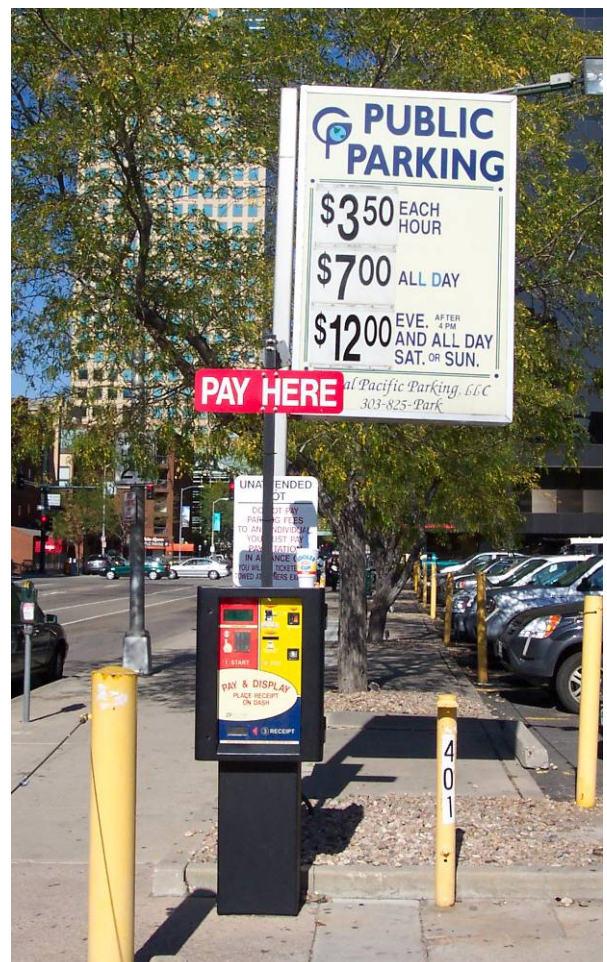
Any revenue collected by the parking programs should be earmarked for downtown public services (as recommended by the Downtown Merchant Association).

LONG TERM PARKING MANAGEMENT STRATEGIES

Real-Time Information Systems and ITS Applications

Real-time information systems should be considered for parking structures and larger lots. These systems alert drivers to availability of parking in off-street lots and minimizes their need to drive searching for a parking space. Information can be provided for an entire structure or lot, or information for separate floors can be provided. These systems can serve as directional aids to locating the parking areas.

ITS applications can also be utilized to increase the efficiency of the parking transaction process. For example a centralized pay station could control on-street parking as opposed to providing a separate meter at each space. A benefit of replacing parking meters with a centralized pay station is that the sidewalk would become less cluttered and would provide more space for pedestrian activity. Another state-of-the-art option for public parking is to allow users to pay for parking via a cell phone using a credit card. This allows users to pay for the exact amount of time that they utilize the parking.



Parking Structures

Parking structures can be utilized to minimize the amount of land area used for parking. Structures are typically the most expensive way to provide parking. Depending on the type of additional features, parking structures can cost from approximately \$15,000 per parking space to in excess of \$20,000 per parking space. The parking structure itself can be enhanced architecturally to resemble the surrounding buildings. Retail and residential space can also be incorporated into the parking structure as well. These types of structures are usually referred to as “wrapped” structures. Parking structures can provide free centralized parking or charge for parking based on the time period parked in the structure.



There are a few parking structures in downtown Carson City including the Ormsby House parking structure and the Legislature parking structure. The in-lieu parking fee program provides a mechanism for collecting fees to contribute to constructing an additional public parking structure in the future.



ADDITIONAL IMPROVEMENTS

The improvements discussed in this section would improve “walkability” in Downtown Carson City. Walkable and pedestrian scale streets greatly encourage pedestrian activity and increase the vitality of an area. Typically a walkable street has wide sidewalks, a buffer between the sidewalk and vehicle travel lanes, pedestrian scale development, pedestrian amenities (street furniture, pedestrian scale wayfinding signage), and street trees and landscaping. Several streets in Downtown Carson City have elements

Investment in walkable streets stimulates development and re-development. In addition, walkable streets can benefit parking. People tend to walk farther on attractive streets that are pedestrian scale. The result is that people park once and walk to multiple destinations as opposed to driving to each destination. People are also willing to park in areas that may be farther from their destination, increasing utilization of parking spaces that are underutilized because of location.

Reduce Travel Lanes on Carson Street

Phase 2 of the Carson City Freeway will provide a bypass around Downtown Carson City and will reduce the amount of through traffic on Carson Street. This will provide the opportunity to invest in the walkability of the section of Carson Street in downtown.

Carson Street has four through lanes with no on-street parking. The sidewalks that front the street are relatively narrow and safety fences have been installed along sections to help improve pedestrian safety. With a reduction of traffic the street could be modified to reduce the number of vehicular travel lanes provide, on-street parking, wider sidewalks, bicycle lanes, and pedestrian refuges.



Improve Intersections and Crossings

Improvements at intersections help to create a more pedestrian-friendly environment by emphasizing pedestrian facilities in the locations with the most pedestrian-vehicle conflicts. Intersection improvements can include curb extensions and bulbouts, textured crosswalks, illuminated crosswalks, pedestrian refuge islands and pedestrian scramble phases at traffic signals. These types of improvements provide more visibility for pedestrians and give visual cues to motorists that pedestrians are present. The improvements can be used to provide uniformity and continuity at intersections within the pedestrian zone. A few intersections in Carson City already demonstrate these types of designs.

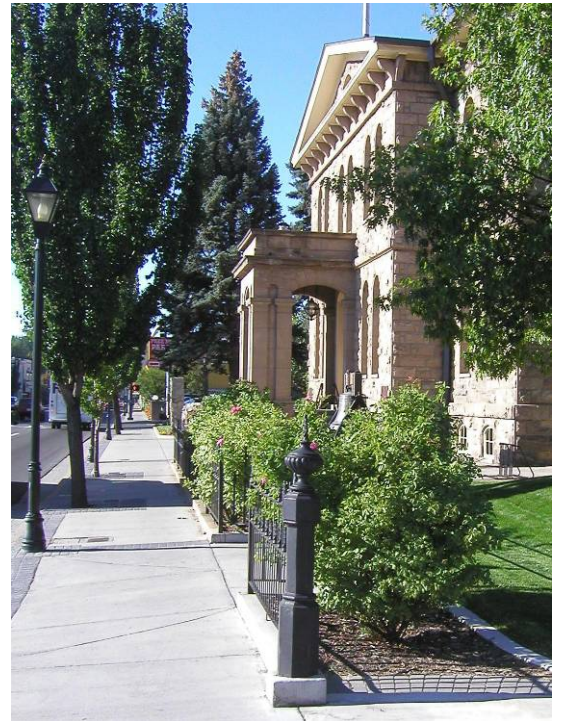


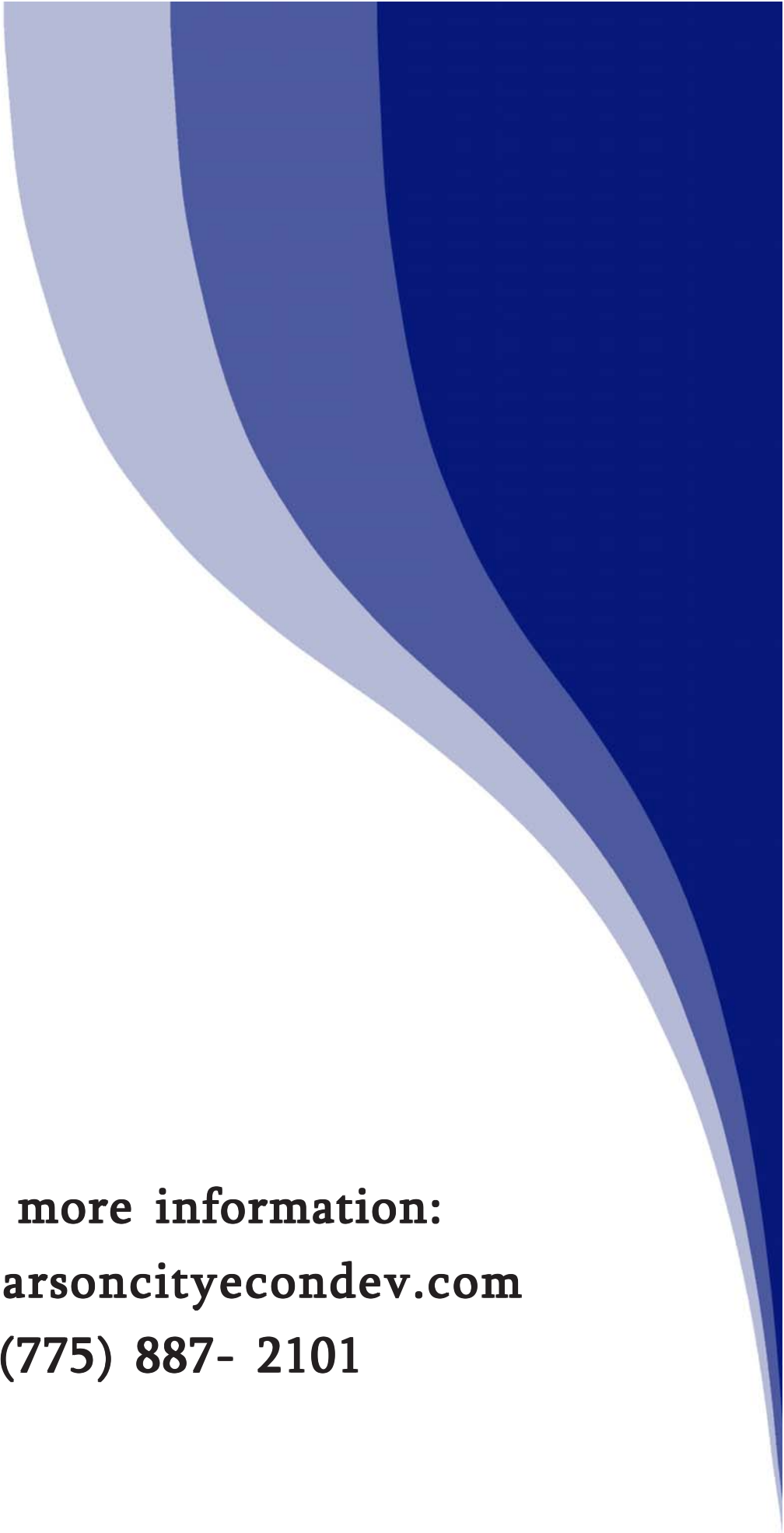
Calm Traffic and Improve Streets

Traffic calming measures such as narrowed travel lanes, on-street parking and raised crosswalks are additional techniques that can be used to enhance the pedestrian environment of Downtown Carson City. The aesthetics of the street environment can also be improved with the addition of street lights, street trees, benches and other pedestrian amenities.

Use Short Block Lengths to Advantage

Downtown Carson City has a typical block length of 200 feet when most blocks in other cities are 400 to 500 feet in length. The shorter block length increases the intersection density within downtown. The increased intersection density can be used to manage traffic volumes and speeds to a greater degree by using different types of intersection control and design. Short blocks also provide less distance for vehicles to accelerate, keeping speeds lower.



A decorative graphic consisting of three overlapping, curved, wedge-like shapes in shades of blue, ranging from a light periwinkle to a deep navy blue, positioned in the upper right corner of the page.

For more information:
www.carsoncityecondev.com
(775) 887- 2101