



# PARKING TODAY

Downtown Atlanta Parking Assessment Existing Conditions



**FINAL REPORT**

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Central Atlanta Progress  
Atlanta Downtown Improvement District

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## Introduction

Downtown Atlanta is thriving as one of the premier urban centers in the Southeastern United States. On a daily basis, the streets bustle with people from all walks of life. Students walk to campus to attend class at Georgia State University. Doctors and nurses head to Grady Memorial Hospital or Emory University Hospital Midtown to treat patients. Businessmen and women walk to work at one of the many high-rise office buildings that dominate the Atlanta sky-line. Government employees head to the Georgia State Capitol or Atlanta City Hall. Atlanta Falcons fans catch a football game at the Georgia Dome. Residents walk home to their urban neighborhood in the Fairlie-Poplar District. Out of town visitors experience something new and exciting, engaging wildlife at the Georgia Aquarium or engaging their senses at the World of Coca-Cola. New destinations awaken in the Downtown fabric on a daily basis, with the National Center for Civil and Human Rights and the College Football Hall of Fame opening in the very near future.

The diversity in all that Downtown Atlanta has to offer draws an equally diverse set of people into the city's central hub for activity. To accommodate ebb and flow, the City provides a number of transportation opportunities to serve its visitors, residents, and commuters. In addition to the extensive public transportation services that connect Downtown to the surrounding region, there are a multitude of options for drivers to access their destination via personal vehicle. Nearly 93,000 parking spaces serve Downtown motorists as they reach their final destinations.

Beyond transportation, countless efforts are underway which are centered on the betterment of Atlanta for current and future generations. The vision of the future of Downtown Atlanta includes cultivating development at all scales and within many areas of the City and facilitating future growth in a sustainable manner. Parking plays a role in the achievement of these goals, as it is a primary link between the people and the places of Downtown Atlanta. In combination with other citywide efforts, strategically planning for the future of the City's parking assets and improving the customer parking experience should be a key focus to help reach the grander goal of a better Downtown.

## THE DOWNTOWN ATLANTA PARKING ASSESSMENT

The Downtown Atlanta Parking Assessment is being conducted to evaluate strategies to enhance the parking system, including an evaluation of how public and private spaces can be used more efficiently to promote a vibrant Downtown. Although there are more than 93,000 parking spaces available in Downtown Atlanta, a public perception of parking is that parking is difficult to find and confusing to use. For the City, changing this perception is an ongoing challenge. With that in mind, a partnership between the Downtown Atlanta business community (led by Central Atlanta Progress and Atlanta Downtown Improvement District [CAP/ADID]), the City and private parking management firms was formed to review and update Downtown's parking characteristics and policies. The intent is to make recommendations for strategies and tools to educate the public on Downtown's parking and transportation assets and the importance of parking management on traffic circulation and accessibility, quality of life, and economic livelihood. The process is focused on developing implementation ready tools that enhance the customer experience and promote a more balanced parking system. The recommendations will likely include technology enhancements, educational and outreach strategies, branding and messaging improvements, and partnerships between the public and private realm to create the impression of a more holistic parking system.

Led by Central Atlanta Progress (CAP) and the Atlanta Downtown Improvement District (ADID), with the support of the City of Atlanta and funding from the region's metropolitan planning organization, the project kicked off in July 2013 and aims to be substantially complete by Spring 2014. Partnerships with the Downtown parking community, including the City's privatized on-street parking management firm – ParkAtlanta – have benefited the study's objectives to efficiently review the current state of on-street and off-street parking in Downtown, revisit key recommendations and policies from previous parking studies, and define and develop a collaborative, implementation-ready toolbox of solutions for managing the public perception of parking Downtown. Unlike past studies which have focused on a plan, this project's primary objective is the creation and implementation of tools that the City and Downtown stakeholders can use immediately to begin addressing questions and issues affecting the view of parking Downtown.

CAP/ADID and the City previously conducted a Downtown Parking Demand Management Action Plan in 2007, which reviewed the Downtown parking conditions and provided strategies for improving the parking system. Out of a number of recommendations provided to better the overall Downtown parking experience, one in particular has influenced the creation of this updated report. This recommendation encouraged the City to review the potential for creating a parking collaborative comprised of the private parking operators, the City, and CAP/ADID to accomplish parking initiatives as an undivided front. The goal of the parking collaborative is to create a cohesive parking

system that is easy to use, easy to access, and is consistent in terms of payment, and high standards of security and facility maintenance. All of which support a positive parking experience for Downtown travelers.

While this is not the only recommendation driving this planning process, it is central in the goal of achieving a more holistic and succinct parking system, accompanied by improvements to technology, operations, marketing, education, and overall branding of the system. In addition to developing the framework for establishing a parking collaborative, the updated parking assessment will also include recommendations for technological improvements to support the improved access for vehicles to and from Downtown parking facilities.

## PHASE 1 - EXISTING CONDITIONS

The study was separated into three distinct phases, which define the structure of this document as well. These three phases were:

- **Existing Conditions Review**, including a review of previous planning efforts in the area, introductory stakeholder outreach to define the perception and operation of parking in the area, and a review of programs who have dealt with similar initiatives, primarily the conversion of private parking into a public-private collaborative.
- **Review of Potential Strategies**, including documentation of potential strategies, review of stakeholder outreach regarding these strategies, and final recommendations for strategies to carry forward into the recommendation phase.
- **Implementation Tools and Plans**, including specific implementation strategies and tools, as well as an Action Plan defining roles, responsibilities, phasing, and cost estimates for potential recommendations.

As part of this initial exercise, Downtown Atlanta's parking assets have been studied to identify supplies, analyze demands, and review their purpose in the overall transportation system. The goal is to determine opportunities to best manage and support this asset as a primary link to the many Downtown destinations, while more efficiently utilizing parking spaces to minimize future demands and reduce the burden on public infrastructure.

The final planning document will include narrative summaries of each of these phases, as well as specific recommendations and strategies associated with the final implementation plan and toolset for CAP/ADID and the Downtown Atlanta Parking System. However, the remainder of this document will focus on the first phase above and the results of the existing conditions review.

**Figure 1** shows the overall study area for the project, which includes the parking system contained generally within the ADID boundary.

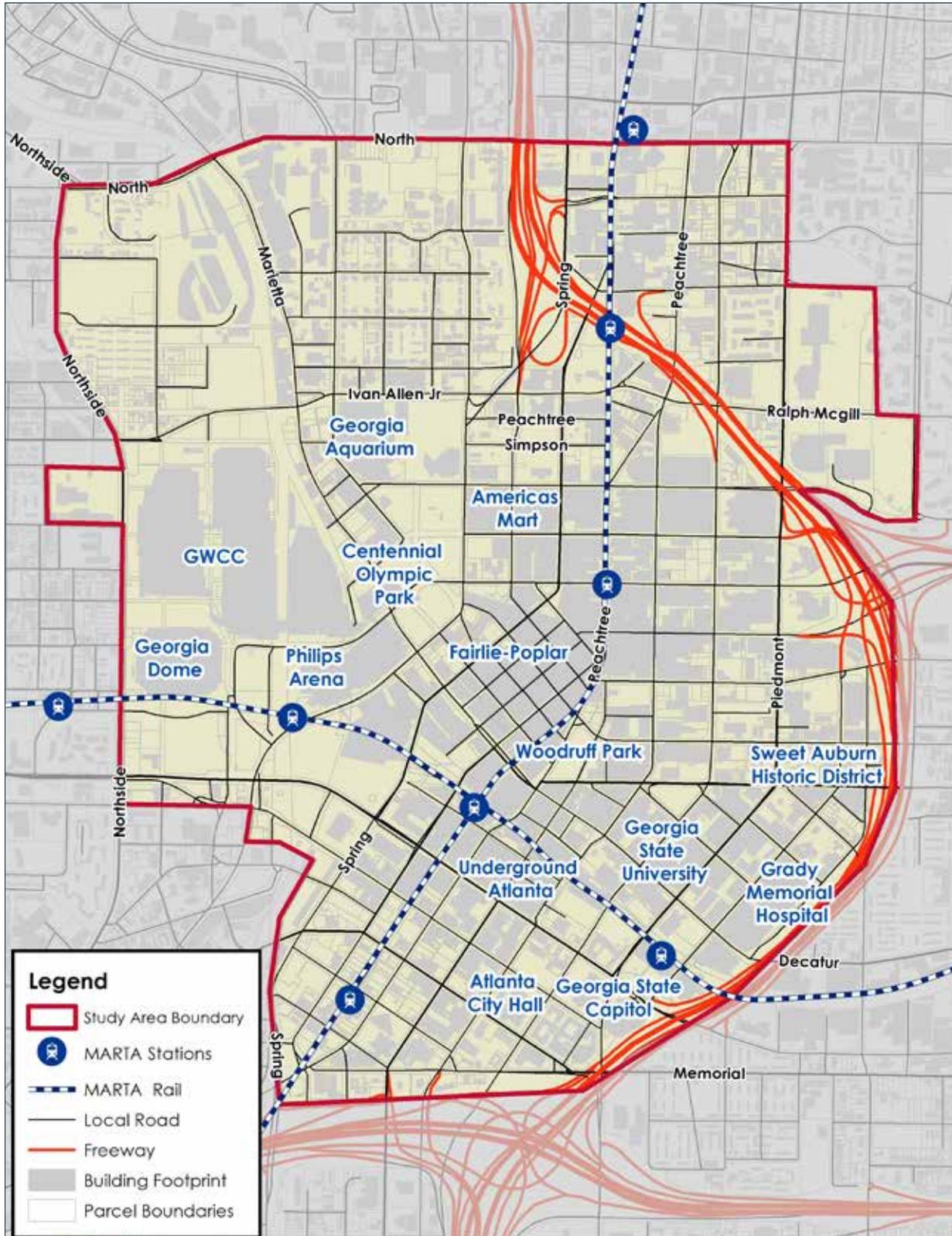


Figure 1 – Project Study Area



## Downtown Atlanta Parking Assessment Goals and Objectives

The following goals and objectives were developed to guide the Downtown Atlanta Parking Assessment in the creation of a framework to manage and support the area's parking assets. These objectives will act as the foundation as recommendations, implementation plans, policies, and program structures are developed to support the needs and context of Downtown Atlanta's parking system.

### Define a Clear Vision and Purpose

- Identify the core purpose of the parking system
- Identify strategic partners and stakeholders
- Find the balance in public-private partnerships
  - Identify mutual benefits for private and public entities
  - Create an environment for both sides to flourish
  - Remove the perception of a divide between public and private systems

### Manage Downtown's Parking Assets and Promote the Functionality of Existing Facilities

- Refresh and update inventory and utilization information in areas with recent changes
- Identify structure(s) and policies for efficient and effective system management
- Determine potential new, suitable and feasible revenue and funding sources for parking and area initiatives

### Enhance the Parking Experience for Users

- Improve access and wayfinding
  - Utilize multiple streams of information
  - Establish consistency with wayfinding and signage
  - Promote an easier experience for users to find parking
- Improve standards for safety and security
- Improve communications and education
  - Develop marketing and education materials
  - Sell the "Success and Benefits" of the program

### Create Implementable Tools to Promote and Support the Downtown Parking System

- Define Marketing/Branding/Communication tactics and develop implementation-ready tools
- Develop Technology Enhancements
  - Implement Pilot Studies
  - Wayfinding
  - Mobile Platforms for payment and parking information sharing
- Clarify responsibilities and improve capacities for enforcement
  - Public works role in code enforcement
  - ParkAtlanta role in parking

## Previous Planning Context

The foundation of any good plan is built on the work that precedes it. This study is no different, building on the findings of recommendations of both parking and planning studies throughout the Downtown area. This section provides a brief summary of these plans, while highlighting recommendations, strategies, and approaches that might prove helpful in the development of the current study. The section begins with Downtown specific plans and continues with area or neighborhood specific parking efforts.

## DOWNTOWN PLANS

### ***DOWNTOWN PARKING DEMAND MANAGEMENT ACTION PLAN***

The Downtown Parking Demand Management Action Plan (2006) – completed by CAP/ADID – reviewed the existing parking environment of Downtown Atlanta and developed strategies to utilize existing parking assets to the highest degree to support the City’s larger vision of achieving economic development, higher quality of life, and use of alternative transportation.

The Downtown Parking Demand Management Plan (referred to from here on as the CAP/ADID study) was guided by the goals provided in the bulleted list below, of which this study will continue to utilize to direct the future development of the Downtown Atlanta parking environment:

- Promote a balanced mix of parking and alternative transportation that suits the needs of both Downtown businesses and residents.
- Encourage parking management strategies that support a vibrant, neighborhood-based mix of retail, service, and residential facilities.
- Clarify the role and influence of parking and multimodal transportation in promoting Downtown economic development objectives.

At the time the CAP/ADID study was conducted, Downtown Atlanta contained nearly 95,000 parking spaces within 325 surface lots, 109 garages, and approximately 2,100 on-street parking spaces. While the City controlled on-street parking assets, all but two of the area’s lots and decks were owned and controlled by a third party of parking operators who maintained agreements or contracts with property owners to supply parking facility management services.

Due to the size of the study area, the CAP/ADID study divided the area into eight analysis zones, each with its distinct land use characteristics and parking needs. As time has not affected these characteristics to a great extent, this study will continue to utilize the zonal boundaries in its review of the study area parking. The zones were reviewed in terms of their specific

parking environment including generators, occupancies, on-street turnover, parking allocation, primary users of the zonal parking system, rates, specific issues, transit services, and general characteristics. The description of the zones are briefly repeated in **Table 1** and shown graphically in **Figure 2**.

The CAP/ADID study provided recommendations for the immediate- (6 month), short- (1-2 year), and long-term planning horizons for the Downtown Atlanta area. However, as in the case of many municipal initiatives during the completion of this study, the impacts of the recession made completing many of the defined recommendations difficult to execute with the available resources, and therefore many of the suggested strategies were placed on hold until additional resources could be secured.

The list below details the direction in which the recommendations were developed, intended for the overall parking environment:

- Optimize the availability and use of Downtown’s existing parking resources by maintaining system data, supporting shared parking, determining funding opportunities, and supporting a more efficient parking system
- Identify parking management policies and programs that will increase the use of alternative transportation modes and contribute to an improved multimodal environment.
- Preserve and expand on-street parking to create a pedestrian- and retail-friendly Downtown, maximizing the availability of short-term parking to support that need.
- Develop initiatives that support a public/private collaborative to promote parking availability, ease of use, common validation programs, high standards of facility safety, facility maintenance, and positive customer experiences.
- Promote parking accessibility for Downtown visitors and reduce site-specific congestion related to special event traffic.

In reviewing the above recommendations, similarities can be linked between the previous recommendations and the current goals and objectives of this project, including promoting shared parking opportunities for efficient parking utilization, promoting alternative modes, promoting on-street parking enhancements through technology, supporting public/private parking opportunities, and improving the visitor parking experience.

The CAP/ADID study also recommended that the City establish a greater presence in the Downtown parking system by expanding its City controlled assets and establishing the City as a management entity in the form of a Parking Authority. In addition to developing a Parking Authority, the study recommended forming a Parking Technical Advisory Committee, to plan for and guide the parking system and related issues. Lastly, it was recommended to develop initiatives involving improved facility security and updated parking technologies.

Zone	Name	Description
A	Major Events District	Includes Atlanta's event venues including the Georgia Dome, Georgia World Congress Center, Philips Arena, and the CNN Center.
B	Centennial Olympic Park District	Centennial Olympic Park, the Georgia Aquarium, and the World of Coca-Cola Museum and the Children's Museum of Atlanta, as well as the AmericasMart shopping center. The Centennial Hill and Centennial Place neighborhoods are located in the northern portion of Zone B.
C	SoNo (South of North) District	Primary parking demands are generated from residents, doctors, nurses, patients, and office employees, with the most identifiable uses being the Emory University Hospital Midtown, the Georgia Power Corporate Headquarters, and the Bank of America Plaza.
D	Hotel District	Many of Downtown Atlanta's major hotels are located within Zone D, of which, parking demands fluctuate throughout the seasons, on weekdays and weekends, and during Downtown events. Also located within the zone are the Peachtree Center office and retail buildings and the SunTrust Plaza building and the One Ninety One Peachtree Tower – two of the largest high rises in Downtown.
E	Fairlie-Poplar District	The Fairlie-Poplar District is a unique and diverse node contained in Downtown. With a mixture of uses from high rise buildings that neighbor renovated medium-rise residential and mixed-use buildings creates a distinct Downtown historic neighborhood.
F	East/Sweet Auburn District	Zone F is comprised of the sweet Auburn historic area, GSU buildings, including the Citizens Trust Bank headquarters building (which also is utilized by the university for classroom space), the former Atlanta Life Insurance building, and the 2,000 bed University Commons resident hall.
G	Institutional District	Zone G contains two large institution campuses, the Grady Memorial Hospital and the Georgia State University main campus and also contains a large portion of Underground Atlanta.
H	Government District	Zone H is most notably characterized by its government offices, where the Georgia State Capitol, Atlanta City Hall, the Fulton County Government Center, and the Richard B. Russell Federal Building are located.

Table 1 – Downtown Atlanta Zones

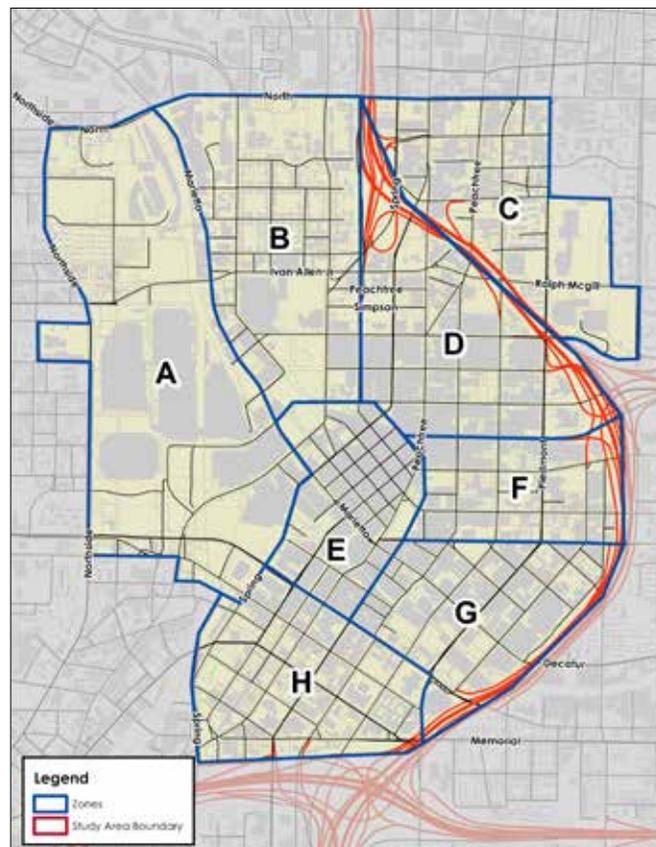


Figure 2 – Downtown Zones

**IMAGINE DOWNTOWN**

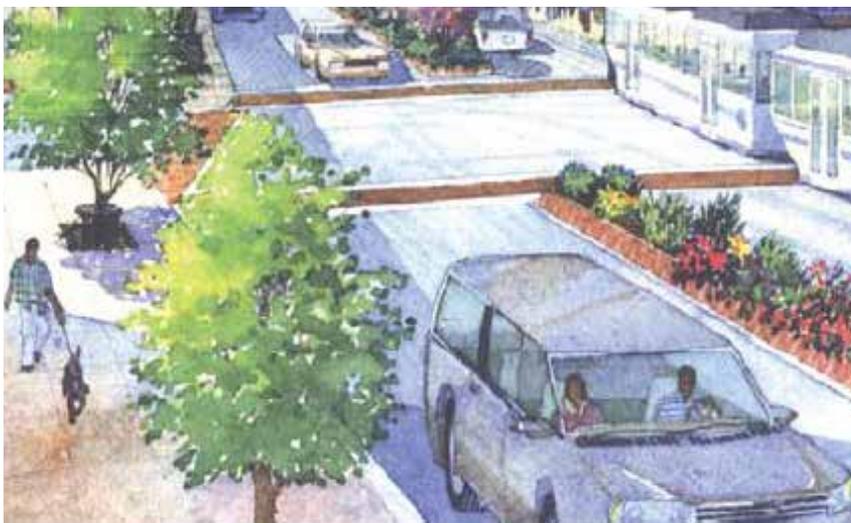
In 2004 the Imagine Downtown plan was initiated to develop a vision for the future of Downtown Atlanta to combine the existing, interspersed plans for Downtown into a cohesive and attainable vision. Identifying and supporting implementable recommendations, in combination with the community support for the betterment of Downtown Atlanta originating from the Imagine Downtown effort created an undivided front with the intent of setting defined initiatives of the project into motion. This force led to the development of a number of projects including the Georgia Aquarium, Renaissance Walk at Sweet Auburn, and World of Coca-Cola Museum.

In 2009, the vision plan was updated, entitled Imagine Downtown: Encore. This phase of the project expanded upon the founding values of the former project. During this phase, the vision for the future of Atlanta was defined through extensive community involvement. With the defined vision as a foundation, the City was divided up into focus areas, each with its own unique characteristics and areas of improvement, which would allow for more specific recommendations, defined by the community identified goals, to be applied.

In addition to developing a vision for the future of Downtown Atlanta, seven principles essential to facilitating development that supports the overall vision of the area were identified.

- Create an environment conducive to encouraging high-quality sustainable development that advances the goals of the City’s sustainability initiative
- Coordinate with regional planning and transportation efforts to keep Downtown central to smart growth in the metro area
- Ensure a community-based implementation process
- Target investment to support Downtown priorities in ways that can both stimulate private investment in underrepresented areas and add momentum to places that are improving
- Facilitate the expansion of Downtown’s cultural and entertainment program within the crescent encompassing Centennial Olympic Park, Fairlie-Poplar, Five Points, and Sweet Auburn aligned along the Luckie-Marietta and Edgewood-Auburn corridors
- Recruit businesses and merchants that will diversify Downtown’s retail offerings and assist their location in places that will both help them be successful and benefit the surrounding uses

The numerous recommendations included enhancements in open space and expansion of pedestrian, bicycle, and transit infrastructure, with parking recommendations included. The general parking recommendations identified in the Imagine Downtown: Encore plan mirrored the recommendations provided in the previous CAP/ADID parking assessment, including promoting efficient parking demand management, identifying opportunities to develop a City owned facility, promoting expansion and management of on-street parking facilities, and encouraging the role of parking in accessibility to Downtown.



**Imagine Atlanta Vision:**

- The center of a world-class city that welcomes diversity
- A Model of progressive growth for the region
- Reflective of the rich cultural traditions of the South
- The Bridge between neighborhoods north, south, east, and west
- The location of choice for urban living in the metro area

## Existing Parking Strategies

While the Downtown Atlanta area is roughly four square miles, there are many distinct and unique districts within the Downtown that each have their own parking needs and issues. Many of these have been documented in neighborhood or district specific parking plans, which created a foundation for this planning review. The following sections review these plans and will provide guidance for future parking recommendations within the area. **Figure 3** provides a graphic depiction of the study areas of these previous planning efforts.

### MULTIMODAL PASSENGER TERMINAL CONCEPTUAL PARKING PLAN

Downtown Atlanta acts as a major transportation hub of local and regional transit services, connecting residents and visitors across the greater Atlanta area. In efforts to take advantage of crossing transit systems, a Multimodal Passenger Terminal (MMPT) is planned to connect existing transit systems and potential future services in one centrally located transit terminal located directly atop the existing “Gulch” parking area between Martin Luther King Jr. Drive and Spring Street. The future of the surrounding area is envisioned to develop into a dense transit-oriented district, supportive and dependent upon the services provided at the MMPT. Because the MMPT will remove a large portion of existing parking in the area, it was necessary to review how parking demands will be accommodated for the future, while remaining true to transit-oriented principles. To best support and facilitate the anticipated transit-oriented development (TOD) district, the MultiModal Passenger Terminal Conceptual Parking Plan (2013) was created in order to plan for the future of parking in an area where auto use is not held above transit and other alternative modes of transportation as experienced in traditional planning.

The study analyzed existing parking supplies and the impact the MMPT will have on such supplies, in addition to the potential parking demands generated by future development. Although development plans of the area are still in flux, the study reviewed projections of how the area will develop in regards to land uses and size, and related that vision into general parking needs. However, it can be determined that because the construction of the MMPT will displace large portion of the parking supplies which service the patrons and employees of Philips Arena, Georgia Dome, Georgia World Congress Center, the Georgia Aquarium, the Federal buildings, and CNN Center, these uses will require specific attention in accommodating new and displaced parking needs. The parking system in the area will require shared parking agreements and parking demand reduction strategies to be implemented in order to meet future parking demands.

As an overall strategy to manage parking demands throughout the study area, it was recommended to implement a variety of parking demand reduction strategies to support the TOD vision of the area and accommodate for future parking needs. The study recommended:

- Defining an MMPT TOD District by establishing an overlay boundary for the area
- Creating an MMPT TOD Overlay Ordinance to support TOD objectives by defining the rules and regulations to development
- Reduce parking maximums in the district to prevent an excess in parking supplies and support transit use
- Create and manage a shared parking system by developing policies to support shared use of parking facilities by multiple uses and identifying and pursuing uses compatible for shared parking as the area develops
- Implement and support TDM strategies to reduce parking demands in the area and support the use of MMPT services
- Implement parking technologies that support information collection, a variety of payment options, remote payment options, and information sharing
- Identify a parking system management entity to carry out the envisioned parking environment

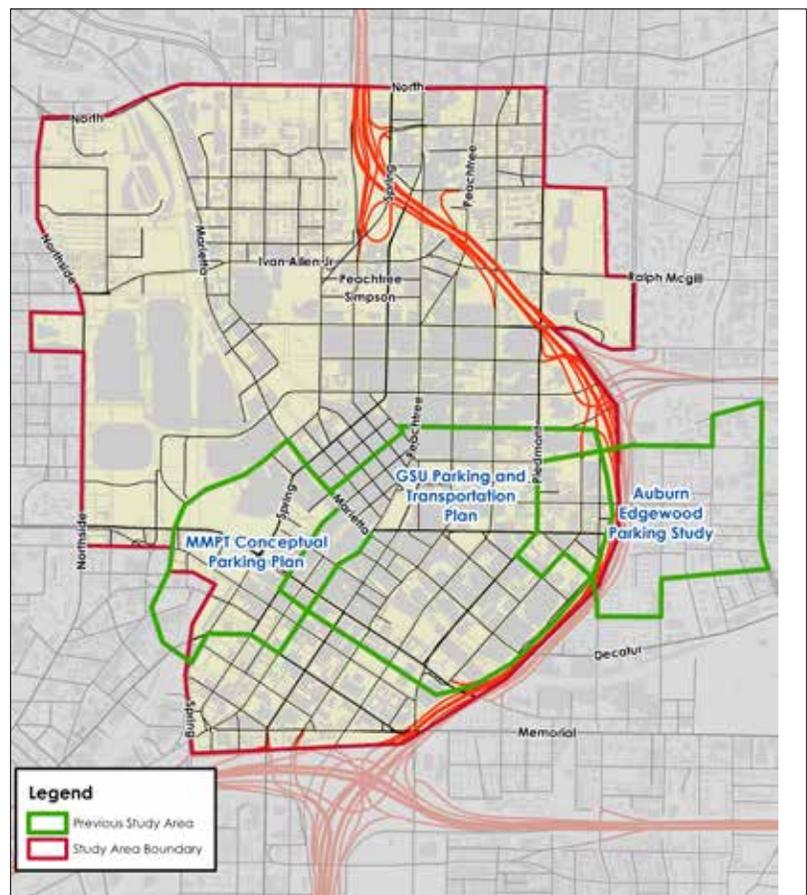


Figure 3 – Specific Parking Plans

### GEORGIA STATE UNIVERSITY PARKING AND TRANSPORTATION PLAN

The Georgia State University Parking and Transportation plan, which would direct the university's parking and transportation system into an efficient and contained system, is in reflection of the university's guiding principle to control the system in such a way that reduces the university's impact on the surrounding street system while utilizing existing parking assets to the highest degree.

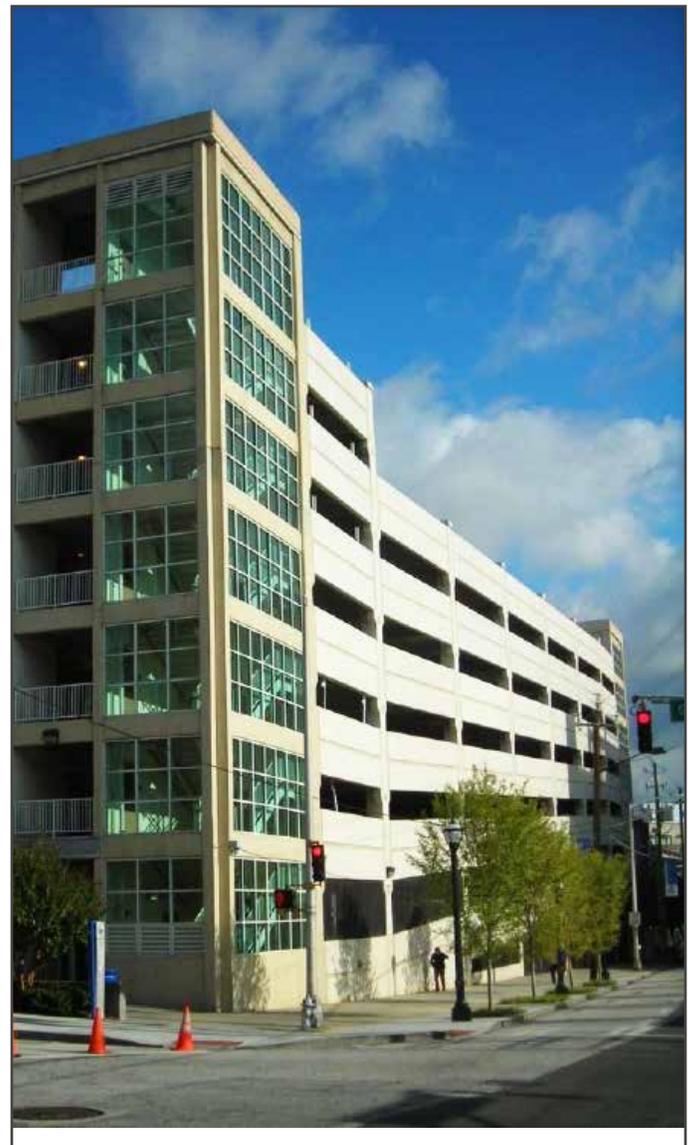
The student population of GSU is anticipated to grow from 32,000 to 36,000 students within the next three years, with an increase of 3,200 students living on campus (from 4,000), as well as approximately 1,142 faculty members, with an approximate increase of 88 members annually. In addition to an increase in student population, future build out plans include the development of additional university student housing, acquisition of two parking garage (1,428 spaces), and development of the University Science Park complex and the new law and business schools.

The university supports a variety of transportation infrastructure for travel to and from campus. A total of 6,227 parking spaces are available for faculty, staff, students, and visitors among the university owned lots and decks, as well as within a commercial parking facility leased by the university. At peak hours, these facilities reach an average parking occupancy of 93 percent for both student and faculty designated parking. The university is also serviced by a wide variety of public transit options including the MARTA system, Georgia Regional Transportation Authority (GRTA), Gwinnett County Transit (GCT), and Cobb Community Transit regional services, as well as its own PantherExpress shuttle bus system which provides service between university destinations and surface parking at Turner Field.

In support of parking demand reductions and the use of alternative modes of transportation, GSU employs a variety of Transportation Demand Management (TDM) strategies in conjunction with TDM initiatives implemented by CAP/ADID. TDM strategies offered to both students and employees include MARTA and GRTA pass reductions, the guaranteed ride home program, and car sharing, as well as various incentives for those who opt out of single occupancy vehicle travel for alternative modes.

Recommendations provided in the report encompassed a multitude of topics regarding the university's transportation system, including specific parking system related recommendations. The general recommendations relating to the GSU parking system include:

- Matching parking supply with university demands
- Maximizing efficiency in existing parking facilities
- Reconfiguring existing parking to increase parking capacities for students
- Reducing traffic impacts on the street system originating from parking entrance vehicle backup
- Attempting to keep faculty and staff assigned parking close to the location in which they work
- Supporting an efficient and easy to use parking system from a technical aspect



#### AUBURN EDGEWOOD STUDY

The Auburn-Edgewood corridor parking study (2012) evaluated parking demands and provided parking solutions in response to renewed interest in the area, including current and future parking adequacies, shared parking opportunities, and recommendations for parking improvements. The Auburn-Edgewood corridor consists of GSU housing, the Grady Memorial Hospital, Auburn Pointe Residential area, Edgewood Retail District area, and King District. Overall, the area has experienced a renewed interest, with the future addition of the Atlanta Streetcar, Auburn Avenue Curb Market, and reinvestment in the area's residential property. In sight of reinvested interest in the area, concerns about the current parking supply being able to meet future parking demands emerged. A parking demand study was conducted in 2012 to identify parking demands in the area. The area's public parking assets include 952 public off-street parking spaces, 731 metered and non-metered on-street public parking, and 1,000 private off-street parking, primarily in surface lots. An overall assessment of the publicly accessible parking assets determined overall parking occupancy to be relatively low, at approximately 45 percent during peak period (1:00 pm). On-street parking located in the hospital area observed the highest occupancy rates, with 72 percent utilization, which was inferred to be generated by hospital staff and patrons, as well as GSU staff and students. The non-metered on-street spaces within the Auburn Pointe Residential area observed the highest utilization rate during peak periods with 97 percent occupancy, where the area is impacted by spillover effects of hospital staff. Although certain locations observe high parking utilization (generally within the Edgewood corridor), the area overall has a parking surplus of approximately 320 spaces.

The introduction of the streetcar and other reinvestments in the Auburn-Edgewood corridor will presumably bring in more traffic (both pedestrian and vehicular) to the area, decreasing the areas parking surplus. The surplus in parking that exists today (less surplus exists in the Edgewood Avenue corridor), is anticipated to decrease significantly in the next three years, with 40 percent occupancy rates in Auburn Avenue parking (an increase of 6 percent), and 103 percent occupancy rates in the Edgewood Avenue corridor.

After a review of the current parking environment in the Auburn/Edgewood area, the study provided recommendations to identify management strategies for the existing and future parking in the area. It was recommended that a parking improvement district be established and combine existing revenues from on-street parking, with a portion of revenues from the public parking system, with total revenues being split between the City and the community to fund parking and transportation improvement projects. If situations do not permit a parking improvement district to be created, it was recommended that a parking advisory committee, made of community members, business owners, and those responsible for managing parking assets, be created

to support alternative parking initiatives. Lastly, the boundary of the community improvement district should be extended to include the Auburn/Edgewood corridor. A fee in-lieu program was also recommended as a strategy to generate the necessary funds to implement redevelopment projects and other initiatives in the corridor.

Other recommendations regarding the Auburn/Edgewood parking assets included:

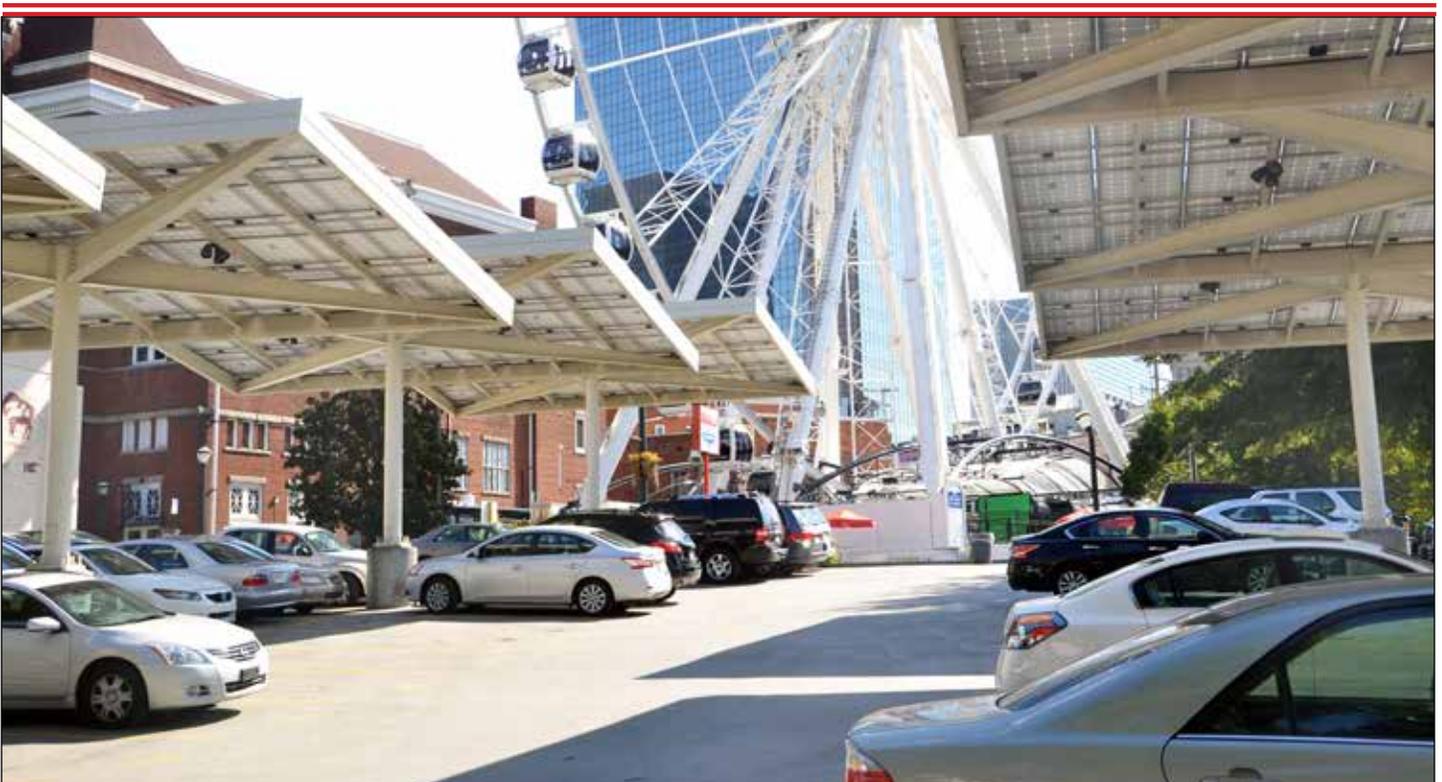
- Supporting a park once policy
- Extending time limits for on-street parking into evening and weekend periods
- Installing additional parking meters
- Adding more on-street spaces along the south streets of Jackson, William Holmes, and Hilliard, and the east-west streets of Chamberlain and Old Wheat
- Identifying land bank or leased parking opportunities
- Encouraging valet services
- Encourage private parking to be publicly available
- Require shared parking between compatible land uses
- Improving walkability
- Implementing shared parking
- Implementing a wayfinding signage system
- Enforcing parking for hire operational rules

## SUMMARY

Based on the studies discussed on the previous pages, the Atlanta area is poised for continued future growth, including changes in the realms of transportation, parking, and redevelopment. Although most of the reviewed plans are spatially explicit, similar goals can be observed throughout. Overarching themes include:

- Promote accessibility and efficiency in the parking and transportation system
- Balance parking with other transportation methods
- Understand the role of parking and its impacts on development of the area
- Plan for parking that meets and mitigates demand
- Leverage technology to improve the parking experience

The overall goal of the Downtown Atlanta Parking Assessment and its recommendations regarding the improvements of the areas parking, align with the above goals, which are rooted in the idea of creating a better Downtown Atlanta. Additionally, the stated goals and recommendations within the larger Downtown studies and smaller area studies will be linked to the implementation strategies defined as part of this study, to ensure that the defined vision of Downtown Atlanta is consistently applied through the parking management and improvement strategies of the Downtown Atlanta Parking Assessment. The end result should provide a foundation for creating an efficient, attractive, and accessible parking system, promoting the accessibility and growth of the Downtown Atlanta area.



## Atlanta Parking Today

While the previous section dealt with the previous planning efforts within the Downtown Atlanta area, this section focuses on the existing parking conditions found within the Downtown area. The review of existing conditions included an evaluation of primary parking codes and governance, existing perceptions of parking from stakeholders and area visitors, an overview of parking management entities in the Downtown area, and a refreshment of parking facility characteristics, including occupancy and utilization information.

The following subsections describe each of these elements of the existing conditions review.

### PARKING POLICY REVIEW

As part of the existing conditions review, the project team conducted a review of existing policies and practices, intended to provide footholds for improving the governance of the parking system after the completion of this project. In particular, the team reviewed the Atlanta City Code, and the ParkAtlanta contract governing on-street parking management.

The following descriptions characterize the overarching review of the various sections from the City Code, and are followed by general guidance for opportunities to expand upon or edit code language to improve the Downtown parking system.

### ATLANTA CITY CODE

Four sections within the Atlanta City Code were reviewed and are described below. The four sections include:

- o Vehicle Immobilization Services (Section 162-251 – Section 162-268)
- o Parking Structures and Surface Parking Lots (Section 30-108 – Section 30-109)
- o C-5 Central Business District (Section 16-15.004 – Section 16-15.011 C-5)
- o SPI-1 Zoning (Section 16-18.001)

### VEHICLE IMMOBILIZATION SERVICES CODE:

This code governs the use of vehicle immobilization devices, or “a device that is designed to be attached to a wheel, tire, or other part of a parked vehicle so as to prohibit the motor vehicle’s usual manner of movement or operation”. The code defines the permitting and operation of vehicle immobilization services, and defines practices which are lawful or unlawful. The code prohibits parking lot owners, operators, and valet operators to be engaged as a vehicle immobilizer and caps booting or immobilization fees are at \$50 per day. Additionally, the code identifies signage requirements where, signage containing information about booting/towing regulations, as well as applicable contact information must be displayed (2.5 x 3 feet in size, four to six feet above the ground).

#### *Initial Thoughts*

*The vehicle immobilization section only addresses licensing and permitting of the operators, not the enforcement standards, which as stated by stakeholders, is the primary concern. The boot fee of \$50 a day, all inclusive, is certainly not outrageous. For example, in Philadelphia it is \$30 a day, but you also have to pay booting and towing fees of \$325. The section doesn't preclude enforcement on private lots, but requires that owners have a contract with a vehicle immobilization operator in order to immobilize.*

*Because booting and towing is conducted using a third party, private operators have limited control over how booting and towing is conducted within their facilities. These parties are thorough in booting and towing vehicles in Downtown facilities, which has become a point of contention for some members of the public, who feel that booting and towing practices are based in revenue generation. In efforts to alleviate this negative perception, the ordinance should be changed to allow parking operators to boot and tow in their facilities, rather than contract with a third party. This would allow operators to boot and tow only as necessary, which would help give the impression of booting and towing as a strategy to improve compliance with parking regulations, as opposed to a means of generating revenue.*

*In addition to changing the ordinance, a maximum fee should be defined for booted and/or towed vehicles at approximately \$25-\$50.*

**PARKING STRUCTURES AND SURFACE PARKING LOT:**

The parking structures and surface parking section provides guidance on the permitting, administration, and operation of parking facilities within the City. The review of this section provided a few key highlights, summarized below.

**Section 30.108 – Permit; Administrative Rules**

- o Any person responsible for and/or engaging in the operation of a park-for-hire facility without a permit, or with a voided permit, are guilty of an offense, if convicted, and punished by the terms provided in section 30-55 of the Code of Ordinances of the City of Atlanta.
- o Park-for-hire facilities must pay an annual permit fee that is relative to the capacity of parking spaces within the facility. These fees range from \$300 per year to \$550 per year.

**Section 30.119 – Operational Rules**

- o Park-for-hire facilities shall provide automobile barriers; detailed ticket stubs, primarily for valet operations; and graphic evidence of violation before booting/towing.
- o First-time applicants for a park-for-hire permit shall be required to pay \$100.00 for the fabrication of a notice sign, displaying information related to operator information, facility characteristics and regulations, and static space availability.
- o Additional signs shall be posted that detail rate information for the parking facility.
- o Lighting standards are tied to the type of activity adjacent to the park-for-hire facility, where major activity is equivalent to a major sporting event, and minor activity is equivalent to industrial employee parking.

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**Initial Thoughts**

*This section is pretty sparse, but provides a great canvas to outline the rules and requirements of the new parking system. Some things that could be added:*

- o *Revenue control requirements*
- o *Safety/security standards*
- o *Data sharing standards (especially related to Parking Guidance Systems)*
- o *Enforcement – if a consolidated enforcement system is considered*

*The fee structures in this section are also pretty small, but provide a good basis for funding portions of the program, especially:*

- o *Signage upgrades provided by the City*
- o *Management of data and wayfinding systems*
- o *Management of improved technology systems*

*There were concerns expressed during the initial site visit about poor maintenance, cleanliness, and lighting in some parking facilities; however there are not many requirements in this language that stipulate the standardization of these issues. The zoning regulations for C-5 Central Business District clearly call for minimum maintenance levels to be maintained:*

- o *Section 16-15.010 Parking structures and surface parking lots, parking attendants, security and maintenance requirements.*
- o *(4) Parking facilities shall be maintained in a clean, safe, sanitary and attractive condition. Parking spaces and driving lanes shall be clearly defined and maintained as such. Parking lots shall not be operated when any damage impairs the drivability of the parking lot.*

*However, similar language is not present in Article XVII. Parking Lots and Parking Garages. Such language about maintenance and cleanliness/sanitation should be added to Article XVII so that those requirements apply to other parking facilities outside of C-5 zoned properties.*

## CENTRAL BUSINESS DISTRICT

This code provides guidance on the development of properties in the Central Business Support District. As defined in the ordinance, the intent of this chapter in establishing the C-5 Central Business Support District is as follows:

- (1) To provide supporting service functions for those high-intensity modes in the central core at moderate intensities.
- (2) To encourage parking garages and lots to serve the major development within the core.
- (3) To provide for the development of high-density employment centers where adequate transportation facilities are available.
- (4) To provide opportunities for the construction of new high-density housing.'

The ordinance solidly outlines a few key requirements for parking facilities within the CBD. A couple of the strong points:

- o For parking garages:
  - Parking facilities shall be maintained in a clean, safe, sanitary and attractive condition. Parking spaces and driving lanes shall be clearly defined and maintained as such. Parking lots shall not be operated when any damage impairs the drivability of the parking lot.
  - Identifying signage shall be located at the primary entrance to all park-for-hire facilities. Such signage shall consist of one 24-inch by 24-inch upper sign which shall be located directly above one 12-inch-high by 24-inch-wide lower sign. Such signage shall be located at a minimum of seven feet above ground level and shall be displayed such that both sign faces are visible from the street. The upper sign shall display a capital "P" which shall be a minimum of 18 inches in height. The lower sign shall display the address of the parking facility with lettering which shall be a minimum of six inches in height. The upper and lower signs may be constructed as one sign that shall be 36 inches in height and 24 inches in width. Sign faces shall be dark blue with white letters in a helvetica medium type face. All lettering shall be clearly legible from the street.
- o For surface lots:
  - Surface parking lots shall have a minimum landscaped area equal to at least ten percent of the paved area within said lot. In no case shall a parking lot owner be required to provide landscaped areas that exceed ten percent of the paved area.
  - Existing parking lots shall not be required to reduce the number of parking spaces by more than three percent as a result of implementing these landscaping regulations.

### Initial Thoughts

These points provide the framework that address some of the desires mentioned in stakeholder engagements, namely that of improved facility safety, cleanliness, signage requirements, and overall attractiveness. Currently, the code provides 24 months for facilities to comply with the requirements however, it appears that these requirements are not producing the desired result. Greater enforcement of City code regarding parking facility requirements is necessary to bring the area's facilities up to current standards to develop well-maintained, safe, and attractive parking facilities consistently throughout the City.

Additionally, the requirement for lighting could be strengthened to secure lighting in the case that a street lamp is removed or is malfunctioning to ensure that facilities provide adequate lighting for its patrons. Additionally, enforcement of the lighting standards is necessary to ensure compliance.

## SP-1 ZONING CODE

The SP-1 zoning code provides guidance for development in seven specific sub-areas of Downtown, including the core, various components of the SoNo district, Centennial Olympic Park, Terminus, and Fairlie-Poplar. The code provides guidance related to parking includes façade treatments for parking garages, ground level retail frontage, and limitation of street facing surface parking facilities. The code also provides guidance on parking requirements in the area, emphasizing parking maximums and removing parking minimums, as well as guidance for bicycle parking, including both minimums and maximums.

### ***Initial Thoughts***

*The current SP-1 Zoning requirements provide an excellent framework for guiding development in such a way that will support the enhancement of the public and built environments across many aspects, and is consistent and supportive of the vision of parking in the future of Downtown Atlanta as defined by the Imagine Downtown initiative. The requirements of the ordinance were reviewed as part of the MMPT parking study, and it was concluded that many of these requirements should be carried forward in that areas TOD zoning (although it was recommended in the MMPT study to lower parking maximums given the presence of a higher intensity transit in the area). In concert with pushing forward with the requirements delineated in the ordinance, we also strongly encourage the consistent and comprehensive enforcement of the requirements to ensure that the founding principles of the ordinance are maintained and carried out in practice.*

## **PARKATLANTA CONTRACT AND AMENDMENT**

As part of the existing policy review, the project team reviewed the ParkAtlanta contract with the City of Atlanta, as well as the subsequent amendment to the contract approved in recent years. In general, the project team had the following comments:

*\*Note: All paragraph numbers below refer to similarly numbered paragraph number in the PSA.*

### REVIEW OF PROFESSIONAL SERVICES AGREEMENT FC-4877, PARKING MANAGEMENT SERVICES

2. Term. A seven-year term is rather excessive for an initial contract with a vendor, and while pricing of the services may be more advantageous to the City for such a lengthy term versus a shorter one, it would appear to limit the City's flexibility in dealing with the vendor from a position of leverage, performance sanctions notwithstanding.

5.4 City's Obligations. The phrase "on a timely basis" (line 2), is indefinite and may be subject to different interpretations by the contracting parties, which may lead to contractual disputes.

5.5.4 Change Documents. No time limit is established for the Consultant to respond to the City's comments on a Proposed Changed Document (ref. lines 6 and 7).

6.2 Consultant Authorized Representative. Subparagraph (d): use of "adequate", i.e., "devote adequate time and efforts to management...", is imprecise and open to interpretation to the disadvantage of the City.

6.4 Removal of Personnel Assigned to City Contract. The phrase "or has otherwise materially failed to comply with the reasonable standards of behavior required of a person who occupies the position which..." should be modified to include "non-compliance with the Consultant's or City's written Standard Operating Procedures for the job or work assignment at hand".

### **PART 1 OF EXHIBIT A, SCOPE OF SERVICES**

1. General Program Management, 1.e. Coordination Meetings. The frequency of the meetings is not specified; instead, the phrase "The Consultant shall attend regularly scheduled coordination and/or reporting meetings as necessary with the City Program Manager". In actuality, this clause affords an opportunity for lax or insufficient oversight of the Consultant on the part of the City.

2. Infrastructure Management, subparagraph 2.A. Standards for Parking Meters to be Acquired by Consultant for Use in Support of Services, 2nd paragraph. Granting the Consultant the ability to "...expand the parking management program including expanding the number and areas where meters are installed..." even though such authority must comply with applicable laws and be "in consultation with the City" affords, perhaps, too broad an authority for the Consultant vis-a-vis the City. It is assumed that these provisions were desired by City officials when vetting the contract provisions, and were a strong consideration for bidders and resulted in a higher contract offering



by the vendors than otherwise would have been achieved. However, it may be desirable to revisit such a broad delegation of authority to any consultant in light of future public planning considerations.

## REVIEW OF 1ST AMENDMENT

Page 4, Paragraph # 2.B. Standards for Parking Related Signage, fourth complete paragraph: If not expressed elsewhere, this paragraph also should indicate that the Consultant is responsible for clearing graffiti from parking meters.

Page 8, Paragraph # 8, subparagraph 4d Types of Violations & Corresponding Fines: While not an issue for the Amendment per se, examination of the Parking Violation Fines indicates the fines for violations substantially more egregious or serious than a meter violation are actually lower in amount than the meter violation fine. The City would do well to consider revisions to its basic violation fine structure so it more appropriately reflects the severity of the parking/pedestrian safety and traffic flow violations versus the basic meter violation-overtime violation. On the other hand, the City would also do well to examine the meter violation fine itself with respect to off-street parking rates. Obviously the fine should be higher than the cost of all-day parking in the Downtown, though there appears to be no across-the-board rule of thumb as to the percentage difference. However, a fine that is more than double the all-day off-street rate may be excessive. Accordingly, all fines should be examined in the context of off-street parking rates, in addition to the relative differences among the meter, safety, service zone violation fines and penalties.

Page 9, Paragraph 10, subparagraph 4.5 Reporting of Missing or Damaged Signage: The annual requirement to report missing or damaged signage appears to be insufficient, and does not allow the City to vigorously monitor the Contractor's performance in this area that is critical to the success of Atlanta's parking management program. It is suggested the frequency of reporting be increased to a minimum of quarterly, and ideally, to a monthly basis.

## Stakeholder Outreach - What We Heard

The project team conducted initial outreach for the study in July 2013. The audience included Downtown parking stakeholders, parking operators, City parking management staff, City planning staff, and ParkAtlanta staff. These discussions helped define the current perceptions of the parking system from stakeholder perspectives and identified the desire to improve the Downtown parking system at a number of different levels. The following themes emerged consistently throughout those conversations and will help guide the creation of recommendations.

### PARKING OPERATOR ASSESSMENT

The project team met with the Downtown Atlanta Parking Stakeholder group, which is largely comprised of parking operators throughout the Downtown area. During this meeting, the project team conducted a SWOT (Strengths/Weaknesses/Opportunities/Threats) analysis for the Downtown parking system. The results are shown in **Table 2** below.



Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> <li>• Private sector and operator dedication to success of the parking system</li> <li>• New technologies, including pay-by-phone</li> <li>• Pricing strategies tied to the duration of stay in the area</li> <li>• Parking capacity is sufficient</li> <li>• CAP/ADID Ambassador Force</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of a plan – what’s the goal for the City?</li> <li>• City’s permitting process</li> <li>• Standards for lots are needed</li> <li>• Need help from the City for off-street security</li> <li>• Consistency of parking experience</li> <li>• Safety (perception or reality)</li> <li>• Off-street booting policy is too aggressive</li> <li>• Parking operators have no legal options to collect on tickets</li> <li>• Customer service is inadequate</li> </ul>	<ul style="list-style-type: none"> <li>• Public/private partnerships</li> <li>• Customer service</li> <li>• Greater enforcement (off-street lots with public assistance)</li> <li>• Improvements to signage</li> <li>• Special event rate consistency</li> </ul>	<ul style="list-style-type: none"> <li>• Public perception of parking</li> <li>• Enforcement practices (or lack of enforcement in private lots)</li> <li>• Homeless population is a destination detractor</li> <li>• Tourist nature of Downtown</li> <li>• Construction activities alter traffic</li> </ul>

**Table 2 - Stakeholder Meeting Results**



### CREATING A HOLISTIC PARKING SYSTEM BRAND

Stakeholders discussed the need for consistent branding of Downtown parking facilities to provide motorists with guidance that is memorable and easy to use. A disjointed, difficult to navigate parking system can cause frustration for visitors unfamiliar with the area, thus harming the overall reputation of Downtown. Stakeholders indicated that it is essential to support a positive parking experience by promoting user satisfaction through a strong, consistent, and cohesive parking system. This level of satisfaction can be supported by consistent branding of Downtown parking assets, to improve access to parking and support ease of use which can be accomplished through a Downtown parking wayfinding system.



### FUNDING

Revenue generation and funding options for Downtown parking facilities were identified during stakeholder meetings. Currently, parking revenues are reinvested into the general fund, but the idea of creating a parking fund to finance study area benefits was discussed. A parking surcharge, or an additional parking charge placed on facility users, was cited as another option to finance area parking initiatives or transportation projects. It has been previously estimated in a Connect Atlanta report that approximately \$47 million in revenues could be expected with the implementation of a parking surcharge. Additionally, as an incentive to promote transit use, the City mentioned that a higher parking surcharge could be placed in facilities near transit to encourage motorists to utilize the transit services provided.

### UPDATED PARKING TECHNOLOGIES AND STRATEGIES

A prominent topic that emerged during stakeholder discussions included that the implementation and standardization of a variety of upgraded parking technologies and strategies to improve enforcement, navigation, and revenue collections within Downtown parking facilities. A universal payment system was discussed, which would streamline the payment processes, support a variety of payment methods, allow for variable pricing, and accept payments made using a smartphone application. Duncan Solutions, the management company behind ParkAtlanta, controls parking equipment and selection for on-street parking assets. Efforts are currently underway in the application of ParkMobile, a mobile parking payment service provider, to allow for payment to be made through the ParkMobile smartphone app or by calling the ParkMobile toll free number.

### PUBLIC PERCEPTION

The City and ParkAtlanta expressed a desire to improve parking perceptions among the general public in Downtown. The initial implementation of the on-street parking management system was not accepted well publicly, resulting in a temporary moratorium on parking management operations. Much of the frustration stems from ParkAtlanta's thorough nature of parking enforcement. Both parties expressed an interest in positive promotion of the parking system through media outreach and targeted marketing.

### NON-PERMITTED PARKING

Stakeholders also mentioned the occurrence of illegal "pop-up" lots. "Pop-up" lots are parking lots that do not have a legal permit to operate, generally operating during large events to capitalize on the demand for parking. These "pop-up" or "gypsy" lots have proven to be a problem for overall management of the parking system, as well as potential safety and security concerns for patrons. Specifically, stakeholders identified the need for enhanced enforcement to eliminate the presence of gypsy

lots, where additional support from code enforcement staff was discussed.

### ADDITIONAL ON-STREET PARKING ASSETS

City stakeholders discussed the implementation of more on-street parking areas throughout the Downtown. The City is currently in control of the area's on-street parking assets, whereas nearly all other parking assets in the study area are controlled by private entities. The additional on-street parking assets would promote accessibility to Downtown businesses, increase revenues for the City, and support walkable urban form practices. The addition of on-street assets may be limited by regulations in the ParkAtlanta contract.



## Public Perceptions: A 2007 and 2013 Comparison

In Fall 2013, a survey effort was initiated to identify the parking and travel behaviors in and around Downtown Atlanta. A third party survey was conducted by the Schapiro Group, surveying individuals from across the Atlanta region. In addition, CAP issued a similar survey to its constituents in the Downtown. The variation in participants between groups – those from the greater Atlanta region in the Schapiro survey and those in the Downtown area in the CAP survey – provides an interesting backdrop to compare the results of the two 2013 surveys to understand the behaviors of people within and outside of Downtown. The public perceptions identified as a result of their combined effort provide insight into areas of focus for the Downtown parking system, as well as guidance in establishing a comprehensive parking program that meets the needs of its users. Additionally, a similar outreach effort was conducted for the previous 2007 CAP/ADID study, which provides some opportunity, where available, to compare how public perception and parking characteristics have changed over the years between studies.

### WHY ARE PEOPLE COMING TO DOWNTOWN?

Specific questions were used to identify the primary reason people come to Downtown Atlanta. The following table summarizes the results of the 2007 survey, the 2013 CAP survey, and the 2013 Schapiro survey to see how trends have shifted.

Nearly all respondents (96 percent) of the 2013 CAP survey, chose “work-related events or meetings” as the primary reason for coming to Downtown. However that same choice generated little response from the Schapiro survey effort, with 23-22 percent of responses. Based on the two different audiences of each survey effort, the results indicate that those living in the greater Atlanta region (i.e. in surrounding counties or outside the

Primary Reason for Traveling to Downtown Atlanta	Percentage		
	2007	2013 CAP	2013 Schapiro
For Work	70%	96%	23%
Sporting Events	-	50%	46%
Concerts or Other Special Events	-	56%	57%
Events and Attractions	51%	37%	60%
Dining	36%	40%	49%
Go to School There	5%	5%	5%
Live There	14%	-	4%

Table 3 - Survey Comparison: Why Are People Coming to Downtown?

perimeter) are less likely to travel to Downtown for work related events.

Although the 2007 survey combined the purpose of coming to Downtown for events and attractions, some inferences can be made between survey results. Based on the regional perspective of the 2013 Schapiro survey, more people are coming to Downtown to visit attractions than the 2007 participants (51 percent). Between both the 2013 CAP and Schapiro surveys, many respondents chose concerts and special events as their primary reason for coming to Downtown, an increase of approximately 5 percent since 2007.

Nearly all respondents (96 percent) of the 2013 CAP survey, chose “work-related events or meetings” as the primary reason for coming to Downtown. However that same choice generated little response from the Schapiro survey effort, with 23-22 percent of responses. Based on the two different audiences of each survey effort, the results indicate that those living in the greater Atlanta region (i.e. in surrounding counties or outside the perimeter) are less likely to travel to Downtown for work related events.

### HOW ARE PEOPLE GETTING TO DOWNTOWN?

In the 2007 survey 84 percent of people stated that they drive alone when traveling to Downtown compared to 63 percent in the 2013 Schapiro survey and 73 percent in the 2013 CAP survey, showing a downward trend in the use of single occupancy trips in favor of other methods of transportation.

### WHERE ARE PEOPLE PARKING?

The 2007 and 2013 surveys also included a question asking whether drivers normally utilize on or off-street parking facilities when parking in Downtown. In 2007, 78 percent of participants parked in off-street parking facilities. The Schapiro survey showed that 65 percent park in off-street facilities and the 2013 CAP survey resulted in 85 percent parking in off-street facilities. Additionally, the 2013 survey asked participants whether the space they park in is designated for them specifically or is available to the general public. 83 percent of participants in the Schapiro group stated that the space was available to the general public and 35 percent in the 2013 CAP survey. In general, trends haven’t changed much in terms of how and where people park, with most transient parkers looking for non-permitted off-street parking.

## HOW DO PEOPLE GET TO OTHER DESTINATIONS IN DOWNTOWN?

In the 2013 Schapiro survey, 64 percent of participants stated that they normally walk between destinations in the Downtown area, compared to 71 percent of 2013 CAP respondents. Fifty-two percent of respondents in the 2007 survey stated that they never park multiple times a day, indicating that they either park once and use other methods of transportation to reach other destinations or do not travel to other destinations at all.

The 2007 survey results showed that 47 percent of people parking in Downtown occasionally or frequently park in multiple places in a day, whereas the 2013 survey showed that 21 percent of 2013 CAP responders and 53 percent of Schapiro responders do the same.

Based on these results, it appears that more individuals are parking and walking to other destinations than in 2007, which indicates the migration to a more Park Once mentality within the Downtown. A comparison between the two 2013 data sets could mean that regional individuals (Schapiro) who frequent that Downtown area are less confident with parking and walking to other destinations than with those who frequent Downtown more often (2013 CAP survey).

## HOW LONG DO PEOPLE STAY?

In relation to how long people stay in Downtown, the 2007 survey showed that 41 percent of participants park for more than 4 hours at time and 19 percent stay 3-4 hours. The 2013 Schapiro survey showed that 46 percent stay 3-4 hours and 27 percent stay 5-10 hours. The 2013 CAP survey showed that 58 percent stay 5-10 hours, 19 percent more than ten hours, and 13 percent 3-4 hours. Generally speaking, it appears that people are staying longer in Downtown in 2013 than in 2007, although those results could be attributed to the participants rather than changing conditions

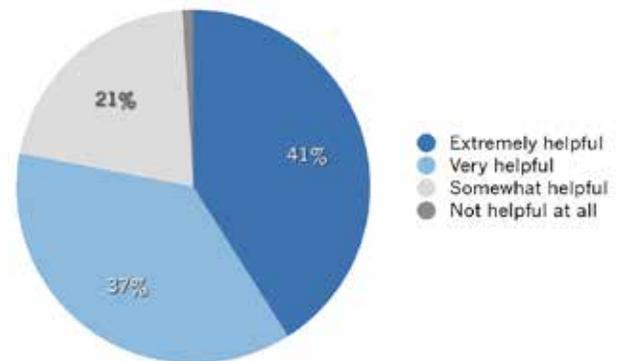
## PUBLIC PERCEPTIONS

Participants were asked to rank a number of aspects in the parking system on a 1 to 10 scale, with a 1 being poor and a 10 being excellent. The ease of garage payment system and the availability of spaces in garages are perceived to be the best aspects of Downtown, ranked as “good” among participants. The number and clarity of signs directing motorists to parking, the ease of street and lot payment system, and the ease of finding open spaces are perceived to be neither good nor bad, where participants remained relatively neutral. The availability of on-street spaces is perceived to be less than good, eluding to the idea that some participants may desire more on-street parking or to learn where on-street parking is located.

More respondents found that it would be either extremely or very helpful if a consistent parking brand was implemented in public parking in Downtown, through consistent signage and updated

parking maps (the results to this survey question are represented in the graphic below for Schapiro participants). This indicates that many people would be supportive of many of the concepts and recommendations provided as a result of this project.

In terms of safety, most respondents were neutral on the safety of Downtown Atlanta generally, and in relation to on-street, surface, and garage parking. Surface lot parking was considered to be the least safe out of the group, ranking 4.84 out of ten. Similar safety concerns were stated in the 2007 survey.



In terms of the price for parking, the perceptions are generally split evenly, where most people somewhat agree with the fact that parking in Downtown is high, but it’s just something that they deal with, or the price of parking is what is expected for a city like Atlanta. In the 2007 survey, 56 percent of respondents did not agree that the price of parking was reasonable. Based on those findings, it appears people are less frustrated regarding the price of parking than in 2007.

A number of questions were formatted to identify why others may not go to Downtown. The results of the survey showed that participants viewed Downtown traffic as being the primary reason people may not visit Downtown. The cost of parking and safety perceptions generally and in terms of parking a vehicle were the second and third most chosen reasons. Survey respondents also voted the difficulties in finding public parking and parking near final destinations as hindrances in generating Downtown visitors.

A few questions in the 2013 survey were interested in identifying public perception on ParkAtlanta, where participants were asked how familiar they were with ParkAtlanta and asked to rate how well ParkAtlanta does its job. Prior to being given an explanation of the roles and responsibilities of ParkAtlanta, – which may have been beneficial for those who have not heard of the parking management entity – ParkAtlanta was rated a 4.4, which translates into slightly less than average.

Digging deeper, the results were evaluated for people who were very familiar with ParkAtlanta, were someone familiar with ParkAtlanta, and were not familiar at all to better understand the participants behind the ratings. Participants that were very



familiar with ParkAtlanta rated an average of 3.74, participants who were someone familiar with ParkAtlanta rated an average of 4.54, respondents who were not familiar with ParkAtlanta rated ParkAtlanta as a 4.99. This further breakdown indicates that individuals who are more aware of ParkAtlanta as a program are less satisfied with the performance of the program. Additionally, people who have no understanding of ParkAtlanta still rate the management entity as doing an average job in managing and enforcing on-street parking in Downtown.

### Parking System Overview

#### MANAGEMENT OF PARKING ASSETS

The Downtown Atlanta parking system consists of a variety of parking management strategies, implemented by numerous private parking operators. These operators and their facilities are characterized by varying rate structures, space availability, signage, revenue systems, and programming. This amalgamation of strategies, developed by separate entities, has influenced the fragmented development of the parking system in Downtown, which lacks the consistency of a parking system that operates under one management entity.

Because the area's assets are operated under such a wide mixture of management entities, the project team reached out to Downtown parking operators to discuss how their facilities operate, in order to develop a better understanding of the overall parking environment in Downtown. These conversations were focused upon a list of information items that would support a general analysis of the overall parking environment.

Items discussed during conversations with parking operators included:

- Facility information
- Capacities
- Transient rates
- Monthly rates
- Event rates
- Event Patterns
- Parking duration averages
- Permit information
- Validation or first hour free programs
- Reserved spaces
- Ingress and egress patterns
- Occupancies
- Seasonal variations

#### PARKING MANAGEMENT CONCLUSIONS

As expected, the variety in parking management entities causes the parking characteristics of Downtown facilities to vary between locations. This variety includes tenant mixture, rate structure, facility programming, and general user types.

The various conversations with parking operators identified that the prices of parking structures vary between companies, facility location, and time of day. Operational standards vary as well – some facilities are open in the evening hours, some are closed on weekends, some are public parking facilities, others provide little parking to the public, some rent spaces from facilities, others lease spaces to facilities, some observe 100% occupancy, others observe 50%. The diversity in the parking system is equal to

that of the diversity observed in many other facets of Downtown. However, this diversity in the parking system is one of the critical elements that creates confusion and frustration amongst the base of users in the Downtown area and is a true threat to the continued successful diversification of Downtown.

Although there seemed to be little consistency within the management aspect of the parking system, conversations did reveal one consistent aspect of the parking system – many of the Downtown facilities are impacted by Downtown events, especially those adjacent to hotel facilities. The continued prevalence of Downtown as an event center will continue to create parking demand constraints, especially in those locations nearest the event centers, such as the GWCC parking facilities, and those around Centennial Park and Spring Street, which serve hotel uses.







## Parking Occupancy Data Collection

As part of the 2007 CAP/ADID study, that project team collected parking occupancy information for nearly 95,000 parking spaces in the Downtown area. That effort was largely conducted out of the need to understand the true scale of the Downtown parking system, including inventory, occupancy rates, and operators. This study did not include a robust data collection effort like that one, largely because of the thoroughness of data collected in the CAP/ADID study and the short time span between the two studies. Instead, parking occupancies were collected on a smaller scale, in three key locations where new demand generators or changes in patron behavior might have impacted the overall parking utilization. Additionally, parking operators were polled to provide peak occupancy characteristics at their individual facilities<sup>1</sup>.

Parking occupancies were collected in 34 parking lots and garages (representing 7,994 parking spaces) located around the northern portion of Centennial Park (near the Georgia Aquarium and World of Coca-Cola); in the Underground Atlanta facilities; and facilities adjacent to the northern portion of the GSU campus. Additional data was collected near Philips Arena and the Georgia Dome during varying event conditions.

These three areas were specifically chosen because of potential changes in parking demand due to known changes in land uses and demand generators since the 2007 study. These changes include the addition of the new World of Coca-Cola site and changes to the GSU campus, which have the potential to impact parking behaviors in the area. The information gathered in the data collection efforts was compared to the 2007 CAP/ADID study, providing some insight into how the parking demands in the Downtown have evolved over the previous six years.

*Parking occupancy data was collected over three non-consecutive days during October 2013 to identify patterns in hourly parking demand during normal business hours. The data collection process identified the peak parking occupancies of each facility, as well as time of day trends for facilities and areas. A number of facilities in each area were unable to be accessed during collection for a variety of reasons, including construction and security access.*

<sup>1</sup>These private operator occupancies are not provided directly in this report due to the nature of the data and the sensitivities that the private operators expressed related to sharing this data. They are, however, used to define how zone by zone occupancies might have changed over the five year span between studies.

*During most of the data collection, there were no large events held in any of the Downtown demand generators, which account for a large amount of parking demand and frustration in the area. The CAP/ADID study also conducted data collection during non-event periods, allowing for a more comparative analysis of the parking occupancies observed between the two studies.*

*Having spoken with the operators of many of these facilities, however, parking occupancies during events often meet or surpass supplies. The final days of data collection, occurring in mid-October 2013, were conducted during a large concert at Philips arena and a football game at the Georgia Dome. These two days of data collection provide a glimpse into the parking environment during large scale events in the Downtown.*

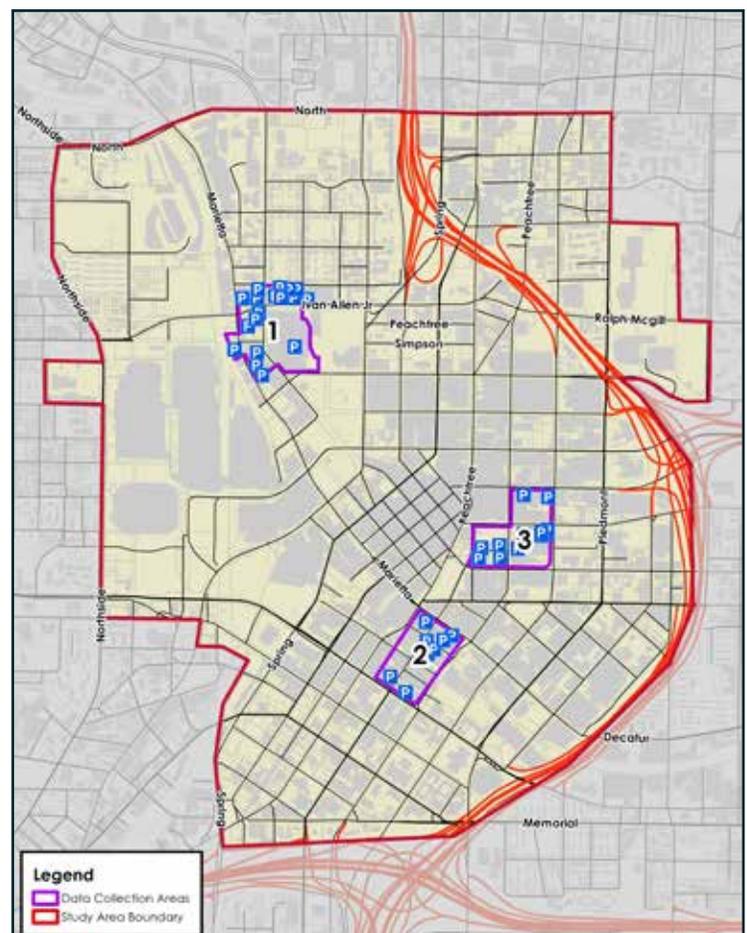


Figure 6 – Data Collection Locations

Area 1 - North Centennial Park	Facility	Capacity	2007 Peak Demand	2013 Peak Demand	Difference
1	306 Marietta St	58	36%	57%	+28%
2	381 Marietta St	8	46%	50%	+4%
3	219 Alexander St	12	17%	8%	-9%
4	22225 Alexander St	35	94%	51%	-43%
5	329 Latmer St	26	46%	35%	-11%
6	362 Luckie St	33	97%	45%	-52%
7	320 Luckie St	25	48%	100%	+52%
8	225 Baker St	1,600	40%	30%	-10%
9	230 Mills St	7	86%	100%	+14%
10	381 Venable St	6	50%	33%	-17%
11	250 Mills St (1)	5	100%	27%	-53%
12	250 Mills St (2)	15	93%	40%	-60%
13	375 Luckie St	14	29%	71%	+42%
14	431 Marietta St	23	17%	26%	+9%
15	380 Luckie St	19	16%	21%	+5%
16	388 Luckie St	5	60%	100%	+40%
17	360 Marietta St	100	28%	46%	-18%
	Total Capacity	2,209			
	Average Occupancy		54%	50%	-4%

Table 5 – Area 1 North Centennial Park Parking Occupancy



Figure 7 - Area 1

Area 2 - Underground Atlanta	Facility	Capacity	2007 Peak Demand	2013 Peak Demand	Difference
1	95 Martin Luther King Jr. Dr	500	100%	100%	0%
2	37 Central Ave (2)	57	100%	50%	-48%
3	37 Central Ave (1)	303	98%	50%	-50%
4	45 Decatur St	93	84%	68%	-16%
5	15 Lower Wall St	136	82%	67%	-15%
6	75 Martin Luther King Jr. Dr	750	58%	44%	-14%
7	46 Wall St	202	71%	96%	+25%
8	15 Peachtree St North-east	566	82%	50%	-32%
	Total Capacity	2,607			
	Average Occupancy		84%	65%	-19%

Table 6 – Area 2 Parking Occupancy Results



Figure 8 – Area 2

Area 3 - North GSU	Facility	Capacity	2007 Peak Demand	2013 Peak Demand	Difference
1	109 Courtland St	18	83%	39%	-44%
2	140 Courtland St	16	100%	100%	0%
3	42 Auburn Ave	199	14%	100%	+86%
4	55 Park Pl	200	17%	54%	+37%
5	57 Peachtree Center Ave	46	100%	100%	0%
6	60 John Wesley Dobbs Ave	2153	52%	67%	+15%
7	60 Peachtree Center Ave	41	78%	20%	-58%
8	63 Peachtree Center Ave	26	54%	100%	+46%
9	67 Park Pl	250	45%	26%	-19%
10	79 Peachtree Center Ave	170	61%	44%	-16%
11	85 John Wesley Dobbs Ave	47	100%	32%	-68%
12	94 Courtland St	12	67%	33%	-33%
	Total Capacity	3,695			
	Average Occupancy		64%	59%	-14%

Table 7 – Area 3 North GSU Parking Occupancy Results

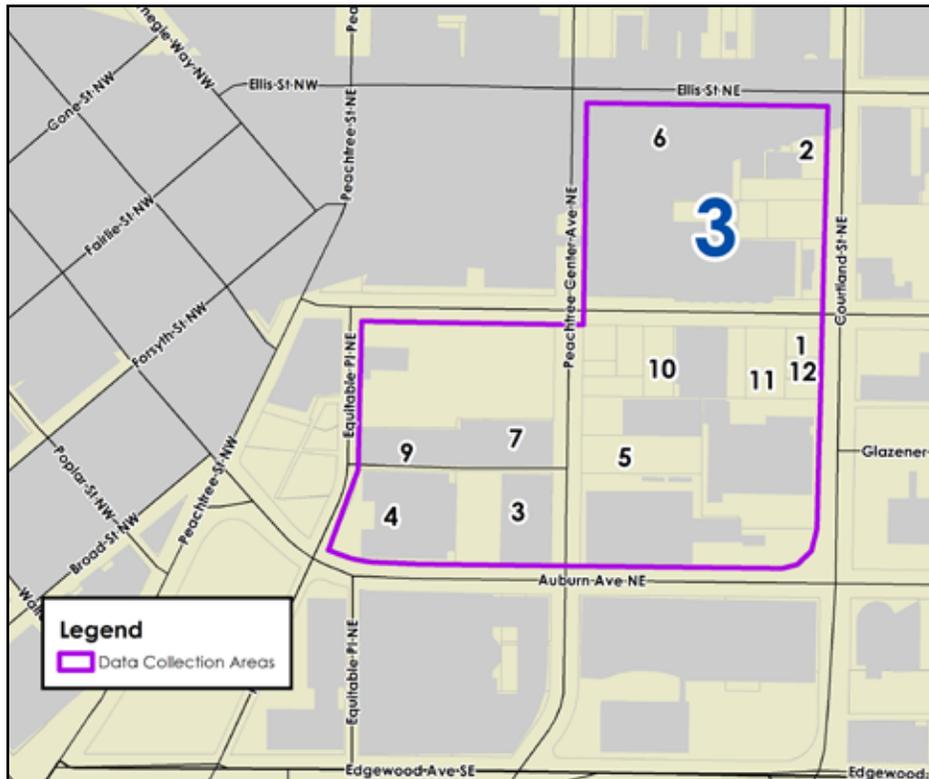


Figure 9 - Area 3

### EVENT PARKING OCCUPANCY

Parking occupancy data was also collected during event conditions in the Downtown area. The data collection occurred on October 20th in eleven parking facilities surrounding the Georgia Dome during an Atlanta Falcons game, as well as a preseason Atlanta Hawks basketball game at the adjacent Philips Arena. For this particular data collection effort, parking occupancy levels were determined through visual observation. This type of collection was undertaken, rather than counting all parked vehicles within the parking 11 facilities, due to special event constraints, such as congestion delays, cramped parking facilities due to tailgating, and staggered ingress/egress patterns. Data collection began three hours before the 1:00pm game, and restarted once the game ended, restarted after the game ended at 4:30pm, and lasted until 7:00pm. The results are shown in **Table 7**.

Visual observations of parking occupancy during an event were also collected during a concert held at Philips Arena on October 19. The purpose of this observation was largely to determine ingress and egress patterns at the CNN deck, adjacent to Philips Arena. Data was collected at the CNN parking deck at the start of the concert and after the concert ended. Before the concert, the bottom of the deck was 30% full and the top was 60% occupied. After the concert, attendees began leaving the parking deck at approximately 10:40pm, and at 11:00pm when most attendees had exited, the top deck was 5% occupied and the bottom deck was 10% occupied.

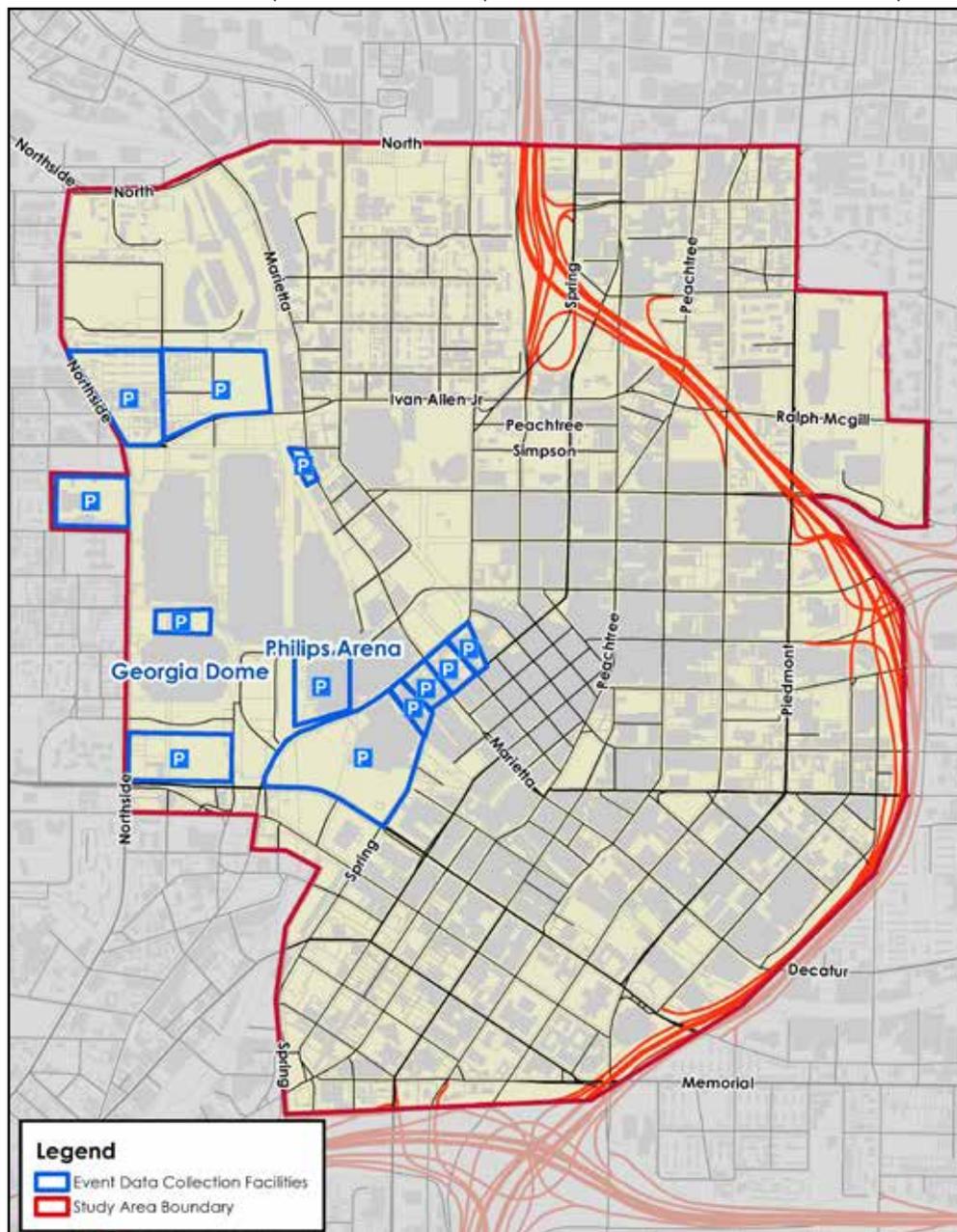


Figure 10 - Event Parking Data Collection

Event Parking Facility	Capacity	10am Occupancy	11am Occupancy	12pm Occupancy	4pm Occupancy	5pm Occupancy	6pm Occupancy	7pm Occupancy	Peak Demand
Orange Lot	580	35%	37%	40%	50%				290
Yellow Lot and Marshalling Yard	2,640	66%	78%	90%	62%	35%			2,376
Gold Lot	300		66%			20%			198
International Red Deck	2,000	10%	30%	50%	20%				1,000
30 Spring St	768		50%	50%	35%	20%			384
30 Spring St (CNN)	850	15%	25%	80%	80%	60%	40%	30%	680
23 Spring St Atlanta, GA (Guich)	720	25%	58%	90%	60%				648
123 Spring St North-west Atlanta, GA (2)	366		85%	90%	60%	60%	60%		329
100 Spring St , 127 Walton St, 141 Walton St, 155 Walton St	120	75%	88%	100%	90%	75%	60%		120
360 Marietta St	100	50%	70%	90%	67%	45%			90
Blue lot	722	50%	28%	90%	55%	20%			650
Total Capacity	9,166								

Table 8 – Event Parking Occupancy Results

## PARKING OCCUPANCY RESULTS

A comparison of the 2013 and 2007 parking occupancy data for the chosen facilities provides some insight into the shift in parking characteristics over the past six years. In observance of the parking demand detailed in the above figures, parking occupancies have both increased and decreased dramatically, but generally speaking, the pattern trends towards a reduction in parking demand.

A multitude of factors can contribute to the increase or decrease in parking demand including events, time of data collection, new development, lost development, shifts in land uses, shifts in transportation characteristic's, of which it is difficult to determine primary sources of change. However, when analyzing changes over the span of the larger area, trends can be observed in relation to general changes in parking demands. This analysis is discussed in the next section.

## EVENT OCCUPANCY RESULTS

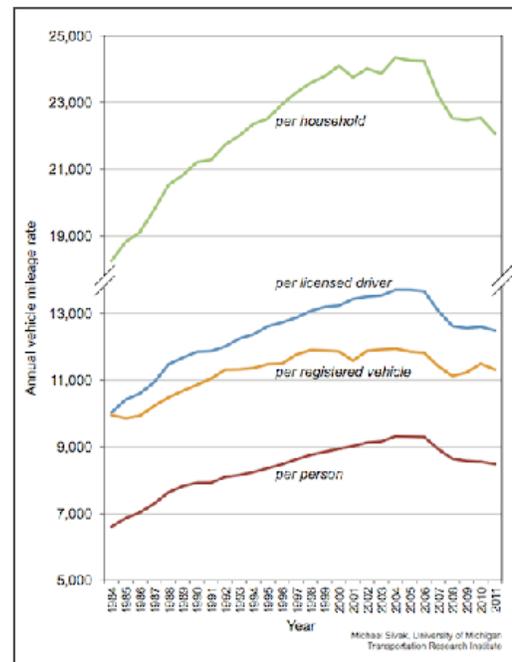
It was determined that the peak hour of demand was 12pm, an hour before the game began, with an overall occupancy of approximately 6,510 vehicles, amounting to 71% of total occupancy of all parking facilities observed. Many of these parking facilities are reserved for season ticket holders, but there are many other opportunities for non-season ticket holders to get to the game including using transit or parking outside of the immediate venue vicinity.

### Shifts in Driving Behavior

Over the past eight years, the pattern of driving among Americans has shifted. Previously, there was an exponential increase in vehicle miles traveled since the wide spread use of the automobile, began in the early 20th century. Around 2005, the trend began to take a steep drop, reflecting changing driving behaviors as costs to drive rise. This trend is observed in both individual and household use.

A multitude of factors may have influenced this pattern. The recession most likely had an impact, where drivers favored saving money on gas or elected to eliminate a household vehicle. Additionally, shifts in work schedules such as telecommuting and compressed work weeks allow employees to work from home more often. Investment and interest has also increased in the use of alternative modes of transportation. Finally, younger professionals have showed to favor non-automobile travel in urban settings.

The figure below, provided by the University of Michigan Transportation Research Institute, represents this downward trend in vehicle travel demand.



## ZONAL PARKING DEMAND

The occupancy information collected in the field (for the current study) was combined with limited information provided by Downtown private parking operators, to create an overview of the current parking demands in the Downtown. This data was compared to 2007 CAP/ADID data to determine how the parking environment has changed over the past six years. The 2007 analysis determined that the parking occupancy of all of the parking lots and garages of Downtown was 63 percent, and the 2013 analysis determine the overall occupancy to be 61 percent.

The decrease in occupancy percentages for Zones A and B can be attributed to the changes in the parking environment of the area. The data collected in the field and provided by parking operators actually shows that more motorists are parking in the area than in 2007 with an increase of 1,900 spaces of demand for Zone A and 530 spaces of demand for Zone B. However, since the CAP/ADID 2007 study, new parking facilities and modifications to existing facilities in the area have been constructed, increasing parking supplies in each zone by over 1,300 spaces, which cause the parking occupancy comparison to be slightly skewed.

**Table 9** below compares the shift in parking occupancies by zone and for Downtown overall between the 2007 and 2013 analyses. As the table shows, parking occupancies throughout the study area have decreased over the past six years. The decrease in parking occupancy can be attributed to the increase in parking capacities, where, as **Table 7** indicates, parking capacities have increased by roughly 2,822 spaces over the previous six years. This number is based on field inventory of selected areas in the Downtown, as well as parking operator data. Changes in

capacity are likely attributed to either development of new parking facilities in conjunction with development sites or redevelopment of existing parking facilities.

## ON-STREET PARKING & PARKATLANTA

At the time of the CAP/ADID Study, there were 632 metered and 386 marked, non-metered spaces throughout the Downtown, managed by the City of Atlanta. Since the completion of that study, the management of on-street assets has shifted from the City's Public Works Department into the hands of a private operator, Duncan Solutions. That entity, known as ParkAtlanta, handles the management and enforcement of approximately 2,500 metered on-street parking spaces located throughout the Downtown and surrounding areas. These metered spaces include 205 multi-space parking meters covering 1,376 spaces (averaging 6.7 spaces per meter) and 1,116 single space meters (including a mixture of coin-operated and credit card meters).

### PARKATLANTA

ParkAtlanta, the primary management entity for on-street parking assets in Atlanta, has conducted its own study regarding the occupancy of metered on-street spaces. From the hours of 7:00am to 10:00pm, occupancy data was collected in the Downtown and greater Atlanta area. Results identified peak occupancy hours for all locations including those outside of the Downtown area to be between 11:00am to 2:00pm and 7:00pm to 10:00pm which reflect high intensity mid-day and evening parking demands (See Figure 11). The study also reviewed occupancies at a smaller scale, defining occupancies in 20

Number	2007 Capacity	2013 Capacity	2007 Occupancy	2013 Occupancy*	Difference
Zone A	16,290	17,669	29%	27%	-2%
Zone B	7,284	7,909	56%	52%	-4%
Zone C	10,587	10,587	62%	NA	NA
Zone D	17,631	18,849	71%	71%	0%
Zone E	8,649	9,926	67%	65%	-2%
Zone F	9,884	8,571	64%	63%	-1%
Zone G	14,072	13,710	79%	72%	-7%
Zone H	8,631	8,631	72%	NA	NA
Totals	93,006	95,828	63%	61%	-2%

**Table 9 – Zonal Parking Demand**

\*Parking Occupancy values shown for 2013 are for a limited amount of field collected data and private parking operator data. As more data is collected from operators, these values will be included to finalize the 2013 occupancy projections.

Zone	Spaces Surveyed	Average Occupancy	Average Occupancy During Peak Hour
Zone 1	105	53%	67%
Zone 2	69	57%	65%
Zone 3	125	56%	76%
Zone 4	111	49%	67%
Zone 5	145	21%	36%
Zone 6	98	76%	82%
Zone 7	35	7%*	-
Zone 8	120	12%	67%
Zone 9	52	40%	56%
Total	860	42%	61%

Table 10 – ParkAtlanta On-Street Parking Occupancies

\*During the time of data collection, Zone 7 was under heavy construction and therefore a thorough survey was not conducted in that location as the results would not accurately represent on-street occupancy within the area.

zones within the City, nine of which are located in the Downtown area. **Table 10** identifies the average occupancy of on-street spaces for each zone as well as the average occupancy during the peak periods defined previously in the study.

### COMPARISON

The on-street data provided in both the CAP/ADID and the ParkAtlanta reports provides insight into the trends into the utilization of the on-street parking assets in Downtown. **Table 11** represents the parking occupancy results collected in each study. The results show that there has been a 228 space increase in metered parking spaces in Downtown since 2007. Although the number of cars parking in on-street spaces increased by 89 vehicles, peak parking occupancies decreased from 69 percent to 61 percent. The overall reducing in on-street parking occupancies may be a result of a number of different factors including:

- Increase in overall capacity of available metered spaces with little changes in demand, resulting in lower occupancies
- Shift in vehicle usage towards alternative modes of transportation
- Variations in sample size affecting demand results (The Auburn/Edgewood area was under heavy construction during ParkAtlanta data collection efforts which may have an effect on the overall parking occupancy in the Downtown area).

### REVENUES

ParkAtlanta manages revenues of on-street metered parking spaces, where rates are primarily \$2.00 per hour. Since 2009, ParkAtlanta has tracked the on-street revenue stream on a

Study	Metered Spaces Surveyed	Peak Occupancy	Peak Demand
CAP/ADID 2007	632	69%	436
ParkAtlanta 2013	860	61%	525
Difference	228	-8%	+89

Table 11– Downtown On-Street Parking Occupancies

monthly basis, providing information into the patterns of on-street utilization as well as profitability. Although monthly revenues vary by month, total annual on-street meter revenue has increased since from \$2,968,548 in 2010 to \$4,529,649 in 2012 (A full report of the monthly revenues from ParkAtlanta is available upon request). The CAP/ADID study conducted a review of the on-street parking inventory and noted rates to be uniformly \$2.00 through the City. As meter rates have remained nearly the same since the time of the previous study, it can be assumed that the increase in meter revenue since 2010 may attributed to an increases in utilization, transactions, and/or increases in meter payment due to the availability of credit card payment options, which support easy payment opportunities. The report divides meter revenue into five identifiable zones including the central business district, Midtown, Buckhead, Little 5 Points, Virginia Highlands, and into an “other” category. The Central Business District results include gross meter revenue from September 2011 to August 2012 of \$1,924,567 and \$2,035,103 from September 2012 to August 2013, of which generate the highest revenue source of all on-street parking districts.

In addition to providing revenues, the report also defines the average transaction value per space per day, which provides insight into how long the parking duration average is for each month. For the 2013 year, parking transaction values ranged from \$4.43 to \$5.46, meaning that individuals are parking approximately between an average of 2.21 and 2.73 hours, provided no citations are issued and motorists pay the parking meter.

As stated previously (as a stakeholder perception), the ParkAtlanta enforcement officers are considered extremely thorough regarding the issuance of on-street parking citations, which has become a point of contention between the public and the City and ParkAtlanta. From 2010 to 2011, citation issuance increased by approximately 100,000 tickets. However, over the past two years, citation issuance has seen decreases of five and seven percent. At the same time, parking citation revenue has

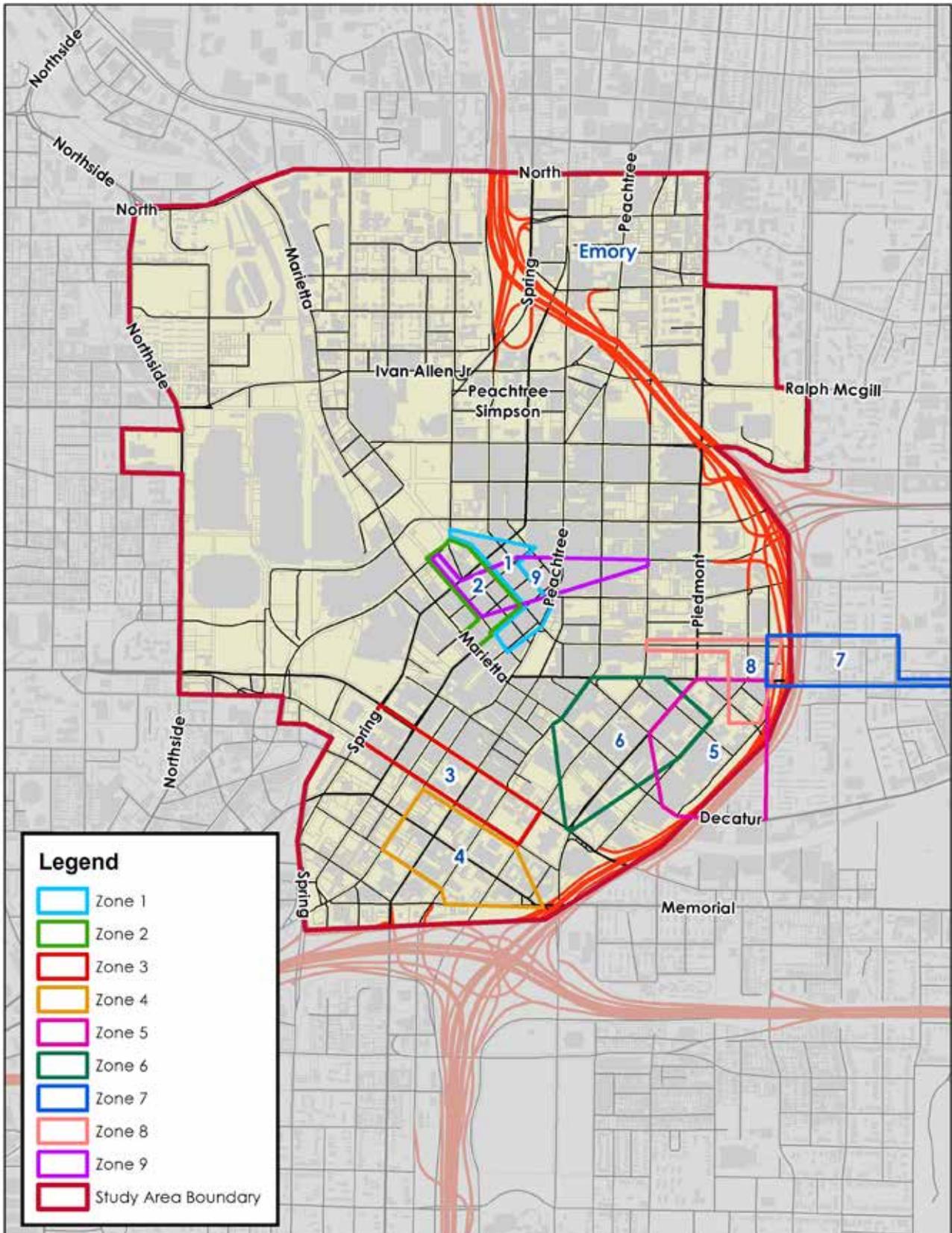


Figure 12 – On-Street Citations and Revenue

seen a slight increase, indicating that the reduction in citation issuance is not impacting the financial stability of the on-street parking management.

**Figure 13** details the trends in revenue generation and citations over the past three years. In this example, the 2013 data was extrapolated to include a full year of data (based on nine months of data).

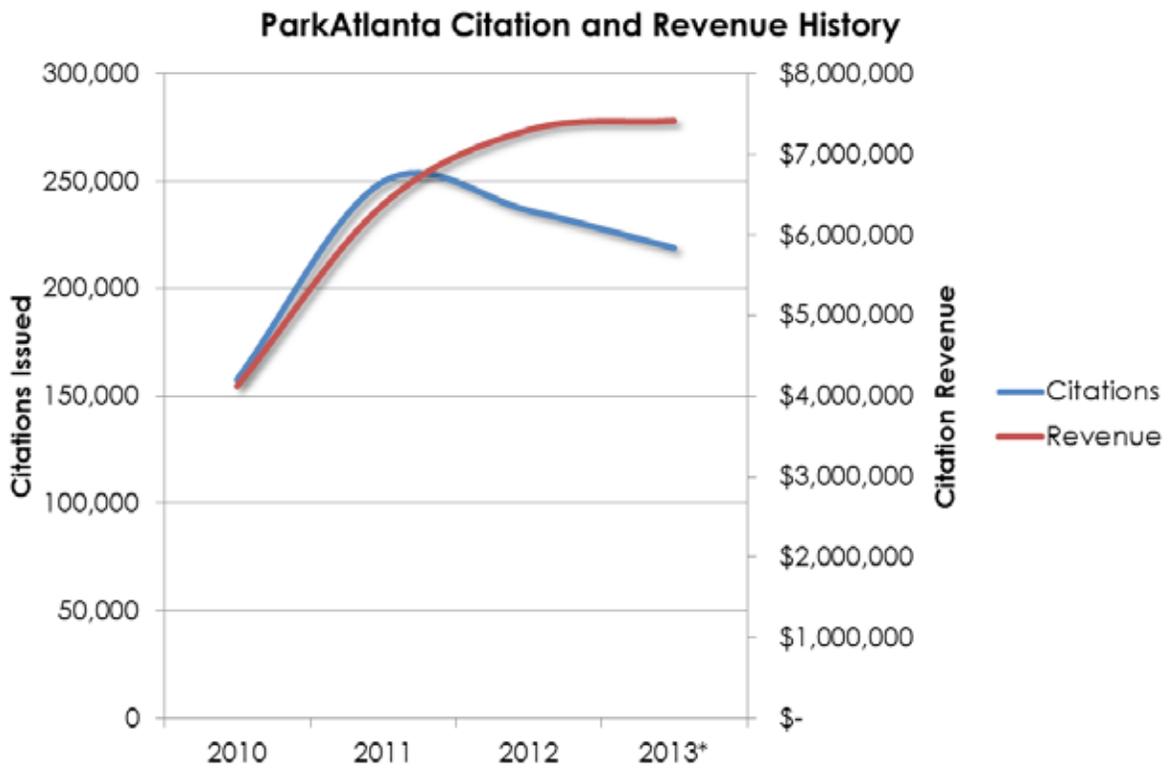


Figure 13 – ParkAtlanta On-Street Parking Zones

## CREATING PUBLIC PARKING FROM PRIVATE SUPPLY - CASE STUDIES

One of the primary recommendations provided in the previous CAP/ADID study was the formation of a public parking system from private parking assets. This concept, sometimes called a parking collaborative, is best implemented in large scale Downtowns with minimal city owned off-street parking ownership. This lack of off-street ownership often limits the ability of city planners and managers to effectively promote the Downtown experience, because the parking system cannot be managed in a way to incentivize Downtown visitation and growth.

The concept of creating a public parking system from private assets is not new – in fact, several large communities have tried it in some fashion or another. The following sections describe a few of these experiences, including lessons learned and advice from Downtown parking and planning peers.

### CHARLOTTE PARKING COLLABORATIVE



Charlotte’s Center City recently experienced a surge of growth as residents, visitors, developers, and business owners renewed their interest in the area, developing new offices, residences, venues, businesses, and restaurants. The strong potential for increased growth in the area ignited the need to create a plan for the future of transportation in the Center City, from which the Center City Transportation Plan was developed. A sub-topic in the overall plan included the evaluation of the existing parking system to determine issues and areas of improvement in efforts to create a more cohesive parking system and experience.

Center City’s 40,000 parking assets were owned by a multitude of private operators each with varying rates, schedules, rules, and regulations. The City, however, controlled only a small portion of these assets, mainly on-street spaces. The amalgamation in ownership created a disjointed parking system that lacked coordination, which generated confusion for Uptown visitors in finding appropriate parking. The disjunction of the parking system pushed the City to explore the creation of a uniform parking system, managed by separate private entities working together to create the appearance of a holistic parking system to better serve the overall Uptown area. This new management system was coined as the Center City Parking Collaborative.

The goals and objectives of the Center City Parking Collaborative were:

- To coordinate between facilities to distribute and share information on the parking system that is consistent across all avenues of communication
- To balance and support access for all travel modes in efforts to meet overall community goals by balancing and managing parking as of piece of the overall transportation system
- To provide safe, attractive, and well-maintained parking facilities by promoting standards and supporting maintenance and security initiatives
- To support customer service to Uptown motorists by establishing a consistent branding, marketing, signage, information sharing, and validation programs
- To develop and provide community education materials and programs to educate the community on the transportation system as well as provide workshops for facility owners and operators
- To create a “best-in-class” parking program by addressing the needs of the community and implementing special programs to support these needs
- To support economic development initiatives for parking and transportation needs by providing expertise and funding opportunities
- To adhere to and execute good planning and design principles

In efforts to support participation by the Center City’s parking operators in establishing a widespread uniform parking system, the City and the Center City Partners allowed for membership into the collaborative at no cost, providing parking decks with system signage and inclusion in marketing materials.

As part of the overall cohesive parking system, the City implemented a variety of wayfinding and information sharing

strategies to support vehicle and pedestrian traffic within and out of Center City, including vehicle navigation signage that provides real-time parking supply information specific to Uptown parking facilities, guiding motorists to and from the freeways and Center City destinations. Pedestrian guidance signage, which include maps that provide routes to and from Downtown destinations, have also been implemented throughout Center City and at transit stations and parking facilities to further assist the public in arriving to their destination quickly.

## **LESSONS LEARNED**

Charlotte's Parking Collaborative is one of the largest public/private parking collaboratives in the nation, providing an excellent opportunity to learn from as a parking collaborative is evaluated for the Downtown Atlanta context. Additionally, there exist many similarities in the initial problems and overall goals between the Charlotte parking collaborative and Downtown Atlanta. To better understand the experiences of the public and private entities in the Downtown agency Parking Collaborative, the project team reached out to the City of Charlotte and Center City Partners (the committee that represents the parking operators) to discuss their experiences thus far and collect advice that may be beneficial to Atlanta in managing its Downtown parking assets.

## **SUCCESSES IN THE CENTER CITY PARKING COLLABORATIVE**

The greatest success of the parking collaborative was the creation of a universal parking system, yet owned and operated by an amalgamation of owners and management entities. The cooperation of most of the Downtown parking facilities supported the creation of the seemingly public parking system. Their cooperation proved to be beneficial in providing uniform information on the overall parking system to the public through vehicle and pedestrian guidance signage and web-based information sharing.

As previously mentioned, the "hook" of getting parking operators to join and cooperate with the new parking collaborative was to provide the facilities with admission into the system and its wayfinding signage and other strategies, at no cost to the operators. Membership in the parking collaborative provided an advantage over facilities not included in the system, with the outcome of directing more vehicles into the collaborative facilities through vehicle navigation signage and web based information, with the potential to generate greater profits through higher parking occupancy.

Ideally, the City wanted to utilize the holistic parking system to promote the area as a promising location for potential businesses. By utilizing the information pool of parking availability, the City could direct interested businesses to parking facilities with available supply to be utilized by commuting employees. This maximizes the efficiency of Center City's parking assets and

reduces the need to build additional parking facilities as growth in the area continues. Currently, interested employers are routed to the website for more information on locations for potential employee parking.

## **HEADACHES**

After the creation and implementation of the parking collaborative. The program, and more especially the parking guidance system (PGS) associated with it, experienced a variety of "headaches" which stem from gaps in communication, as well as undefined, unrealized, or unadopted responsibilities, and, finally, unanticipated system costs.

The full cost of the cohesive parking collaborative were not realized prior to implementation, partly due to the fact that the parking guidance system (PGS) was the largest attempt to create a privately owned yet seemingly public parking system. The City estimated that it has cost them \$100,000 annually to maintain the PGS associated with the collaborative. The cost of troubleshooting system bugs and unrealized signage maintenance costs, such as sign replacements, were not planned for in its entirety, creating unexpected needs exceeded envisioned (although indefinite) amounts.

Issues in the software aspect of the PGS, which generated a large part of the unanticipated troubleshooting costs, partly stemmed from inconsistencies in revenue systems which are the source of parking facility data. The system relies on the parking data supplied by the revenue systems to support vehicle navigation signage and other system needs. However, revenue systems within the parking facilities vary, providing data in a format that is not uniform between facilities as well as providing streams of data that were often unreliable due to the variability in processes and procedures at each facility. Such inconsistencies cause hiccups in data processing, hindering the functionality and efficiency of the software and accuracy of the data presented to the motorist.

Interest in joining the collaborative has been continuous, as the Center City Parking signage has been requested by three other parking decks and replicated by surface lots (though they are not included in the system). However, the three interested decks were no longer interested after being presented with the cost of implementing new signage and other membership costs (\$25,000 - \$40,000). The costs of including additional facilities to the system after the system has been implemented deter most, if not all, interested operators and facilities. The City representative recommended having extra signage on hand to support growth in system membership for late admissions, therefore increasing overall system parking assets.

After the PGS system was implemented, roles and responsibilities required to keep the system running properly were realized and others unfulfilled, because roles were not directly defined prior to system integration. In order to function properly, deck operators

must reset revenue control systems daily to provide the system with data in a uniform fashion. The absence of accountability expectations, which should have been set before system creation as specific data provision standards, has created some inconsistencies in data collection, adding to overall system inefficiency. Another undefined role includes the monitoring of signage to insure signs are working properly. There is little communication that brings the issue to City’s attention and the out of order sign remains unattended to. The City representative stated that during one instance, they realized a sign was out of order when taking an alternate route to work; who knows how long the sign was actually out of order? The lack of specifically stated responsibilities of parking collaborative members and staff has created gaps in communication between responsible entities, severely hindering efficiency in the overall parking system.

### ADVICE

In addition to providing insight into problems experienced by the collaborative, representatives also provided some advice and insight into what they wish could have been done differently in Charlotte.

- o Require universal revenue control system or ingress / egress technologies that connect to the parking supply signs to bypass data consistency issues
- o Think about long term maintenance and resources prior to implementation, including operating costs, system maintenance, signage, technology requirements, troubleshooting, and staff resources
- o Define funding partners and opportunities to keep the system running
- o Charge venues to be included on signage to support operation and maintenance costs
- o Ensure that the responsible entity which manages the system is capable of carrying out intended goals and fulfills system responsibilities
- o Analyze the parties that are included in the parking collaborative to support a strong management system, promote fluid operations, reduce costs, and improve communications (the City stated the system may benefit from the PGS system being trimmed to only necessary groups)
- o Provide information on the entrances to parking facilities to the public instead of using facility addresses to lessen confusion as motorists attempt to find the facility

### ST. PAUL, MINNESOTA ADVANCED PARKING MANAGEMENT SYSTEM



The City of St. Paul, Minnesota implemented an advanced parking management system in its Downtown to better guide the four million visitors to area facilities. Although the area’s supply is adequate, visitors seemed to have difficulty finding available parking spaces in relation to their destination, creating traffic congestion, most notably during special event periods. In 1995, the City of St. Paul, in coordination with the Federal Highway Administration (FHWA) and the Minnesota Department of Transportation (MnDOT), implemented a \$1,150,700 (21% provided by private sector contributions) Advanced Parking ITS operational test in 10 Downtown parking facilities – both privately and publicly owned – to support efficient movement of vehicles to appropriate parking facilities. Information sharing infrastructure included variable message signs and advisory signs which displayed parking supplies and guided motorists to available parking spaces.

After the test period was complete, an evaluation of the pilot was conducted to determine its successes and obstacles at both the private and public level, which indicate a number of lessons learned that support the creation of a similar system in Downtown Atlanta.

Gauging the experiences of the parking operators was essential in determining the success of the program. After the pilot period concluded, operators determined that facility occupancy rates increased with the use of the advanced parking system, but as with many cases that aim to produce higher occupancies, the increase was not solely attributed to the advanced system. When asked their opinions about the system as a whole, operators recognized the system to be beneficial, and most were

interested in continued participation and expanding the system to other facilities. Defining ongoing costs of membership in the system, however, was the determining factor for remaining in the system.

One overarching goal of the system was to improved traffic flow along city streets through enhanced navigational guidance. This, in turn, would support the influx of people into the area, bringing more activity to Downtown businesses, and thereby strengthening economic development. After discussions with the City and operators regarding the success of the pilot test, both entities believed this goal still remained true and attainable.

The technical performance of the system was also reviewed. Initially, the system was fully operational without failure during 55 percent of the pilot period, however, after a six-month troubleshooting period, the system functioned at a 96 percent success rate, which was deemed a success. It was also determined that the accuracy of the real time parking supply data is dependent on the parking operators consistency in providing data, resetting parking counters, and properly training new and existing employees in the system requirements.

A key factor in soliciting private partnership and cooperation in the system was to provide education and encourage involvement at the beginning of the process to support inclusion in the project, ownership in the process, as well as gaining monetary support from parking operators.

Key findings and lessons learned from the pilot test included:

- Roles and responsibilities of private and public entities involved must be properly defined prior to implementation to support efficiency and effective operations
- Parking facility operators within the advanced parking system must be given proper training, communication, and support to carry out duties and responsibilities of the newly established advanced parking management system to better handle technical difficulties and other unplanned events
- Parking operators must train new staff to be able to carry out roles required of the system
- The contractor responsible for installing and operating the traffic control equipment must be familiar with the equipment and its installation to keep project timelines on course
- The project schedule should account for troubleshooting in the system prior to full system evaluation and implementation
- The system required a “debugging” period to get to sufficient working condition
- An advanced parking management system is relatively transferable to other cities
- System accuracy depends on parking operators consistent cooperation in providing real-time data by resetting parking counters

In 2004, a survey was conducted on the occupancy rates of facilities within the system – seven additional facilities have been added since its initial implementation – in comparison to facilities not connected to the vehicle navigation system. Parking vacancy rates of the twenty-five facilities not included in the system averaged 38 percent, whereas vacancies in the parking facilities that were part of the system were approximately 17 percent. This disparity supports the perceived benefits of an advanced vehicle wayfinding system, supported by a public-private partnership.

## CITY OF SEATTLE, WASHINGTON ADVANCED PARKING WAYFINDING SYSTEM



Traffic congestion in Downtown Seattle, especially near the Seattle Center (coined the “Mercer Mess” by locals), was inescapable, generated by traffic volumes and vehicles circulating for any available parking. In addition to difficulties locating off-street parking, the available on-street parking spaces were going to be severely impacted by years of future construction projects.

The City of Seattle Department of Transportation (SDOT) recognized the parking issue and its impacts on City reputation and set out to develop a plan to reduce area congestion and parking confusion to figure out a way to guide motorists into available off street parking facilities. This realization lead to the development of the Center City Parking Program Plan.

During the initial development of the plan, a multitude of options to better the area’s parking system were discussed and evaluated, including a Parking Guidance System (PGS). Stakeholders were strongly involved throughout these discussions, including parking facility operators and property owners (some of which sit on the board of the Downtown Seattle Association). From the discussions and evaluations of potential options, the PGS was chosen to be implemented as a pilot program. Six parking facilities were chosen to participate, three publicly owned and

three privately owned (five additional facilities were also included in the program, but do not provide real-time information, only passive information related to their location).

Outreach to potential participating private parking operators and owners was fairly straightforward. Initially, two property owners and one parking operator were happy to participate based on the idea that it would support Downtown Seattle and promote a more active use in the area. The City financed all aspects of system inclusion including updates in systems, maintenance, and marketing tools. Parking facilities were also chosen based on their capability to provide up-to-date and real time data. After first stage of the pilot was implemented, a second stage was developed (and will be deployed shortly), but now there is an average of \$10,000 to participate, with the City paying for signs, excluding implementation.

The implementation of the pilot program was viewed as quite successful, but along with its success have come obstacles and lessons learned. To become more familiar with the experiences regarding Seattle's ePark system, the project team reached out to a City representative to discuss experiences, issues, and potential advice.

## **HEADACHES**

During the initial phase of the pilot, there was little difficulty regarding the provision of data by facility operators, as each were very much supportive of the pilot program and were willing to be as helpful and cooperative as needed in terms of providing the necessary data. However, during attempts to include additional facilities in the PGS system, operators were hesitant or unwilling to provide any data, especially regarding occupancy counts. Understanding the trepidation in data provision, the City remained very flexible in terms of what type of data the facility needed to provide. Essentially, the City would take whatever the facility was willing to divulge, as long as it included available spaces that could be displayed in the PGS system. This lack of cooperation in data provision proved to be an obstacle in retrieving more in depth data of the parking facilities, in some cases, as well as in obtaining additional parking facilities for the next stage of the pilot study.

Initially, the City financed all aspects of the PGS system through reimbursement of implementation costs. After the first stage of the pilot was implemented, a second stage was developed (and will be deployed shortly), which now requires a \$10,000 fee to participate. Although the city still pays for marketing and maintenance, the participation fee has proven to be a deterrent for membership among a number of facilities.

When facilities went through the initial system implementation process, all participating facilities utilized the same company to install signage. Because this company was small, it was difficult to meet the installation demand due to limited resource. This caused a few months delay, stalling the full deployment of the

ePark system.

Issues also occurred when there were transitions between new parking operators in the processes of managing the system. It takes significant training to get the new operators and employees that will be handling the system to understand what is required to keep it operating. After initial troubleshooting periods, system operations reach equilibrium once again.

When reaching out to parking facilities to join the PGS, it was difficult to provide qualitative evidence as to how their facilities would benefit. Although it can be inferred that a vehicle guidance system would direct more visitors into their parking facilities, no hard evidence existed at that time that proved that belief. This made it difficult to formulate an argument to encourage parking facilities to participate as it was difficult for operators to determine if their work in the system would provide a return on investment.

## **SUCCESSSES**

One aspect that strongly influenced the successful implementation of the PGS within privately owned and operated facilities was the inclusion and participation of facility operators and property owners from the beginning of the process. This began far before of the process of developing the Center City Parking Plan and by extension, the PGS. Many of Downtown Seattle's parking operators are strongly involved in Downtown public participation efforts; some even sit on the board of the Downtown Seattle Association. Such a strong presence of parking operators in community outreach initiatives has developed a strong sense of ownership among the group to create a better Downtown Seattle.

Parking operators and owners were highly involved as the City began to facilitate stakeholder engagements to discuss and develop the Center City Parking Plan. It is because of this initial active involvement of parking operators and property owners in stakeholder engagements, during and far before the development of PGS that the ePark system was successful. They helped develop the idea. They supported the betterment of Downtown. They were willing to do their part to achieve that goal. Stakeholder engagement efforts and Downtown pride were key factors in facilitating the public/private partnership.

The strong sense of ownership in the partnership provided the foundation for good lines of communication between the private and public partners. If something goes wrong at the facility; for example the system goes out, or a sign needs repairing, facility operators call the City to have it fixed. If the City sees an error in the real-time data that is provided, the City will call the facility operator to reset their system.

The back-end operating system that is utilized by the PGS retrieves parking occupancy data every three to five minutes to display on DMS messages and the ePark website. The efficiency in collection has allowed for up-to-date, real-time parking data to be provided to motorists. However, even this highly efficient set



up could be even quicker, especially for smaller facilities, which can reach capacity very quickly. In these situations, three to five minutes could mean the difference between a full facility and a partially full facility.

As stated previously, there existed little to no concrete evidence that the GPS would increase revenues for participating facilities. Since the deployment of the program, data has been collected to review patterns in revenue streams. Based on this evidence (although it is still developing as of this report), a correlation between the vehicle navigation system and increased occupancies exist. There also exists a small, yet observable, relationship, between reduced circulation on the street network around participating facilities