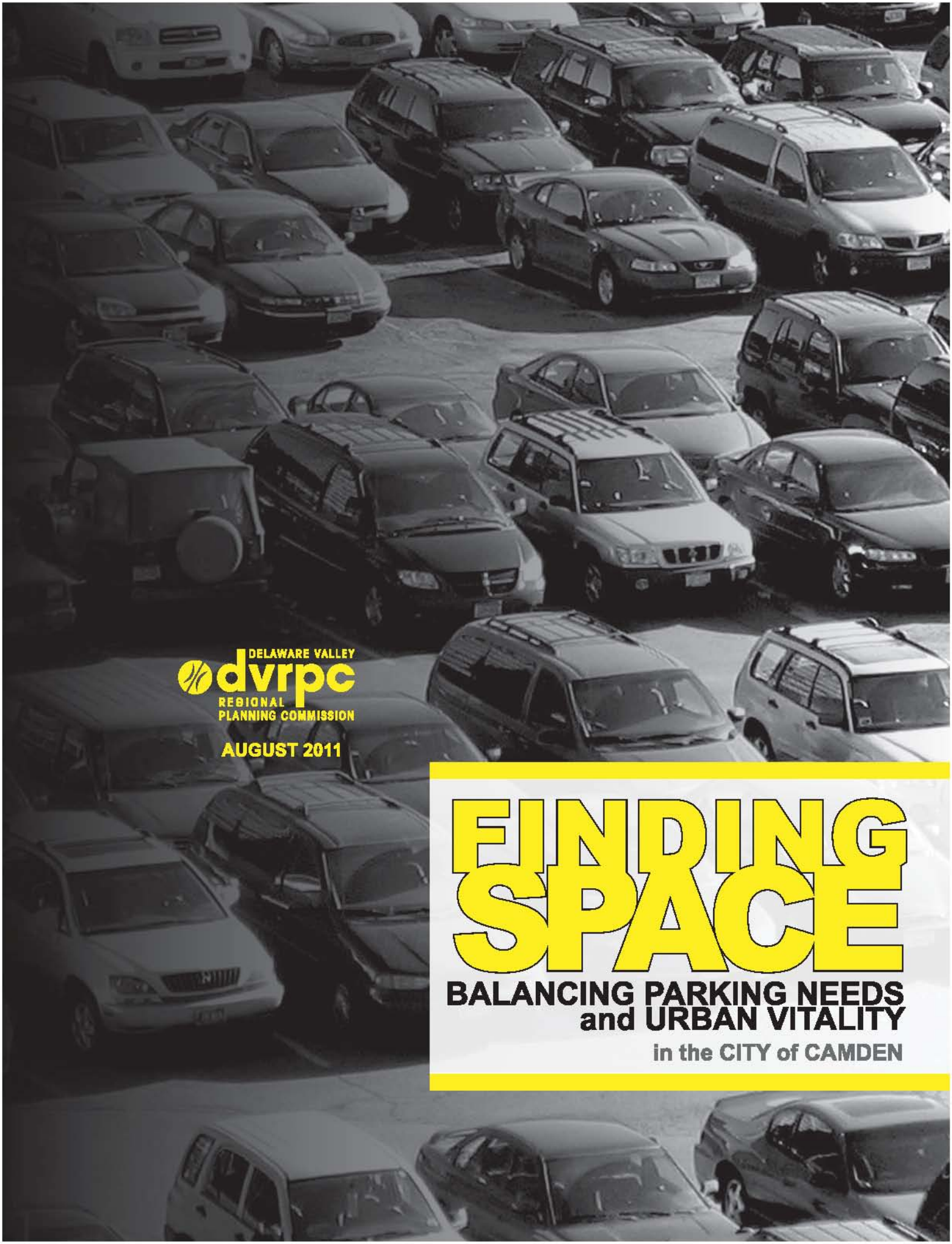

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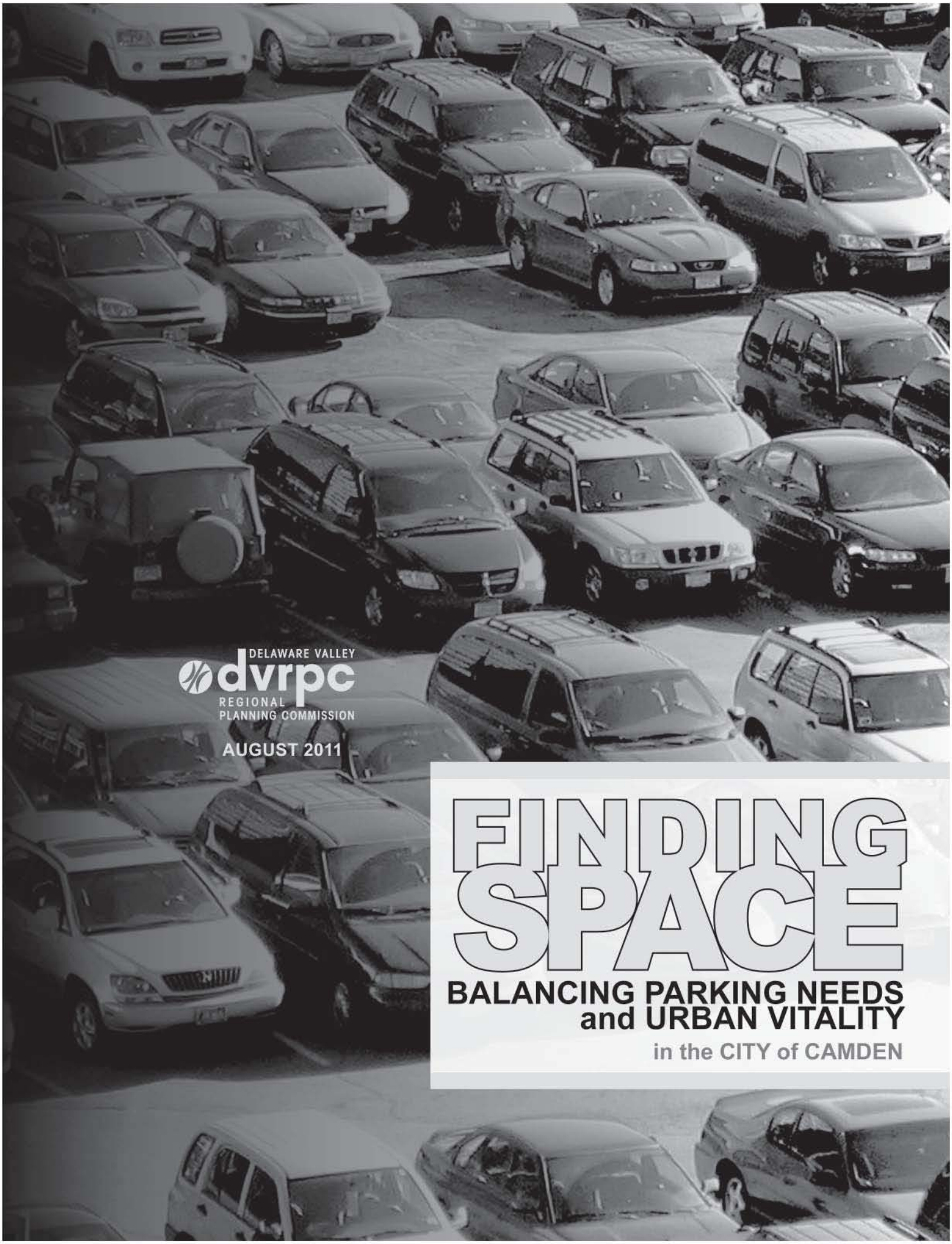
AUGUST 2011

FINDING SPACE

BALANCING PARKING NEEDS and URBAN VITALITY

in the CITY of CAMDEN



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The Delaware Valley Regional Planning Commission is dedicated to uniting the region's elected officials, planning professionals and the public with a common vision of making a great region even greater. Shaping the way we live, work and play, DVRPC builds consensus on improving transportation, promoting smart growth, protecting the environment and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region - leading the way to a better future.

The symbol in our logo is adapted from the official DVRPC seal and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole, while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. The authors, however, are solely responsible for the findings and conclusions herein, which may not represent the official views or policies of the funding agencies.

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EXECUTIVE SUMMARY

The Delaware Valley Regional Planning Commission (DVRPC) prepared this plan for Camden County, along with the City of Camden, in order to assess and accommodate the parking needs of critical areas of Camden as it moves forward with new development. The study area included five neighborhoods in Camden–Downtown, Cooper Lanning, Central Waterfront, North Camden, and Gateway–which are home to most of Camden's major employers and attractions. Recent investments in the area and plans for extensive redevelopment in the future by key stakeholders have created an urgent need for a comprehensive parking strategy. During the course of this study, DVRPC conducted physical surveys of the study area, examined Camden's public policies as they relate to parking, met with key stakeholders, reviewed proposed developments and related planning efforts, and studied the parking operations of comparable cities.

Twelve-hour surveys of license plates, parking duration, and parking location were completed for the Downtown and Cooper Lanning areas on Tuesday, October 5, 2010, and for the Central Waterfront and North Camden areas on Tuesday, March 29, 2011. The Gateway area was not surveyed because, while there were many cars parked on the Campbell's Soup campus, there were very few cars parked in the rest of the neighborhood. Using the data gathered during the on-street parking survey, the team performed a spatial analysis in which parking demand generators were located relative to available parking supply in order to identify areas where the supply is deficient.

The parking requirements of Camden's Land Development Ordinance, adopted in April 2011, were compared with those in its previous ordinance and with current smart growth policies and progressive parking trends. It was found that the parking requirements in Camden's newly adopted ordinance are significantly higher–in many cases double–than those they replaced, which is incompatible both with current trends in parking and smart growth principles, providing a valuable opportunity for the city to make meaningful parking policy changes.

The parking needs of Cooper Hospital and Rutgers University Camden were assessed through stakeholder interviews. As the major institutions in the study area, it is important that their current needs be met and their future needs planned for by Camden. In addition, interviews with Cooper's Ferry Development Association provided critical information on future development that will affect the Rutgers campus and impact the parking environment in the Central Waterfront neighborhood.

Off-street parking is operated by a variety of entities, both public and private, throughout the study area. Out of 100 off-street parking locations, only five provide parking in structured garages. While parking is a necessary element of a vibrant urban downtown, too much surface parking can easily become visually overwhelming and diminish an area's sense of place, something that has happened in Camden. The large areas of impervious coverage associated with surface parking lots increase the amount of stormwater runoff and contribute to Camden's flooding problems.

For parking managed by the City of Camden, strategies were researched and case studies reviewed in an effort to identify areas where improvements could be made to increase revenues. Appropriate stormwater runoff mitigation measures were also identified and locations for new structured parking proposed. Over time, the consolidation of the majority of the off-street parking supply to structured parking can contribute to not only a more active realm, but also to a reduction in stormwater runoff.

All future changes to Camden's parking policies or physical infrastructure should support activity generation in the study area. A place's activity level is directly linked with public safety and, given that the primary deterrents to travel modality changes in the study area are safety concerns, parking should be used as a tool to combat this wherever possible. Progressive parking policies and mixed-use, centrally located parking garages can serve this purpose in Camden.

All of the recommendations of this study have been identified and explained throughout the body of the report. In the Implementation section, a complete list of the recommendations is presented and grouped based on when implementation should occur–short-term, medium-term, or long-term–and by the goal that each action will help to achieve. All of the recommended actions support one or more of the following goals, which emerged throughout the course of the study:

1. Increase and upgrade the parking supply to meet demand sustainably.
2. Increase parking revenue.
3. Increase compliance with parking regulations.
4. Increase pedestrian and cyclist safety and reduce crashes.
5. Encourage parking policy that supports smart growth.

Moving forward, it is important to balance the immediate perceived need for more parking with the eventual need for parking given the significant amount of developable land. If implemented, the array of recommended actions will significantly increase the quality of not only the parking environment in Camden, but the pedestrian realm and the development climate.

INTRODUCTION

Parking, while a necessary element of a vibrant urban downtown, can easily become visually overwhelming and diminish an area's sense of place. A successful parking strategy must provide the requisite amount of parking to meet existing and future needs, but also incorporate design elements and innovative policies that mitigate its effects on the surrounding land uses. Progressive parking policies can foster growth and economic development in a municipality.

In recent times, the parking situation in downtown Camden has been characterized by a confusing array of options and a veritable sea of surface parking lots, many located along the waterfront. Camden has plenty of existing parking; however, due to the reluctance of pedestrians to walk more than a few blocks because of safety concerns, much of the supply is underutilized, while some is at or above capacity. In fact, the perception that the study area is unsafe is one of the largest hurdles to be overcome as the City of Camden works to increase its vibrancy.

Moving forward, it is important to balance current and future parking needs as the significant amount of developable land becomes more productively used. A mixed-use parking structure in Downtown Camden could serve as an activity generator, while not oversaturating the parking supply or contributing to the proliferation of unsightly surface lots. Increasing the on-street parking supply can also decrease the pressure to provide off-street parking. Over time, the consolidation of the majority of the off-street parking supply to structured parking can contribute to a more active realm and a reduction in stormwater runoff.

Recent investments and plans for extensive redevelopment in the future have created an immediate need for a comprehensive parking strategy. Future changes to Camden's parking policies or physical infrastructure should support activity generation. A place's activity level is directly linked with public safety and, given that the primary deterrents to travel modality changes in the study area are safety concerns, parking should be used as a tool to combat this wherever possible. Progressive parking policy and mixed-use, centrally located parking garages can serve this purpose in Camden.

Photo 1: Camden's Waterfront Parking Lots (Source: DVRPC 2011)

STUDY APPROACH

Camden County, along with the City of Camden, requested that the Delaware Valley Regional Planning Commission (DVRPC) prepare a plan to accommodate the parking needs of the City of Camden as it moves forward with new development.

The study consisted of two phases. In Phase One, DVRPC conducted a thorough analysis of existing parking, including surface lots, on-street parking, and structured parking facilities. Future development plans by public entities, institutions located in the area, and local nonprofit and community groups were reviewed. Key stakeholder interviews were conducted with a variety of public and private organizations. This Final Report concludes Phase Two and provides recommendations to alleviate some of the pressure to provide parking and to utilize the existing stock more efficiently.

The team performed a spatial analysis in which parking demand generators were located relative to available parking supply in order to identify areas where the supply is deficient. In addition, parking requirements and policies were examined, parking management practices studied, and the built environment reviewed. Over the duration of the study, the following goals emerged:

1. Increase and upgrade the parking supply to meet demand sustainably.
2. Increase parking revenue.
3. Increase compliance with parking regulations.
4. Increase pedestrian and cyclist safety and reduce crashes.
5. Encourage parking policy that supports smart growth.

Preferred sites for future parking facilities have been identified and are located where they will have the greatest positive impact on the existing environment, while supporting future development. Upgrades to the existing parking infrastructure, including stormwater management features, have also been recommended. Smart growth principles have been applied in order to develop strategies that minimize the amount of parking required overall and to mitigate the downward pull that parking can have on the built environment.

The Implementation section provides a summary of the recommendations contained throughout the body of this report. Additional details and data collected are located in the Appendix.

PROJECT TIMELINE

Begun in July 2010, this study was completed in July 2011. The study was divided into two phases: Phase One, which looked closely at the Downtown and Cooper Lanning neighborhoods, and Phase Two, which examined the Central Waterfront, North Camden, and Gateway areas. Deliverables were as follows:

- October 29, 2010: Technical Memo Phase One
- December 30, 2010: Phase One Draft Report
- May 2011: Draft Final Report
- August 2011: Final Report

STAKEHOLDER MEETINGS

The official Project Kickoff and Steering Committee Meeting was held on August 25, 2010, from 10:00 AM to 12:00 PM. Two of the study area boundaries were expanded at the request of the Steering Committee.

A number of additional meetings were held with individual stakeholder groups to assess their specific parking needs and future development plans that impact parking. These meetings are listed below.

- 7/14/2010 at 9:00 AM – Camden County
- 8/10/2010 at 3:00 PM – Cooper's Ferry Development Association
- 9/28/2010 at 10:00 AM – Rutgers University
- 9/28/2010 at 1:30 PM – Camden Police Department, Rutgers Police Department, Camden Parking Authority, Cooper's Ferry Development Association
- 9/28/2010 at 2:00 PM – Camden Redevelopment Agency
- 9/29/2010 at 2:30 PM – Cooper Hospital
- 10/7/2010 at 2:00 PM – Delaware River Port Authority
- 10/8/2010 at 10:00 AM – Cooper's Ferry Development Association
- 10/14/2010 at 2:30 PM – Camden County
- 10/21/2010 at 9:00 AM – Camden Parking Authority

During meetings with the Steering Committee, DVRPC staff presented the Phase One Draft Report on February 9, 2011 and the Final Draft Report on June 30, 2011. This Final Report reflects the Steering Committee's input and includes an implementation plan with short-, medium-, and long-term actions.

STUDY AREA

This project includes five Camden neighborhoods in their entirety: Downtown, Cooper Lanning, Central Waterfront, North Camden, and Gateway.

Downtown consists of the area bounded primarily by 3rd Street on the west, Cooper and Penn streets on the north, Haddon Avenue on the east, and Martin Luther King, Jr. Boulevard (also called Mickle Boulevard) on the south. Camden's business district, City Hall, and Walter Rand Transportation Center are all located within Downtown, but the area lacks the intensity of activities needed for a vibrant city center. The Rutgers Camden Campus is adjacent to Downtown.

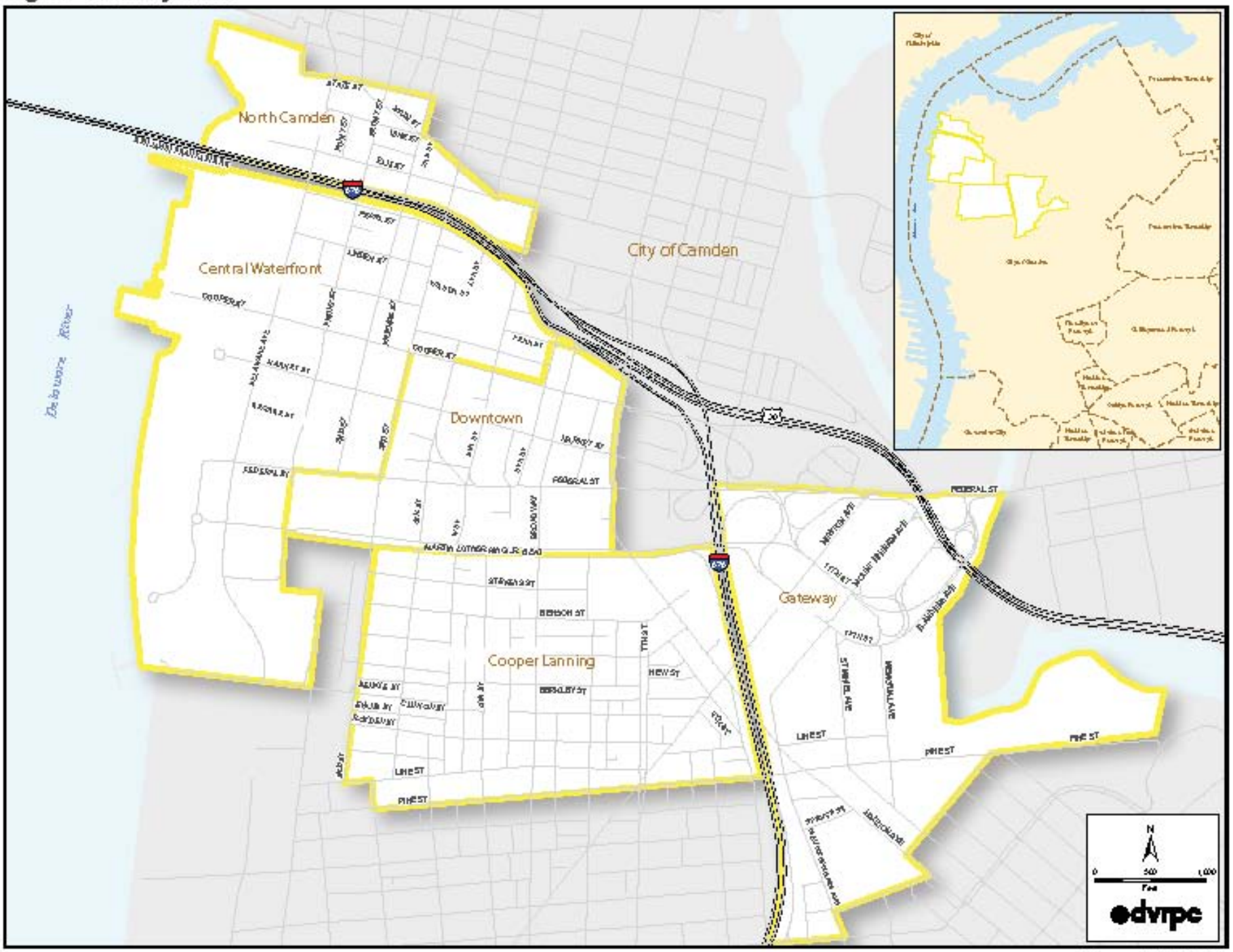
Cooper Lanning consists of the area bounded by 3rd Street on the west, Martin Luther King, Jr. Boulevard on the north, Pine Street on the south, and I-676 on the east. While the majority of this area is residential, Cooper Hospital, an important regional healthcare institution, and Cooper Medical School of Rowan University, scheduled to open in 2012, are located in the northeast portion of this area. Much of the residential portion of Cooper Lanning is run down and in need of basic maintenance of sidewalks, streets, and parking facilities. The streetscape in the area around Cooper Hospital is in much better condition because the hospital has funded upgrades to the public realm environment.

Central Waterfront consists of the area bounded by the Delaware River on the west, the Benjamin Franklin Bridge on the north, 6th and 3rd streets on the east, and Clinton Street on the south. This area, in particular, is home to a plethora of surface parking lots and has one structured parking garage, the Waterfront Garage, near its south end. While many Rutgers University Camden students park in the surface lots along the Delaware River, the main campus is located adjacent to Downtown. Three important tourist destinations in Camden–Campbell's Field, the Adventure Aquarium, and the Susquehanna Bank Center–are located in the Central Waterfront, but there is little connectivity between the Central Waterfront and the Downtown.

North Camden consists of the area bounded by the Delaware River on the west, State Street on the north, Second Street on the east, and the Benjamin Franklin Bridge on the south. The bridge is a major barrier between North Camden and the Central Waterfront area to the south. The entire waterfront portion of North Camden is vacant, as it was the former site of the state prison, which was recently demolished.

Gateway consists of the Campbell's Soup campus and adjacent areas. While there are some positive features in this area, including the Campbell's campus and the Early Childhood Development Center, much of this area is vacant and very inhospitable to pedestrians. Additionally, the Gateway area is cut off from the Cooper Hospital area due to I-676 and is connected only via a dingy, uninviting underpass. There is some light industrial activity between the Campbell's campus and the residential neighborhood to the south. Although there is no indication of a parking shortage in this area, it was observed that the pedestrian environment was deteriorated and, in some cases, unsafe.

Figure 1: Study Area



Source: DVRPC, 2011

STUDIES AND PLANS REVIEWED

Numerous reports have been done, plans written, and development projects proposed for the areas of study. Some of these plans are complementary, but some also have conflicts with each other, and many of the proposed projects were abandoned during the recent economic downturn. At the very least, the work to date has not been coordinated and represents a piecemeal approach to the development of a parking strategy. The study team reviewed the following list of documents in an effort to consolidate work efforts and identify any projects still slated for construction.

- City of Camden Parking Study, 1988
- FutureCamden Master Plan, 2002
- The City of Camden Parking Authority Waterfront Parking Study, 2003
- Rutgers Camden Campus Plan, 2003
- Camden Downtown Redevelopment Plan, 2004
- Cooper Plaza Redevelopment Plan, 2005
- Gateway Redevelopment Plan, 2005
- City of Camden Downtown/Riverfront Traffic Circulation and Management Study, 2005
- Steiner & Dranoff Master Plan for the Downtown Waterfront, 2008
- Lanning Square Redevelopment Plan, 2008
- North Camden Neighborhood Plan, 2008
- North Camden Infrastructure Assessment Study, 2009
- Cooper University Hospital Parking Structure Feasibility Study, 2009
- A Vision for Cooper's Poynt, 2010
- Downtown & Beyond: Annual Report on the State of Economic Development in the Camden Special Services District, 2010
- Welcome to Camden Wayfinding and Directional Signage Program, Cooper's Ferry Development Association, 2010
- Camden – Glassboro Light Rail Transit Analysis of Camden Stops and Opportunities, Heart of Camden, 2010
- Student Housing Market Study & Demand Analysis, Rutgers University – Camden, 2010
- NJDOT Traffic Operations Study for Cooper Street, 2010
- Retail Study in Camden's University District, ULI Philadelphia Technical Assistance Program, 2011

DEVELOPMENT PROJECTS

Many development projects have been proposed for the study area (see Figure 2); however, the recent economic downturn has created difficulties in financing new projects, and much of what has been proposed is no longer feasible. After completing a literature review and compiling a list of all the projects proposed, the study team met with City of Camden staff and reduced the list to just those projects that the city reasonably expects to move forward. It is important that any proposed parking solutions support and enhance this new development.

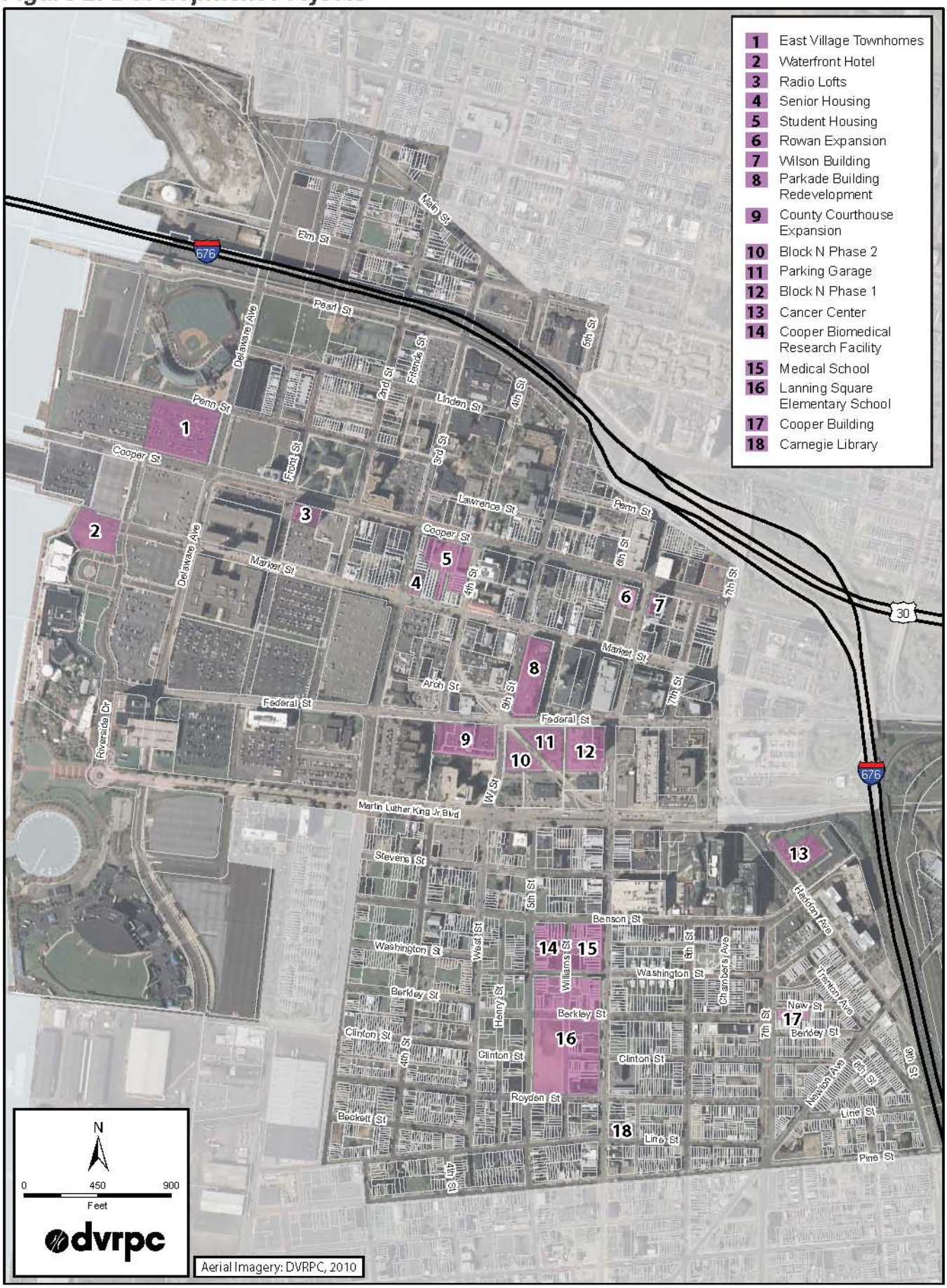
Two new residential developments by Dranoff Properties, East Village Townhomes and Radio Loft Condominiums, are planned for the Central Waterfront area of Camden and are listed on the map as Projects 1 and 3, respectively. The East Village Townhomes will provide 120 residences on the waterfront on a site bounded by Cooper Street, Delaware Avenue, Penn Street, and the extension of Riverside Drive. The Radio Loft Condominiums project will rehabilitate a former RCA industrial building into 86 new residential units.

The Waterfront Hotel (Project 2) is scheduled to be developed on Aquarium Drive next to the Ferry Terminal Office Building and will provide 140 rooms for those visiting Camden's downtown attractions. This project has been approved by the Camden Redevelopment Agency, the New Jersey Economic Development Authority, and the City of Camden. Cooper's Ferry Development Association has already installed the necessary roadway and utility upgrades for the hotel development.

Market Fair Senior Housing has recently been completed and is shown on the Development Projects Map as Project 4. Thirty-five affordable housing units for seniors have been fully occupied and the ground-floor commercial space developed in the historic Security Trust building is awaiting tenancy.

The Camden County Improvement Authority plans to construct 102 units of housing with 350 beds to serve Rutgers University graduate students on the south side of the 300 block of Cooper Street (Project 5). This is currently a surface parking lot, and its location downtown in the University Village area of Camden makes it a prime location for much-needed student housing.

Figure 2: Development Projects



Source: DVRPC, 2011

Rowan University is expanding its Camden campus into the historic First National Bank and Trust Company site on the southwest corner of Cooper Street and Broadway (Project 6). The renovated building will house 44,000 square feet of new administrative and instructional space to support the university's plans for expansion of its student population in Camden.

The Wilson Building, Project 7, is currently under renovation by Wilson Development Associates. It will provide ground-floor retail, with office space above. This building is on the National Register of Historic Places.

The Parkade Building demolition and redevelopment is Project 8. This site will eventually house a public plaza at the foot of City Hall. The space between the Parkade Building and City Hall is a paved public space currently used for parking municipal vehicles. After creation of the new park on the Parkade site, these cars will be relocated, probably to the proposed Project 11 parking garage.

The Camden County Courthouse is in need of expansion and is located next to the downtown branch of the public library. The public library and its associated surface parking lot is the proposed site for Project 9, the courthouse expansion. There is some uncertainty about the future of the library system in Camden and whether the downtown branch will remain open. However, the study team is not aware of any other proposed sites for the courthouse expansion.

Three potential development projects (10, 11 and 12) are located on Block N. Many ideas have been generated for redevelopment of this block, but physical conditions and financial hardships have slowed progress of any new development. The first site on Block N, Project 10, is located above an existing PATCO tunnel that cannot bear significant weight. This portion of Block N may be redeveloped as a taxi stand to move the taxis currently queuing on the street to a centrally located off-street site. The site of Project 11 has been proposed as a suitable location for redevelopment as a parking garage that would serve City Hall and other nearby employers. Project 12 is the site of Penn Pizza Palace, located in an unstable, mostly vacant structure built upon a piece of the foundation of the former Woolworth's building. The issues with the foundation have caused the adjacent lot to remain undeveloped. The building that houses Penn Pizza Palace may be demolished and a new mixed-use retail/office building constructed in its place.

Project 13 is a new building for the Cooper Cancer Institute, currently located in the suburbs. This new development is a possibility, although no plans have yet been submitted to the planning board.

The first new medical school in New Jersey to be built in 30 years will be the Cooper Medical School of Rowan University, Project 15. The adjacent block, which is the site of Project 14, is the location where Cooper plans to build a $50 million biomedical research facility. Both projects are part of a $600 million expansion of its Health Sciences Campus in Camden.

The new Lanning Square Elementary School will be constructed on the site of Project 16. The 90,000 square foot facility, costing $44.8 million, will house a cafeteria, auditorium, gymnasium, media center, and more than 30 classrooms. Site acquisition, clearance, and environmental remediation of the site are underway.

Wells Fargo and the New Jersey Housing and Mortgage Financing Agency (NJHMFA) recently financed the Cooper Building (Project 17), located at New Street and Lanning Boulevard. This newly constructed residential housing contains 25 one- and two-bedroom units. One parking space per unit is provided.

Vacant since 1986, the historic Carnegie Library building has suffered extensive damage from neglect. Project 18, the Carnegie Library Re-use, will rehabilitate the structure and utilize the space as an office and community facility.

Several streetscape projects are underway to improve circulation throughout the study area. Streets slated for upgrades include 2nd Street from Market Street to Cooper Street (Market to Riverline project), Pearl Street, Line Street and Martin Luther King, Jr. Boulevard (federally funded through TIGER grants), and Cooper Street and Riverside Drive (streets will be extended and include dedicated bike lanes).

ZONING

In early 2011, Camden's City Council approved the new Land Development Ordinance of the City of Camden ("the Ordinance"). Along with the Zoning Map, this Land Development Ordinance comprises the current zoning code for the City of Camden, except for areas that have adopted redevelopment plans; in those areas the redevelopment plans have precedence. It is unclear why the zoning designations in existing redevelopment plans were not included in the text of this Ordinance or the zoning map, since the inconsistencies could be a potential source of confusion for developers. For example, in the Cooper Plaza Redevelopment Plan, one of the redevelopment plans relevant to the study area, there is a zoning designation, Commercial Retail Zone (CR), that is not listed in the Ordinance at all. The following zoning summary is a compilation of the requirements of the Ordinance and the redevelopment plans, as appropriate.

Ten zoning districts are represented within the study area. One of the two largest is the Office Light Industrial Zone (OLI), which makes up 20 percent of the total land area studied and over 80 percent of the land in the Gateway area, home to the Campbell's Soup Campus. This zone is to be used for scientific or research development laboratories, offices, and wholesaling, among other similar uses. It is not to be used for residential development. This zone permits off-street parking lots and multilevel parking garages.

Another 20 percent of the study area runs along the east side of the Delaware River and is zoned Mixed Waterfront. The Mixed Waterfront Zone (MW-1) allows for uses conducive to a vibrant, active, mixed-use waterfront. Higher-density housing, offices, retail, restaurants, and entertainment, arts, and culture uses are all allowed. The majority of the developable land parcels in the areas studied are zoned MW-1; many of them are in the form of surface parking lots, but also include the site of the former prison just north of the Ben Franklin Bridge. There are several popular waterfront destinations in this zone, including the Adventure Aquarium and the Susquehanna Bank Center. This zone permits off-street parking lots and multilevel parking garages.

The University and Support Zone (US) spans three of the subareas studied–Downtown, University/ Waterfront, and Cooper Lanning–and comprises 18 percent of the total land area studied. The Rutgers-Camden campus is located in this zone, which also permits a variety of housing types and commercial/retail development supportive of both the campus community and the adjacent residential neighborhoods. This zone permits off-street parking lots and multilevel parking garages.

One residential district, Residential Zone 2 (R-2), represents 16 percent of the study area and is found in parts of North Camden, Cooper Lanning, and Gateway. Here, several types of housing are permitted, including single-family detached dwellings, semidetached dwellings, duplexes, and townhouses. Supportive uses such as parks, libraries, and schools are also permitted. Churches, family day care centers, cemeteries, and home offices are among the permitted conditional uses. The only parking permitted in the R-2 Zone is in off-street parking and private garages.

Fifteen percent of the entire study area and well over half of the Downtown area is the Center City Zone (CC) and permits a very large variety of uses: single-family detached dwellings, semidetached dwellings, duplex dwellings, townhouses, multifamily dwellings, a variety of retail stores, personal services, medical offices and facilities, professional and private offices, financial institutions, restaurants, shopping centers, commercial recreation facilities, rail stations and facilities, hotels, theaters, museums, art galleries, concert halls, visitor information centers, parks, City of Camden buildings and uses, playgrounds, community centers, libraries, and educational institutions. Off-street parking and private garages are permitted in this zone, along with multilevel parking structures.

A small area around Cooper Hospital, five percent of the total study area, is zoned Medical and Support (MS) and permits most of the uses allowed in the CC, in addition to hospitals, medical clinics, health care facilities, nursing and convalescent homes, outpatient care facilities, including surgical centers, establishments for physical therapy treatments, health care and allied services, medical and dental education, and vocations centers, and medical and dental laboratories and testing centers. This zone permits off-street parking lots and multilevel parking garages.

Recreation and conservation are the primary purposes of the Conservation Overlay Zone (CV-2), which makes up approximately three percent of the entire study area and 11 percent of the Gateway area. Uses such as picnicking, hiking, and boating, along with public parks, playing fields, and amphitheaters, are among the uses permitted in this zone. Parking in off-street lots is permitted, provided it does not increase traffic congestion in abutting streets.

The Commercial Zone (C-2) represents two percent of the study area and is found in North Camden, along two blocks of Broadway in Cooper Lanning, and along

Haddon Avenue and Mount Ephraim Avenue in the Gateway area. This zone allows a mix of residential, commercial, and retail uses, along with parks and educational institutions. Off-street parking and private garages are permitted.

The goal of the Commercial Retail Zone (CR), as described in the Cooper Plaza Redevelopment Plan, is to foster the development of businesses that will cater to the needs of the surrounding neighborhoods. Located on the east side of Broadway in Cooper Lanning and consisting of only one percent of the entire study area, this zone allows all residential uses permitted in the R-2 Zone and residential uses above nonresidential first floor uses, retail, personal services, professional and private offices, medical offices and facilities, financial institutions, restaurants, commercial recreation facilities within enclosed structures, buildings, structures, and uses owned and operated by the City of Camden for municipal uses, parks, playgrounds or recreation areas, community center buildings, and libraries, mixed-use buildings, places of worship, and home offices. Parking lots and parking structures are permitted, provided they do not increase traffic congestion in abutting streets.

Less than one percent of the study area, the Commercial Zone (C-1) allows a variety of the residential uses that are permitted, in addition to banks, offices of various types, retail businesses, social clubs, convenience stores, restaurants, shopping centers, bars, parks, and schools. Off-street parking and private garages are also permitted.

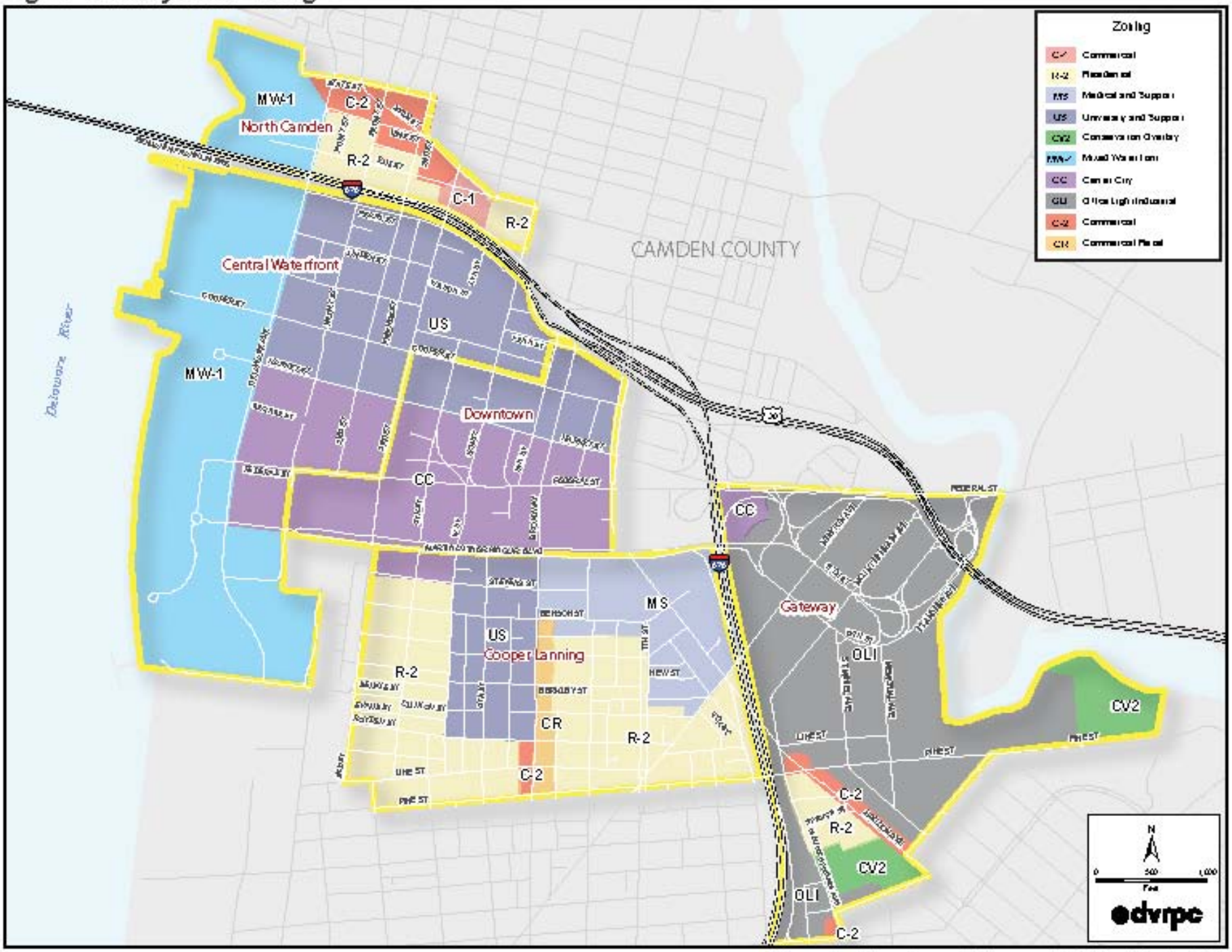
The parking requirements in Camden's new Land Development Ordinance are significantly higher–in many cases double–than those they replaced, which is incompatible both with current trends in parking and smart growth principles. Camden's previous zoning, while adopted in 1978, was very progressive for that time and is still much more conducive to sustainable urban development than the new requirements. Increasing the parking requirements in Camden is completely unnecessary since the city is well served by public transit and has a low rate of car ownership by residents. Other urban areas across the country are lowering parking requirements. For example, Philadelphia has proposed very low minimum parking standards in its new zoning code, and Washington D.C. is considering removing all parking minimums from its zoning (Clarion Associates, LLC, Duncan Associates 22).

While implementation of the high parking requirements is unnecessary and would be problematic for all of Camden, it would be particularly devastating to the downtown core, where there is already significant blight in the form of surface parking lots. A vibrant public realm environment must have an active pedestrian network; too much off-street parking creates the perception that the place is built for cars, not people.

As Camden works to attract development to its urban core, it should also be noted that onerous parking requirements will thwart those efforts. Developers have an interest in building what the market will support, while maintaining the attributes that initially attracted them to a place. If there were no parking minimums, the market would supply fewer spaces (Shoup 91). When parking minimums are required, it also forces developers to compromise on-site design elements in order to fit all the required parking on the development site.

Furthermore, some of Camden's most valuable institutions could be harmed by these excessive parking requirements. For example, hospitals were previously required to provide one space for every four beds, plus one space per doctor, plus one space for every two employees. The parking requirement for doctors and employees is unchanged, but the new zoning code requires one space for every two beds. Doubling the amount of required parking per bed may discourage hospital expansion or new development in the future.

Figure 3: Study Area Zoning



Source: Land Development Ordinance of the City of Camden, 2011

Recommendations

It is recommended that Camden **eliminate the parking minimum requirements from the Land Development Ordinance** (Section 577-230 B, F-I, L, M, O, P, T, W, and X). The city should rewrite this section to promote a sustainable parking environment using methods such as lowering the amount of required parking, setting parking maximums, or eliminating required parking entirely. While each of Camden's parking requirements should be examined in the context of Camden's unique market, the American Planning Association's Model Smart Land Development Regulations are a good resource and could provide Camden with model language for use in its ordinance.

For example, since nearly all of the study area is zoned for a mix of uses, the city should consider adopting the language pertaining to parking from the Model Mixed-Use Zoning District Ordinance (Sec. 4.1 from the *Model Smart Land Development Regulations*):

> 111. Off-Street Parking
>
> (1) [Insert off-street parking standards]
>
> (2) No off-street parking is required for nonresidential uses in Neighborhood Commercial, Mixed-Use Districts unless such uses exceed [3,000] square feet of gross floor area, in which case off-street parking must be provided for the floor area in excess of [3,000] square feet.
>
> Comment: Paragraph (2) may be incorporated into paragraph (1). Exempting small retail businesses from compliance with off-street parking requirements will help promote pedestrian-oriented character and encourage use/reuse of storefront retail space. Communities should also examine off-street parking ratios with an eye toward reducing the amount of off-street parking required overall and encouraging shared and off-site parking arrangements.
>
> (3) Off-street parking spaces must be located to the rear of the principal building or otherwise screened so as to not be visible from public right-of-way or residential zoning districts.

If rewriting the parking requirement section is outside of the budget, simply replacing the new requirements with those found in Camden's previous zoning ordinance would prevent parking from further deteriorating the city's public realm. A recent DVRPC publication (*The Automobile at Rest: Toward Better Parking Policies in the Delaware Valley*, 2008) listed maximum parking recommendations for zoning, and Camden's previous zoning ordinance is in conformance with those, with the exception of General Retail (5.5 spaces required vs. three to four recommended). If the city elects to replace the requirements from the new Land Development Ordinance with the parking requirements from the previous zoning code instead of rewriting the Ordinance, it is recommended that the General Retail requirement be changed to three spaces per 1,000 square feet of gross floor area.

It is also recommended that the city **update the Zoning Map in the Land Development Ordinance** to reflect the zoning designations found in the redevelopment plans. The Land Development Ordinance should include the Commercial Retail Zone (CR) found in the Cooper Lanning Redevelopment Plan. This will make it much easier to determine the appropriate zoning designation for a property and the corresponding development requirements.

Furthermore, the city should **disallow new surface parking lots as permitted uses in the Downtown and Waterfront study areas**, both of which already have a proliferation of surface parking lots and very little sense of place. This is where the majority of new retail, commercial, and tourist development will occur with the potential to revitalize the city. While surface parking certainly has a place in cities, that place is not in the densely developed urban center. While this may be a challenge for the city because the majority of the waterfront lots are owned by the New Jersey Economic Development Authority (NJEDA), which is exempt from city and county planning board regulation, NJEDA should recognize the importance of putting this valuable land to a higher and better use than surface parking.

VEHICULAR VOLUME AND PARKING DEMAND

By understanding where, when, and how many vehicles are accessing the study area, and by recognizing that all vehicles must eventually seek parking, relationships between vehicular volume and parking demand may be established.

Camden's central business district is nestled between Interstate 676 (I-676) to the east and north, the Delaware River to the west, and residential neighborhoods to the south. In an effort to identify vehicular movement into and out of the study area, vehicle counts were conducted at major entry and egress locations within the study area. Thirty-three automatic traffic recorders (ATR) were installed at key locations throughout the study area on weekdays in October and November 2010. Each ATR recorded 48 consecutive hours of vehicles per direction of travel. This data was adjusted to minimize the seasonal variation of travel patterns, thus providing a measurement of annual average daily traffic (AADT). These counts and prior counts are illustrated in Figure 4.

I-676 and US 30 provide the most direct ingress to and egress from the study area for most motorists. However, the interchanges for both highways are atypical due to their lack of ramps serving all potential movements, thus contributing to motorist confusion and excessive vehicle circulation. An example of this occurs at I-676 East exits 5A and 5B, which provide access to westbound Federal Street and eastbound Market Street, respectively. Access to I-676 East is only available from Martin Luther King, Jr. Boulevard, albeit from both directions of travel. Direct access to I-676 West is not possible from this area. Similarly, access to US 30 East is provided at Cooper Street and Campbell Place, while access to US 30 West is only available at 11th Street.

Despite being situated at incomplete interchanges, the ramps for I-676 and US 30 carry the most volume of any of the facilities that provide access to the study area. I-676 serves vehicles traveling from points west and south of the study area, including Philadelphia and southern New Jersey, respectively.

For vehicles originating south of the study area, access is most prevalent via I-676 West's "Exit 5A: MLK Blvd and Campbell Place," the study area's busiest highway off-ramp, with approximately 8,700 vehicles per typical weekday. About 5,800 vehicles, 67 percent of the ramp's total volume, continues onto 11th Street, presumably to the Campbell's facility and other nearby employment centers. As one would expect, the on-ramp onto the opposite direction of I-676 is the heaviest, with about 9,500 vehicles per weekday. Access is available from either direction of Martin Luther King, Jr. Boulevard.

For vehicles originating in Philadelphia and points further west, there are two exits from I-676 East that access the study area, each with a pair of off-ramps. The closely spaced "Exit 5A: MLK Blvd and Campbell Place" and "Exit 5B: Market St – Downtown Camden" carry only 1,000 and 1,600 vehicles per weekday, respectively. A slightly greater volume of vehicles enters the study area from I-676 East at the "Sixth St – Broadway – Camden" exits at the base of the Benjamin Franklin Bridge near Rutgers University, with approximately 1,900 and 1,600 vehicles at the two off-ramps. The only on-ramp in the study area onto the opposite direction, I-676 West, is Linden Street at the Benjamin Franklin Bridge toll plaza, where about 6,000 vehicles enter the highway and exit the study area.

After I-676, US 30 carries the next largest traffic volume to the study area, primarily from points east. Its heaviest off-ramp is the "Camden Business District – Rutgers Univ" Exit at Linden Street, with roughly 8,200 vehicles per weekday. Almost all of these vehicles continue from Linden Street onto the 7th Street overpass to access the central business district, thus generating congestion along the southbound direction of 7th Street at this location. US 30 West's other off-ramp is at the "MLK Blvd – Campbell Place" Exit at 11th Street. Roughly 6,900 vehicles per weekday utilize this exit, with 90 percent continuing along 11th Street in order to access either the Campbell's facility or the central business district. There are two on-ramps onto US 30 East within the study area, at Cooper Street and at Campbell Place, with AADTs of approximately 5,000 and 6,000, respectively.

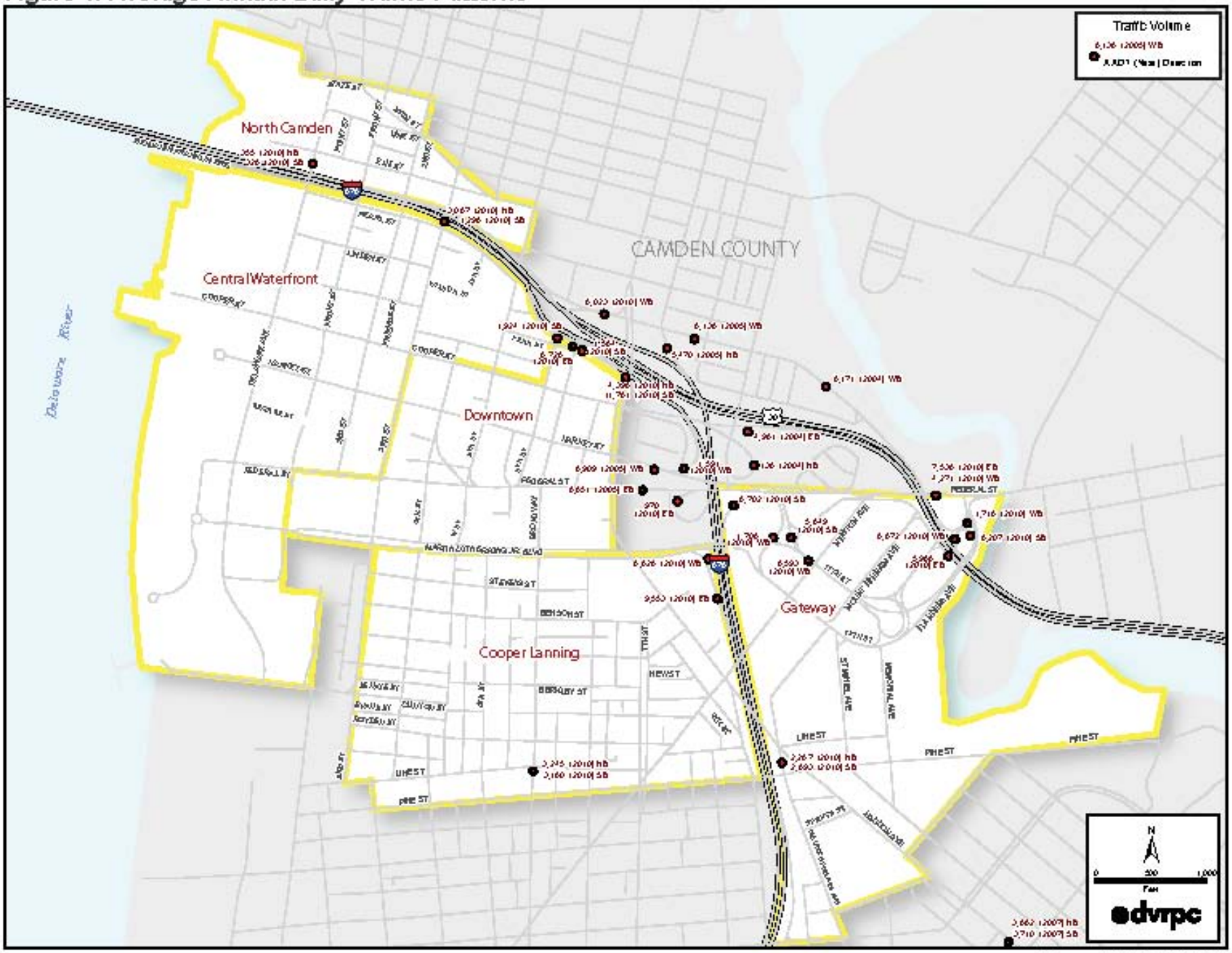
In addition to I-676 and US 30, there are multiple at-grade arteries that provide ingress and egress to and from the study area. Approximately 4,200 vehicles enter and 7,500 vehicles exit the city via Federal Street (CR 537). Access to and from the south is accommodated via three major arteries: Haddon Avenue (CR 561), with roughly 3,700 vehicles entering and exiting the city, Broadway (CR 551), with an average of 3,300 vehicles, and Mount Ephraim Avenue (CR 605), with about 2,500 vehicles. Access to and from the north is largest at 7th Street, though a majority of those vehicles originate from the aforementioned exit off US 30 West via Linden Street.

Overall, most locations experience a time-of-day directionality. Unsurprisingly, volumes are larger in

the inbound (toward the CBD) direction during the morning peak period, and conversely, they are larger in the outbound direction during the afternoon peak period. This trend is most pronounced in the area of Martin Luther King, Jr. Boulevard near the I-676 ramps. Here, I-676 West's Exit 5A "MLK Blvd and Campbell Place" carries twice as much volume in the morning peak hour (1,045 vehicles) as it does in the afternoon peak hour (520 vehicles), whereas the on-ramp from Martin Luther King, Jr. Boulevard to I-676 East carries 150 percent more vehicles during the afternoon peak hour (1,338 vehicles) than the morning peak hour (521 vehicles). However, this imbalance indicates available capacity in the highway network to accommodate increased development within the study area. Additional residential, institutional, and special-event development will mostly add vehicular trips during nonpeak hours or directions of travel. Thus, opportunities remain for growth that will not overburden the existing vehicular circulation network. The study area's morning peak hour typically starts at 7:30 AM, and the afternoon peak hour starts at 3:30 PM. Vehicular volumes measured during these peak hours are displayed in Figures 5 and 6.

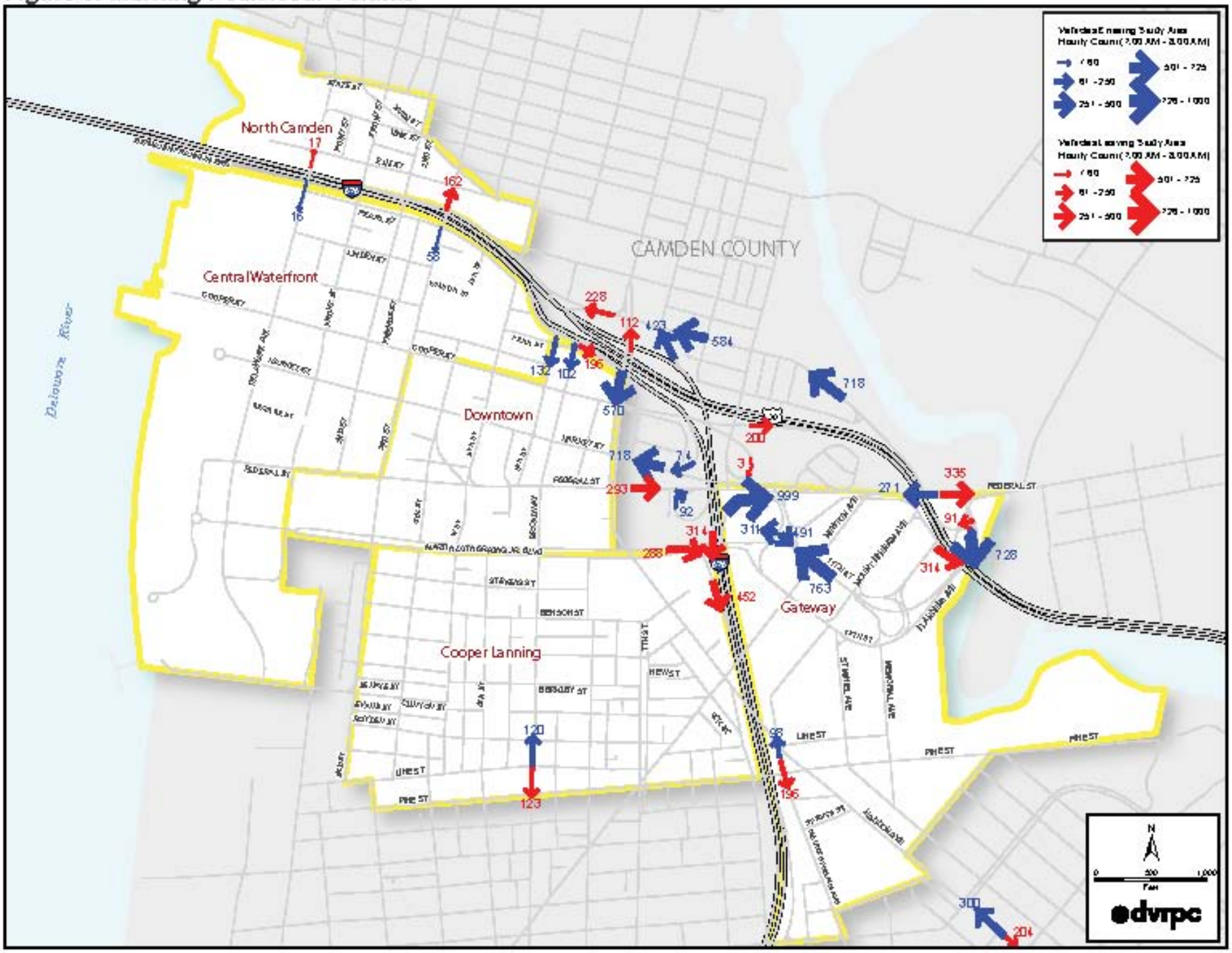
By measuring vehicular volumes at multiple locations throughout and just beyond the study area, a comprehensive perspective on the accessibility of various portions of the city is provided. The atypical designs of the study area's highway interchanges create asymmetric travel patterns that cause certain routes to carry large volumes, while similar nearby routes are underutilized. This imbalance is accentuated by the time-of-day directionality that is pervasive throughout the study area. With roadways overburdened for only select periods of the day and remaining idle during the rest of the day, the roadway network operates in an inefficient manner. These relationships should be taken into consideration when selecting the site of any future developments, particularly parking facilities, as a site's proximity to established and well-utilized travel routes will affect the viability of that facility.

Figure 4: Average Annual Daily Traffic Patterns



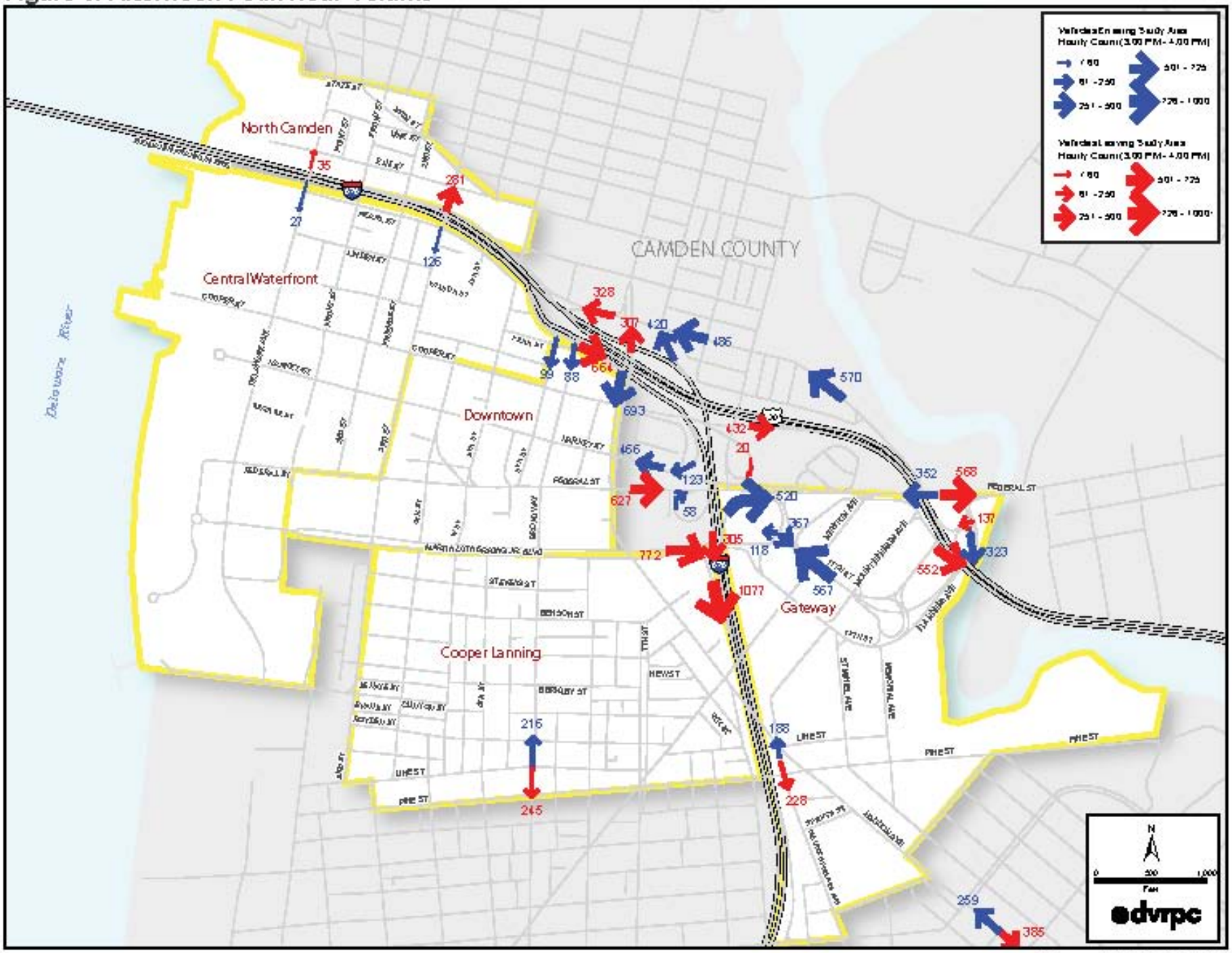
Source: DVRPC, 2004-2010

Figure 5: Morning Peak Hour Volume



Source: DVRPC, 2004-2010

Figure 6: Afternoon Peak Hour Volume



Source: DVRPC, 2004-2010

CRASH ANALYSIS

An analysis of the study area's crash history was performed to understand the safety issues that impact access and mobility at critical locations. The concentration and behavior of crashes may negatively impact the effectiveness of adjacent parking facilities. Concerns identified through this analysis may influence the siting of a future parking facility.

By utilizing the NJ Department of Transportation's crash database, 1,425 crashes from 16 different crash types were identified within the study area from 2006 through 2009. Table 1 demonstrates that rear-end crashes are the most frequent, with 368 occurrences, or 26 percent of all crashes. As shown in Table 2, crash frequency peaked on Wednesdays, with 18 percent of all crashes, whereas each of the remaining weekdays experienced 14 to 16 percent of the crashes. The weekends experienced far fewer crashes, with only nine percent of all crashes occurring on a Sunday and 11 percent on a Saturday. This is likely due to the lower traffic volumes on weekends. Table 3 demonstrates that 107 crashes, or 7.5 percent of all crashes, occurred during the 4:00 PM hour, the same time as the afternoon's peak hour of travel.

Table 1: Crash Type and Amount

Crash Type and Amount		
Crash Type	Number of Crashes	Percent of Total
Same Direction (Rear End)	368	25.82%
Same Direction (Side Swipe)	211	14.81%
Right Angle	256	17.96%
Opposite Direction (Head-On, Angular)	10	0.70%
Opposite Direction (Side Swipe)	14	0.98%
Struck Parked Vehicle	176	12.35%
Left turn/U Turn	57	4.00%
Backing	64	4.49%
Encroachment	11	0.77%
Overturned	2	0.14%
Fixed Object	155	10.88%
Pedestrian	66	4.63%
Pedalcyclist	29	2.04%
Non-fixed Object	2	0.14%
Railcar-Vehicle	1	0.07%
Other	3	0.21%
Total	1425	100.00%

Table 2: Crashes by Day of Week

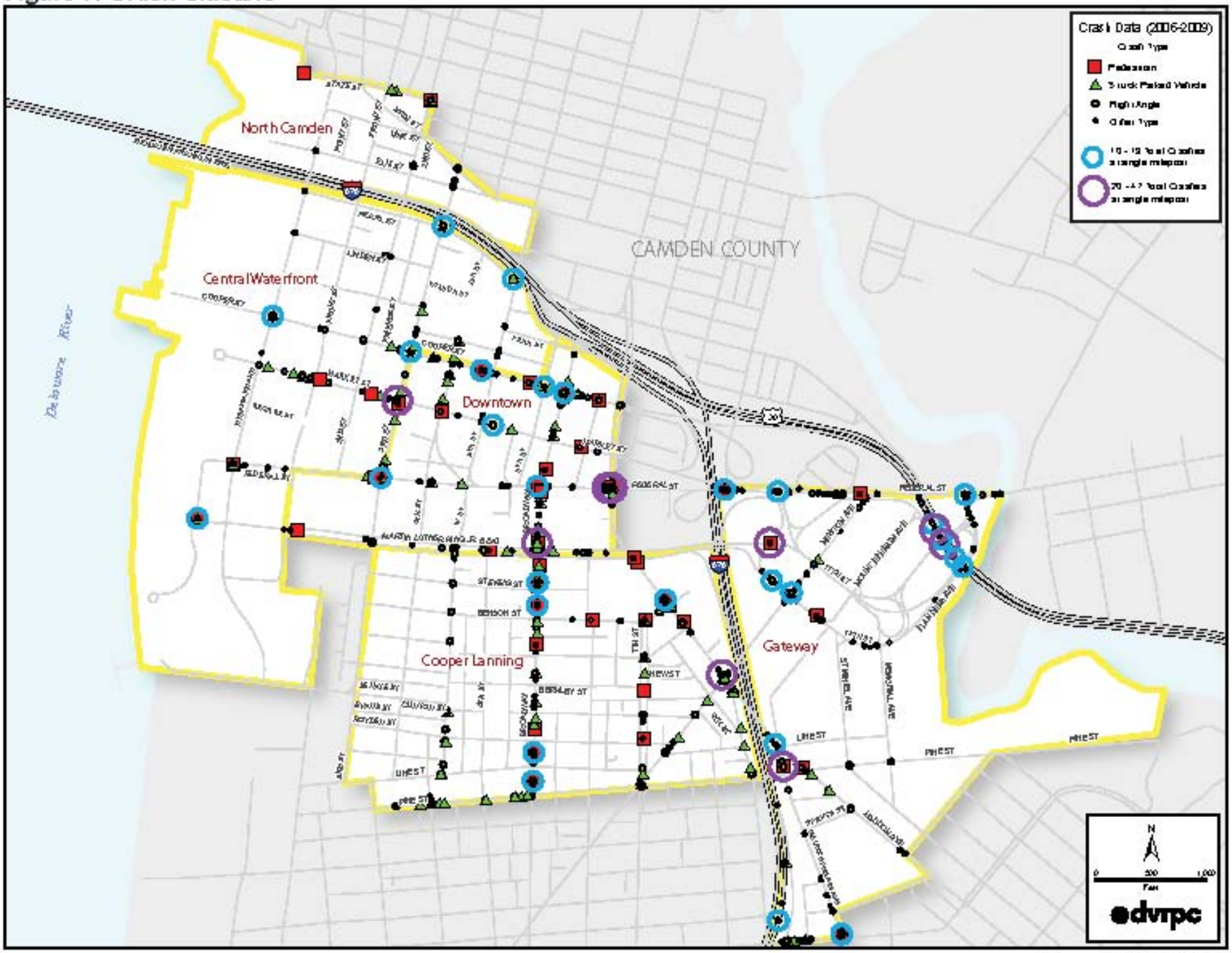
Crash Occurrence by Day of Week		
Day of Week	Number of Crashes	Percent of Total
Monday	201	14.11%
Tuesday	230	16.14%
Wednesday	250	17.54%
Thursday	233	16.35%
Friday	228	16.00%
Saturday	160	11.23%
Sunday	123	8.63%
Total	1425	100.00%

Table 3: Crashes by Time of Day

Crash Occurrence by Time of Day		
Hour Beginning	Number of Crashes	Percent of Total
12:00 AM	31	2.18%
1:00 AM	28	1.96%
2:00 AM	22	1.54%
3:00 AM	27	1.89%
4:00 AM	11	0.77%
5:00 AM	13	0.91%
6:00 AM	9	0.63%
7:00 AM	55	3.86%
8:00 AM	93	6.53%
9:00 AM	86	6.04%
10:00 AM	66	4.63%
11:00 AM	104	7.30%
12:00 PM	96	6.74%
1:00 PM	94	6.60%
2:00 PM	99	6.95%
3:00 PM	95	6.67%
4:00 PM	107	7.51%
5:00 PM	88	6.18%
6:00 PM	81	5.68%
7:00 PM	53	3.72%
8:00 PM	42	2.95%
9:00 PM	25	1.75%
10:00 PM	33	2.32%
11:00 PM	44	3.09%
Unassigned	23	1.61%
Total	1425	100.00%

Tables 1, 2, and 3 Source: NJ Transit and DVRPC, 2010

Figure 7: Crash Clusters



Source: NJ DOT, 2006-2009

As illustrated in Figure 7, seven major crash clusters were identified: the intersection of Broadway at Martin Luther King, Jr. Boulevard; the intersection of Federal Street, Haddon Avenue, and 7th Street; the intersection of Broadway at Federal Street; the intersection of Broadway at Cooper Street; the intersection of Cooper Street at 7th Street; the intersection of Newton Avenue at 10th Street; and the intersection of Newton and Haddon avenues. It should be noted that the intersection of Newton and 10th streets experienced the highest frequency of crashes in the years of 2006 and 2007; however, after improvements were made, the intersection experienced only one per year. Street segments with high crash rates include Cooper Street from 4th Street to North 7th Street, Broadway from Federal Street to Benson Street, Broadway from Clinton Street to Pine Street, and North 3rd Street from Federal Street to Cooper Street.

Figure 7 also displays the concentration of three specific crash types within the study area: right-angle, struck-parked-vehicle, and pedestrian. These types are highlighted because the right-angle crashes involved multidirectional conflicts, which may suggest deeper issues related to intersection efficiency for both pedestrians and vehicles. Struck-parked-vehicles crashes involve the presence of on-street parking, while pedestrian crashes reduce pedestrian safety and thus reduce the catchment area for existing or future parking facilities.

The first and third most frequent right-angle crash locations were the intersections of Broadway at Martin Luther King, Jr. Boulevard, and Federal Street at Haddon Ave and North 7th Street. These two intersections carry significant vehicular volumes, provide access to Camden's central business district, and partially circumscribe the block occupied by the Walter Rand Transportation Center and the state-owned office building, which are an existing parking garage and a large employment center, respectively. The intersections of Mount Ephraim Avenue at Pine Street and North 3rd Street at Pearl Street also experienced high rates of right-angle crashes. Both intersections are two-way stop-controlled, with limited sight lines for motorists due to bridge abutments for railroad and highway overpasses; these factors likely contributed to the increased frequency of right-angle crashes.

Struck-parked-vehicle crashes were most frequent along Broadway, with 44 such crashes between Royden Street and Cooper Street. This correlates to a crash every 290 feet, or about 12 parking stalls, per year. The intersections of Broadway at Federal Street, and of Broadway at Stevens Street, experienced the highest frequencies of this crash type. At the former, on-street parking is limited to only one side of a single approach leg, despite having these crashes occur along all four approaches. At the latter, on-street parking often exceeds the provided capacity, resulting in illegal parking and standing. In both instances, increased enforcement or physical improvements, such as curb bulb-outs, may reduce the likelihood of this crash type. Struck-parked-vehicle crashes were also prevalent, though to a much lesser degree, along Federal and Cooper streets. Such crashes occurred most frequently during the late morning and early afternoon on these three streets, coinciding with periods of relatively high on-street parking demand.

Pedestrian crashes were concentrated at heavily traveled intersections and along commercial corridors. The largest number of pedestrian crashes, nine, occurred at the intersection of Haddon Avenue at Benson Street and Cooper Plaza, which serves as the primary pedestrian link between hospital facilities across Haddon Avenue, and as a driveway from Cooper Hospital's Haddon Parking Garage. There were 15 pedestrian crashes along Broadway, including six at or near its intersection with Martin Luther King, Jr. Boulevard, which is in close proximity to the Walter Rand Transit Center. The proximity of pedestrian crashes to parking garages, transit stations, and commercial corridors may indicate a need to improve safe access to and from such facilities.

Overall, crash frequencies and concentrations correspond to locations with high vehicular and pedestrian demand. The direct cause of vehicular and pedestrian crashes may be due to a variety of reasons, including poor vehicular access, inefficient intersection design, and a lack of adequate pedestrian crossing amenities. Regardless of the specific causes, the locations and patterns of crashes have a negative influence upon the effectiveness of nearby existing and future parking facilities. Consequently, the success of a parking facility partially depends upon identifying nearby crash patterns and their causes, and implementing recommendations that reduce the probability of future crashes.

There are a variety of interventions that can serve to reduce crashes, including increased enforcement of existing traffic regulations and changes to the physical design of intersections and crossings. Intersections and crossings can be retrofitted with crosswalks, pedestrian walk signals with countdown timers, and raised median refuges. Signage for drivers can be made more visible and traffic-calming measures can be applied. In particular, amenities for pedestrians and cyclists can be enhanced.

Pedestrian and bicycle improvements can greatly increase pedestrian and cyclist safety and are effective at reducing the number of crashes at critical intersections. A combination of factors contributes to their success (VTPI, 2005):

- Improving walkability (the quality of walking conditions) expands the range of parking facilities that serve a destination. It increases the feasibility of sharing parking facilities and the use of remote parking facilities. Specific strategies to improve walkability include the installation of continental-style crosswalks, countdown timers, and raised median refuges across streets with heavy pedestrian activity and long crossing distances.
- Improving walkability increases “park once” trips, that is, parking in one location and walking rather than driving to other destinations, which reduces vehicle trips and the amount of parking required at each destination.
- Walking and cycling improvements allow these modes to substitute for some automobile trips.
- Walking and cycling improvements encourage transit use, since most transit trips involve walking or cycling links.

There are several projects currently underway that will help to increase the walkability and bikeability in Camden. NJ Transit has upgrades planned for the Walter Rand Transit Center that, in addition to improving the bus drop-off/pick-up area, will enhance the area around the station with improved crosswalks and new plantings. When the *Welcome to Camden Pedestrian Wayfinding and Directional Signage Program*, designed by Cooper’s Ferry Development Corporation, is installed, it will provide Camden with much-needed pedestrian signage. Recently completed improvements to the streetscape around Cooper Hospital (such as marked crosswalks, new sidewalks, and landscaping) have made that general area much more conducive to foot traffic.

Recommendations

Additional pedestrian and cyclist amenities would greatly enhance the public realm in Camden and would promote the use of alternate modes of transportation over vehicles, decreasing the pressure to provide more parking. Numerous intersections within the study area are situated near major trip generators such as the Walter Rand Transportation Center and LEAP Academy, but have long crossing distances, high volumes of turning traffic, and documented histories of pedestrian crashes. These disadvantages may be mitigated by the installation of continental-style crosswalks, countdown timers, raised median refuges, and leading pedestrian intervals. It is recommended that such **improvements be immediately considered for the intersections of Broadway at Martin Luther King, Jr. Boulevard and at Federal Street, and Federal Street at Haddon Avenue.**

At locations where one street terminates into another, pedestrians crossing against free-flow traffic may be assisted with mid-block crosswalks, pedestrian crossing signage, and Rectangular Rapid Flash Beacons (RRFB). It is recommended that the city **consider these improvements for the intersections of Cooper Street at North 6th Street and North 7th Street**. Other ideas for improving these intersections may be found in the NJDOT Traffic Operations Study for Cooper Street.

For cyclists, Martin Luther King, Jr. Boulevard between Riverside Drive and Haddon Avenue has already been identified as an important connection between the riverfront and existing cycling facilities. In addition to the current streetscape improvements underway on Martin Luther King, Jr. Boulevard between 5th Street and Broadway by the Camden County and Cooper Hospital, the city should **implement the bicycle lanes, upgraded sidewalks, and streetscape improvements previously recommended for Martin Luther King, Jr. Boulevard between Riverside Drive and Haddon Avenue**.

In the Gateway portion of the Study Area, unsafe pedestrian conditions were observed, even on paths marked with “Safe Corridor” signage. It is highly recommended that Camden **fix the unsafe pedestrian conditions in the Gateway area**.

Finally, it is recommended that the city **require bicycle parking and pedestrian amenities with all new development and at existing Downtown and Waterfront destinations**.

Photo 2: Pedestrian Conditions in the Gateway Area (Source: DVRPC 2011)

ON-STREET PARKING

Vehicular parking may be divided into two categories: off-street and on-street. Off-street parking is designed for long-term parkers, while on-street parking, especially in commercial areas, is better suited to short-term parkers, as it provides them with convenient parking opportunities while they shop, dine, keep appointments, and run errands. The efficient use of on-street parking spaces is optimized through frequent turnover (short parking duration per vehicle) and proximity to primary destinations. Well-designed and appropriately priced on-street parking provides numerous benefits to drivers, businesses, and pedestrians. Studies have shown that 30 percent of central business district traffic is due to people circling around looking for parking (Shoup, n. pag.); thus, having convenient on-street parking available is essential.

When located within exclusively residential areas, on-street parking is the primary source of long-term and overnight parking, particularly in dense urban areas where there are few off-street options. However, in mixed-use areas, it is important that residents have access to off-street parking so that the on-street spaces are available to those who need them for short-term purposes.

Not only does high-turnover on-street parking benefit drivers, as spaces are constantly becoming available, it contributes to street-level activity, as the drivers leave their cars to go to nearby destinations. Traffic is also calmed through the presence of on-street parking, and the parking lane provides a buffer that shields pedestrians and sidewalk activities from passing traffic.

When priced appropriately and implemented with the right tools, on-street parking can be a source of valuable revenue for municipalities. The use of kiosks rather than meters can increase the amount of revenue generated. Kiosks increase compliance because they are easy to use and accept more forms of currency than just coins. Easy-to-use payment systems encourage more people to pay for the parking they use. The use of parking kiosks in Baltimore City nearly doubled the revenue from meters, while reducing the number of tickets issued (Janis, 2008).

Kiosks also increase the number of cars able to park on a street segment. While meters provide one-size-fits-all spaces, kiosks do not designate individual spaces, allowing people to park as many cars as will fit. Finally, parking kiosks can be electronically monitored, saving on administrative costs.

Philadelphia recently converted its parking meters to solar-powered kiosks in most of Center City, and while there were some growing pains with the transition, the city has greatly increased its revenue since installing the kiosks. In the fiscal year prior to the kiosks' installation, the city collected $21 million in parking meter collections. In the fiscal year since, revenues have increased to $28 million. (See Appendix A for a summary of DVRPC's interview with the Philadelphia Parking Authority.)

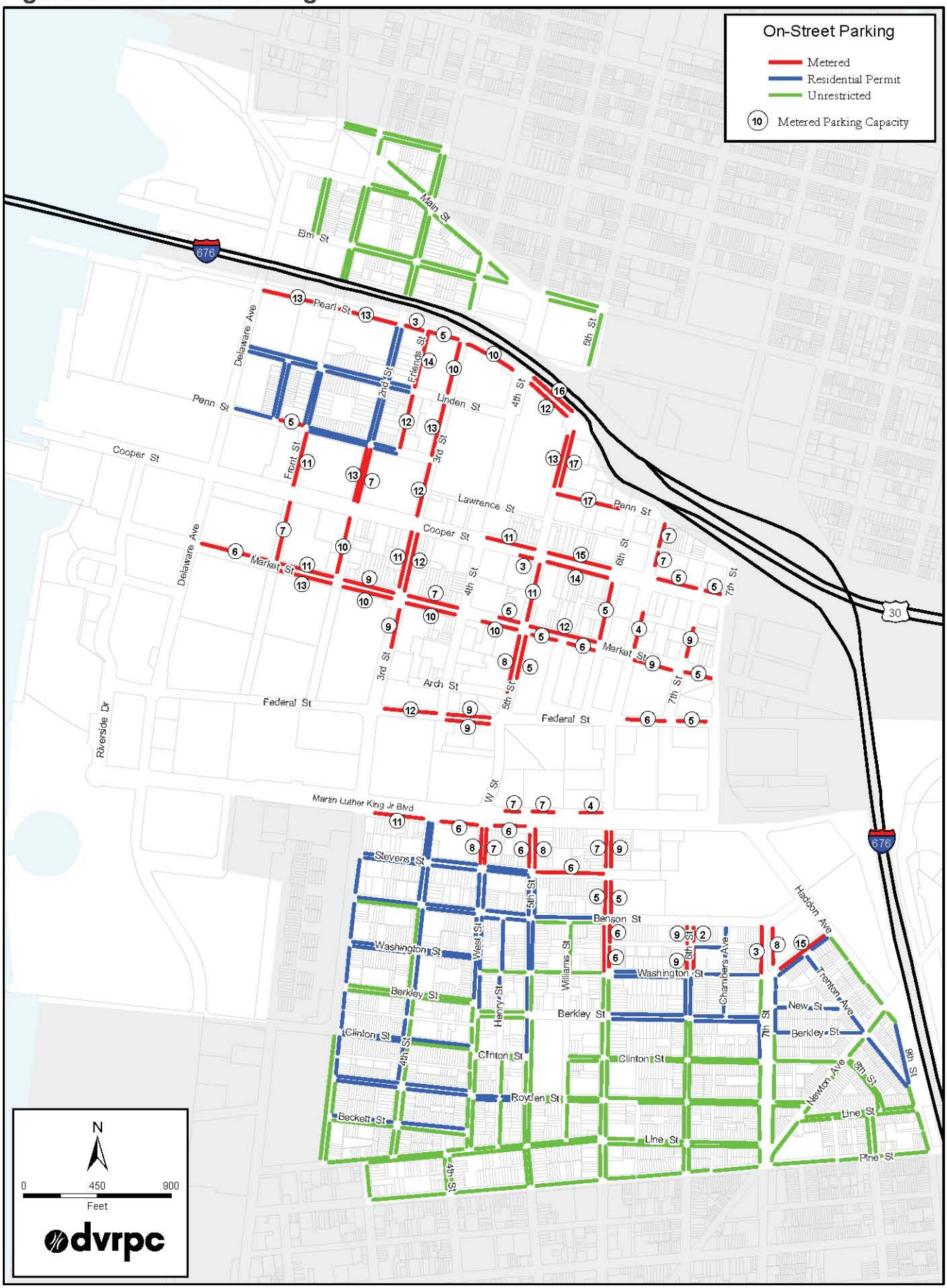
Types of On-Street Parking

As shown in Figure 8, there are currently three major types of on-street parking within the study area: metered, residential permit, and unrestricted. All of Downtown and the portions of Rutgers University and Cooper Lanning that are closest to Downtown have metered parking. Metered parking rates of $1 per hour are in effect Monday through Friday, with a 10 hour maximum.

Residential permit parking is often located immediately adjacent to metered streets, particularly near major institutions, such as Cooper Hospital and Rutgers University. Annual residential parking permits are available in two types and are zone specific. The $60 permit allows parking in residential permit areas and on metered streets within their respective zone. The other permit only allows parking in residential permit areas, but is free-of-charge. Two of the city's three residential permit zones, Zone 1 for the Rutgers subarea and Zone 2 for the Cooper Hospital subarea, are represented within the study area.

Unrestricted parking is mainly confined to residential portions along the periphery of the study area.

Figure 8: On-Street Parking



Source: DVRPC, 2010-2011

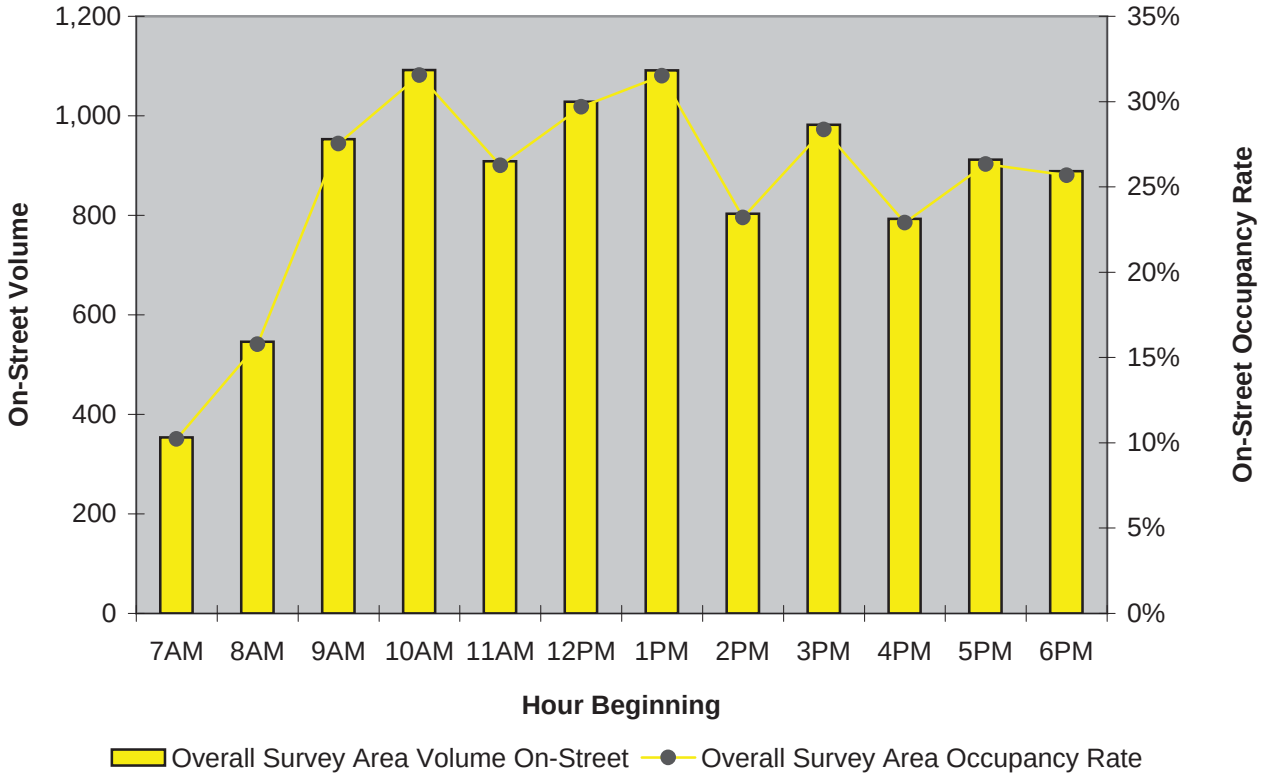
On-Street Parking Survey

To facilitate the analysis and subsequent recommendations for on-street parking, surveys were taken of the existing utilization of on-street parking facilities throughout the study area. Beginning at 7:00 AM, 12-hour surveys were taken of the Downtown and Cooper Lanning areas on Tuesday, October 5, 2010, and of the Central Waterfront and North Camden areas on Tuesday, March 29, 2011. (See Appendix B for a description of the survey methodology and Appendix C for data collected during the on-street survey.) An initial evaluation showed that it was unnecessary to survey the Gateway area because, while there were many cars parked on the Campbell's Soup campus, there were very few cars parked in the rest of the neighborhood. The survey collected data about license plates, time of day, and parking location.

On-Street Parking Volume and Occupancy Rate

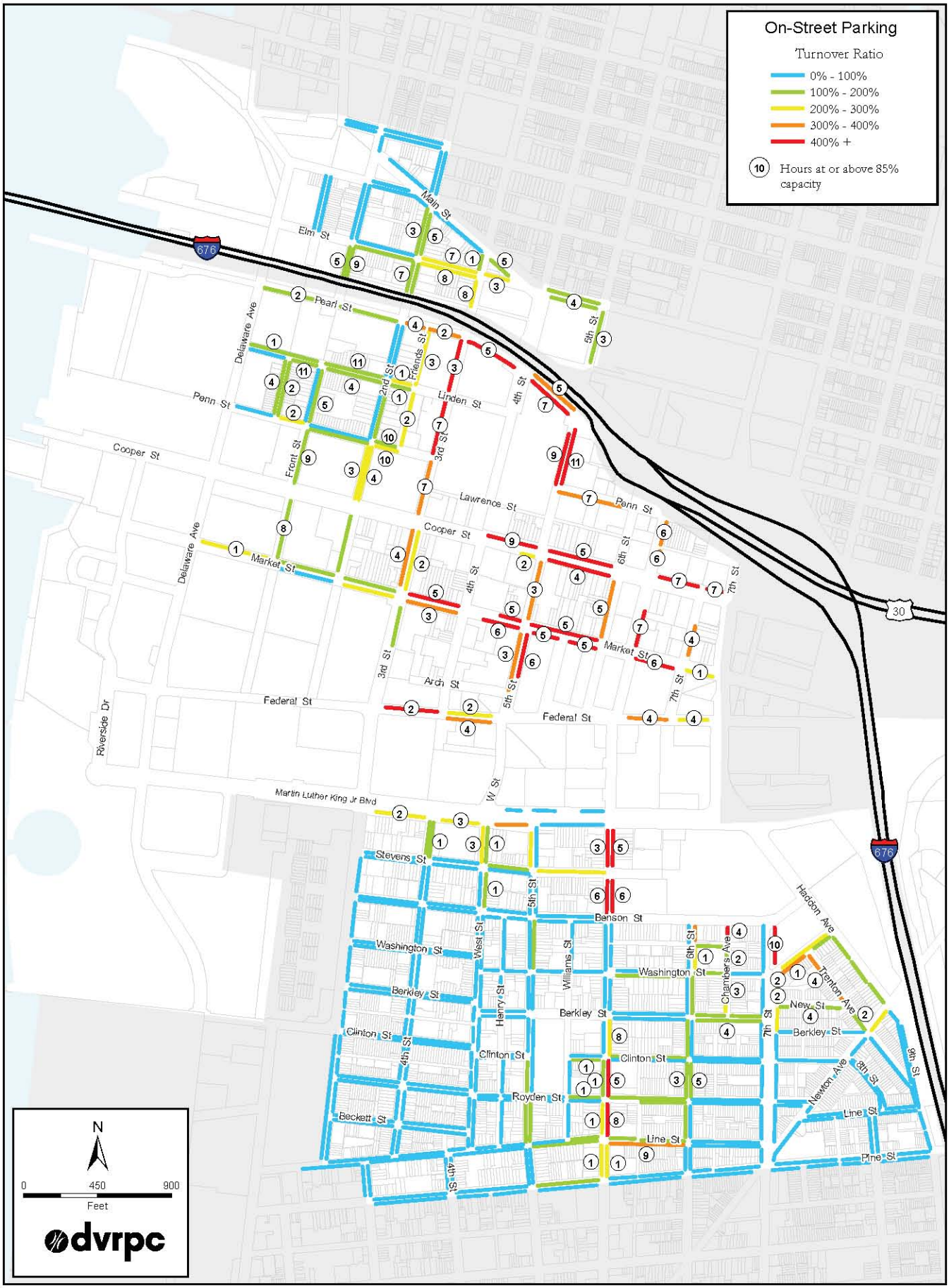
As shown in Figure 9, the study area's overall on-street parking demand peaks at 10:00 AM, with 1,092 vehicles. It remains high through the 1:00 PM hour, before declining to around 900 vehicles for the remainder of the day. These peak parked vehicle volumes represent about 25 to 30 percent of the total on-street parking capacity. However, parking demand is not evenly distributed throughout the study area, and specific areas experience acute parking shortages as a consequence. As revealed in Figure 10, a large proportion of the streets in the Downtown area experience occupancy rates greater than 85 percent for multiple hours. Conversely, only a small percentage of Cooper Lanning's streets are at or beyond capacity for multiple hours.

Figure 9: On-Street Parking Volume and Occupancy Rate



Source: DVRPC, 2010-2011

Figure 10: On-Street Parking Capacity and Turnover Ratio



Source: DVRPC, 2010-2011

On-Street Parking Duration and Turnover

The average parking duration for all surveyed vehicles is 2.5 hours. However, smaller areas, and even particular streets, have unique parking duration characteristics. Within the Downtown subarea, which is entirely metered, durations averaged one hour and 25 minutes, while the meters around Cooper Hospital and Rutgers University averaged one hour and 42 minutes, and two hours and 19 minutes, respectively. Streets that are residential permit parking in the Cooper Hospital and Rutgers University subareas average two and a half hours and over five hours, respectively. The unrestricted streets in the North Camden subarea closest to Rutgers University average parking durations of almost four and a half hours.

As shown by Figure 10, the streets with the highest turnover ratio (number of unique parked vehicles on a given street throughout the survey period per that street's on-street parking capacity) are concentrated in the Downtown subarea around the Rutgers University campus and in the northern portions of Cooper Lanning. Of the top 50 streets with the highest turnover ratios, 44 are metered, with the remaining six limited to residential permit parkers. Of the 50 streets with the lowest turnover ratios, most are located in western and southern Cooper Lanning and in North Camden. Of these, only three streets are metered (an additional four are metered, but their utilization during the survey was affected by construction).

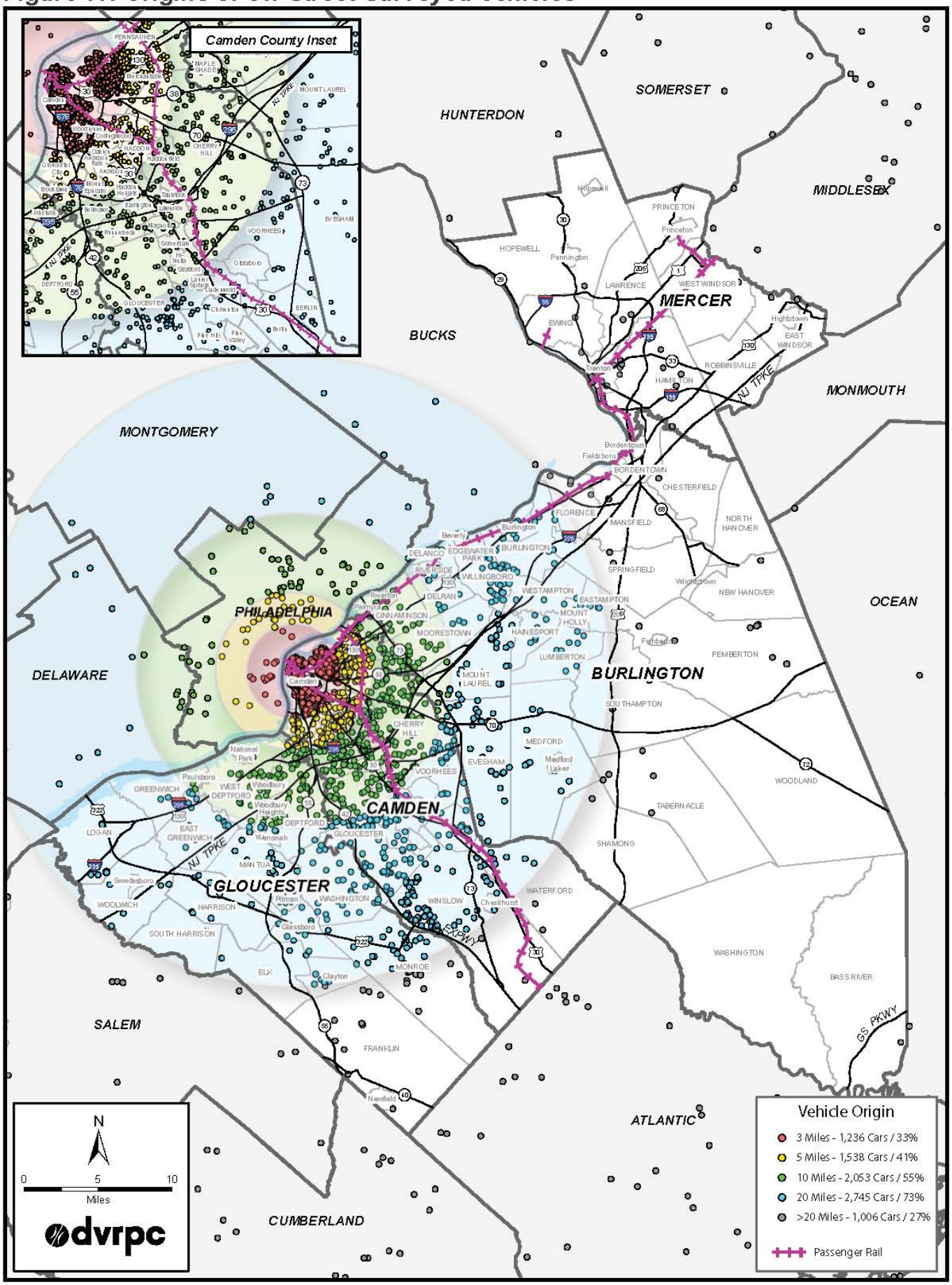
Origins of Parked Vehicles

The license plate data collected during the on-street parking survey provided an opportunity to examine origin-destination travel patterns (see Figure 11). Registration addresses were obtained from NJDOT, though no additional personal data was requested by nor made available to the project team. The top ten origin municipalities are the source of approximately half of the 3,751 surveyed vehicles. About 30 percent were registered to Camden City addresses, while the nine remaining top ten origin municipalities provide only 19 percent or 726 parked vehicles. (For a complete listing of vehicle origin by municipality, see Appendix D.)

The proportion of locally registered vehicles varied according to the subarea and the type of parking restrictions in place. Approximately 31 percent of vehicles parked in Downtown, which is entirely metered, were registered to addresses in Camden, although the vast majority were from outside the study area, and less than two dozen were from within the Downtown subarea. The residential permitted streets near Cooper Hospital held the greatest share of local vehicles, at 48 percent. The lowest percentage is along metered streets in the Rutgers University area, with 11 percent. Of the streets closest to Rutgers University within the North Camden subarea, only 18 percent of the parked vehicles are registered within the city, a direct contrast to the 34 percent that are registered within the city for the remainder of the North Camden subarea.

Less than one percent of all non-Camden City surveyed vehicles are located within a quarter mile, typical walking distance, of a PATCO or RiverLINE station, but about 19 percent are located within one mile of a PATCO or RiverLINE station. Almost 31% are within a quarter mile of a NJ Transit bus stop that serves Camden via the Walter Rand Transportation Center. These factors indicate that a modal shift from private vehicles to transit for travel to the study area is most likely to occur through an increase in walking to a nearby bus stop or driving to the nearest rail station. A successful modal shift of only 15 percent of these vehicles would increase capacity by 233 spaces, a volume of on-street spaces slightly larger than available within the Downtown district.

Figure 11: Origins of On-Street Surveyed Vehicles



Source: DVRPC, NJ DOT, PA DOT, 2010-2011

Recommendations

When financially feasible in the future, it is recommended that the city **upgrade its parking payment system from meters to kiosks**, similar to those in Philadelphia and other cities. A single kiosk can replace all meters along the length and side of a block and, because the size of parking stalls will no longer be determined by the spacing of meters, on-street parking capacity will be increased. The city will be able to easily adjust the price of on-street parking to accurately reflect demand trends from a centralized off-site location.

As shown in Figure 12, it is recommended that the kiosk upgrades occur in two phases. Forty-eight street segments should be converted in the first wave of upgrades, with an additional 15 segments to follow in phase two. These segments were selected due to their tendencies to be at or beyond effective capacity (85 percent) for a large portion of the day, have high turnover rates, and short average parking durations. Consideration was also taken to provide continuous segments of similar payment systems beginning with the entire downtown, portions of the Rutgers sub-areas, and adjacent streets.

It is recommended that Camden **expand the parking payment system to residential permit streets that currently limit parking duration for vehicles without permits to one hour or less**. This could be done using kiosks or smart meters. For example, while Philadelphia has had phenomenal success using kiosks in its downtown, it prefers smart meters for areas with low parking turnover. The Philadelphia Parking Authority believes that the lower maintenance required by smart meters offsets the additional revenue to be gained from using kiosks in low turnover areas.

As shown in Figure 12, the parking payment system should be expanded in two phases, the first phase adding kiosks or smart meters to 12 street segments, and expanding to include six additional segments in the second phase. These segments were selected due to high occupancy rates, relatively low proportions of immediately local residential vehicles, and proximity to existing metered segments. Residents electing to purchase the $60 yearly residential permit are exempt from paying for parking in their residential permit zones; therefore, the city should strongly encourage residents who live on the 18 street segments targeted for a new payment system to purchase this permit. The city should adjust the price of parking on these street segments to ensure that there is adequate available parking for vehicles with residential parking permits.

It is recommended that Camden **expand the parking payment system to streets that currently allow unrestricted parking**, particularly in North Camden and along Broadway south of Washington Street. A lack of restrictions has given motorists free access to park along these high-demand segments. In North Camden, the demand for on-street parking is due to the proximity of Rutgers University, while along Broadway, demand is a product of the commercial context of that arterial.

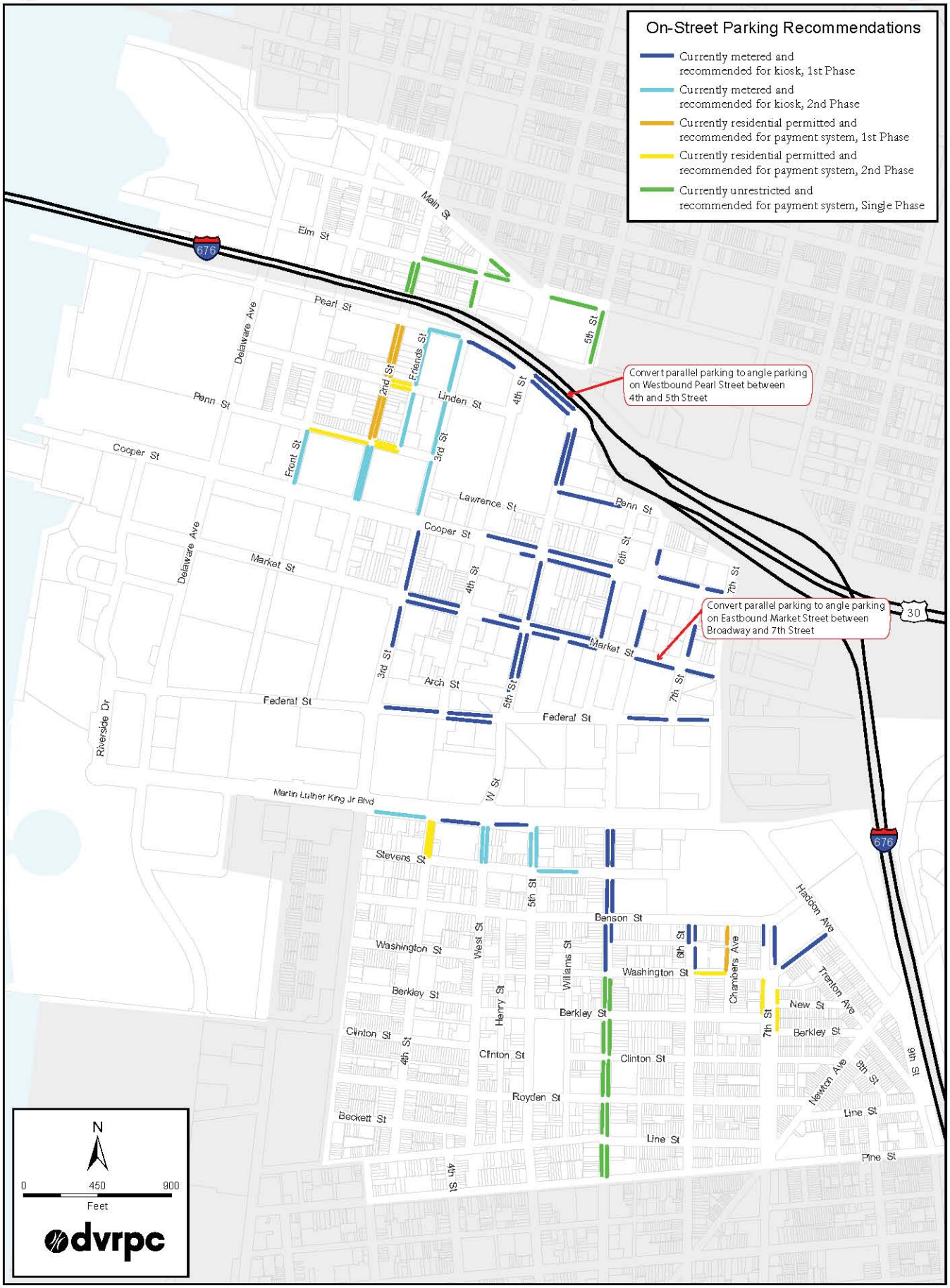
A parking payment system should be implemented along 18 currently unrestricted street segments, either through the use of kiosks or smart meters (see Figure 12). These segments were selected due to their high demand rates, lack of immediately local residential vehicles, and proximity to existing metered segments. The $60 yearly residential parking permit program should be extended to residents living along these 18 street segments to ensure that adequate residential parking is available.

In order to maximize the amount of on-street parking, it is recommended that, wherever street widths permit, the city **convert parallel parking to angle parking**, which increases on-street parking capacity. All of the surveyed on-street parking is parallel except for a one-block section of 5th Street within the Rutgers University subarea, which is angle. A change from parallel to angle parking could be implemented immediately at minimal cost.

One segment was identified where such a conversion is feasible and desirable: westbound Market Street between North 7th Street and Broadway. This segment has at least a 400 percent turnover ratio and five hours of “at capacity” utilization. A conversion would provide a net increase of eight to 10 spaces, assuming an angle of 45º.

It is recommended that the new parking be “reverse angle parking,” where drivers back into spaces and pull out in the direction of the traffic flow. Reverse angle parking improves driver visibility and decreases collisions because drivers can see oncoming traffic, including cyclists. Safety is improved for children because the direction that the car doors open steers them towards the sidewalk rather than towards traffic. Vehicle loading is improved because the trunk of the vehicle is at the curb rather than close to moving traffic.

Figure 12: Recommended Conversions of and Expansions to On-Street Parking



Source: DVRPC, 2011

OFF-STREET PARKING

Ample off-street parking options are critical to support a vibrant city center. While on-street spaces provide convenient short-term parking, off-street parking is needed for those who need parking for more than several hours at a time, and is preferably provided in structured parking garages.

Though it costs significantly more to build structured parking than surface parking, the benefits are numerous. Furthermore, it is not just large cities embracing the trend toward structured parking. Even small cities such as Wilkes-Barre have recently constructed mixed-use structured parking (McDonald, 237). It is a much more efficient use of land, particularly the highly valuable land in an urban center, and provides parking for many more vehicles with the same amount or less of impervious coverage than a surface lot.

Structured parking is inherently more sustainable than surface parking and can be made even more so through good design. Stormwater runoff is significantly reduced because of the decreased amount of impervious coverage. Features such as efficient lighting, solar roof panels, and bicycle parking with shower facilities can increase the sustainability of the facility, while serving more users. Many structured parking garages also include preferred parking spaces for car-share vehicles, and the technology exists to provide recharging stations for electric cars once they are more prevalent.

Structured parking also provides an opportunity to mask the presence of cars, while at the same time accommodating many drivers. Preventing parking from dominating the visual landscape is extremely important when trying to increase the activity level of a place. Furthermore, structured parking provides an opportunity to provide a mix of uses on the same lot; many parking structures built today include active ground floor uses.

Shared parking means that a parking facility serves multiple users or destinations (VTPI, 2005). This is most successful if destinations have different peak periods (such as office and entertainment), or if they share patrons, so motorists park at one facility and walk to multiple destinations. Strategically located structured parking provides an opportunity to take advantage of shared parking, accommodating more drivers with fewer parking spaces.

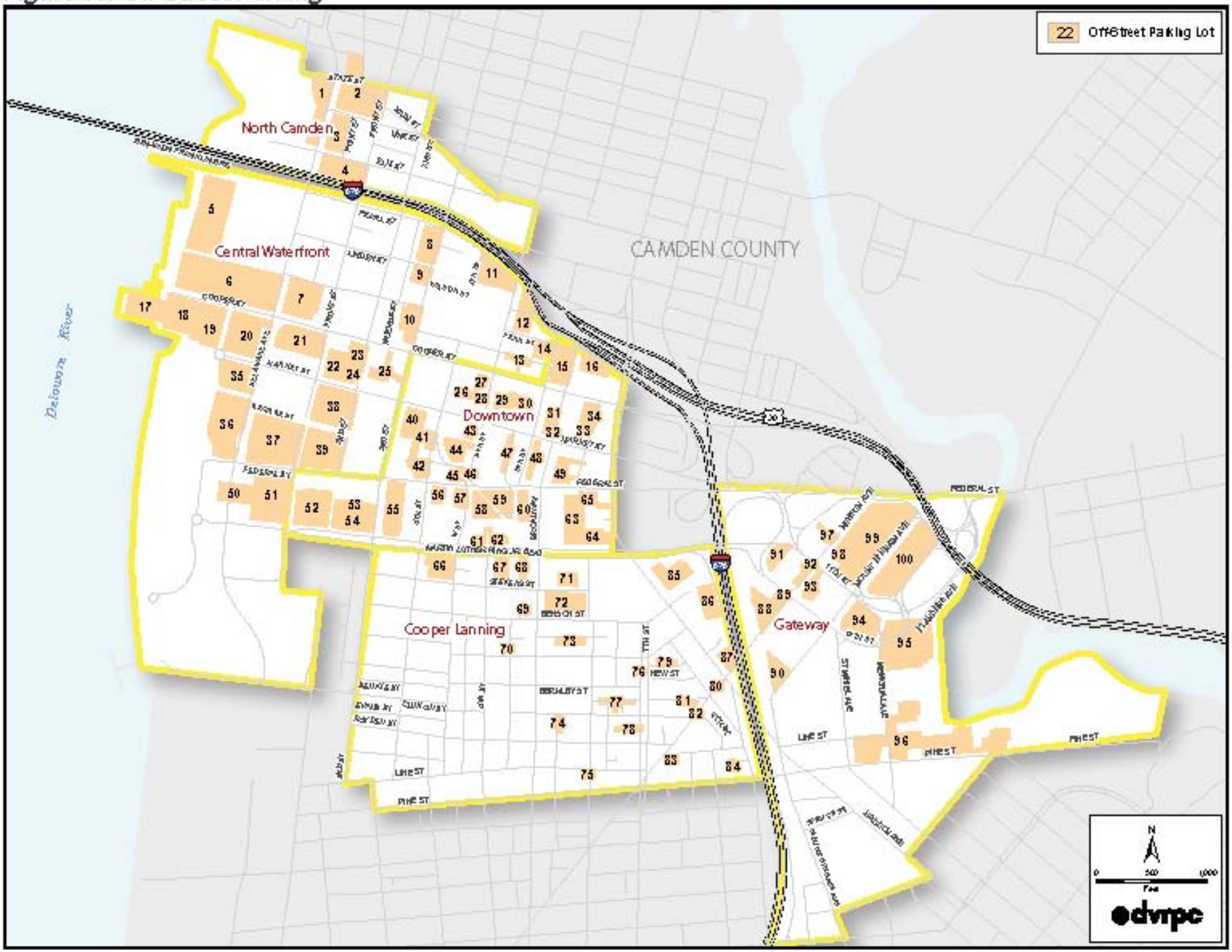
Well-designed structured parking also has the potential to serve as an event space. A recently constructed garage in Miami Beach, Florida, features removable parking barriers, soaring ceilings, and open walls. It is extremely popular and has hosted a range of events, from high-end weddings to yoga (Barbaro, A1). Camden's Waterfront Garage has a flat rooftop with panoramic views of the Philadelphia skyline and could be used for event space, if desired.

Just as structured off-street parking provides many benefits, surface parking lots have a negative effect on places. Too much surface parking discourages people from walking around because there are no retail spaces or dining establishments, or anything else to hold their visual interest. In fact, "when the density of cars passes a certain limit, and people experience the feeling that there are too many cars, what is really happening is that subconsciously they feel that the cars are overwhelming the environment, and that the environment is not a place for people…" (Alexander, Ishikawa, and Silverstein, 122).

Off-Street Surface Parking

As shown in Figure 13 and Table 4, there are more than 13,345 off-street parking spaces available within the study area, excluding public agencies and department lots used for storage and some restricted private lots. Of these considered facilities, at least 8,922 spaces are provided solely by 62 surface lots.

Figure 13: Off-Street Parking



Source: DVRPC, Camden City Parking Authority, Camden Redevelopment Agency, Cooper's Ferry Development Association, 2010-2011

Table 4: Off-Street Parking Location Inventory

Off-Street Parking Location Inventory					
Map Number	**Lot Name**	**Lot Area (acres)**	**Lot Owner**	**Lot Manager**	**Lot Capacity**
1	Prison Lot	1.69			144
2	Surface Lot	3.40	NJ Department of Corrections/State Treasury		500
3	Surface Lot	1.38	Hargrove Demolition		170
4	Surface Lot	1.59	NJ Department of Corrections/State Treasury		110
5	Stadium	4.32	NJ Economic Development Authority (NJEDA)		450
6	City Lot 11	6.95	Camden Redevelopment Agency	CCPA #11	900
7	Baseball VIP / Board of Education	2.17	Camden Redevelopment Agency (leased to BOE)		255
8	Rutgers 14	1.29	Rutgers		213
9	Rutgers 13	0.59	Rutgers		79
10	Rutgers 12	1.18	Rutgers		146
11	Rutgers 1	1.57	Rutgers		116
12	Rutgers 2	0.95	Rutgers		119
13	Surface Lot	0.32			34*
14	Rutgers 3	0.53	Rutgers	Rutgers	54
15	Camden Technology Center	1.31	Camden County College	Standard Parking	621
16	Camden County College	0.69	Camden County College		55
17	RCA Pier	1.54	Camden Town Center		218
18	RCA Pier	2.28	Camden Town Center		323
19	Aquarium Buses	1.65	Camden Redevelopment Agency	CCPA #10	100
20	Public Schools / Victor's Pub	3.06	Delaware River Port Authority	CCPA #9	300
21	Victor's	2.12	Dranoff Properties		362
22	Surface Parking	0.93	Dranoff Properties		124
23	Surface Parking	0.74	Dranoff Properties	CCPA #14	85
24	Surface Parking	0.45	Dranoff Properties		43
25	Surface Lot	0.66			71*
26	Federal and US Marshall	0.26			14
27	Tabernacle of Faith	0.24	Tabernacle of Faith	Tabernacle of Faith	33
28	Surface Lot	0.10			13
29	Surface Lot	1.06		Central Parking System	135
30	Surface Lot	1.06		Central Parking System	54
31	Rowan University	0.19			23
32	PNC Bank	0.39	PNC Bank		47
33	PNC Band and Camden Diocesan	0.58	PNC Bank		72
34	Surface Parking	0.33		Bill's Gas & Go	31
35	Aquarium Parking	1.84	NJEDA	CCPA #8	150
36	Aquarium Parking	3.62	NJEDA	CCPA #7	500
37	L-3 Communication Systems	4.27	NJEDA	L3 #18	480
38	L-3 Communication Systems	2.78	NJEDA	L3 #20	350
39	L-3 Communication Systems	2.76	NJEDA	L3 #19	370
40	Jury Parking	0.89	Jury Parking	CCPA #46	125
41	Surface Parking - Daily Public Parking	0.83	Commercial Lot (privately owned)		158
42	Camden Fire Marshall's Office	0.69	Fire Department	Fire Department	50
43	Church Parking	0.20	St. Paul's Episcopal Church		30
44	County Prosecutor	0.84	Prosecutor		105
45	Sufrin Zucker Steinberg	0.11			16
46	County Prosecutor	0.15	Prosecutor		17
47	Court Parking	0.41	City	CCPA	49
48	City Hall Parking	0.41	City	CCPA	47
49	Cathedral Hall	0.75	Prob. Cathedral Hall		78
50	Aquarium Garage	1.12	City of Camden Parking Authority	CCPA #3	688

*** Capacity estimated based on dimension and orientation of unmarked surface lot.**

Source: DVRPC, City of Camden Parking Authority, Camden Redevelopment Agency, Cooper's Ferry Development Association, 2010-2011

Table 4 (continued): Off-Street Parking Location Inventory

Off-Street Parking Location Inventory					
Map Number	**Lot Name**	**Lot Area (acres)**	**Lot Owner**	**Lot Manager**	**Lot Capacity**
51	One Port Center (OPC) Lot	3.51	DRPA	CCPA #4	300
52	Incubator Building	2.27	NJEDA	CCPA #5	150
53	YMCA	0.55			51
54	Jury and Public	1.61	Public	CCPA #6	250
55	County Jail & Court	1.72	City of Camden Parking Authority	CCPA #47	170
56	Library	0.34	City of Camden	Enforcement by County Sheriff	29
57	Surface Lot	0.49	Camden Redevelopment Agency	CCPA #49	55
58	Block N	0.74	Camden Redevelopment Agency	CCPA #50	85
59	Block N	1.01	Camden Redevelopment Agency	CCPA #51	85
60	Office	0.75	Camden Redevelopment Agency		64*
61	TD Bank	0.20			26
62	CVS	0.31			41
63	Walter Rand Transportation Center	1.31	NJ Transit	CCPA #53	450
64	State Building	1.08	State of New Jersey	State of New Jersey	161
65	McDonalds	0.36			29
66	Surface Parking	1.12		CCPA #45	150
67	Surface Lot	0.67	Camden Redevelopment Agency		96
68	Unpaved Lot	0.36			30
69	Planned Parenthood	0.14			24
70	Surface Lot	0.17			17
71	Ronald McDonald House	0.48			29
72	CCIA	1.73	CCIA	Standard Parking	1600
73	Surface Lot	0.43	Center for Family Services		57
74	Broadway School & Head Start	0.17	School District		20
75		0.08			7
76	Surface Lot	0.09			11
77	Surface Lot	0.40			30*
78	Surface Lot	0.34			38*
79	Surface Lot	0.26			25
80	Surface Lot	0.09			9
81	Surface Lot	0.17			15
82	Surface Lot	0.07			7
83		0.09			10
84	Surface Lot	0.15			18
85	South Jersey Health Care Center	1.13			120
86	Cooper 2	0.94	Cooper 2	Standard Parking	1064
87	Unknown	0.51	Cooper		62
88	NJ Transit Newton Garage	1.16			108
89	Greener Cleaners	0.33			20*
90	NJ Transit Newton Garage	0.84			79
91	Camden County DPW	0.60			50
92	Camden County DPW	0.37			25
93	Campbells Soup	0.48	Campbells Soup		56
94	Campbells Soup	2.07	Campbells Soup		164
95	Campbells Soup	3.51	Campbells Soup		329
96	Campbells Soup	1.30	Campbells Soup		557
97	Municipal Lot	0.29			18*
98	United Way	0.30			27
99	Surface Lot	6.46			0
100	Sears	4.14			0

*** Capacity estimated based on dimension and orientation of unmarked surface lot.**

Source: DVRPC, City of Camden Parking Authority, Camden Redevelopment Agency, Cooper's Ferry Development Association, 2010-2011

City of Camden Parking Authority (CCPA)

At 24 lots, the City of Camden's Parking Authority (CCPA) is the single largest owner and operator of surface lots within the study area. With a staff of approximately 40, the CCPA regularly manages or owns outright 4,400 spaces within these lots alone. In addition, the CCPA contracts to provide parking management for other companies including the Adventure Aquarium, Camden Riversharks, and Rutgers University. Though CCPA does not have the infrastructure to boot nor tow violators (these services are instead provided by private contractors), and despite the lack of entry gates at many facilities, most of their lots are reserved for the exclusive use of permit holders, many of whom are public employees from state, county, and municipal services. A waiting list for monthly permits exists for most of these lots, with the price of a permit varying depending upon the location and contractual agreements. Another major user of CCPA surface lot parking is jurors, who are supplied with 250 spaces in CCPA Lot #6. This lot is generally full at the beginning of the week, when the jury pool is largest, but occupancy tapers down as the week progresses. Other large restricted CCPA lots include the fully utilized Lot #47 (Jail Lot) adjacent to the county jail and courthouse, with a 170-space capacity, and Lots #50 and #51, which comprise "Block N" and provide about 170 spaces as well. The only CCPA lot that is not regularly at capacity is Lot #45, which, unlike almost all other CCPA lots, is open to those who do not have permits.

Rutgers University Parking

Parking for Rutgers University commuter students is concentrated on CCPA's Lot#11, a large surface lot near the waterfront, with a capacity of 900 spaces. This lot, located about 1,000 feet west of campus, is leased by the CCPA to the university, which provides two continuously circulating, free shuttles to bring students back and forth from the parking lot to campus. For the 2010 to 2011 academic year, an all-day commuter permit to park on CCPA Lot #11 costs $139.10. There are also two surface lots (RU #12 and #13) available to students for on-campus parking, for which permits cost $185 for the academic year. The remaining surface lots on the campus (RU #1, #2, #3, and #14) are limited to faculty and staff use during the day, and use by other permit holders in the evening.

Reserved Private Parking

There are several surface parking lots exclusively reserved for employees of private companies. The largest of these employers are Campbell's Soup, with approximately 1,106 spaces, and L-3 Communications, which provides 1,200 parking spaces over three surface lots (CCPA #18, #19, and #20). These three surface lots comprise approximately ten acres, which are owned by the New Jersey Economic Development Authority, as are the L-3 Communications office buildings.

Public Parking - Privately Owned and Operated

Some commercial parking lots are privately owned and operated for public use. Several are located in the Downtown area, with one of the largest located just off of 4th Street between Market and Federal streets. This lot has about 158 spaces, all of which are often fully utilized. Another large privately owned lot is located at 5th Street between Cooper and Market streets, behind the former Plaza Hotel site, and it has a capacity of over 70 spaces, also often fully utilized. Prices for all day parking range from $6 to $10.

Restricted Retail Commercial Parking

There are several commercial establishments that have free parking reserved for their staff and customers. These are usually small lots concentrated in the downtown part of the study area and include banks and several retail establishments. One of the larger lots, located on North 6th Street at Market Street, serves PNC Bank employees and customers and has capacity to park approximately 47 vehicles.

Table 5: Facilities Inventory of Parking Garages

Facilities Inventory of Parking Garages					
	CCIA	Haddon	CCC	Walter Rand	Waterfront
Payment Method	• Automated • Non-permit holders utilize pay station before retrieving vehicle • Card access for permit holders	• Automated card access for permit holders • Attendant payment upon exit for non-permit holders	• Automated • Non-permit holders utilize pay station before retrieving vehicle • Card access for permit holders	• Attendant • Permit holders display permit upon entry • Non-permit holders pay upon entry	• Attendant • Attendants at entrance due to broken ticket machine • Permit holders display permit on departure
Security	• Cameras at elevators and mid-ramp on every floor • Emergency call boxes on every floor • Stairwell open and transparent • Lighting is adequate	• Cameras at elevators and mid-ramp on every floor • Emergency call boxes on every floor • Stairwell open and transparent • Lighting is adequate	• Cameras mid-ramp on every floor • Stairwell open and transparent from 3rd to 8th floors, enclosed from 1st to 3rd floors • Lighting is adequate	• Cameras in elevators • Elevator landings set back and enclosed • Stairwells daylighted but enclosed • Lighting is adequate	• Cameras on top level only • Blown bulbs contribute to poor lighting
Wayfinding	• Color coded signage for floor designation near elevators • Reminder cards available at all elevators • Wayfinding signs to facility entrance on Broadway	• No color or symbology coding of floors • Reminder cards available at all elevators	• Color coded signage and elevator doors for floor designation • Wayfinding signs to facility entrance on Cooper St	• Good interior signage to elevators and exits • Color coded floor designation by elevators • Wayfinding signs to facility entrance on MLK Blvd	• Destination-specific symbology and color coded signage at elevators and mid-ramp for floor designation • Good internal wayfinding • Wayfinding signs to facility entrance on Delaware Ave
Stall Layout	• Angled stalls • Reserved handicapped stalls • Assigned section for van parking • Bicycle racks on ground floor • Small unused corner areas	• Angled stalls • Reserved patient parking stalls • Valet parking stalls • Small unused corner areas	• Angled stalls • Reserved handicapped stalls • Small unused corner areas	• Angled stalls • Reserved handicapped stalls • Compact car stalls	• Angled stalls
Operations	• Facilities in excellent condition • Garbage receptacles at elevators	• Facilities in excellent condition	• Facilities in excellent condition • Garbage receptacles at elevators	• Facilities in fair condition	• Facilities in fair condition • Ticketing equipment requires repair

Source: DVRPC, 2011

Off-Street Structured Parking

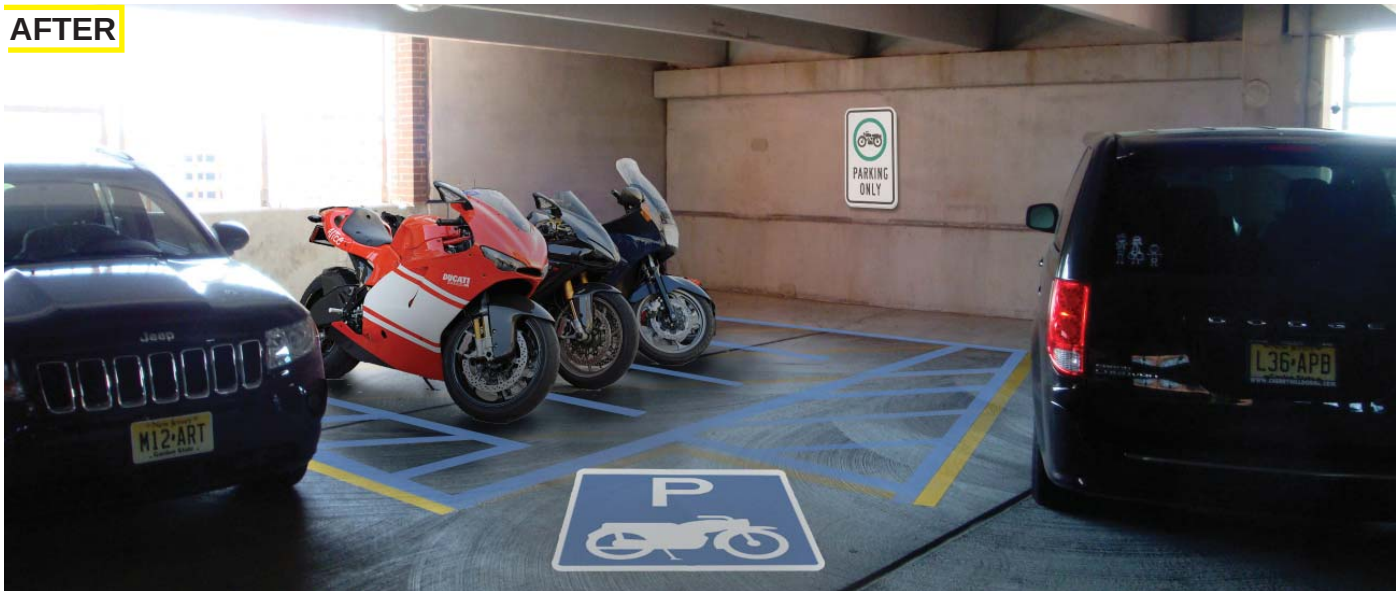
In contrast to the dozens of surface parking lots, there are just five parking garages within the study area. Though their footprint is only a fraction of that of the surface lots, they provide up to one-third of the study area's available parking via their 4,423 spaces.

An inventory of the basic facilities and operations of each garage was taken in 2011. (See Table 5 for a summary of findings.) Payment methods are either automated or require an attendant. For the former, nonpermit payments are conducted at automated pay stations prior to the motorist retrieving his or her vehicle. For the latter, all drivers, including permit holders, at the Walter Rand and Waterfront garages are provided ingress and egress via manual payment or confirmation of their permits. Security cameras are present in all five garages, although their placement is broader and more strategic in the Walter Rand Garage. Internal wayfinding signage, through the abundant use of color coded signage and symbology, is most robust in the Camden County College and Waterfront garages. Many of the garages have unused spaces in the corners of each floor, too small to be accessible to cars, that could accommodate multiple motorcycles, mopeds, and other small vehicles. At locations with high demand, such as the CCIA and Haddon garages, allowing motorcycle parking in these spaces would provide minor but easy increases to capacity and revenue (see Figure 14). Overall, all five garages are clean and in good condition.

Figure 14: Conversion of Existing Unused Space to Motorcycle/Scooter Parking

BEFORE

AFTER



Source: DVRPC, 2011

A license plate survey, similar to the on-street parking inventory, was taken on Thursday, March, 31, 2011. The license plates of all vehicles parked within each of the garages were recorded in the morning at 9:00 AM, midday at 11.30 AM, and in the afternoon at 2:00 PM. The results of this survey are shown in Figures 15 and 16. There was very little variation in distance traveled to the five study area parking garages. The maximum median distance is 10.97 miles to the CCIA garage while the minimum is 7.04 to the Walter Rand garage. (For a complete listing of vehicle origin by municipality, see Appendix E.)

CCIA and Haddon Garages

The CCIA and Haddon garages are the two largest in the study area, despite being only a quarter mile apart. Owned by the CCIA, the CCIA garage has capacity to park 1,600 vehicles, while the Haddon Garage, owned by Cooper Hospital, has capacity to park 1,000 vehicles. Both are operated by Standard Parking via a late 2010 acquisition of Expert Parking. Parking prices are the same at both garages, starting at $5 for the first hour and increasing to $10 for 24 hours. The Haddon Garage is dedicated to serving Cooper Hospital, and the CCIA garage leases 1,015 spaces in its upper four floors to the hospital.

The survey results showed that the volume of parked vehicles in all five garages is greatest in the CCIA Garage, particularly during the midday period. However, the peak occupancy rate at the Haddon Garage is the highest, at 92 percent, and is the most consistently occupied throughout the day. With continued growth in the immediate area, including the current construction of the Medical School Building across the street from the CCIA Garage, the high parking demand generated by the hospital will increase in the near future.

Walter Rand and Waterfront Garages

The Walter Rand Garage, owned by NJ Transit, is situated above the Walter Rand Transportation Center and has 450 parking spaces. It is only open Monday through Friday, 7:00 AM to 7:00 PM. The Waterfront Garage, owned by the Delaware River Port Authority (DRPA), is adjacent to One Port Center, Adventure Aquarium, and the Susquehanna Bank Center, and provides 688 parking spaces. Both garages are operated by CCPA. All day public parking costs $9.75 at the Walter Rand Garage and $8.50 at the Waterfront Garage, though both garages receive nearly all their revenue from the sale of monthly permits.

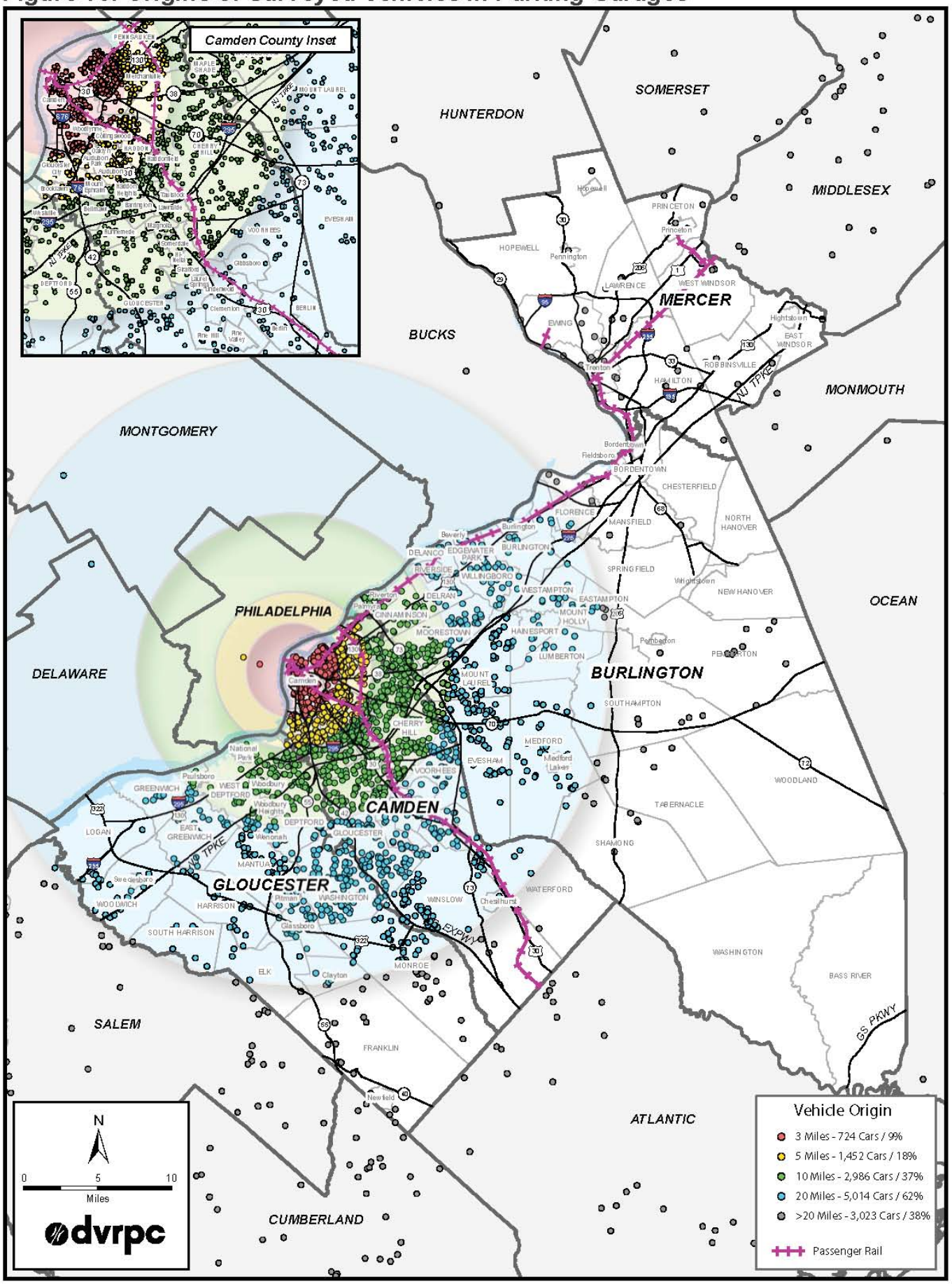
Permit holders at the Walter Rand Garage typically work in the adjacent state office building, and the permit holders at the Waterfront Garage tend to be employed by the adjacent entertainment destinations. At the Walter Rand Garage, slightly more permits than total capacity are sold each month (primarily to state, county, and municipal agencies). As a result, only about 10 nonpermit vehicles are accommodated on a daily basis. Many public employees enter and leave this facility during the course of the day. On the day of the survey, there was a peak demand of 302 vehicles at midday, an occupancy rate of only 67 percent. The Waterfront Garage has the lowest volumes and occupancy rates of all five garages, with 156 vehicles (23 percent of capacity) in the morning, gradually declining to 118 vehicles (17 percent of capacity) in the afternoon. This indicates available capacity for about 500 vehicles throughout the day. Prior to the construction of the CCIA Garage, Cooper Hospital reserved spaces in the Waterfront Garage and provided shuttles to transport employees between the garage and hospital.

Camden County College Garage

The Camden County College Garage is owned and operated by the college. Its 621 spaces are buffered from the street via ground floor retail and second-floor classrooms. Daily public parking rates are $3.25 per hour for the first two hours and $8.25 for any duration longer than two hours. The majority of parkers are permit holders whose permit costs vary based on institution affiliation: monthly permits cost $76 per month ($556 per academic year) for Camden County College students and staff, and $113 per month ($832 per academic year) for Rutgers University and Rowan University students and staff. Permits are available to the general public for $116 per month.

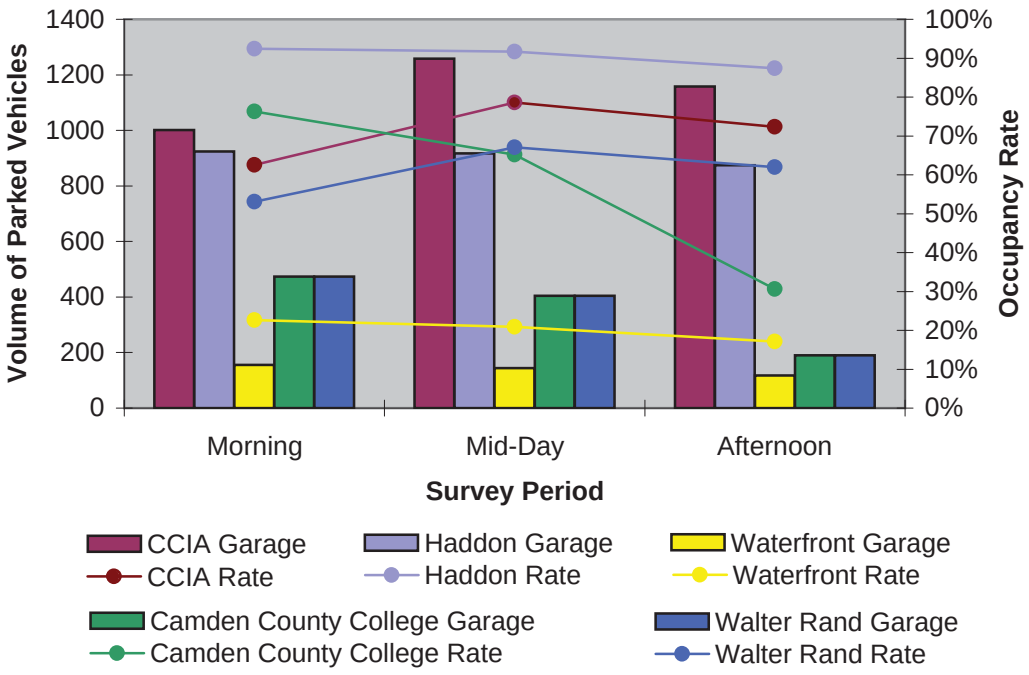
Camden County College data sourced from its automated payment system show that demand is greatest during the morning period, when parking is at 76 percent capacity (474 vehicles). Demand levels decline throughout the day, with a sharp reduction in the afternoon to just 31 percent of capacity (190 vehicles). This indicates availability of about 150 spaces in the morning and over 400 spaces by the afternoon. Although the garage is open until 11:00 PM on weekdays, by 5:00 PM, it is only 20 percent occupied, leaving available capacity for additional parkers. Rutgers University and Rowan University students may experience parking shortages in the future, as surface lots are developed and drivers wish to utilize the available capacity in the Camden County College Garage.

Figure 15: Origins of Surveyed Vehicles in Parking Garages



Source: DVRPC, NJ DOT, PA DOT, 2010-2011

Figure 16: Garage Volume and Occupancy per Survey Period



Source: DVRPC, 2011

Sustainable Parking

While impervious coverage occurs from roads, buildings, and sidewalks, the largest contiguous areas of impervious surfaces are parking lots. These large areas of impervious coverage can cause problems with stormwater runoff, a problem experienced by Camden. Retrofitting these parking lots to reduce and interrupt the impervious coverage would lessen flooding and runoff by redirecting stormwater to planted areas. Redesigning the parking lots for sustainable stormwater management would also improve the water quality of the Pennsauken Creek by reducing pollutant loads from draining into the stream. Installing stormwater treatments, such as vegetated swales, infiltration basins, and pervious pavement in existing parking lots, would delay, capture, and cleanse runoff, aiding in the remediation of the polluted local water resources and recharging groundwater. The New Jersey Stormwater Best Management Practices Manual offers descriptions and technical information on the various types of treatments that are appropriate for retrofitting parking lots.

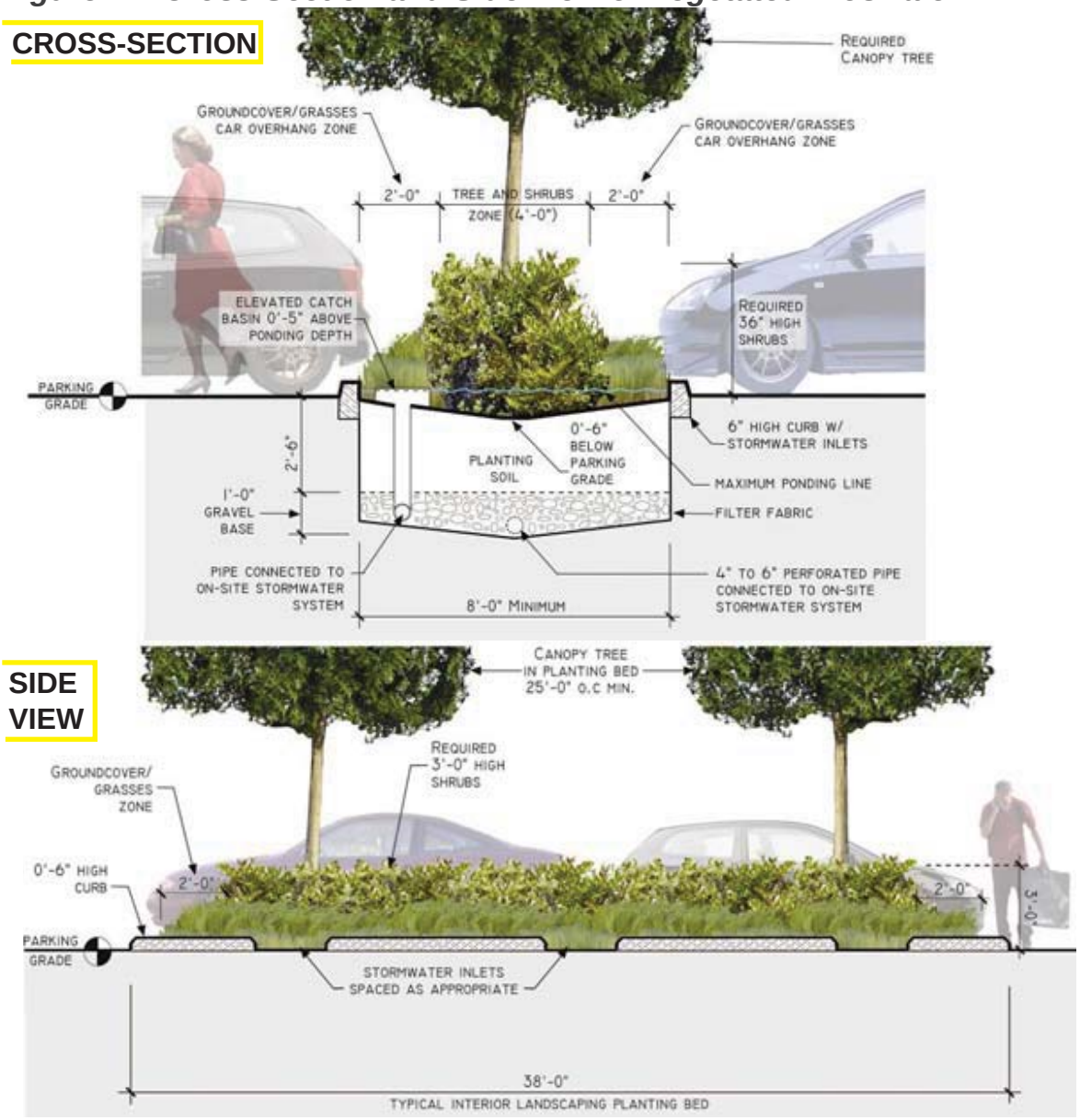
The New York City Department of City Planning adopted design standards for commercial and community parking lots in 2007. For parking lots of at least 18 spaces or 6,000 square feet, New York's standards require one street tree planted for every 25 feet of frontage, as well as a seven-foot wide landscaped strip around the perimeter of the lot. Larger lots of at least 36 spaces or 12,000 square feet have an additional requirement of one shade tree for every eight spaces, located within a vegetated planting island in the interior of the lot. All landscaped areas must be designed to absorb stormwater runoff. (See Figure 17 for a cross-section and side view of a stormwater bioswale.)

There is an excess of surface parking throughout the study area, and while some have some perimeter landscaping islands, hardly any have interior landscaping. As indicated earlier in Figure 13 and the associated Table 4, a total of 100 surface lots were identified in the study area. After excluding public agencies and department lots used for storage and some restricted private lots, 62 off-street parking facilities account for over 8,922 spaces, the source of a large volume of runoff that could be mitigated.

The five structured parking facilities within the study area represent a fraction of the impervious surface area of surface parking lots; however, due to their greater profile, garages can serve as models for sustainable parking practices. For instance, in order

to minimize the volume of stormwater runoff, all of a garage's floor drains may be led into cisterns or rain barrels for temporary storage, or adjacent bioretention areas for cleansing and slower absorption into the ground. To lessen a garage's capacity to absorb and retain solar heat, all exterior surfaces should be comprised of or covered by a light-colored material. To reduce power consumption, or even generate additional electricity for the power grid, solar and wind provide sustainable and clean sources of energy. Solar cells may be placed upon a structural steel canopy that is raised above and over vehicles parked on the garage's roof, thus preserving the existing garage capacity. Since many parking structures are as tall or taller than adjacent buildings, and lack static populations of noise-adverse building occupants, they are good candidates for the local generation of wind power. Appropriately scaled vertical axis wind turbines are recommended for existing and future study area garages because they are more appropriate for the highly variable wind patterns present in developed areas. Beyond reducing operating costs and environmental impact, these innovative and effective sustainability measures are strong candidates for implementation at parking garages due to the greater physical and symbolic profiles of such facilities.

Figure 17: Cross-Section and Side View of Vegetated Bioswale



Source: New York City Department of City Planning, 2009

Recommendations

Based on the study analysis and field work, the following recommendations are proposed. In the immediate future, parking garage operators should **analyze their existing parking structures to determine if there is an opportunity to park motorcycles or other similar small vehicles** in currently underutilized curb frontage (edges, corners), or an opportunity for conversion of some regular-sized spaces (approximately 325 square feet) to compact car spaces (approximately 275 square feet). Motorcycles should be permitted to share car spaces or park in their own designated spaces located in areas unsuitable for standard vehicle parking.

In addition, the use of valet parking can increase parking capacity by 20 to 40 percent. **Cooper Hospital, in particular, should consider expanding its existing valet services in order to increase capacity within its existing parking garages**.

Due to Camden's limited public resources, any **new parking facilities should be shared among multiple users** to achieve maximum value for cost. Despite the fact that the existing parking garages are nearly full, **the city should pursue existing opportunities for shared parking where possible**. The Camden County College Garage, located at 6th and Cooper streets, does have available spaces (approximately 150 spaces during the daytime peak and over 400 in the evening) that could be immediately leased by Rutgers University or Rowan University for additional student parking, particularly in the evening when on-street parking demand in the immediate area is high while garage capacity is underutilized. **Rutgers University should work with the Camden County College Garage to allow students to purchase discounted evening parking passes.**

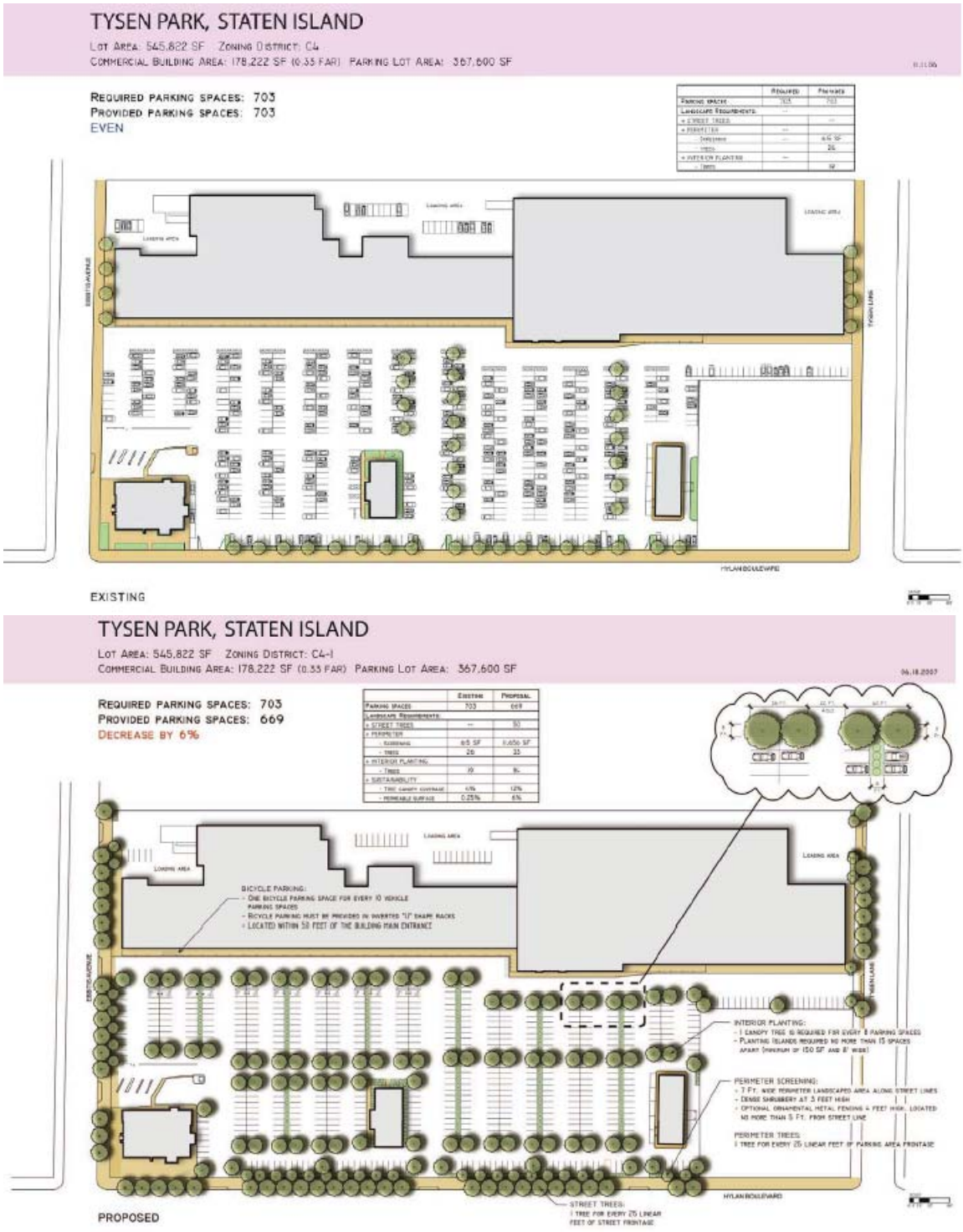
Another option is to utilize the Waterfront Garage on Riverside Drive, with approximately 500 spaces available. The half-mile distance to campus may be mitigated by existing RiverLINE service, its four-minute travel time to campus at 15 to 30 minute headways, and a potential free-ride program for this two-stop trip. The RiverLine service could be reinforced by a proportional expansion of the existing shuttle bus service. Some of the Waterfront Garage's excess capacity may be reserved by Cooper Hospital in an arrangement similar to their previous one, or by the state agencies that currently purchase parking permits for both their government vehicles and the personal vehicles of their employees. Along with increasing its hours of operation, **moving state employees' vehicles out of the Walter Rand Garage would create available spaces**. The Walter Rand Garage is ideally situated for multiple users including Cooper Hospital.

The City of Camden should **adopt the New York Department of City Planning's design standards or standards similar to those for stormwater management on surface parking lots.** Requiring commercial parking lot owners to effectively address stormwater runoff issues would help mitigate the flooding problems in Camden, while making surface lots more attractive. **Existing surface parking lots should be retrofitted with stormwater treatment features** as appropriate, similar to the redesign plan for surface parking in Tysen Park on Staten Island (see Figure 18). There, vegetated bioswales will be installed in every other column of parking stalls, breaking up the impervious coverage and allowing for the absorption of rainfall, thus reducing stormwater runoff, flooding, and water-quality impairment, while enhancing the parking lot with attractive natural elements.

It is recommended that Camden **1) disallow any new surface parking lots associated with buildings to front on public streets** throughout the study area and, as mentioned in the Zoning section of this report, **2) disallow any new surface parking lots as primary uses** within the Downtown and Waterfront areas.

Photo 3: Compact Car Stall (Source: DVRPC, 2011)

Figure 18: Tyson Park Surface Parking Lot, Existing and Retrofitted



Source: New York City Department of City Planning, 2007

Requiring that buildings buffer pedestrian traffic from their associated parking lots will help to create a more positive pedestrian environment. Preventing future surface parking lots from locating in the study area will combat fragmentation of the urban fabric and reinforce the notion, in particular for the Downtown and Waterfront areas, that the city is a place for people, not just vehicles. Ideally, new development will take the place of the surface lots and provide parking either behind the building, away from the active streetscape, or in structured garages, which should be encouraged.

Finally, in an effort to be more cost effective, Camden should **eliminate free or discounted public employee parking**. Market rates should apply for parking at all city-owned facilities.

CITY MANAGED OFF-STREET PARKING OPERATIONS

As discussed in the previous section of this report, there are multiple operators of parking within the study area. The overall parking demand in Camden is highest in the Downtown area, where major employers and destinations are concentrated. Parking facilities there primarily provide access to commercial areas in Downtown. The area in the vicinity of Rutgers University and Camden County College also experiences high parking demand, primarily by students.

On-street parking is most efficiently utilized for short-term parking, while garages and lots are best suited for long-term parking. A successful off-street parking operation needs proper management and must be responsive to changing conditions in order to meet the needs of the customer.

DVRPC looked at other cities of comparable size to determine if there are lessons to be learned from the way that those places handle the parking operations that may be applied in Camden. The team found that parking facilities in other cities are operated by a wide variety of public and private entities and that there are no clear advantages or disadvantages to any particular group serving as parking operators if parking is managed appropriately. Parking operations in Camden are similar to those of other comparable cities in the region. Trenton (NJ), Reading (PA), Bethlehem (PA), and Scranton (PA) also have municipal parking authorities and post information regarding parking locations, hours, and rates on their websites. Trenton and Scranton, like Camden, have private parking operators in addition to the local parking authorities. None of the small cities looked at had real-time parking wayfinding information available or used “smart” meter systems, probably because of the cost; however, the use of this technology did not appear necessary for a successful parking environment. Furthermore, when all appropriate parking management strategies have been adopted, the parking operator is less significant than the effective operation of the lot.

Recommendations

While public parking lots and garages in the City of Camden are already profitable, they could bring in more revenue if operated more efficiently. **One method of doing so is through consolidation, an option that should be explored by the city.** In doing so, several benefits could be realized. These include:

1. Economies of scale through reduced operating costs.
2. Cost efficiencies through a more favorable expense/revenue ratio.
3. Improved management through consolidation of management for efficiencies.
4. Bonding capacity increased under one ownership/ management, leading to the leveraging of more funds that could facilitate future expansion.

The city should **properly maintain parking facilities** to increase profitability. There are several privately owned and operated parking lot operators in the central business district, most on unattractive surface lots. City parking lots and garages can out-perform these lots by providing a premium service that enhances customer safety and comfort. It is highly recommended that facilities be maintained in order to ensure continued profitability. At a minimum, the city parking operators should ensure that the following are done periodically:

1. All parking structures should be in a state of good repair and preventive maintenance should be done on a regular basis. The infrastructure should be protected against weathering.
2. Garages should be inspected to see whether lighting quality is adequate. Lighting influences the perception of security and safety in a facility. Poor lighting in a facility, resulting from inoperative lights, is an indication of poor management.
3. There should be a safe environment for the security of customers and employees. Lighting can provide for the safe movement of people and vehicles. An open façade garage visible from the street; pedestrian access control; light-colored paint that reinforces a patron’s sense of security and; closed circuit television monitored by security personnel all elevate the customer security.
4. Signage for safe access and egress to the facility and within the facility.
5. Appropriate advertising on the interior and exterior walls can be used to enhance the physical appearance, as well as generate additional revenue.
6. Manage the facility as an asset. A new parking facility with the right mix of retail-commercial

tenants can be a catalyst for economic development in the area.

The fare collection system that exists at the Waterfront garage is deficient or inoperable and should be improved with state-of-the-art technology. Fare collection mechanisms should be operational and easy to use. A good example of this is in place at the Camden County College Garage on Penn Street, where payment is handled at a central pay station, where customers pay prior to exit or with prepaid cards. There should be opportunities for variable rates based on time of entry, or when there are special events that create excessive demand. Entry and exit lanes at facilities should have a valid card reader or ticket dispenser. Upon entry, a ticket should be issued, while payment would be made prior to departure. Monthly parkers would have an electronic access card for entry and exit. This system would allow for faster entry and egress and better monitoring of traffic entering the facility. The tracking of peak utilization rates would then be possible. The city should **modernize the fare collection system at the Waterfront parking garage**.

Wayfinding signs can provide guidance to the location of parking lots/garages. More advanced systems can provide real-time occupancy information, and it is recommended that eventually Camden **implement real-time information on parking availability** in conjunction with the *Welcome to Camden Wayfinding and Directional Signage Program* developed by Cooper's Ferry Development Association.

Internal audits should be performed periodically to determine whether all goals and objectives are being met, and whether implementation of additional parking management strategies is appropriate.

PERFORMANCE-BASED PRICING

Performance-based pricing, under which rates are set to optimize parking facility use, means that about 15 percent of parking spaces are vacant and available at any time (Shoup, 2005). This ensures that parking is utilized at a high rate, but that there are always spaces available for those willing to pay for them. Performance-based pricing can be used to set rates in structured parking facilities, as well as for on-street meters. This pricing method also helps to ensure that parking is used as it is intended to be used, i.e., people will not park all day at short-term parking meters and continue to feed the meter because, if priced correctly, that would be cost prohibitive. To ensure that there is no erosion in income, parking charges should be indexed to inflation and adjusted on an annual or biannual basis.

Recommendations

Camden should use performance-based pricing to appropriately price long-term and short-term parking. To free up parking spaces, thereby reducing double parking and traffic congestion, the city should charge at least as much for on-street parking as nearby garages. By not doing so, the city is effectively subsidizing the lucky drivers who do find spots while creating traffic problems.

In an effort to discourage parkers from parking on the street for long durations when off-street parking is available, on-street parking should be priced on a sliding scale, where parkers pay a higher hourly rate based on the length of time they are parked. It is recommended that the city develop an escalating fee structure to increase the availability of on-street parking. Camden could start by setting on-street parking rates at $1.50 for the first hour, $2.00 for the second hour, and $2.50 for the third hour. The city would need to tweak the prices until it achieves the 85 percent occupancy threshold advised under performance-based pricing.

Based upon high occupancy rates, **performance-based pricing should be immediately applied to parking spaces along both Market and Cooper streets between Haddon Avenue and 4th Street and along north-south cross streets** (5th, 6th, North 7th, and Broadway) **between Cooper and Federal streets**. The on-street parking utilized primarily by Rutgers students should initially be priced the same as nearby garages; however, once new development begins in the waterfront area adjacent to Rutgers, the price of on-street parking should be increased until the 85 percent occupancy, 15 percent vacancy has been achieved.

Figure 19: Possible Sites for New Structured Parking

Source: DVRPC, 2011

POSSIBLE SITES FOR NEW STRUCTURED PARKING

In an effort to meet current and future parking demand, an analysis was done to identify where parking need is most critical and how that demand can be met.

On-street parking capacity is finite and cannot meet the demand in the commercial core, and all but two of the parking garages in the study area are at capacity. Recent expansions at Cooper Hospital and Rutgers University have led to increased demand for more parking spaces in and around these institutions. When the new medical school is completed, there will be even more parking needed. There is clearly a need for additional parking that can only be accommodated in a structure.

Taking into consideration the fact that the plan for Camden's Waterfront (approved by the Camden Redevelopment Agency and the New Jersey Economic Development Authority) already includes structured parking to support the proposed development projects, ten sites have been identified that could support the construction of structured parking elsewhere to serve the needs of the Downtown community. Figure 19 shows each location in context.

Site 1

Located between Delaware Avenue and Elm, and Front streets, this location (Block 46, Lot 51) would be ideal to serve the baseball stadium and function as a remote parking facility for Rutgers University. Due to its distance, Rutgers University would still need to operate the shuttle bus to the campus.

Site 2

Located between Cooper, Penn, and 3rd streets (Block 69, Lot 1) is a parking lot for residents of Rutgers University. This lot could accommodate a total of 690 spaces in a seven-story parking structure (six levels of parking above ground-floor retail). Seven stories are contextually appropriate and consistent with existing structures in the vicinity of the project, although an additional level would provide another 115 spaces. This garage would primarily serve Rutgers University, but could also serve the Riversharks Stadium to the west, the Susquehanna Bank Center to the south, and the federal court building, which is only a block away to the east. Due to its proximity to the University dorms, as well as its accessibility from Cooper Street, this structure would be ideal as a mixed-use facility, with the ground floor assigned primarily for retail.

Site 3

Block 119 Lot 1, on the east side of 5th Street between Cooper and Market streets, is currently the site of a privately owned surface parking lot and a vacant structure that was once the Plaza Hotel. Less than a block from City Hall and federal and county courts, adjacent to the site of the former Parkade Building, and two blocks east of planned Rutgers-Camden graduate student housing, this location is proposed Site 3.

A mostly commercial/office area, this location would provide an excellent opportunity for a mixed-use parking structure incorporating ground-level retail. And although construction of structured parking on this site would necessitate demolition of some buildings, this would be a positive change in an area experiencing the detrimental effects of allowing the Plaza Hotel, long vacant and run down, to occupy a prime location

Photo 4: Site 1 (Source: DVRPC, 2011)

Photo 5: Site 2 (Source: DVRPC, 2011)

along Cooper Street's developing commercial corridor. While it would be ideal to reuse this structure, there have been no financially viable proposals to do so.

In the heart of downtown, Site 3 has good pedestrian access. While Cooper Street is two way, 5th and Market streets are one way, so if a vehicular exit from a garage was placed on 5th Street, traffic heading to the Ben Franklin Bridge would have to travel south to Federal and north on Haddon Avenue. Also interesting to note is that there exists a tunnel that provides direct access from the Plaza Hotel site to the nearby PATCO train station. This could be a vibrant retail center when market conditions dictate.

The following employers are all located within 1,000 feet of Site 3: Rutgers University Camden Campus, Law School, and Office of the Provost, the Camden County Social Services Board, the Camden County Social Services Department, the Superior Court Juvenile Probation, the Camden County Prosecutor, the Camden County Sheriff, SOUTH Jersey Behavioral Health, Heads Up Temps Services, the U.S. Post Office, LEAP Academy, Hogan House, Camden County Buildings and Operations, and the Camden County Youth Advocate.

Site 4

Site 4 is currently a surface parking lot adjacent to the county jail on the east side of Third Street between Martin Luther King, Jr. Boulevard and Federal Street. Already owned by the Camden Parking Authority, this site's size and regular shape are ideal for construction of structured parking and could easily accommodate parking for 1,200 cars. Furthermore, the large size of the site would be ideal for a mixed-use parking structure.

Just two blocks from City Hall, this site is within walking distance of numerous other employers, including the Honorable Linda G. Baxter, the Camden Fire Marshall's Office, South Jersey Behavioral Health, Heads Up Temp Services, the U.S. Post Office, and the Camden County Youth Advocate. The proposed county courthouse expansion (discussed earlier as Project 9) could also be served by a parking structure on this site.

The site has vehicular and pedestrian access from Third Street, Martin Luther King, Jr. Boulevard, and Federal Street. It is adjacent to a jury parking lot, which poses a concern about redundant use; however, jury parking could be accommodated within a garage on Site 4, freeing that surface lot for future development.

Photo 6: Site 3 (Source: DVRPC, 2010)

Photo 7: Site 4 (Source: DVRPC, 2010)

Site 5

Very close to Site 4, Site 5 is adjacent to the site of the proposed county courthouse expansion at 5th and Federal streets. This site, owned by Camden County, currently parks 55 cars on a surface lot. Use of this site may require relocation of the library; however, this would probably be necessary with a future Justice Center expansion. Despite its small size, this lot would likely be able to accommodate a parking structure for 600 cars and has good pedestrian and vehicular access.

Site 6

Site 6, the northeast corner of "Block N," is located in the core of the central business district, is directly accessible from Federal and Hudson streets, and is in close proximity to major destinations, such as Cooper Hospital, City Hall, the Justice Center, and the federal building. This central location could also serve the Walter Rand Transportation Center and provide access to the proposed expanded justice facility to the south. While the triangular shape of this lot would restrict the type of development possible on the site despite being nearly 1.5 acres, there is the potential of consolidating this lot with Block 174, Lot 5 (Site 7) across Hudson Street to create a larger, more flexible building footprint.

Site 7

Located just across the street from Site 6, Site 7 is an "L" shaped lot with frontage on Federal Street and Broadway. Already owned by the Camden Redevelopment Agency, it is just over an acre in size. The site is accessible from Federal, Broadway, and Hudson streets, and is in close proximity to Cooper Hospital, City Hall, the Justice Center, the federal building, and the Walter Rand Transportation Center. It also has direct access to the River Line Station.

While development of this site may require shoring up or demolishing the existing partially vacant building located at the corner of Federal Street and Broadway, it is an ideal site for mixed-use development. A six-story parking structure (five levels of parking above ground-floor retail) located here could provide 650 spaces.

Photo 8: Site 5 (Source: DVRPC, 2010

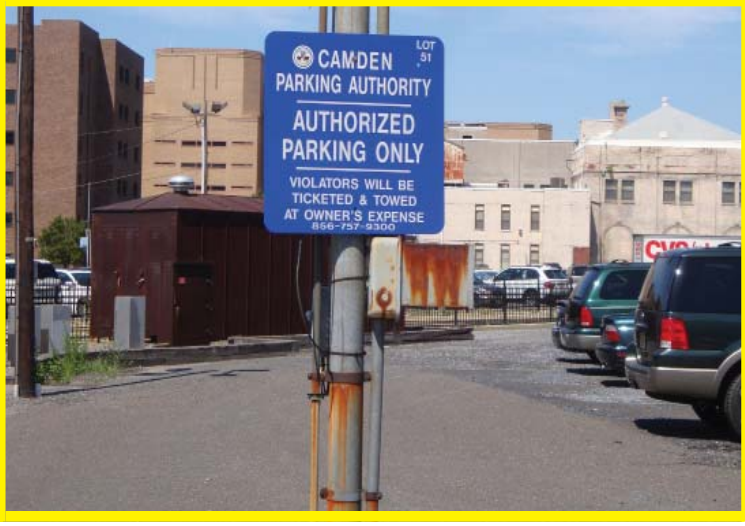


Photo 9: Site 6 (Source: DVRPC, 2010)

Site 8

Surface parking adjacent to the Walter Rand Transportation Center (Block 1397, Lot 7) and currently part of the State Office Building complex is proposed Site 8. This site is close to both City Hall and the State Office Building, and is within 1,000 feet of Cooper University Hospital, the Camden County Social Services Board, the Camden Police Department, the Camden County Sheriff, Southjersey, and Camden County Buildings and Operations.

Like Sites 3 and 7, this site also provides a valuable opportunity for a mixed-use garage. The Walter Rand Transportation Center is the downtown transit hub for the City of Camden, but has not yet reached its potential in this role. NJ Transit has planned upgrades to enhance the area adjacent to the station and will be adding an additional bus loading/unloading gate in January 2011. A garage on this site could accommodate new loading/unloading gates for still more bus traffic truncating at the station, strengthening Walter Rand as a regional transportation center, while serving the needs of the hospital and other nearby employers.

The Delaware River Port Authority (operator of the PATCO high speed line) supports creating other types of activity inside Walter Rand, such as vendors or entertainment. The Walter Rand Transportation Center has the potential to become a bustling, vibrant transit hub filled with positive energy and activities, although some issues need to be resolved, such as reducing drug activity and the number of homeless people congregating in the station area.

Furthermore, there is good vehicular access to Site 8 via southbound Haddon Avenue, Martin Luther King, Jr. Boulevard, and Federal Street. Because this site is currently used for surface parking, converting it to structured parking would be a more efficient way to provide the same use. Use of this site for structured parking would, however, obscure views from the south side of the State Office Building on the block.

Photo 10: Site 7 (Source: DVRPC, 2010)

Photo 11: Site 8 (Source: DVRPC, 2010)

Site 9

Site 9 is currently a surface parking lot serving Cooper Hospital. As the single largest employer in the study area, Cooper Hospital is nearing a critical parking shortage and is in need of more parking immediately, particularly for employees. Site 9, on Block 1443, Lot 6, is adjacent to the existing hospital campus, but not close enough to serve any other major employers. A feasibility study done by Tim Haahs in 2009 identified this site as a possible location for a parking garage with up to 850 spaces, depending on the number of levels constructed. This would be more than sufficient to meet Cooper Hospital's demand for new spaces.

Of the 10 sites proposed, only this one does not have the potential to serve more than one primary user group. Locating a parking structure on Site 9 would only serve the needs of Cooper Hospital because of its remote location. The continued operations of the hospital are critical to the economy of downtown Camden and the needs of the hospital should certainly be addressed; however, there may be ways of achieving this goal that do not require devoting public money to constructing parking for a single user. In an effort to immediately address some of the hospital's employee parking concerns, DVRPC is working with Cooper Hospital to expand TransitChek usage among its staff to reduce the demand for parking.

Site 10

This is located at the NJ Transit employee lot in the Gateway area located at Newton Avenue and the I-676 overpass (Block 1450, Lot 12). A parking structure could be constructed at this lot that would serve both NJ Transit employees and Cooper Hospital employees. A nine-story structure, eight levels of parking above ground-floor retail, would be comparable in height to the nearby Haddon Garage and provide 612 spaces. This lot is located within easy walking distance from Cooper Hospital since it is located just a block away; however, the underpass below I-676 would need to be cleaned and lit to make it safe and attractive to pedestrians.

The advantages and disadvantages of the 10 sites proposed for new structured parking are compared in Table 6.

Photo 12: Site 9 (Source: DVRPC, 2010)

Photo 13: Site 10 (Source: DVRPC, 2011)

Table 6: Comparison of All Possible Sites for New Structured Parking

Comparison of All Proposed Structured Parking Sites: Advantages and Disadvantages										
Advantages	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10
opportunity for shared use	X	X	X	X	X	X	X	X		X
could provide overflow parking for Susquehanna Center				X	X					
no building demolition required	X	X		X		X	X	X	X	X
compatible with adjacent land uses	X	X	X	X	X	X	X	X	X	X
opportunity for a mixed use garage (see Photo 14)		X	X	X		X	X	X		
location suitable for financing partnership	X	X	X			X	X	X		X
proximity to many users (employers, institutions)		X	X	X	X	X	X	X		
pedestrian friendly and accessible		X	X	X	X	X	X	X	X	
good vehicular access	X	X	X	X	X	X	X	X	X	X
Disadvantages										
would not serve multiple users									X	
pedestrian safety concerns	X	X								X
may require shuttle service										
remote location									X	
may/would require building demolition			X		X					
irregularly shaped lot						X	X			
may compromise views from adjacent building								X		
possible redundancy in market served				X	X					

Source: DVRPC, 2011

Photo 14: Philadelphia Whole Foods Mixed-Use Parking Structure (Source: DVRPC, 2011)

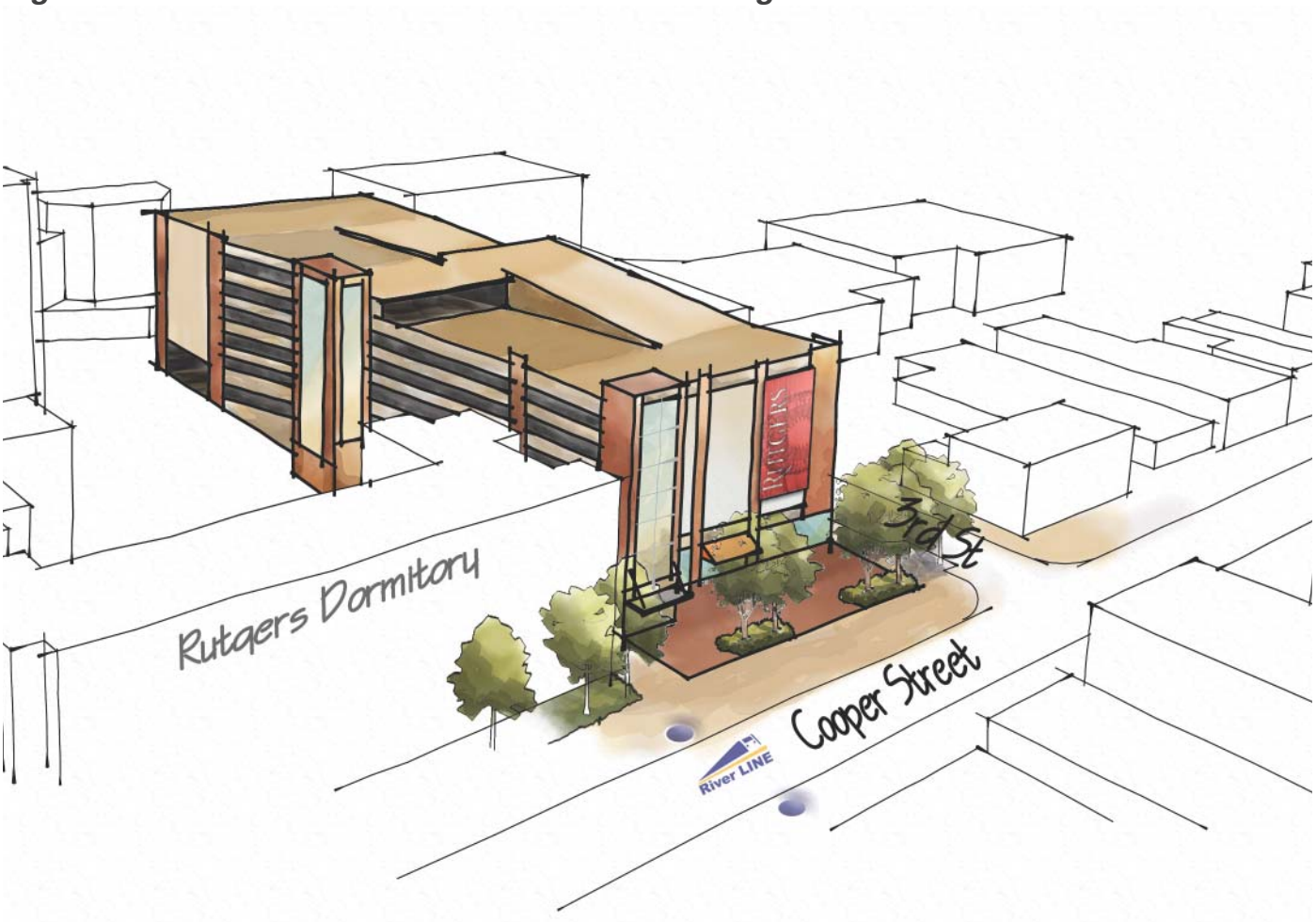
Recommendations

It is recommended that the City of Camden **prioritize several markets–Cooper Hospital, Rutgers University, and public parking–when determining the location of future structured parking facilities**. This prioritization brings three of the 10 proposed sites to the forefront as preferred sites for new structured parking: Site 2, Site 7, and Site 10. Not only do these sites have easy, direct access from the road network, they can serve as potential catalysts for economic development.

Currently, Rutgers University has 900 students parking on a surface lot by the waterfront. Once the waterfront surface lot is ready to be developed, the student parking will have to be relocated. Several alternatives were considered to accommodate the displaced students. One option is to assign spaces in the underutilized Waterfront and the Camden County College garages for Rutgers students. These garages could together accommodate 600 of those students. However, there would still be a deficit of 300 spaces. Another option is to build a garage at the surface lot on 3rd Street between Linden Street and Pearl Street. Because this location abuts the Ben Franklin Bridge and the Rutgers Gym, this secluded location would provide little opportunity for mixed use such as retail. Additionally, the site would only be accessible to Rutgers and the option of shared parking with another entity would not be viable.

The proposed garage at Site 2 could meet that need as well as the needs of other nearby uses. (See Figure 20 for a possible configuration of new structured parking on Site 2.) It could also share its capacity with complimentary uses such as the Camden Riversharks, whose home games are played less than three blocks away at the Riversharks Stadium on Penn Street. The 2011 schedule has a total of 50 weekday home games. Of these, there are only six afternoon games that may overlap with student parking demand. The remaining 44 games are evening games with a start time of 7:05 PM when student demand is significantly reduced. Additionally, this garage could also supplement parking for the Susquehanna Bank Center located 0.7 miles to the south which hosts

Figure 20: Possible Mixed-Use Structured Parking on Site 2



Source: DVRPC, 2011

500,000 concert attendees each year.

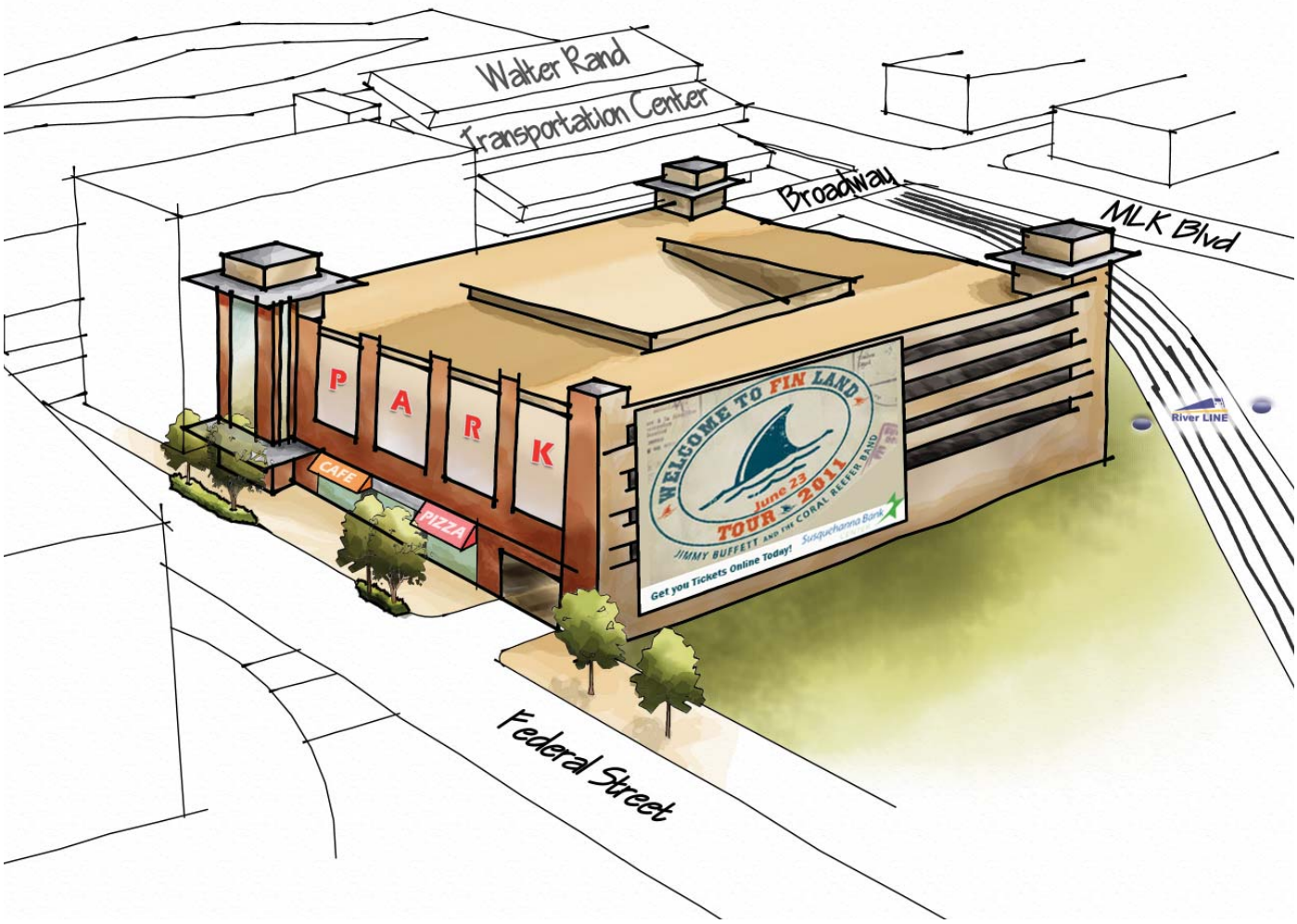
As suggested for the development of any parking structure, this facility could provide street-level activity via commercial frontage along Cooper Street and 3rd Street. Frontage may be further preserved by segregating vehicular ingress and egress, from 3rd Street and Penn Street, respectively.

Site 7 is the ideal site for new public parking. Located at Federal Street and Broadway in the heart of the central business district, this site would serve multiple destinations and is ideal for mixed-use development (retail, commercial, and parking). The commercial activity would be centered along Federal Street, with vehicular access provided at the current Hudson Street intersection and via a mid-block driveway along Broadway. See Figure 21 for a possible configuration of new structured parking on Site 7.

Cooper Hospital has immediate parking needs that could be accommodated by the 300 available spaces in the Waterfront Garage. Due to the remote location of the garage, Cooper would need to provide an employee shuttle back and forth to the hospital. Interesting to note is that although the parking garages and street parking in the vicinity of Cooper Hospital are at or near capacity, there is an opportunity to expand public parking on nearby streets. Currently, on-street parking is prohibited across from hospital facilities along Haddon Avenue between Washington Street and Newton Avenue from 7:00 AM to 6:00 PM. Additionally, unused capacity exists along many of the streets slightly beyond the hospital, which are restricted to residential permits. The installation of parking kiosks or smart meters will increase on-street capacity without negatively affecting residential vehicles, assuming their owners acquire the slightly costlier permit that renders on-street parking fees unnecessary.

In an effort to meet the current parking demands of Cooper Hospital, it is recommended that the **hospital explore restarting the employee shuttle to the Waterfront Garage** that was in existence prior to the completion of the CCIA Garage. The travel distance

Figure 21: Possible Mixed-Use Structured Parking on Site 7 with Wallscape

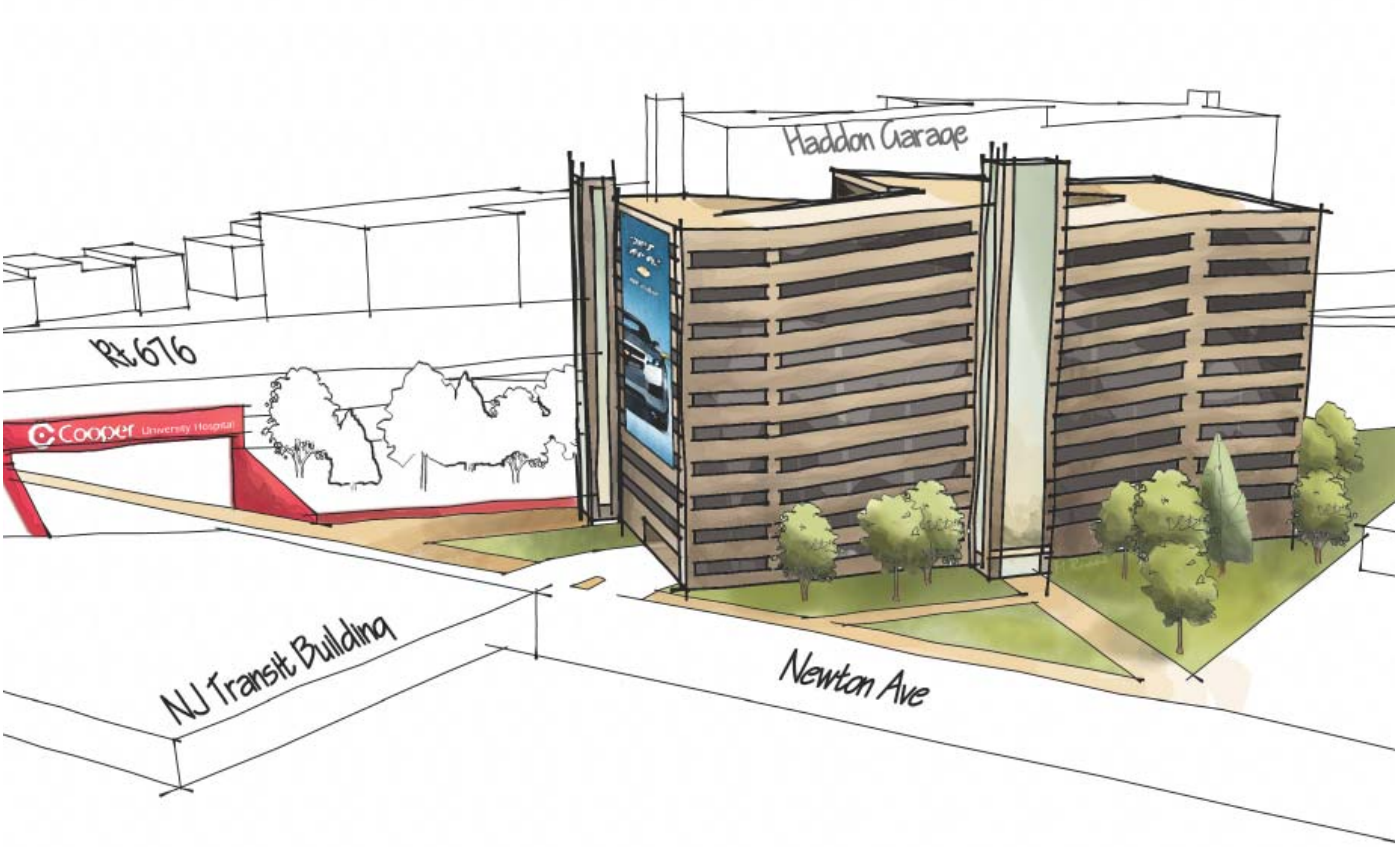


Source: DVRPC, 2011

from the garage to the hospital is 0.9 miles and travel time is less than five minutes. This service could be provided to the hospital by a third party on a fee for service basis. Such an arrangement could be similar to that at Rutgers University where two shuttle buses loop between the remote parking lot and campus on a continuous basis from 8:00 AM to 10:00 PM Mondays through Thursdays, and 8:00 AM to 5:00 PM on Fridays at a cost of approximately $300,000 per year. Shuttle service to Cooper Hospital could be timed to meet scheduled shift changes which would require fewer shuttle trips.

To meet Cooper Hospital's long-term demand, Site 10 is an ideal location. (See Figure 22 for a possible configuration of new structured parking on Site 10.) Vehicular access would be provided along Newton Avenue, across from the NJ Transit bus garage. The proposed structure would be shared between Cooper and New Jersey Transit and would require **rehabilitation of the Newton Avenue underpass that separates Site 10 from the hospital campus**. (See Figure 23 for an example of how the underpass could be made pedestrian friendly.) This improved underpass could serve as a gateway for visitors to the Cooper Hospital campus and to the greater Camden central business district area. It would connect to the recently improved Cooper Plaza Triangle Park at the adjacent intersection of Newton and Haddon avenues. Cooper has done a tremendous job upgrading the streetscape around its campus, and those enhancements should be expanded via improved lighting and beautification of the underpass. By leveraging these recent and nearby streetscape investments, an improved underpass may extend the boundaries of the hospital campus and its environment of safety and security for pedestrians, towards the Gateway and possibly link to the recently redesigned Campbell's Soup facility.

Figure 22: Possible Structured Parking on Site 10 with Upgraded Underpass



Source: DVRPC, 2011

Figure 23: Possible Newton Avenue Underpass Improvements

Source: DVRPC, 2011

It is recommended that **new structured parking developed on these sites incorporate sustainable design features**, including efficient lighting, robust stormwater management, preferred parking for car-share, and bicycle parking. Solar panels and vertical axis wind turbines on the roof, as well as recharging stations for electric cars, are options if local conditions and demand permit.

It is also recommended that Camden **explore leasing advertising space via wallscapes, or breathable wall wraps, on the exterior of its parking structures**. Most of Camden's structured parking, both existing and proposed, can be seen from the nearby heavily traveled roadways and would provide great visibility for advertisers. Allowing local businesses and institutions, such as the Susquehanna Bank Center or Rutgers University, to advertise upcoming events or programs could help their marketing efforts and bring revenue to the city. See Appendix F for a sample ordinance (Ordinance 27587, Dallas, Texas) that regulates "supergraphic" signs including wallscapes.

Table 7 provides a comparison of the prioritized structured parking Sites 2, 7, and 10.

Table 7: Comparison of Prioritized Sites for Structured Parking

Comparison of Prioritized Structured Parking Sites: Garage Possibilities			
	Site 2	Site 7	Site 10
Location	Rutgers University Camden Campus (NW corner of Cooper St & N 3rd St)	Block N (south of Federal St., west of Broadway)	NJ Transit Lot (east of Route 676 on Newton Ave)
Building Dimensions	114' x 310'	215' x 183'	190' x 115'
Total Height	7 levels, compatible with existing nearby structures	6 levels, compatible with existing nearby structures	9 levels, compatible height with nearby Haddon Garage
Footprint	35,340 square feet per floor	40,077 square feet per floor	21,850 square feet per floor
Typical Level Efficiency	307 square feet per space	308 square feet per space	321 square feet per space
Parking Yield	690 spaces over 6 parking levels	650 spaces over 5 parking levels	612 spaces over 9 parking levels
Ground Floor Retail Space	15,200 square feet	10,300 square feet	none
Additional Level Parking Yield	115 spaces	130 spaces	68 spaces
Approximate Construction Cost	$12.36 million ($18,000 per space plus retail)	$12.02 million ($18,400 per space plus retail)	$9.83 million ($16,100 per space)

Source: DVRPC, 2011

PARKING MANAGEMENT

Parking management "refers to policies and programs that result in more efficient use of parking resources… [and] can significantly reduce the number of parking spaces required in a particular situation, providing a variety of economic, social and environmental benefits" (Litman, 2006). Using a combination of appropriate parking management strategies can serve to reduce parking demand within a designated area. In order to provide the city with ideas for improving its parking management, DVRPC researched best practices and identified those that are recommended for Camden.

Recommendations

Smart growth is a general term for development policies that result in more efficient transportation and land-use patterns by creating more compact development with multimodal transportation systems (VTPI, 2005). It is highly recommended that Camden's **public policy support smart growth**.

Traditionally urban settings are, by and large, smart-growth environments due to their dense, walkable street grids and their patterns of mixing uses. However, downtown Camden no longer has a sustainable mix of uses. People come downtown to work or for municipal services, but overall they do not eat, shop, or play downtown. While there are numerous surface parking lots just outside of downtown, particularly along the waterfront, the lack of vibrant street-level activity causes people to feel unsafe walking even short distances from their parked cars to their destinations. Providing a healthy mix of uses generates sidewalk activity, which leads to both the perception and the reality of a safer place.

For example, there are few restaurant options for the many employees in the study area outside of the buildings in which they work. A parking policy that allowed parking for food trucks on select streets at certain times of day could generate street-level activity, raise money for the city through the sale of food truck permits, and provide jobs for food truck operators, all while bringing new eating options to downtown. Additionally, increased street-level activity would increase the perception of safety. **Food trucks, in particular, should be encouraged** in the Cooper Hospital, Rutgers, and City Hall areas at all times, and at the waterfront during special events. (A copy of Philadelphia's Mobile Food Vending Unit Plan Submission Guide is contained in Appendix G.)

Recently, the ULI Technical Assistance Program conducted a retail market study for the area and recommended that Camden create a retail district along Market Street that connects to the hospital and higher education institutions to the north and south via 3rd Street, 6th Street, and Broadway. Adding retail, which is sorely needed to promote a sustainable mix of uses and generate street-level activity, would greatly contribute to smart growth in Camden's central core.

The City of Camden should not allow parking structures to preclude the development of more intense uses in its downtown. Instead, where more parking is absolutely necessary, structured parking should be built and wrapped with an appropriate mix of ground-floor retail/commercial uses compatible with the eventual revitalization of the downtown. **Camden should require that land development, at least throughout the study area, be efficient and compact** (i.e., mixed-use and accessible through multiple modes of transportation). Additionally, **Camden could pass an ordinance requiring new parking facilities located in or near the central business district to be mixed-use**.

Any efforts to increase the parking supply in Camden should be coupled with strategies to increase the overall number of people coming to the downtown. It is important to note that, while there may be a current need for more parking downtown, eventually, incrementally less parking may be needed once people feel safe using alternate modes of transportation.

Mobility management is a general term for strategies that increase transportation system efficiency by changing travel behavior (VTPI, 2005) and can include a wide range of interventions. In Camden, it is recommended that the city work to **increase the use of TransitChek by area employees**, "unbundle" the cost of parking from the cost of leasing commercial and office space, and implement a Safe Routes to School program for the LEAP Academy Charter School.

TransitChek is an employer-offered commuter benefit program through which employers provide employees with vouchers that can be redeemed to purchase fare materials on all regional public transit and vanpool providers. Given that commuters can save more than $900 a year in federal income taxes by using TransitChek, they are strongly encouraged to use public transit to get to work rather than personal vehicles. Local employer participation in this program can help to reduce the number of cars needing parking in Camden.

TransitChek also benefits employers. By participating in TransitChek, employers can cut payroll taxes, boost their benefits package, increase employee morale, and help improve air quality and congestion in the region. TransitChek is authorized as a tax-free benefit under Section 132(f) of the U.S. Internal Revenue Code. Commuting costs paid for through TransitChek are not subject to federal income and FICA taxes, and there is no use-it-or-lose-it penalty or plans to prepare. Employees can receive up to $230 a month in TransitChek benefits. Employers can save on FICA taxes, and program costs are tax deductible.

Employers offer TransitChek to their employees by ordering and distributing TransitChek vouchers. Employees may then redeem the vouchers to purchase tickets, tokens, and/or passes with every major area transit agency. including: SEPTA, PATCO, NJ Transit (including the RiverLINE), DART First State, Capital Area Transit (Harrisburg), COLT (County of Lebanon Transit), Red Rose (Lancaster County), rabbittransit (York County), BARTA (Berks County), and Amtrak. Even the vanpool service VPSI accepts TransitCheks. For PATCO riders, TransitChek benefits are also available for electronic upload to FREEDOM cards.

TransitChek can be offered through pretax payroll deductions, as an employee-paid benefit, or as a combination of these. The fees for the program are a four percent service fee applied to the total cash value of the order, as well as a $15 shipping and handling fee per order. Even after accounting for the ordering fees, employers come out ahead because of the tax savings that TransitChek provides.

In addition to encouraging employers to participate in TransitChek, the city should **allow the price of parking to be "unbundled" from the cost of leasing commercial and office spaces**. Knowing how much parking actually costs encourages employers to persuade employees to use public transit to get to work. If employers are unwilling to provide costly parking for employees, many employees will find an alternative to driving in a personal vehicle, whether it be via public transit or carpools. "Unbundling" the cost of parking from commercial and office rents would require a policy change; however, policy changes can usually be implemented quickly at minimal cost, although the cost to enforce those changes can be significantly higher, depending on the nature of the change.

Implementation of a Walking School Bus program for students who live within one mile of the school could alleviate some of the double-parking in front of the LEAP Academy Charter School that consistently blocks traffic and creates circulation problems in the area. There are other benefits gained from this type of program, ranging from health benefits to social and environmental benefits. Students who participate increase the amount of fresh air and exercise that they get, which helps with weight management, a common problem among children today. Being escorted in groups to and from school by one or more trusted adults allows children to interact socially outside of school in a positive way. Reducing the number of parents driving to school each day and then idling in their cars while they drop students off mitigates traffic congestion in the immediate area and reduces harmful emissions into the environment.

Funding for a Walking School Bus program may be available through the Federal Safe Routes to School program, although the costs to implement the program are minimal. Partnerships between the school, the community, the police department, and the parents and students would be necessary to initiate a Walking School Bus Program for the LEAP Academy. Additional partners in successful programs in other locations have included local businesses, educational institutions, politicians, local media outlets, and sports celebrities.

For concerns about policy, leadership, and liability issues, the National Policy and Legal Analysis Network to Prevent Childhood Obesity website (www.nplanonline.org) is a valuable resource. Schools do not put themselves at any higher liability risk due to endorsing a well-designed Safe Routes to School program.

PedNet (http://www.pednet.org/) does a one-day community specific training workshop to help get Walking School Bus Programs off the ground at interested schools. They define the steps to take to get a successful program off the ground as follows:

1. Evaluate walkability around the school. (An audit checklist may be downloaded at www.saferoutesinfo.org.)
2. Start with a special event–just one walking day initially.
3. Advertise and register kids.
4. Recruit and train volunteer leaders. (Rutgers students and neighborhood senior citizens might be good resources.)
5. Plan the route.
6. Implement a safety code. For example:
    a. Be visible
    b. Walk, don't run.
    c. Stay on the sidewalk.
    d. Walk sensibly (no horsing around).
    e. Walk together in a group.
    f. Cross main streets at crosswalks.

Enforcement of existing parking policies is extremely important and, wherever possible, it is recommended that Camden do this. Not only does parking enforcement provide an important revenue stream, regular enforcement also encourages drivers to pay for parking when appropriate and not try to circumvent the system. During the survey of on-street parking, blocks with parking volumes greater than official capacity, indicating an enforcement problem, included: Cooper Street between 7th Street and Broadway, Market Street from 4th Street to North 7th Street, and 6th Street between Market and Cooper streets. Camden should **increase the fines for parking violations** and then enforce them, leading to more compliance by motorists and more revenue for the parking authority. Furthermore, enforcement should be prioritized in areas that impact circulation and safety in no-parking-zones, such as bus zones.

Also, there are confusing signs regarding parking, particularly in the residential permit parking areas of Camden, that dictate when cars should be moved for street cleaning; however, street cleaning is not something that the city currently provides. Outdated, confusing information also decreases the rate of compliance with parking policies as a whole. The city should immediately increase enforcement on the blocks mentioned above and begin **replacing confusing signage**.

Parking benefit districts allow the revenue gained from charging for parking to be returned to the community itself, usually in the form of streetscape/ public realm enhancements. Usually, residents are exempt from parking fees or pay a reduced rate for a parking permit. Communities tend to support higher fees charged for nonresident parking, even though it affects those coming into the area to visit, shop, eat, etc., when the benefit of those charges is visible in their neighborhood. Parking benefit districts have been successfully implemented in both business districts and residential areas. For example, in 2001, Pasadena's parking benefit district collected net annual revenue per parking meter of $1,712, bringing in $1.2 million that went toward increased public services in the district and funding for added sidewalks and street maintenance (Shoup, 2005). When curb parking pays for neighborhood public services it decreases pressure on the general revenue fund which can instead use its money to pay for general public purposes (Shoup, 2005).

It is recommended that Camden **consider implementing a parking benefit district throughout the Downtown, Cooper Lanning, North Camden, and Central Waterfront areas, as defined in this report**. Since the city's general budget currently uses the on-street parking revenue and a parking benefit district would redirect those funds to the neighborhoods, an incremental approach to implementation is suggested. The city should establish a dollar amount for the parking revenue that will go toward the general fund, based on the amounts collected in previous years. Any on-street parking revenue above the predetermined dollar amount should go toward the parking benefit district. Many of the actions recommended in this report should increase parking revenue, which should be reinvested in the public realm. Cooper's Ferry Development Association would be an excellent choice to manage a parking benefit district given its successful investment record and commitment to livability in Camden. Ultimately, the allocation of the funds collected through a parking benefit district should be in accordance with the goals of those living in the neighborhoods that provide the parking resource. As Camden moves toward financial sustainability, the amount of parking revenue taken by the city should be gradually reduced until all of the on-street revenue is returned to the neighborhoods that accommodated the parking.

IMPLEMENTATION

Throughout this report, various strategies and recommendations have been put forth to improve parking conditions in the study area. Below is a comprehensive list of the recommendations, grouped based on when implementation should occur–short-term, medium-term, and long-term–and by the goal that each action will help to achieve. Estimated costs have been projected and are represented as follows: $ - $250,000 or less, $$ - $250,000 to $5,000,000, and $$$ - more than $5,000,000.

Short-Term Recommendations

To Increase and Upgrade the Parking Supply Sustainably:

1. Convert parallel parking to angle parking along westbound Market Street between North 7th Street and Broadway. (Page 29) **$**

2. Share new parking facilities among multiple users and pursue existing opportunities for sharing (approximately 150 spaces during the daytime peak and over 400 in the evening at the Camden County College garage, and over 500 spaces at the Waterfront Garage during the daytime peak). (Page 42) **$**

3. Analyze existing parking structures to determine if there is an opportunity to park motorcycles or other similar small vehicles in the unused spaces in the corners of each floor. (Page 42) **$**

4. Cooper Hospital should consider expanding its existing valet services in order to increase capacity within its existing parking garages. (Page 42) **$**

5. Cooper Hospital should explore restarting its employee shuttle to the Waterfront Garage. (Pages 55-56) **$$**

6. Rutgers University should work with the Camden County College Garage to allow students to purchase discounted evening parking passes. (Pages 42) **$**

7. Move state employees' vehicles out of the Walter Rand Garage to the Waterfront Garage. (Pages 42) **$**

8. Adopt the New York Department of City Planning's design standards (or similar) for stormwater management on surface parking lots and require new structured parking to incorporate sustainable design features. (Pages 42 & 58) **$**

To Increase Parking Revenue:

1. Upgrade the existing parking payment system from meters to kiosks along 48 designated street segments. (Pages 29-30) **$$**

2. Expand the parking payment system to residential permit streets along 12 street segments. (Pages 29-30) **$**

3. Expand the parking payment system to streets that currently allow unrestricted parking along 18 street segments. (Pages 29-30) **$**

4. Eliminate free or discounted public employee parking. (Page 43) **$**

5. Implement performance-based pricing to parking along Market and Cooper streets between Haddon Avenue and 4th Street and along north-south cross streets (5th, 6th, North 7th, and Broadway) between Cooper and Federal streets. (Page 46) **$**

6. Properly maintain parking facilities. (Page 44) **$**

7. Explore leasing advertising space via wallscapes on the exterior of parking structures. (Page 58) **$**

To Increase Compliance with Parking Regulations:

1. Enforce existing parking policies. (Page 61) **$**

2. Increase fines for parking violations. (Page 61) **$**

3. Replace outdated and confusing signage. (Page 61) **$**

To Increase Pedestrian and Cyclist Safety and Reduce Crashes:

1. Fix the unsafe pedestrian conditions by improving amenities in the Gateway area. (Page 22) **$**

2. Require bicycle parking and pedestrian amenities with all new development and at existing Downtown and Waterfront destinations. (Page 22) **$**

To Encourage Parking Policy that Supports Smart Growth:

1. Eliminate the parking minimum requirements from the Land Development Ordinance, replacing them with the previous requirements or rewriting them entirely using smart growth guidelines (such as the ones in the DVRPC publication *The Automobile at Rest*). (Page 12) **$**

2. Allow and encourage food trucks to operate in the Cooper Hospital, Rutgers, and City Hall areas and at the waterfront during special events. (Page 59) **$**

3. Increase the use of TransitChek by area employees. (Pages 59-60) **$**

4. "Unbundle" the cost of parking from the cost of leasing commercial and office space. (Page 60) **$**

5. Disallow new surface parking lots as permitted primary uses in the Downtown and Waterfront areas. (Pages 12 & 42-43) **$**

6. Disallow any new surface parking lots associated with buildings to front on public streets. (Pages 42-43) **$**

7. Make smart growth public policy and require that land development, at least throughout the study area, be efficient and compact. (Page 59) **$**

8. Pass an ordinance requiring new parking facilities located in or near the central business district to be mixed use. (Page 59) **$**

9. Update the Zoning Map in the Land Development Ordinance to reflect the zoning designations found in the redevelopment plans that have precedence. (Page 12) **$**

Medium-Term Recommendations

To Increase and Upgrade the Parking Supply Sustainably:

1. Existing surface parking lots should be retrofitted with stormwater treatment features. (Page 42) **$$**

2. Prioritize several markets – Cooper Hospital, Rutgers University, and public parking – and build structured parking facilities. (Pages 54-56) **$$$**

To Increase Parking Revenue:

1. Upgrade the existing parking payment system from meters to kiosks along 15 designated street segments. (Page 29) **$$**

2. Expand the parking payment system to residential permit along six street segments. (Pages 29-30) **$**

3. Explore consolidating the operations of public parking lots and garages. (Page 44) **$**

4. Modernize the fare collection system at the Waterfront parking garage. (Page 45) **$**

To Increase Pedestrian and Cyclist Safety and Reduce Crashes:

1. Install continental-style crosswalks, countdown timers, raised median refuges, and leading pedestrian intervals at the intersections of Broadway at Martin Luther King, Jr. Boulevard and Federal Street, and Federal Street at Haddon Avenue. (Page 22) **$$**

2. Install mid-block crosswalks, pedestrian crossing signage, and Rectangular Rapid Flash Beacons (RRFB) on Cooper Street at North 6th Street and North 7th Street. (Page 22) **$$**

3. Implement the bicycle lanes, upgraded sidewalks, and streetscape improvements previously recommended for Martin Luther King Boulevard between Riverside Drive and Haddon Avenue. (Page 22) **$$**

4. Rehabilitate the Newton Avenue underpass separating the Gateway area from the Cooper Hospital campus. (Pages 56-57) **$**

To Encourage Parking Policy that Supports Smart Growth:

1. Implement a Walking School Bus program through Safe Routes to School for the LEAP Academy Charter School. (Page 60) **$**

2. Consider implementing a parking benefit district throughout the Downtown, Cooper Lanning, North Camden, and Central Waterfront areas. (Page 61) **$**

Long-Term Recommendations

To Increase Parking Revenue:

1. Periodically perform internal audits of public parking facilities. (Page 45) **$**

2. Implement real-time information on parking availability. (Page 45) **$$**

POTENTIAL FUNDING SOURCES

While a goal of this report was to propose inexpensive interventions that will improve Camden's parking environment, all improvements require some level of funding. The implementation actions recommended range in cost from less than $250,000 to greater than $5,000,000. Following is a list of potential funding sources that may be available to assist Camden with implementation of the actions recommended in this report.

Municipal Programs and Tools

Business Improvement Districts (BIDs) are public/private partnerships in which businesses in a defined area elect to pay an additional tax in order to fund future improvements within that specific geographic area. Funds are collected by the taxing authority and used to provide services, such as street and sidewalk maintenance, marketing, and capital improvements. BIDs are formed through the adoption of a municipal ordinance. State financial assistance is available for municipalities.

Capital Improvement Program (CIP) sets out a municipality's plans for future capital improvements, such as roads and other public facilities. The range and scope of these vary, but most cover an immediate five- to six-year period and can be scoped for up to 20 years. A successful CIP should include a schedule of implementation with a projected budget. If a municipality's CIP is consistent with the master plan and zoning ordinance, they can be useful tools, allowing the municipality to plan for future growth and improvements and lowering costs by anticipating the future demands of the municipal infrastructure system. The CIP can also provide developers and the public with more certainty concerning future public improvements, thereby improving opportunities for participation and increasing accountability. The adoption and updating of the CIP is no small task, but should be considered an immediate priority for municipalities.

Impact Fees are paid by developers to help finance a variety of needed services and facilities that result from growth. This type of revenue provides a better quality of life for residents by financing the infrastructure needed to support additional population, employment, and development. It ultimately reduces the need to impose higher taxes on existing residents to finance additional facilities. An impact fee ordinance requires modification to the master plan and subdivision and zoning codes.

Parkland Dedications/Fees-in-Lieu requires developers to provide open space within their development or to contribute fees-in-lieu to improve or preserve open space elsewhere. Fees-in-lieu should be outlined in the zoning and municipal subdivision code for the municipality. They are often based on the number of residential units that a particular development will introduce.

Regional Programs

Transportation and Community Development Initiative (TCDI)
Eligibility: Eligible municipalities
Purpose: Support local planning projects to improve transportation and encourage redevelopment
Terms: Grants up to $100,000 for single projects and $150,000 for multimunicipal projects; 20 percent local match required
Deadline: Approximately every two years
C: Delaware Valley Regional Planning Commission (DVRPC)
P: 215-592-1800
I: www.dvrpc.org/tcdi

Transportation Enhancements Program (TE) – New Jersey
Eligibility: New Jersey local governments, counties, state or federal agencies, nonprofits
Purpose: Funds nontraditional projects designed to enhance the transportation experience, to mitigate the impacts of transportation facilities on communities and the environment, and to enhance community character.
Terms: 80 to 90 percent of costs can be funded
Deadline: Varies
C: Delaware Valley Regional Planning Commission (DVRPC)
P: 215.592-1800
I: www.dvrpc.org/te

State Programs

Brownfields Development Area (BDA) Initiative
Eligibility: New Jersey community groups and municipalities
Purpose: Project management assistance for communities impacted by multiple brownfield sites
Terms: Project manager is assigned from the Office of Brownfield Reuse
Deadline: Annual
C: New Jersey Department of Environmental Protection
P: 609-292-1251
I: www.state.nj.us/dep/rsp/brownfields/bda

Brownfield Redevelopment Incentive Program
Eligibility: New Jersey business owners and developers
Purpose: To finance brownfield site remediation
Terms: Interim financing up to $750,000 at below-market interest rates
Deadline: Varies
C: New Jersey Economic Development Authority
P: 609-777-4898
I: www.njeda.comu

Environmental Equity Program
Eligibility: New Jersey government entities and developers
Purpose: Provides loans for site acquisition, remediation, and demolition costs for brownfield redevelopment
Terms: Vary
Deadline: Varies
C: New Jersey Redevelopment Authority
P: 609-292-3739
I: www.njra.us

Fund for Community Economic Development
Eligibility: New Jersey Community Development Organizations, developers
Purpose: To finance feasibility studies or other predevelopment activities
Terms: Vary
Deadline: Varies
C: New Jersey Economic Development Authority
P: 609-777-4898
I: www.njeda.com

Historic Site Management Grants
Eligibility: New Jersey municipalities, counties, nonprofits
Purpose: Awards range from $5,000 to $50,000
Terms: Vary
Deadline: Varies
C: New Jersey Department of Community Affairs
P: 609-292-7156
I: www.state.nj.us/dca

Innocent Party Grants
Eligibility: New Jersey municipalities, counties, redevelopment entities, homeowners
Purpose: Applicant must not be responsible for contamination
Terms: Vary
Deadline: Open
C: New Jersey Economic Development Authority
P: 609-777-0990
I: www.njeda.com

Municipal Grants
Eligibility: New Jersey municipalities, counties, redevelopment entities, homeowners
Purpose: Returns contaminated and underutilized properties to productive reuse
Terms: Up to $3 million, per municipality, per year for 100 percent of costs of preliminary assessment, site investigation, remedial investigation, and remedial action
Deadline: Open
C: New Jersey Economic Development Authority
P: 609-777-0990
I: www.njeda.com

Redevelopment Investment Fund (NJRIF)
Eligibility: New Jersey municipalities, counties, nonprofits, corporations
Purpose: Flexible investment fund that provides debt and equity financing for business and real estate ventures
Terms: Vary
Deadline: Varies
C: New Jersey Redevelopment Authority
P: 609-292-3739
I: www.njra.us

Redevelopment Area Bond Financing
Eligibility: New Jersey municipalities with designated redevelopment areas
Purpose: Tax-exempt bonds to fund the infrastructure and remediation components of redevelopment projects
Terms: Vary
Deadline: Varies
C: New Jersey Economic Development Authority
P: 609-777-4898
I: www.njeda.com

Smart Futures Grant
Eligibility: New Jersey local governments, counties, nonprofits
Purpose: Funds projects that balance development with the preservation of open space and environmental resources
Terms: Vary
Deadline: Annual
C: New Jersey Department of Community Affairs
P: 609-292-7156
I: www.state.nj.us/dca

Smart Growth Redevelopment Funding
Eligibility: New Jersey developers undertaking mixed-use development projects
Purpose: To finance site preparations costs, such as demolition, removal of debris, or engineering
Terms: Low-interest loans and loan guarantees up to $1 million
Deadline: Varies
C: New Jersey Economic Development Authority
P: 609-777-4898
I: www.njeda.com

Special Improvement Districts: Loans and Grants
Eligibility: New Jersey municipalities
Purpose: To finance capital improvements within a designated business improvement zone
Terms: Loans up to $500,000 for capital improvements; grants up to $10,000 for technical support
Deadline: Open
C: New Jersey Department of Community Affairs
P: 609-633-9769
I: www.state.nj.us/dca

New Jersey Environmental Infrastructure Financing Program
Eligibility: New Jersey local government units
Purpose: To finance infrastructure projects to protect clean water and drinking water
Terms: Loans up to $10 million per borrower
Deadline: Annual
C: New Jersey Environmental Infrastructure Trust
P: 609-219-8600
I: www.njeit.org

Section 319(h) Nonpoint Source (NPS) Grant Program
Eligibility: Municipal planning departments or boards, health departments or boards; county planning departments or boards, health departments or boards; designated water-quality management planning agencies; state and regional entities entirely within New Jersey; state government agencies, universities, and colleges; interstate agencies of which New Jersey is a member; watershed and water resource associations and other local nonprofit organizations.
Purpose: To finance the construction and implementation of projects that help to protect, maintain, and improve water quality
Terms: Vary
Deadline: Annual
C: New Jersey Department of Environmental Protection, Division of Watershed Management, Bureau of Watershed Planning
P: 609-984-0058
I: www.nj.gov/dep/watershedmgt

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ULI – the Urban Land Institute and NPA – the National Parking Association. 1993. *The Dimensions of Parking*. Third Edition. Washington D.C.: ULI – the Urban Land Institute.

APPENDIX A – PHILADELPHIA CASE STUDY: PARKING KIOSKS

Source: Fran Westerfer, Philadelphia Parking Authority (PPA), phone interview 4/12/11

The City of Philadelphia converted its parking meters to solar-powered kiosks in most of Center City and while there were some growing pains with the transition, the city has greatly increased its revenue since installing the kiosks. In the fiscal year prior to the kiosks' installation, the city collected $21 million in parking meter collections. In the fiscal year since, revenues have increased to $28 million.

Because meter rates were scheduled to go from $2 per hour to $3 per hour and the old coin-operated meters and meter collections schedule would not have been able to accommodate the additional coins, the city installed the new kiosks in only one year's time (a process that usually takes between 18 months and 2 years) beginning in July of 2009. To aid with the transition and public acceptance of the kiosks, rates were not increased. In April 2011, rates were $2 per hour in Center City and $1.50 per hour in other parts of the city. The kiosks are all programmable and, as of April 2011, are programmed for 2-hour parking during the day and 3-hour parking at night.

While the early problems have now been resolved, they dealt mostly with software and power issues and physical issues such as signage. Prior to installation of the kiosks, loading zones had to be relocated and all street signage redone. After lengthy debate, PPA decided to accept bills even though bill acceptance requires a lot of power. Even though the biggest problems initially were with printers and power (receipts were not all printing correctly and some kiosks were not accepting bills properly), the Authority feels it made the right decision and is now getting 40 percent of its revenue from bills. Approximately three percent of the kiosks need bill attention on any given day, although that percentage increases during rainy weather.

Credit cards are the other major source of revenue, making up 40 percent of the total take. 15 percent still comes from coins and about five percent from smart cards.

Acceptance of credit cards has been hugely important to increasing parking revenue. PPA has observed that many users simply push "Max Time" when using a credit card to avoid the potential hassle of returning to add time to the meter. This practice allows payment to be collected for the same time period by more than one car since the extra time purchased does not carry forward for other vehicles to use – a contrast with traditional parking meters which allow subsequent parkers to use paid time remaining on the meter.

PPA used a local vendor, Metric, based in New Jersey for the installation. Despite being the first major city installation completed by Metric, PPA is extremely satisfied with their work, both during the physical installation and the subsequent support provided. They feel that the right vendor selection was critical to the success of the conversion to kiosks.

PPA did not change the size of its shop when it converted the meters to kiosks, although the coin room had to be enlarged due to the 2009 meter rate increase and the additional work associated with counting both bills and coins. They still employ 17 mechanics and deploy five of them to service the kiosks. Mr. Westerfer estimates that they will need four to five mechanics on the street per 1,000 kiosks once they take over the complete servicing operation (kiosk parts are still under warranty through Metric). Through their extensive back end system, PPA can see a myriad of data for the kiosks, including the exact locations of any problems, specific breakdowns of currency for each machine, etc. and in addition, can change rates and hours remotely.

In residential permit parking areas, PPA does not recommend kiosks over meters; meters are sufficient because there is so little turnover.

Overall, the Philadelphia Parking Authority is extremely pleased with the conversion of meters to kiosks in Philadelphia and highly recommends their use in other cities.

APPENDIX B – SURVEY METHODOLOGY

Survey Design

The on-street parking surveys were executed by DVRPC staff on Tuesday, October 5, 2010 and Tuesday, March 29, 2011 between the hours of 7:00 AM to 7:00 PM.

The tabulation sheet recorded cars parked in the Downtown area, the Lanning Square East area, the Lanning Square West area, the Central Waterfront area, and the North Camden area.

Trip Origins, Destinations, and Trip Length

The tabulation of license plates will permit us to obtain information on the origins and destination of motorists parking in the study area. This information can be used to determine the average distance traveled to the city, what specific zip codes drivers who are parking in the city are coming from (the length of the trip) and possible transportation alternatives.

Survey Locations

- The east Cooper Lanning area is generally bounded by Broadway in the west, Martin Luther King, Jr. Boulevard in the north, Haddon Avenue in the east, and Berkley and Pine Streets in the south.
- The west Cooper Lanning area is generally bounded by Broadway in the east, Martin Luther King, Jr. Boulevard in the north, Third Street in the west, and Benson and Pine Streets in the south.
- The Downtown area is generally bounded by Haddon Avenue in the east, Martin Luther King, Jr. Boulevard in the south, Front Street and Third Street in the west, and Cooper Street and Penn Street in the north.
- The Waterfront area is generally bounded by Delaware Avenue to the west, Pearl Street and the Ben Franklin Bridge in the north, Front Street and Third Street in the east, and Penn Street in the south.
- The North Camden area is generally bounded by State Street, Main Street, and Elm Street in the north, 5th Street in the east, the Ben Franklin Bridge in the south, and Point Street in the west.

Staff Training

Staff was instructed in the survey process and procedures. Surveyors were instructed in how to conduct the survey in an efficient and safe manner. Survey team members were given a package which included a map of the survey area as well as survey forms grouped in hourly increments.

Conduct of Survey

In an effort to conduct the survey on a typical weekday, Tuesdays, Wednesdays and Thursdays were the only days considered. The surveys were conducted on Tuesday, October 5, 2010 and Tuesday, March 29, 2011. However, partly due to inclement weather, they were conducted in roving vehicles instead of on foot. This represented a typical workday. The duration of the survey was planned for 7:00 AM through 7:00 PM. The license plates recorded were collated and grouped in hourly increments. Recording of the license plates were done in the same direction during all time periods.

The survey coordinator was responsible for scheduling the number of appropriate survey staff, coordinating with the police and ensuring that the crew was properly prepared and safety procedures were followed. Strategies concerning coordination, and any other preliminary questions regarding survey operation were resolved before initiating the survey. On the days of the surveys various elements (fire department activities, roadway construction, persistent rain) did interfere with the planned operations of the survey team. However, these interruptions did not affect the integrity of the surveys.

Surveyors were provided with the following information on each form prior to execution:

- An alphanumeric code for the city block and each quadrant on that block (serial number). The first digit of the serial number represents the block while the second digit represents the direction (1-west, 2-north, 3-east, and 4-south). The code was pre-printed on each form.

- Space was provided at the top of each form to record the start time each loop was surveyed.

Local Involvement

Rutgers University and various municipal agencies and officials were contacted prior to the survey. In particular, contact was maintained with municipal police for their approval of the survey's field activity.

Data Entry

Completed surveys were entered into an electronic database to facilitate analysis of the survey responses. An electronic data entry form resembling the paper forms was created for efficient data entry and to minimize errors. Most responses could be entered through the use of yes/no or drop-down selections, eliminating the possibility of extraneous entries for these items.

Geocoding

The license plate data was sent to the State of New Jersey to secure addresses only. The address information was used to geocode the home locations of parkers in a geographic information systems application (ArcGIS). Trip start locations were matched to provide a spatial point of reference for each parker at their trip origin.

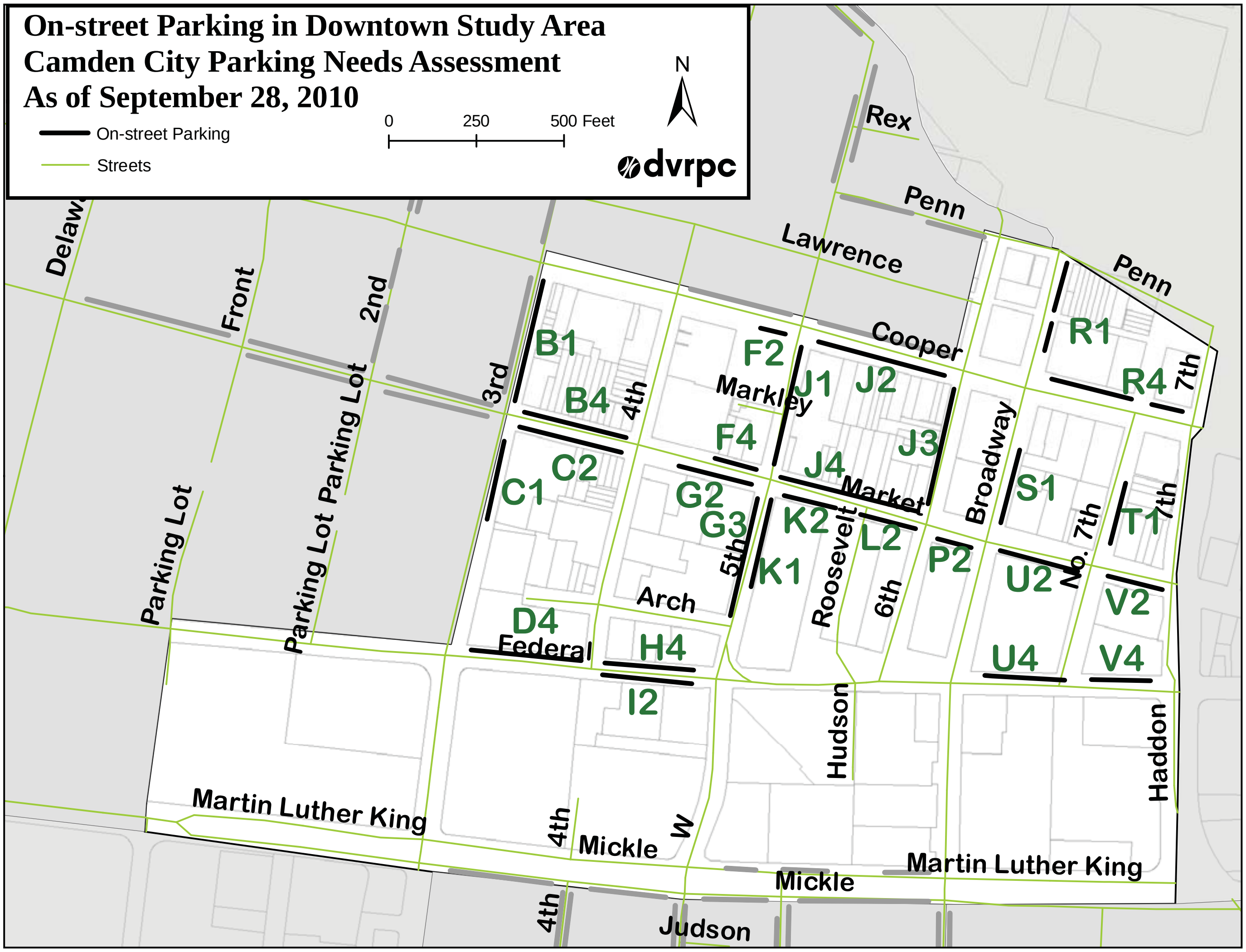
APPENDIX C – ON-STREET SURVEY DATA

On-Street Parking Survey Data						
Segment	Sub-Area	Type	Capacity	Average Occupancy Rate	Average Duration (hours)	Turnover Ratio
1B1	Downtown	Metered	13	67.31%	1.75	2.85
1B4	Downtown	Metered	7	83.93%	1.27	5.00
1C1	Downtown	Metered	9	27.78%	1.11	2.00
1C2	Downtown	Metered	10	58.75%	1.47	3.10
1D4	Downtown	Metered	12	75.00%	1.38	4.33
1F2	Downtown	Metered	3	58.33%	2.00	2.33
1F4	Downtown	Metered	5	102.50%	1.05	7.60
1G2	Downtown	Metered	10	83.75%	1.24	5.40
1G3	Downtown	Metered	8	60.94%	1.26	3.88
1H4	Downtown	Metered	9	62.50%	1.67	3.00
1I2	Downtown	Metered	9	81.94%	1.74	3.67
1J1	Downtown	Metered	11	57.95%	1.13	3.91
1J2	Downtown	Metered	14	70.54%	1.23	4.50
1J3	Downtown	Metered	5	107.50%	2.39	3.40
1J4	Downtown	Metered	12	90.63%	1.34	5.42
1K1	Downtown	Metered	5	87.50%	1.17	6.00
1K2	Downtown	Metered	5	82.50%	1.22	5.40
1L2	Downtown	Metered	6	87.50%	1.35	5.00
1P2	Downtown	Government Permit	8	43.75%	2.55	1.25
1R1	Downtown	Metered	7	78.57%	1.63	3.57
1R4	Downtown	Metered	5	175.00%	1.35	10.20
1S1	Downtown	Metered	4	121.88%	1.77	5.50
1T1	Downtown	Metered	9	68.06%	1.48	3.67
1U2	Downtown	Metered	9	87.50%	1.21	5.67
1U4	Downtown	Metered	6	79.17%	2.00	3.17
1V2	Downtown	Metered	6	60.42%	1.61	3.00
1V4	Downtown	Metered	5	60.00%	1.71	2.80
2A2	Cooper Lanning West	Metered	9	50.93%	1.96	3.00
2A3	Cooper Lanning West	Residential Permit	10	25.00%	2.50	1.10
2A4	Cooper Lanning West	Residential Permit	10	5.00%	1.50	0.40
2AA3	Cooper Lanning West	Unrestricted	3	13.89%	1.25	1.33
2AC3	Cooper Lanning West	Unrestricted	12	38.89%	2.95	1.17
2AD3	Cooper Lanning West	Unrestricted	9	18.52%	2.22	0.67
2AE1	Cooper Lanning West	Metered	7	5.95%	1.67	0.43
2AE3	Cooper Lanning West	Metered	7	61.90%	1.41	5.14
2AE4	Cooper Lanning West	Metered	13	54.49%	2.13	2.92
2AF1	Cooper Lanning West	Residential Permit	7	1.19%	1.00	0.14
2AF3	Cooper Lanning West	Metered	5	86.67%	1.63	6.40
2AF4	Cooper Lanning West	Residential Permit	10	15.83%	1.73	0.90
2AG1	Cooper Lanning West	Residential Permit	11	53.03%	3.50	1.18
2AI3	Cooper Lanning West	Metered?	6	8.33%	1.20	0.83
2AJ1	Cooper Lanning West	Unrestricted	19	0.44%	1.00	0.05
2AJ3	Cooper Lanning West	Unrestricted?	8	10.42%	1.11	1.00
2AL1	Cooper Lanning West	Unrestricted	8	4.17%	2.00	0.13
2AL2	Cooper Lanning West	Unrestricted	7	45.24%	3.80	1.14
2AL3	Cooper Lanning West	Unrestricted	9	41.67%	2.25	1.67
2AL4	Cooper Lanning West	Unrestricted	6	23.61%	1.55	1.83
2AM1	Cooper Lanning West	Unrestricted	8	52.08%	3.85	1.25
2AM2	Cooper Lanning West	Unrestricted	7	11.90%	3.33	0.29
2AM4	Cooper Lanning West	Unrestricted	8	29.17%	4.00	0.63
2AN2	Cooper Lanning West	Unrestricted	8	22.92%	2.75	1.00
2AN3	Cooper Lanning West	Unrestricted	9	62.04%	2.58	2.44
2AN4	Cooper Lanning West	Unrestricted	6	38.89%	2.55	1.33
2AO1	Cooper Lanning West	Unrestricted	10	57.50%	4.60	0.90
2AO2	Cooper Lanning West	Unrestricted	13	43.59%	2.65	1.15
2AO3	Cooper Lanning West	Unrestricted	8	56.25%	2.25	2.50
2AO4	Cooper Lanning West	Unrestricted	14	57.74%	3.03	1.71
2B1	Cooper Lanning West	Residential Permit	7	11.90%	1.25	1.00
2B3	Cooper Lanning West	Residential Permit	8	8.33%	2.67	0.38
2B4	Cooper Lanning West	Residential Permit	10	5.83%	7.00	0.10
2I1	Cooper Lanning West	Residential Permit	7	47.62%	2.50	1.86
2I2	Cooper Lanning West	Metered	6	47.22%	2.00	2.83
2I3	Cooper Lanning West	Metered	8	37.50%	2.00	2.25
2I4	Cooper Lanning West	Residential Permit	12	8.33%	2.40	0.33
2J1	Cooper Lanning West	Residential Permit	8	15.63%	3.75	0.38
2J2	Cooper Lanning West	Residential Permit	10	31.67%	2.92	0.80
2J3	Cooper Lanning West	Residential Permit	10	0.83%	1.00	0.10

On-Street Parking Survey Data						
Segment	Sub-Area	Type	Capacity	Average Occupancy Rate	Average Duration (hours)	Turnover Ratio
2J4	Cooper Lanning West	Residential Permit	11	6.06%	2.67	0.09
2K2	Cooper Lanning West	Residential Permit	10	2.50%	1.00	0.30
2R1	Cooper Lanning West	Metered	7	28.57%	1.71	2.00
2R2	Cooper Lanning West	Metered	6	54.17%	1.95	3.33
2R3	Cooper Lanning West	Metered	6	34.72%	1.56	2.67
2R4	Cooper Lanning West	Metered	9	34.26%	3.08	1.11
2S1	Cooper Lanning West	Residential Permit	7	46.43%	2.44	1.86
2S2	Cooper Lanning West	Residential Permit	9	22.22%	2.40	1.00
2S3	Cooper Lanning West	Residential Permit	6	12.50%	1.50	1.00
2S4	Cooper Lanning West	Residential Permit	9	6.48%	3.50	0.22
2U3	Cooper Lanning West	Residential Permit	11	25.00%	4.13	0.64
3AP1	Cooper Lanning East	Metered	8	107.81%	1.47	5.75
3AQ1	Cooper Lanning East	Metered	5	107.50%	1.16	7.40
3AR1	Cooper Lanning East	Metered	6	2.08%	1.00	0.17
3AR3	Cooper Lanning East	Metered	18	7.64%	1.83	0.33
3AR4	Cooper Lanning East	Residential Permit	14	25.00%	3.50	0.57
3AS1	Cooper Lanning East	Metered???	8	15.63%	1.25	1.00
3AS2	Cooper Lanning East	Residential Permit	12	43.75%	2.33	1.50
3AS3	Cooper Lanning East	Residential Permit	8	50.00%	3.56	1.00
3AT1	Cooper Lanning East	Unrestricted	5	160.00%	4.27	2.80
3AT3	Cooper Lanning East	Unrestricted	8	57.81%	2.85	1.38
3AT4	Cooper Lanning East	Unrestricted	20	58.13%	3.32	1.30
3AU1	Cooper Lanning East	Unrestricted	2	112.50%	1.64	5.00
3AU2	Cooper Lanning East	Unrestricted	20	35.63%	4.75	0.60
3AU3	Cooper Lanning East	Unrestricted	7	91.07%	3.40	1.57
3AU4	Cooper Lanning East	Unrestricted	15	56.67%	3.09	1.53
3AV1	Cooper Lanning East	Unrestricted	3	158.33%	2.11	5.67
3AV2	Cooper Lanning East	Unrestricted	15	46.67%	2.80	1.27
3AV3	Cooper Lanning East	Unrestricted	5	60.00%	2.67	1.20
3AV4	Cooper Lanning East	Unrestricted	17	35.29%	2.29	1.06
3AW1	Cooper Lanning East	Unrestricted	4	90.63%	2.90	2.50
3AW2	Cooper Lanning East	Unrestricted	6	168.75%	3.38	3.33
3AW3	Cooper Lanning East	Unrestricted	6	2.08%	1.00	0.17
3AW4	Cooper Lanning East	Unrestricted	12	63.54%	4.07	1.00
3AX1	Cooper Lanning East	Metered	4	53.13%	1.31	3.25
3AX3	Cooper Lanning East	Residential Permit	4	81.25%	1.30	4.50
3AY1	Cooper Lanning East	Metered	5	42.50%	1.55	2.40
3AY2	Cooper Lanning East	Residential Permit	15	66.67%	2.50	1.93
3AY3	Cooper Lanning East	Residential Permit	6	95.83%	4.18	1.83
3AY4	Cooper Lanning East	Residential Permit	4	56.25%	3.00	1.50
3AZ4	Cooper Lanning East	Residential Permit	5	22.50%	1.80	1.00
3BA1	Cooper Lanning East	Residential Permit	8	68.75%	3.38	1.63
3BA4	Cooper Lanning East	Residential Permit	12	41.67%	2.35	1.33
3BA5	Cooper Lanning East	Residential Permit??	8	89.06%	2.71	2.50
3BB1	Cooper Lanning East	Unrestricted	5	25.00%	2.00	1.00
3BB2	Cooper Lanning East	Residential Permit	6	93.75%	3.46	1.83
3BC1	Cooper Lanning East	Unrestricted	7	96.43%	3.86	1.86
3BD1	Cooper Lanning East	Unrestricted	5	32.50%	4.33	0.60
3BE1	Cooper Lanning East	Unrestricted	6	20.83%	3.33	0.33
3BF1	Cooper Lanning East	Metered	8	126.56%	2.08	4.88
3BF4	Cooper Lanning East	Metered	15	65.00%	2.41	2.07
3BG1	Cooper Lanning East	Residential Permit	4	78.13%	3.13	2.00
3BG2	Cooper Lanning East	Residential Permit	6	83.33%	1.90	3.50
3BG3	Cooper Lanning East	Residential Permit	11	98.86%	2.18	3.45
3BH1	Cooper Lanning East	Residential Permit	4	62.50%	2.22	2.25
3BH2	Cooper Lanning East	Residential Permit	13	107.69%	3.61	2.00
3BH3	Cooper Lanning East	Residential Permit	4	75.00%	3.00	2.00
3BH4	Cooper Lanning East	Residential Permit	21	26.19%	2.44	0.76
3BL2	Cooper Lanning East	Residential Permit	10	57.50%	2.42	1.90
3BL3	Cooper Lanning East	Prohibited 7AM to 6PM; Unrestricted otherwise	15	26.67%	1.68	1.27
3BM2	Cooper Lanning East	Unrestricted	6	68.75%	2.54	2.17
4A3	North Camden	Unrestricted	17	48.53%	7.07	0.65
4B1	North Camden	Unrestricted	17	38.73%	3.95	0.71
4B3	North Camden	Unrestricted	14	32.74%	5.50	0.64
4C1	North Camden	Unrestricted	6	54.17%	4.88	0.83
4C2	North Camden	Unrestricted	16	1.56%	1.50	0.13

On-Street Parking Survey Data						
Segment	Sub-Area	Type	Capacity	Average Occupancy Rate	Average Duration (hours)	Turnover Ratio
4C3	North Camden	Unrestricted	11	78.03%	4.29	1.91
4C4	North Camden	Unrestricted	13	53.85%	3.50	1.00
4D1	North Camden	Unrestricted	8	68.75%	6.00	1.38
4D2	North Camden	Unrestricted	17	29.90%	3.59	0.82
4D3	North Camden	Unrestricted	2	16.67%	1.00	2.00
4D4	North Camden	Unrestricted	10	85.00%	4.25	2.30
4E2	North Camden	Unrestricted	8	70.83%	3.78	1.88
4E4	North Camden	Unrestricted	6	70.83%	3.19	2.33
4F4	North Camden	Unrestricted	12	30.56%	2.93	1.17
4G3	North Camden	Unrestricted	7	64.29%	6.75	1.14
4H1	North Camden	Unrestricted	2	87.50%	3.50	1.50
4H2	North Camden	Unrestricted	12	60.42%	3.22	1.25
4H3	North Camden	Unrestricted	8	92.71%	5.56	1.75
4I1	North Camden	Unrestricted	12	55.56%	3.64	1.42
4I2	North Camden	Unrestricted	10	100.83%	4.17	2.70
4I3	North Camden	Unrestricted	7	89.29%	4.17	2.57
4K2	North Camden	Unrestricted	10	70.00%	4.20	1.90
4L1	North Camden	Unrestricted	12	79.86%	4.60	2.00
5AA1	Rutgers	Metered	11	83.33%	7.33	1.27
5AA2	Rutgers	Residential Permit	15	34.44%	3.10	1.13
5AA3	Rutgers	Metered	13	64.10%	2.63	2.85
5AB1	Rutgers	Metered	7	59.52%	2.08	2.86
5AB2	Rutgers	Residential Permit	4	95.83%	4.60	2.25
5AB3	Rutgers	Metered	12	82.64%	3.13	3.17
5AC4	Rutgers	Metered	11	87.88%	1.87	5.55
5AD2	Rutgers	Metered	17	86.27%	2.48	3.88
5AD4	Rutgers	Metered	15	77.22%	1.81	5.00
5AE4	Rutgers	Metered	6	72.22%	2.89	2.83
5AF1	Rutgers	Metered	7	92.86%	6.00	1.86
5AF3	Rutgers	Metered	10	38.33%	3.07	1.20
5AF4	Rutgers	Metered	11	18.18%	2.00	1.09
5AG3	Rutgers	Metered	11	71.21%	2.09	3.64
5AG4	Rutgers	Metered	9	32.41%	2.33	1.33
5AI2	Rutgers	Metered	13	23.08%	2.12	0.77
5AJ2	Rutgers	Metered	10	32.50%	1.50	2.60
5M2	Rutgers	Metered	13	36.54%	2.59	1.54
5M4	Rutgers	Residential Permit	10	71.67%	5.06	1.70
5N2	Rutgers	Metered	13	20.51%	1.28	1.08
5N3	Rutgers	Residential Permit	15	28.89%	8.67	0.40
5N4	Rutgers	Residential Permit	14	94.64%	6.63	1.57
5O1	Rutgers	Residential Permit	13	29.49%	4.60	0.62
5O2	Rutgers	Metered	3	47.22%	1.70	3.33
5O4	Rutgers	Residential Permit	3	41.67%	2.14	2.33
5P1	Rutgers	Metered	14	52.38%	2.38	2.64
5P2	Rutgers	Metered	5	60.00%	1.89	3.80
5P3	Rutgers	Metered	10	63.33%	1.77	4.30
5Q2	Rutgers	Metered	10	67.50%	1.84	4.20
5R2	Rutgers	Metered	16	67.71%	2.03	4.00
5R4	Rutgers	Metered	12	75.69%	2.14	4.17
5S2	Rutgers	Residential Permit	7	59.52%	10.00	0.71
5S3	Rutgers	Residential Permit	16	80.21%	6.70	1.25
5S4	Rutgers	Residential Permit	10	35.00%	6.00	0.70
5T1	Rutgers	Residential Permit	16	73.44%	5.04	1.50
5T2	Rutgers	Residential Permit	3	113.89%	5.86	1.67
5T3	Rutgers	Residential Permit	15	53.89%	4.22	1.00
5T4	Rutgers	Metered	5	63.33%	2.71	2.60
5U1	Rutgers	Residential Permit	11	82.58%	7.27	1.18
5U2	Rutgers	Residential Permit	15	79.44%	4.77	1.53
5U3	Rutgers	Residential Permit	13	41.67%	7.22	0.69
5U4	Rutgers	Residential Permit	15	27.22%	3.06	0.80
5V1	Rutgers	Residential Permit	15	33.89%	3.05	1.07
5V2	Rutgers	Residential Permit	3	30.56%	2.75	1.33
5V4	Rutgers	Residential Permit	3	94.44%	6.80	1.33
5X1	Rutgers	Metered	12	68.75%	2.91	2.83
5X3	Rutgers	Metered	13	79.49%	2.14	4.38
5Y1	Rutgers	Metered	13	98.08%	2.10	5.54
5Y3	Rutgers	Metered	17	92.16%	2.54	4.35

Source: DVRPC, 2010-2011


On-street Parking in Downtown Study Area
Camden City Parking Needs Assessment
As of September 28, 2010
On-street Parking
Streets
0
250
500 Feet
N
dvrpc
Rex
Penn
Lawrence
Penn
Cooper
Front
2nd
3rd
4th
Markley
Market
Broadway
No. 7th
7th
5th
Roosevelt
6th
Arch
Federal
Parking Lot
Parking Lot
Parking Lot
Martin Luther King
Mickle
Hudson
Haddon
W
Judson
B1
B4
C1
C2
D4
F2
F4
G2
G3
H4
I2
J1
J2
J3
J4
K1
K2
L2
P2
R1
R4
S1
T1
U2
U4
V2
V4

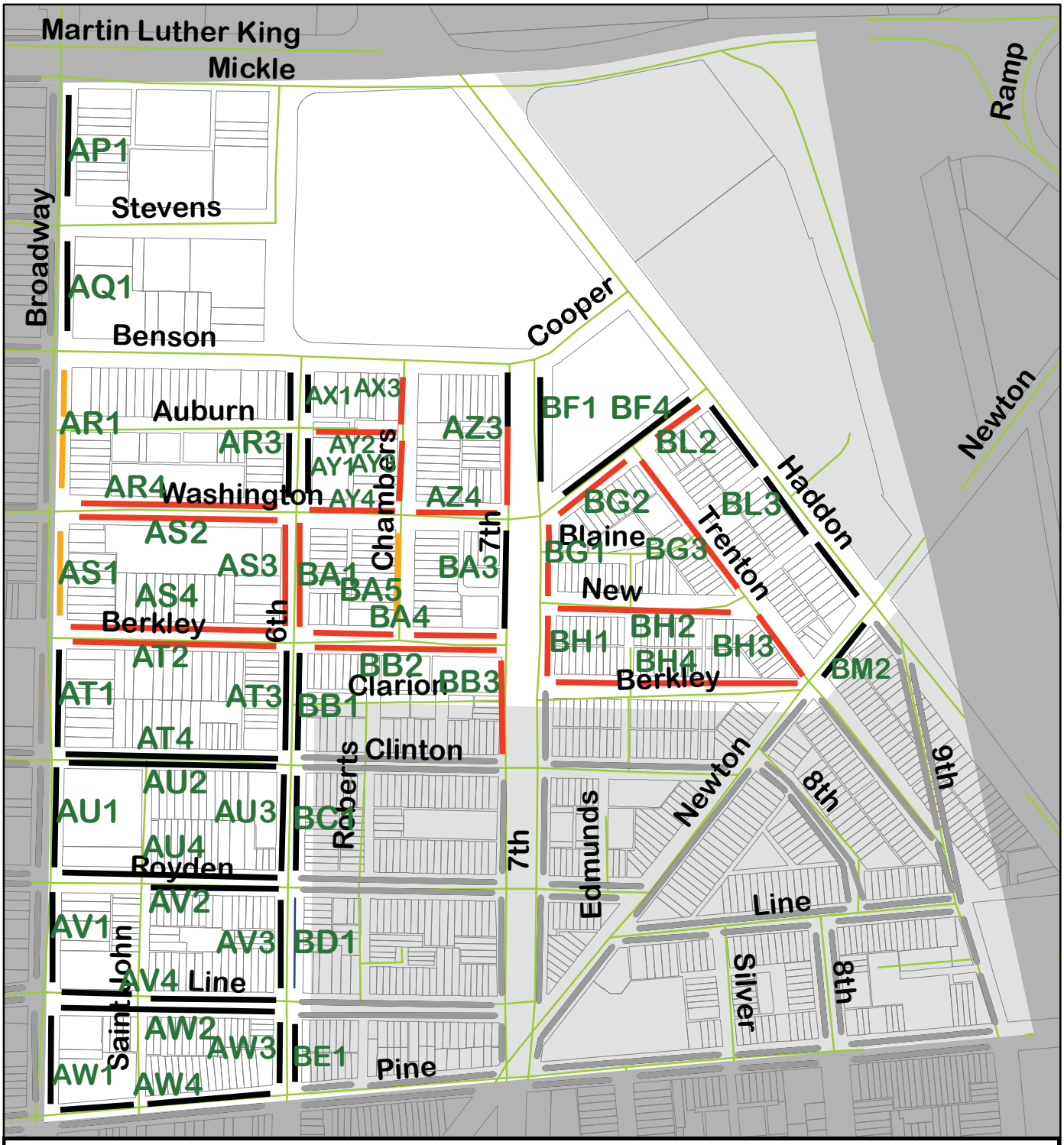
On-Street Parking in West Cooper Lanning Study Area
Camden City Parking Needs Assessment, as of September 29, 2010

- on-street parking
- residential permit on-street parking
- on-street parking temporarily displaced by construction
- Streets

0 250 500 Feet

N

dvrpc



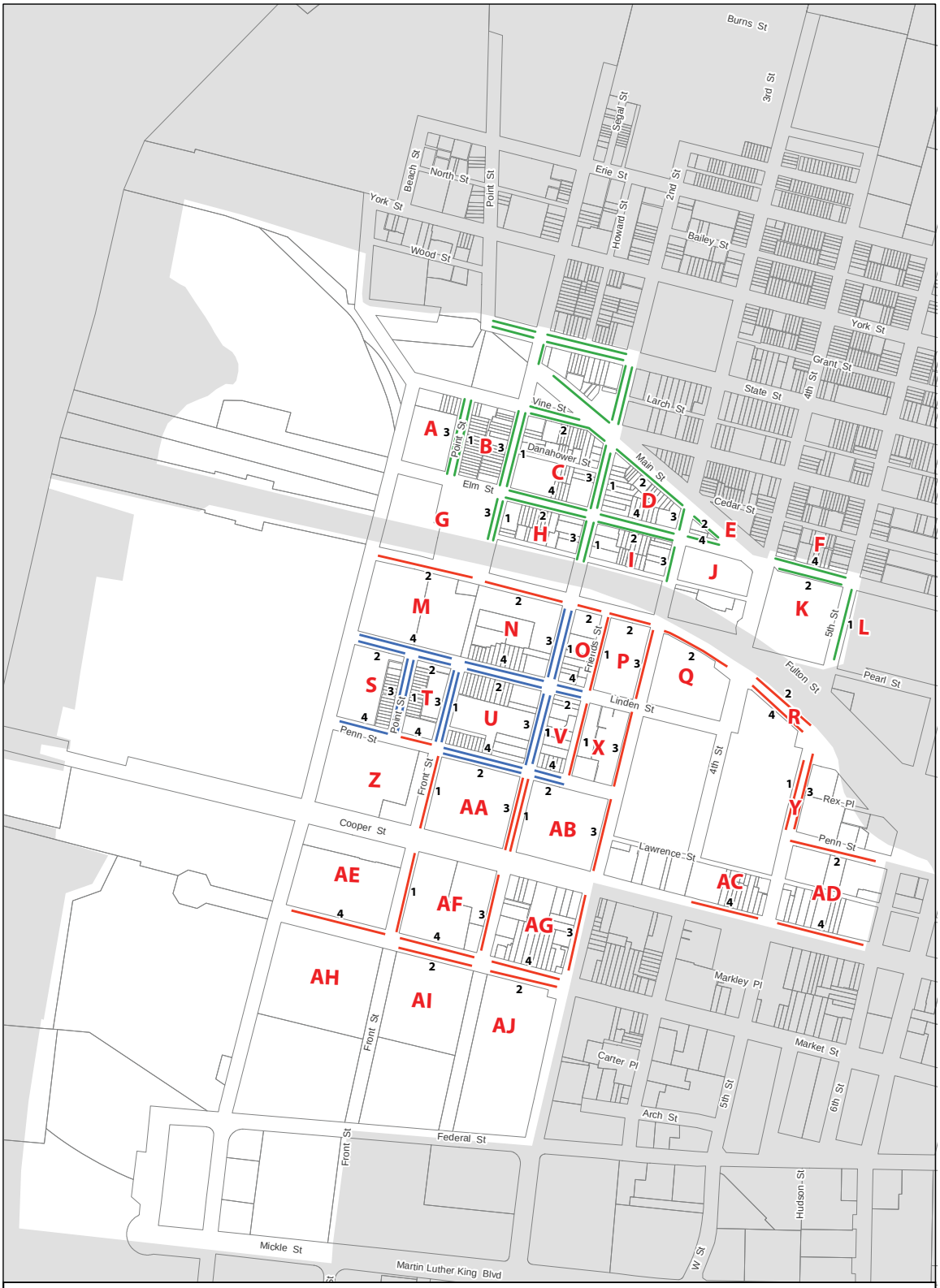
On-Street Parking in East Cooper Lanning Study Area
Camden City Parking Needs Assessment, as of September 29, 2010

- on-street parking
- on-street parking temporarily displaced by construction
- residential permit on-street parking
- Streets

0 250 500 Feet

N

dvrpc



On-Street Parking in Waterfront, North Camden Study Areas
Camden City Parking Needs Assessment, as of March 29, 2011

meters
residential permits
unrestricted

0 190 380
Feet

N

dvrpc

APPENDIX D – ON-STREET PARKED VEHICLES: ORIGINS BY MUNICIPALITY

On-Street Parked Vehicles: Origins by Municipality		
Municipality	**Quantity**	**Percent**
Camden County	**2055**	**54.79%**
Camden City	1125	29.99%
Pennsauken Township	185	4.93%
Gloucester Township	128	3.41%
Cherry Hill Township	126	3.36%
Winslow Township	74	1.97%
Collingswood Borough	38	1.01%
Voorhees Township	35	0.93%
Haddon Township	27	0.72%
Lindenwold Borough	26	0.69%
Lawnside Borough	24	0.64%
Bellmawr Borough	22	0.59%
Woodlynne Borough	21	0.56%
Audubon Borough	20	0.53%
Barrington Borough	20	0.53%
Gloucester City	20	0.53%
Haddonfield Borough	18	0.48%
Merchantville Borough	15	0.40%
Clementon Borough	14	0.37%
Haddon Heights Borough	13	0.35%
Runnemede Borough	13	0.35%
Mount Ephraim Borough	11	0.29%
Pine Hill Borough	11	0.29%
Waterford Township	10	0.27%
Berlin Township	9	0.24%
Somerdale Borough	9	0.24%
Magnolia Borough	8	0.21%
Stratford Borough	8	0.21%
Berlin Borough	5	0.13%
Laurel Springs Borough	5	0.13%
Brooklawn Borough	4	0.11%
Oaklyn Borough	4	0.11%
Chesilhurst Borough	3	0.08%
Hi-Nella Borough	3	0.08%
Audubon Park Borough	1	0.03%
Burlington County	**311**	**8.29%**
Mount Laurel Township	44	1.17%
Willingboro Township	41	1.09%
Evesham Township	39	1.04%
Maple Shade Township	29	0.77%
Cinnaminson Township	14	0.37%
Moorestown Township	14	0.37%
Delran Township	11	0.29%
Medford Township	11	0.29%
Burlington Township	10	0.27%
Lumberton Township	10	0.27%
Pemberton Township	10	0.27%
Mount Holly Township	9	0.24%

On-Street Parked Vehicles: Origins by Municipality		
Municipality	**Quantity**	**Percent**
Hainesport Township	7	0.19%
Westampton Township	7	0.19%
Burlington City	6	0.16%
Riverside Township	6	0.16%
Tabernacle Township	6	0.16%
Florence Township	4	0.11%
Medford Lakes Borough	4	0.11%
Palmyra Borough	4	0.11%
Riverton Borough	4	0.11%
Eastampton Township	3	0.08%
Southampton Township	3	0.08%
Beverly City	2	0.05%
Chesterfield Township	2	0.05%
Delanco Township	2	0.05%
Edgewater Park Township	2	0.05%
Springfield Township	2	0.05%
Bass River Township	1	0.03%
Bordentown Township	1	0.03%
Mansfield Township	1	0.03%
New Hanover Township	1	0.03%
Shamong Township	1	0.03%
Gloucester County	**303**	**8.08%**
Deptford Township	47	1.25%
Washington Township	45	1.20%
Monroe Township	36	0.96%
West Deptford Township	24	0.64%
Mantua Township	21	0.56%
Woodbury City	18	0.48%
Glassboro Borough	16	0.43%
Franklin Township	15	0.40%
East Greenwich Township	11	0.29%
Harrison Township	10	0.27%
Logan Township	8	0.21%
Clayton Borough	7	0.19%
Paulsboro Borough	7	0.19%
Pitman Borough	7	0.19%
Woodbury Heights Borough	7	0.19%
National Park Borough	6	0.16%
Woolwich Township	6	0.16%
Westville Borough	5	0.13%
Elk Township	3	0.08%
Wenonah Borough	2	0.05%
South Harrison Township	1	0.03%
Swedesboro Borough	1	0.03%
Atlantic County	**54**	**1.44%**
Galloway Township	6	0.16%
Hamilton Township	6	0.16%
Hammonton	6	0.16%

On-Street Parked Vehicles: Origins by Municipality		
Municipality	**Quantity**	**Percent**
Atlantic City	5	0.13%
Buena Vista Township	4	0.11%
Egg Harbor Township	4	0.11%
Brigantine	3	0.08%
Egg Harbor City	3	0.08%
Margate City	3	0.08%
Northfield	3	0.08%
Buena Borough	2	0.05%
Folsom Borough	2	0.05%
Pleasantville	2	0.05%
Estell Manor	1	0.03%
Mullica Township	1	0.03%
Somers Point	1	0.03%
Ventnor City	1	0.03%
Weymouth Township	1	0.03%
Mercer County	**36**	**0.96%**
Trenton City	18	0.48%
Hamilton Township	9	0.24%
East Windsor Township	4	0.11%
Lawrence Township	2	0.05%
Ewing Township	1	0.03%
Princeton Township	1	0.03%
West Windsor Township	1	0.03%
Other NJ County	**240**	**6.40%**
Other State	**752**	**20.05%**
Total	**3751**	**100%**

Source: DVRPC, 2010-2011

APPENDIX E – GARAGE PARKED VEHICLES: ORIGINS BY MUNICIPALITY

Garage Parked Vehicles: Origins by Municipality		
Municipality	**Quantity**	**Percent**
Camden County	**1563**	**34.75%**
Camden City	296	6.58%
Cherry Hill Township	245	5.45%
Pennsauken Township	193	4.29%
Gloucester Township	156	3.47%
Collingswood Borough	68	1.51%
Winslow Township	65	1.45%
Voorhees Township	64	1.42%
Gloucester City	48	1.07%
Bellmawr Borough	46	1.02%
Haddonfield Borough	42	0.93%
Haddon Township	36	0.80%
Audubon Borough	34	0.76%
Haddon Heights Borough	30	0.67%
Mount Ephraim Borough	24	0.53%
Oaklyn Borough	24	0.53%
Pine Hill Borough	20	0.44%
Runnemede Borough	20	0.44%
Berlin Borough	19	0.42%
Lindenwold Borough	16	0.36%
Barrington Borough	15	0.33%
Waterford Township	13	0.29%
Woodlynne Borough	13	0.29%
Stratford Borough	12	0.27%
Lawnside Borough	11	0.24%
Somerdale Borough	11	0.24%
Magnolia Borough	9	0.20%
Merchantville Borough	7	0.16%
Clementon Borough	6	0.13%
Berlin Township	4	0.09%
Brooklawn Borough	4	0.09%
Audubon Park Borough	3	0.07%
Gibbsboro Borough	3	0.07%
Hi-Nella Borough	3	0.07%
Laurel Springs Borough	2	0.04%
Chesilhurst Borough	1	0.02%
Gloucester County	**568**	**12.63%**
Washington Township	119	2.65%
Deptford Township	75	1.67%
Monroe Township	61	1.36%
West Deptford Township	47	1.04%
Mantua Township	37	0.82%
Glassboro Borough	27	0.60%
Woodbury City	24	0.53%
East Greenwich Township	22	0.49%
Woolwich Township	22	0.49%
Harrison Township	21	0.47%

Garage Parked Vehicles: Origins by Municipality		
Municipality	**Quantity**	**Percent**
Paulsboro Borough	15	0.33%
Pitman Borough	15	0.33%
Franklin Township	14	0.31%
Logan Township	9	0.20%
National Park Borough	9	0.20%
South Harrison Township	9	0.20%
Clayton Borough	8	0.18%
Greenwich Township	8	0.18%
Wenonah Borough	8	0.18%
Westville Borough	8	0.18%
Elk Township	5	0.11%
Newfield Borough	2	0.04%
Woodbury Heights Borough	2	0.04%
Swedesboro Borough	1	0.02%
Burlington County	**512**	**11.38%**
Mount Laurel Township	81	1.80%
Evesham Township	69	1.53%
Moorestown Township	66	1.47%
Maple Shade Township	47	1.04%
Willingboro Township	39	0.87%
Medford Township	28	0.62%
Cinnaminson Township	26	0.58%
Delran Township	19	0.42%
Burlington Township	12	0.27%
Palmyra Borough	12	0.27%
Westampton Township	12	0.27%
Lumberton Township	10	0.22%
Pemberton Township	10	0.22%
Shamong Township	9	0.20%
Eastampton Township	7	0.16%
Florence Township	7	0.16%
Tabernacle Township	7	0.16%
Delanco Township	6	0.13%
Hainesport Township	6	0.13%
Southampton Township	6	0.13%
Medford Lakes Borough	5	0.11%
Mount Holly Township	5	0.11%
Riverside Township	5	0.11%
Riverton Borough	4	0.09%
Beverly City	3	0.07%
Bordentown Township	3	0.07%
Burlington City	3	0.07%
Edgewater Park Township	3	0.07%
Mansfield Township	2	0.04%
Atlantic County	**54**	**1.20%**
Hamilton Township	8	0.18%
Hammonton	8	0.18%

Garage Parked Vehicles: Origins by Municipality		
Municipality	**Quantity**	**Percent**
Egg Harbor Township	7	0.16%
Buena Vista Township	5	0.11%
Atlantic City	4	0.09%
Absecon	3	0.07%
Galloway Township	3	0.07%
Linwood	3	0.07%
Northfield	3	0.07%
Brigantine	2	0.04%
Pleasantville	2	0.04%
Somers Point	2	0.04%
Estell Manor	1	0.02%
Margate City	1	0.02%
Mullica Township	1	0.02%
Ventnor City	1	0.02%
Cumberland County	**52**	**1.16%**
Vineland	20	0.44%
Millville	9	0.20%
Maurice River Township	5	0.11%
Hopewell Township	4	0.09%
Upper Deerfield Township	4	0.09%
Fairfield Township	3	0.07%
Downe Township	2	0.04%
Lawrence Township	2	0.04%
Bridgeton	1	0.02%
Commercial Township	1	0.02%
Deerfield Township	1	0.02%
Other NJ County	**331**	**7.36%**
Other State	**1418**	**31.53%**
Total	**4498**	**100%**

Source: DVRPC, 2011

APPENDIX F – SAMPLE ORDINANCE REGULATING WALLSCAPES

091677

06-24-09

ORDINANCE NO. 27587

An ordinance amending Chapter 51A, "Dallas Development Code: Ordinance No. 19455, as amended," of the Dallas City Code by amending Sections 51A-1.105 and 51A-7.930; establishing fee schedules for sign location permits and copy change permits; establishing regulations for central business district wallscape signs, civic center wallscape signs, and promotional wallscape signs; providing a new sunset date for supergraphic signs in the Downtown Special Provision Sign District; providing a penalty not to exceed $2,000; providing a saving clause; providing a severability clause; and providing an effective date.

WHEREAS, the city plan commission and the city council, in accordance with the Charter of the City of Dallas, the state law, and the ordinances of the City of Dallas, have given the required notices and have held the required public hearings regarding this amendment to the Dallas City Code; Now, Therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Subsection (q), "Fee for Sign Review In Special Provision Sign Districts," of Section 51A-1.105, "Fees," of Article I, "General Provisions," of Chapter 51A, "Dallas Development Code: Ordinance No. 19455, as amended," of the Dallas City Code is amended to read as follows:

"(q) Fees for sign review in special provision sign districts.

(1) An application will not be processed until the fee has been paid.

(2) The applicant shall pay the fee to the director. The director shall deposit fees received in the official city depository not later than the next business day following receipt of the fees.

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(3) No refund of a fee may be made.

(4) Fee schedule.

Type of Application	Application Fee
Certificate of appropriateness for a sign in a special provision sign district when review by the city plan commission is required under Section 51A-7.505 [~~of this code~~].	$345
Sign location permit under Section 51A-7.930.	$5,000
Copy change fee under Section 51A-7.930."	10 cents per square foot of effective area

SECTION 2. That Section 51A-7.930, "Supergraphic Signs," of Division 51A-7.900, "Downtown Special Provision Sign District," of Article VII, "Sign Regulations," of Chapter 51A, "Dallas Development Code: Ordinance No. 19455, as amended," of the Dallas City Code is amended to read as follows:

"**SEC. 51A-7.930. SUPERGRAPHIC SIGNS.**

(a) Definitions. In this section:

(1) AFFILIATE means any person who is an owner, shareholder, member, partner, agent, officer, or director of an applicant for a supergraphic sign location permit pursuant to this section or a person who has a contractual relationship with an applicant related to supergraphic signs.

(2) CENTRAL BUSINESS DISTRICT WALLSCAPE SIGN means a supergraphic sign located in the inner loop area that is neither a promotional wallscape nor a civic center wallscape.

(3) CIVIC CENTER WALLSCAPE SIGN means a supergraphic sign located on a city-owned performance venue with a minimum 1,000 person seating capacity, convention center, or library.

(4) INNER LOOP AREA means the Main Street Subdistrict, the Retail Subdistrict, and the General CBD Subdistrict.

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(5) LOCATION PERMIT means a sign permit to erect a supergraphic sign in a specific location.

(6) PROMOTIONAL WALLSCAPE SIGN means a supergraphic sign that identifies or promotes a cultural activity or sporting event that significantly benefits the city.

(7) QUALIFIED APPLICANT means any person who has been qualified by the director to apply for a location permit.

(8[~~2~~]) SUPERGRAPHIC SIGN means a large attached premise or non-premise sign on a mesh[~~-type~~] or fabric surface.

(9) WALL FACE means an uninterrupted blank plane of a wall, from vertical edge to vertical edge, from its highest edge to its lowest edge. Edges can be established by a distinct change in materials or off-set which runs across (transects) the entire wall in a straight line.

(b) Visual display and coverage.

(1) Except as provided in this paragraph, a [~~A~~] supergraphic sign must have one large visual display with a minimum of 80 [~~92~~] percent non-textual graphic content (no more than 20 [~~eight~~] percent text).

(A) Multiple displays giving an appearance of multiple signs are prohibited.

(B) The effective area of text is the sum of the areas within minimum imaginary rectangles of vertical and horizontal lines, each of which fully contains a word.

(C) A promotional wallscape sign may contain 10 percent text or logo related to sponsorship. The remainder of the promotional wallscape sign must promote the special event.

(2) Subject to the maximum effective area in Subsection (c), a central business district wallscape [~~A supergraphic~~] sign must cover at least 60 [~~90~~] percent of the wall face of the building to which it is attached. The lower 10 feet of the wall face may not be covered and is disregarded in calculating the coverage area.

(3) Supergraphic signs are intended to be creative and artful and not strictly a representation of an advertised product. It is the intent of this provision to:

(A) encourage the use of illustrative images or other non-repetitive design elements;

(B) encourage visually interesting, vibrant, and colorful designs;

(C) discourage use of solid colors or repetitive design elements; and

(D) discourage an image of a single product or product logo without other graphic elements.

(4) Supergraphic signs may not be internally illuminated.

(5) No building may have more than two central business district wallscape signs. The two central business district wallscape signs must be oriented a minimum of 90 degrees from each other.

(c) Effective area. [~~Maximum permitted effective area of a supergraphic sign is 20,000 square feet.~~] Minimum permitted effective area of a central business district wallscape sign is 2,500 [~~10,000~~] square feet. This subsection controls over Paragraph (b)(2).

(d) Height. No central business district wallscape sign or civic center wallscape [~~supergraphic~~] sign may exceed 450 [~~150~~] feet in height. There is no maximum height for promotional wallscape signs.

(e) Number of sign[s] locations permitted.

(1) No more than 12 central business district wallscape locations [~~six supergraphic signs~~] are permitted within the inner loop area.

(2) No more than four civic center wallscape locations are permitted within the inner loop area.

(3) No supergraphic signs are permitted outside of the inner loop area.

(f) Extensions prohibited. A supergraphic sign may not extend beyond the edge of the face of the building to which it is attached.

(g) Location.

(1) A central business district wallscape [~~supergraphic~~] sign may only be located on a blank wall face [~~of a building~~].

(2) No supergraphic sign may:

(A) cover any window or architectural or design feature of the building to which it is attached;

(B) be attached to an historic or landmark structure; or

(C) be attached to a facade erected or altered after June 1, 2005.

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(3) Central business district wallscape signs are only permitted on parking structures or buildings with lodging, residential, retail and personal service, or office uses occupying at least 75 percent of the leasable ground floor area and an overall building occupancy of at least 50 percent of the floor area.

(h) Message duration. A supergraphic sign location may not display the same message for more than four consecutive months in any 12-month period.

(i) Hardware fasteners. All hardware fasteners for a supergraphic sign must comply with the Dallas Building Code and all other ordinances, rules, and regulations of the City of Dallas.

(j) HBA signs prohibited. No supergraphic sign may be a Highway Beautification Act (HBA) sign as defined in Section 51A-7.102.

(k) Permits [~~Sign permit application review~~].

(1) Application to be a qualified applicant.

(A) An applicant shall submit an application to the director for the purpose of qualifying as an applicant. The application must include:

(i) the name, address, phone number, and other pertinent information of the applicant, and if the applicant is a business entity, the names and business addresses of the principal officers, managers, and other persons who own more than five percent of the entity; and

(ii) an affidavit stating that the applicant is in good standing with the city on all code enforcement matters related to supergraphic signs.

(B) A person may not qualify as an applicant if that person:

(i) has any outstanding code violations related to supergraphic signs;

(ii) has previously displayed a non-permitted supergraphic sign within the previous 12 month period; or

(iii) is an affiliate of another qualified applicant.

(2) Location permit.

(A) Qualified applicants must submit a separate location permit application for each location. The director shall time stamp all applications upon receipt.

(B) The director shall review location permit applications in order of submittal. If the director determines that a location permit application is incomplete or does not meet the guidelines, the director shall reject the application and then review the next location permit application. If the initial number of location permit applications exceeds the number of location permits available, the director shall provide for a lottery to distribute the location permits.

(C) An application for a supergraphic sign location permit must contain:

(i) a memorandum of lease, sworn to by affidavit, that shows that the qualified applicant has an enforceable lease for a supergraphic location;

(ii) an affidavit stating that the property where the supergraphic sign will be located has no outstanding code enforcement matters;

(iii) a current tax certificate and affidavit stating that there are no unpaid governmental liens for the supergraphic sign location; and

(iv) an affidavit stating that the building meets the occupancy requirements in Paragraph (g)(3).

(D) Location permit holders may not be an affiliate of any other location permit holder.

(E) A person may not have more than five pending or active location permits combined at any one time.

(F) A person shall not obtain a location permit for use by another person.

(G) A location permit expires two years after the date of issuance.

(H) The director shall revoke a location permit if the location has displayed obsolete supergraphic advertising or has been without supergraphic advertising matter for six months or more.

(3) Promotional wallscape signs. An application for a promotional wallscape must be supported by a resolution of the city council that recognizes the activity or event as significantly benefiting the city. A promotional wallscape may not be erected more than 60 days before the beginning of the activity or event and most be removed not later than 30 days after the activity or event has ended.

(4) Review procedure. The director shall review a[~~A~~]ll applications for location permits and copy change permits [~~sign permits for supergraphics signs shall be reviewed~~] using the director procedure in Section 51A-7.505.

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(l) Mandatory removal in 2014 [~~2009~~]. All supergraphic signs must be removed on or before, July 31, 2014 [~~February 27, 2009~~]. This section does not confer a nonconforming or vested right to maintain a supergraphic sign after July 31, 2014 [~~February 27, 2009~~], and all permits authorizing supergraphic signs shall automatically expire on that date.

(m) Sunset. This section expires on July 31, 2014 [~~February 27, 2009~~], unless re-enacted with amendment before [~~prior to~~] that date. The city plan commission and city council shall review this section before [~~prior to~~] its expiration date."

SECTION 3. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed $2,000.

SECTION 4. That Chapter 51A of the Dallas City Code shall remain in full force and effect, save and except as amended by this ordinance.

SECTION 5. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 6. That this ordinance will take effect on July 31, 2009, and it is accordingly so ordained.

APPROVED AS TO FORM:

THOMAS P. PERKINS, JR., City Attorney

By_____
Assistant City Attorney

Passed JUN 24 2009

APPENDIX G – SAMPLE MOBILE FOOD VENDING UNIT PLAN SUBMISSION GUIDE

Office of Food Protection
321 University Avenue, 2nd Floor
Philadelphia, PA 19104
http://www.phila.gov/health/Environment/FoodProtection.html

Mobile Food Vending Unit-Plan Submission Guide

New or modified, units not previously licensed are required to have properly prepared plans submitted and approved prior to construction, fabrication or change of ownership. Mobile Food vending units include trucks, trailer hitch units, pushcarts, stands and foot peddlers.

Enclosed are forms and information sheets needed to obtain approval for a mobile food vending unit: **Food Vending Unit Design Requirements; Food Establishment Plan Review Application; Mobile Food Vending Unit Fact Sheet; Equipment List; Menu Description and Preparation worksheets; Mobile Food Unit Commissary Verification Form and information about the Food Safety Certification Requirement.**

FEES REQUIRED: **$340.00** FOR NEW UNITS ($150.00 FOR PLAN REVIEW AND $190 FOR INSPECTION). **THIS FEE IS APPLICABLE IF VENDOR ID# IS NOT PROVIDED**.

-OR-

$255.00 FOR OWNERSHIP CHANGE **-MUST HAVE HEALTH DEPT. VENDOR ID#-** ($65.00 FOR FILING AND $190.00 INSPECTION)

The fees must be paid by cashier's check or money order made out to **"Philadelphia Health Dept. - E.H.S." Business checks, personal checks, or cash are NOT accepted**. License approval will follow upon inspection of the finished unit.

Commissary/Support Facility

All vending operations must have approved servicing areas to support the operations of the vending unit and report at least daily to such a location for all food and cleaning supplies and service of operations for the unit. The Mobile Food Unit/Cart-Commissary verification form must be completed and submitted with copy of the appropriate City of Philadelphia food license or an equivalent permit if from another jurisdiction. The commissary or other fixed establishment used as a base of operation must be constructed and operated in compliance with the "Regulations Governing Food Establishments". Foods, beverages, and ingredients from commissaries located outside of the limits of the City of Philadelphia may be sold in Philadelphia if such commissaries conform to the "Regulations Governing Food Establishments" or their equivalent code as approved by the Office of Food Protection (OFP). The OFP will verify that the designated support facility is approved.

Food Safety Certification

All food handling requires that an individual with a valid City of Philadelphia Food Establishment Personnel Food Safety Certificate be present during vending unit operation. Provide copy of City Issued Food Establishment Personnel Food Safety Certificate.

The following is a checklist of forms and items that must be included with your application submission:

___PLAN DRAWN TO SCALE SHOWING ALL FOOD EQUIPMENT
___FOOD ESTABLISHMENT PLAN REVIEW APPLICATION
___MOBILE VENDING UNIT FACT SHEET
___EQUIPMENT LIST
___MENU DESCRIPTION AND PREPARATION—ON SITE FOOD PREPARATION
___MENU DESCRIPTION AND PREPARATION—PRE-APPROVED LICENSED FACILITY
___MOBILE FOOD UNIT COMMISSARY VERIFICATION
___A COPY OF THE CITY OF PHILADELPHIA FOOD ESTABLISHMENT PERSONNEL FOOD SAFETY CERTIFICATE
___PROCESSING FEE

Incomplete submissions may result in delays in processing or disapproval of your application.
If you need additional information or assistance, please contact:

The Office of Food Protection, 321 University Avenue, Philadelphia, PA 19104, (215) 685-7405

Mobile Food Vendor Inspection Guide License Approval/Renewal

All mobile food unit licenses, "Retail Food, Non-permanent Location licenses," expire on April 30th. License renewal applications are mailed by the Department of Licenses and Inspections. To receive approval to obtain an original license or renew an existing license the vending unit and its operation must be evaluated and approved by the Department of Public Health Department. When a vending unit is approved for operation a "license eligibility report," and a "Mobile Food Vendor Certificate of Eligibility" will be issued by a Department representative. The license eligibility report is submitted to the Department of Licenses and Inspections to pay for and obtain your license. The Certificate of Eligibility identifies what type of food items are approved to be provided by this vending unit and is required to be posted on the vending unit.

All new mobile food vending units are required to have properly prepared plans drawn to scale submitted and approved prior to construction and fabrication. See the Plan Review section for additional information.

Mobile Food Unit inspection procedures for license approval/renewal are outlined below:

- Mobile food units will be inspected for compliance with required structural and design features (Mobile Food Vending Unit Design Requirements) at District Health Center locations listed below:

Health District #1,2	500 S. Broad St.	(215) 685-6574
Health District #3,4	43rd and Chester Ave.	(215) 685-7537
Health District #5,6	1920 N. 20th St.	(215) 685-2356
Health District #8,9	111-131 W. Hunting Park Ave.	(215) 685-9017
Health Center #7,10	111-131 W. Hunting Park Ave.	(215) 685-9013

District Offices can provide inspections only in the morning. Please contact the district office prior to arriving for inspection to ensure that inspection service is available that day.

- Bring vending unit proof of ownership and proper identification for obtaining the license.
- Bring City issued Food Establishment Personnel Food Safety Certificate.
- Bring food purchase records for the most recent 30 days prior to inspection for review.
- An approved commissary or service support facility is required to serve your operational needs. A copy of license for the commissary or a recent inspection report is required to be presented. If the proposed facility does not have prior approval or is new than plan submission requirements must be fulfilled. If the commissary is outside the city information must be provided to the Office of Food Protection.
- When the above requirements are met; your vending unit will be inspected during operation to determine compliance with operational requirements for license approval.

REQUIREMENTS FOR MOBILE VENDING UNIT FOODSERVICE OPERATIONS

General:

1. All food must be clean, wholesome, free from spoilage, adulteration, and safe for human consumption.
2. All food shall be from approved licensed facilities or be prepared on unit, subject to Health Department approval.
3. A person-in-charge must be present at the site at all times.
4. Personnel must wear clean outer garments and must keep their hands clean at all times while engaged in food handling operations.
5. All individuals involved in food handling activities must wear a suitable head covering or hair restraint to protect the food from contamination.
6. All persons with signs, symptom or diagnosis with any foodborne illness must report it to the person-in-charge.
7. Restrooms must be readily available for employee use.
8. Mobile food units must be constructed so as to be easily movable by one person when fully operational and in compliance with all other provisions of the Philadelphia Vendor Code.

Physical Facilities:

A. Floors, Walls and Ceilings:

1. Floors, walls and ceilings must be smooth and easily cleanable.
2. Outer openings of a food facility shall be protected against entry of insects and rodents by use of tight-fitting doors and windows. If windows or doors need to be opened for ventilation or other reasons, such as service to the customer, then screens, air curtains or other effective means must be present to protect the interior of the unit.
3. Outer openings shall be no larger than necessary to carry out the food operation.
4. When the mobile unit is in motion, openings must be covered with solid materials, such as doors, plastic, etc, to protect the unit from windblown dust and debris during travel. The drivers' compartment and food preparation area must be protected against airborne contaminants and vermin, if not separated from the food facility portion of the unit.

B. Hand washing Facilities:

1. Each mobile vending unit must have a handwash sink with hot and cold running water under pressure.
2. The water system must be a closed system from filling outlet to discharge outlet.
3. Each sink must have a sign indicating, "Employees must wash hands".
4. Each sink must be supplied with clean, potable, warm (100ºF) water for employee handwashing.
5. Each hand washing sink must include: soap, single use paper towels, and a waste receptacle.
6. Each hand washing station must have an acceptable water supply and waste water collection container.

C. Water Supply:

1. The water supply shall be of a safe, sanitary quality. Water supplied at the unit must conform to all applicable regulations of the Department of Public Health and the Water Department.
2. The mobile vending unit must provide hot (110ºF) and cold running water under pressure with the unit. The hot water facilities shall be functional when the vehicle is mobile or stationary.
3. The water system must be closed from filling outlet to discharge outlet.
4. Separate hoses must exist for filling the water tank and flushing the waste storage tank.
5. The water-filling inlet must be designed to protect from contamination, and provided with a hose connection of different size and type from the waste retention tank flushing connection.
6. The water storage tank shall have a minimum capacity for one day's use and capacity shall be indicated on the tank or the data plate.
8. Backflow/backsiphonage must be installed as required to protect the water supply.

D. Waste Water:

1. Each mobile unit must provide for the collection of all wastewater from hand washing, utensil cleaning and food refrigeration units using ice as a refrigerant. Waste collection systems must provide a minimum of 15% or greater capacity then the fresh water supply and ice quantity needed for one full day of operation. The data plate for the mobile food unit must indicate the waste tank storage capacity.
2. The waste collection tank (plastic, galvanized, etc.) shall be constructed so that its contents can be emptied and drained into a municipal sanitary sewer (not on the ground or into a storm drain) and must be designed with a valve to hold and release the liquid waste from the tank and be located to permit complete drainage of the entire tank. The storage tank shall be flushed and cleaned each time after emptying.

E. Refuse:

1. All mobile vending units must be supplied with an easily cleanable and leak-proof waste and refuse container with a tight fitting lid. The lid must be in place when not in use.
2. A separate refuse receptacle shall be provided for public use. The refuse receptacle shall be affixed to the vending unit and be of sufficient size not less than 20 gallons or as needed, in accordance with Philadelphia Vendor Code.
3. Handling details about used cooking oil and charcoal residue must be provided. Submit information regarding cooking oil recycling. Refer to the "Philadelphia Water Department Guide"

F. Dishwashing Facilities:

1. Single service articles or extra food handling utensils must be available to be used unless adequate dishwashing facilities are available and used.
2. Adequate facilities include a three-compartment sink (separate from the handwashing sinks) set up for accomplishing a three-step method of cleaning and sanitizing of utensils. Where only spatulas, tongs and similar devices are washed and sanitized, and only stationary equipment must be cleaned, a two-compartment sink may be approved. Utensil washing sink shall be sufficient in size to immerse the largest utensil to require cleaning during the mobile food unit operation.
3. Complete utensil cleaning operations are expected to be completed at the commissary or approved base of operation.
4. Sanitizers (Quaternary Ammonia, Chlorine) used in the 3 step cleaning method or for any food contact surface cleaning must be available at all items, approved and used appropriately.
5. Appropriate sanitizer testing devices (strips, titration kits) must be available in the facility at all times.

G. Equipment:

1. All equipment must be easily cleanable, durable, free from breaks, cracks & crevices, made of appropriate materials that are non-toxic and corrosion resistant, well constructed, and adequate for the intended use.
2. All equipment must be appropriately maintained.
3. All equipment shall be installed according to all appropriate federal, state or City code requirements for construction and fire safety. The owner/licensee is responsible for ensuring that these requirements are met.
4. All components of the mobile food unit must be permanent or semi-permanent to provide for an integral vending unit. The use of unapproved auxiliary equipment at the exterior of the vending unit, such as coolers used for refrigeration, is not approved. Refrigeration units must be part of the integral design of the vending unit.
5. Refrigeration and cold holding units must be capable of reaching and maintaining 41ºF or below when in use and must be supplied with an accurate thermometer.
6. All cooking units shall be capable of cooking foods to their appropriate temperature and hot holding units must be capable of holding foods at 135ºF or above.
7. A metal stem-type numerically scaled, or other approved thermometer must be provided and used to monitor proper cooking temperatures.
8. Wood, other than approved cutting boards, shall not be used in a food zone. No exposed wood shall be permitted; wood used for structural purposes must be finished with approved materials. Painted wood is not approved for food contact or splash zone areas.
9. Ice & Ice Storage Units
    a. All ice must come from approved sources. All ice used in drinks or for consumption shall be received packaged with proper identification of the ice manufacturer on the packaging.
    b. Ice used in the preparation of beverages or for other purposes where ice will be consumed must be stored in a clean, easily cleanable, nonporous, closed container made of approved materials. Galvanized metal coolers may not be used to store potable ice.
    c. All ice must be dispensed with an ice scoop having an appropriate handle. Scoops may be stored in the ice with the handle up out of the ice or outside the ice on a clean surface protected from contaminants.
    d. Ice used as a coolant may not be used in drinks or as ingredients in food. Ice as a coolant is considered non-potable.
    e. Personal drinks may not be stored in potable ice chests.
    f. Packaged foods, including drinks, whose packaging is not subject to the entry of water because of the nature of the container or packaging, (ex: hermetically sealed cans or bottles) may be stored in ice. Continuous effective draining of melting ice is required to reduce the potential for contamination when such products are stored in this manner.
    g. Ice used in the preparation of drink beverages or for other purposes where ice will be consumed must be stored in a clean, easily cleanable, non-porous, closed container made of approved materials.

H. Food Safety and Handling:

1. All foods requiring temperature control for safety shall be kept out of the temperature danger zone (41º F to 135º F) at all times.
2. All food shall be protected at all times from environmental and other sources of contamination during storage, preparation, cooking and service.
3. Unwrapped displayed food requires approved covers, food shields, or sneeze guards, to minimize contamination by customers. Shields and guard must be designed to intercept a direct line between the customer's mouth and the food on display. Additional design detail information is available in the "Food Establishment Plan Review Guide".
4. No bare hand contact is allowed on any ready to eat foods. Gloves or utensils must be used.
5. Stockpiling of hot foods such as hot dogs, sausages etc. for stock or display is prohibited, unless all areas of the food (surface and interior) are above 140º F or below 41º F.
6. All frozen foods shall be thawed using proper procedures and all hot foods to be cooled shall be cooled rapidly using proper procedures.
7. All foods must be covered when not in use, or not in the "cooling" process.
8. Condiments for patron self-service must be dispensed from an approved dispensing unit, or be prepackaged single serve portions.
9. The reuse of original food containers for food storage, such as cans, boxes and bags, is not permitted.

Office of Food Protection
321 University Avenue, 2nd Floor
Philadelphia, PA 19104
http://www.phila.gov/health/Environment/FoodProtection.html

MOBILE FOOD VENDING UNIT PLAN REVIEW/CHANGE OF OWNERSHIP APPLICATION

1) Mobile Vending Unit's Trade Name: _____

2) Licensee Name (owner, partnership, or corporation): _____

3) Mailing Address, City, State, Zip: _____

4) Food Vending Location(s)/Area(s): _____

5) Home Phone: _____ Cell Phone:_____

Fax: _____ Email: _____

6) Primary Language Spoken _____

Establishment Emergency Contact Name: _____

Establishment Emergency Contact phone #: _____

CHOOSE ONE OF THE FOLLOWING:

____ **Change of Ownership Only /** Ownership Change Date: _____

Mobile Food Unit Philadelphia Health Dept. ID# (**THIS IS REQUIRED**.)_____

Previous Establishment's Name:_____

(New ownership of an existing ongoing food establishment operation without modification to the food equipment and/or food handling activities. Establishment floor plans & equipment details are not required. **Required Fees: $255 IN MONEY ORDER OR CASHIER'S CHECK only payable to Philadelphia Department of Health- EHS".)**

_____ **Modification** Work Start Date:_____ Work Completion Date:_____

Modification includes the remodeling or alteration of an existing mobile food vending unit or change that affects the way the establishment operates, which may or may not include installation of equipment, replacement or relocation of permanently installed equipment, change in menu or operational procedure.

Provide a description of what has been modified._____

_____

_____ **New Unit (Includes units not previously approved by the Philadelphia Health Dept.)**

I certify that the information provided on this application is correct to the best of my knowledge. I understand that incomplete or illegible application will be returned unprocessed.

Applicant Name (Print)_____ Title:_____

Applicant Signature: _____ Date: _____

MOBILE FOOD VENDING UNIT FACT SHEET

1. General Mobile Vending Unit Plan
   Submit an accurately scaled plan of the vending unit showing placement of all food equipment from Equipment List to be used in the operation of mobile unit. The plans must be clear, concise, legible, to scale, and be of such size as to enable all information to be clearly shown. The over all interior dimensions must be shown. No free hand drawing will be accepted. All information is to be submitted in duplicate.

2. Please provide description and details for each of the items below. Refer to the Requirements included in this packet for guidance. You may use additional paper if needed.

ITEM	DESCRIPTION/DETAILS
PHYSICAL FACILITIES:	
Overhead Enclosure	
Type of Materials for Overhead Enclosure	
Support Structure	
Side Enclosure	
Type of Materials for Side Enclosure	
Floor Materials Service Opening/window Type of Materials for Service Area	
HAND WASHING FACILITY:	
Handwashing Sink	
WATER SUPPLY & WASTE WATER DISPOSAL:	
Potable Water Source Water Storage Tank; Materials and Construction Detail	
Capacity of Water Storage Tank Backflow Prevention Device	
Method of Generating Hot Water; Materials and Construction Detail	
Hot Water Storage Tank; Materials and Construction Detail	
Waste Water Storage Tank; Materials and Construction Detail Capacity of Waste Water Storage Tank	
Disposal Method for Waste Water	
REFUSE:	
Type of Waste Containers	
Number of Waste Containers	
Will cooking grease waste be generated?	
Cooking grease recycling information	
Name of recycler	
UTENSIL/EQUIPMENT WASHING FACILITIES:	
On-Unit utensil washing & sanitation	
Type & number of compartments for utensil cleaning; Materials and Construction Detail	
Type of Sanitizer	
Thermometer:	
Indicate types that will be used	
Provide details about the power source for ovens, fryers, refrigerators, etc.	
Generator	
Propane fuel:	
Other(Describe):	
Light Fixtures and Protections:	
Indicate the type and placement of all light fixtures and means of protection in mobile vending unit.	

EQUIPMENT LIST

3. List the type, make and model number for all food service equipment and submit with manufacturer's cutsheet and specification. **All equipment must be designed and constructed in accordance with the sanitation criteria set forth by the American National Standard Institute (ANSI).**

ITEM NUMBER	EQUIPMENT DESCRIPTION **(Include manufacturer name and model number)**	**METHOD OF INSTALLATION**

FOOD SAFETY AND HANDLING

Provide a copy of the proposed menu.

Indicate if raw or undercooked animal food items are being served: Yes _____ No _____

If yes, ensure that menu includes a Consumer Advisory information for this product

MENU:
All food, beverages, condiments, ice or any other items that will be consumed must be listed on the MENU DESCRIPTION AND PREPARATION worksheets. Use the following samples as a guide to filling out the worksheets. Continue on a separate piece of paper if necessary. Bring all food receipts to the special event.

SAMPLE MENU DESCRIPTION FOR FOOD PREPARED ON SITE

Food Item	Ingredients	Serving Size	Total Servings	Preparation Description
Fish Sandwich	Whiting Filet Breadcrumbs Roll Lettuce Tartar Sauce (prepackaged)	6 oz filet ½ oz 1 roll 1-2 leaves 1 oz	200 200 200 200 200	Fish is stored in cooler in wet drained ice at 41° F until prepared. Fish is tossed in breadcrumbs in stainless steel bowl on prep table. Fish is cooked to order. Fish is deep-fried for 5 minutes, until internal temperature is 160° F. Cooked fish is placed on roll with lettuce and tartar sauce. Lettuce is commercially prewashed, prepackaged, ready to eat product. Sandwich is wrapped in foil and served.

SAMPLE MENU DESCRIPTION FOR FOOD PREPARED AT PRE-APPROVED LICENSED FACILITIES

Food Item	Serving Size	Total Servings	Transportation Description	Preparation description at the site	Facility Name, Address, Phone #, Food License #
jambalaya	8 oz	150	Transported to the site at 40^0 F in 2 inch deep pans in a cooler using ice packs.	Rapidly reheated to internal temperature of 165^0 F and stored in chafing dish for serving.	ABC Restaurant, 123 Restaurant St. Philadelphia, Pa 19100 (215) 555-5555 Philadelphia Food License # 1234567

The preparation description portion of the worksheet must include:

Storage of foods	Cooking time of foods	Menu item assembly
Preparation of foods	Cooking temperature of foods	How menu item will be served

MENU DESCRIPTION AND PREPARATION

ON MOBILE UNIT FOOD PREPARATION

Food Item	Ingredients	Serving Size	Total Servings	Preparation Description

MENU DESCRIPTION AND PREPARATION

PRE-APPROVED LICENSED FACILITY AND COMMERCIALLY PACKAGED FOOD / BEVERAGE

Food Item	Serving Size	Total Servings	Transportation Description	Preparation description at the Mobile Unit	Facility Name, Address, Phone #, Food License #

PHILA. DEPT. OF PUBLIC HEALTH MOBILE FOOD UNIT COMMISSARY INFO. FORM

Trade name of Mobile Food Unit/Cart:_____

Name of Owner or Corporation:_____

Owner's Mailing Address, City, Zip:_____

Home Phone#:_____ Cell Phone#:_____

- List address of food vending location(s): _____
- Days / Hrs. of Operation_____ Number of Employees per shift _____
- City of Phila. Food Safety Certified Person(s) _____ Cert#: A_____
- Primary Language Spoken_____
- Do you operate from a commissary on a daily basis? ☐YES ☐NO
  If No, explain: _____
- Do you report back to the commissary at the end of the day for all cleaning, servicing operations and waste disposal? ☐YES ☐NO
  If No, Explain: _____
- What hours do you report to the commissary? Morning:_____ Evening:_____
- Is this commissary inspected by the Philadelphia Health Department? ☐YES ☐ NO
  If No, provide a copy of a recent inspection report for the commissary.
- Name of regulatory agency that inspects the commissary:_____
- Indicate location of toilet facilities used during operation: _____
- Date: _____ Vendor Signature:_____

Type of Unit/Cart: Tag# _____State_____

☐Step van ☐Truck ☐Tow Unit
☐Table ☐Stand ☐Push Cart
☐Propane Fuel ☐Electrical Generator

Menu/Types of Foods Sold
☐Prepackaged only ☐Pretzels ☐Water Ice
☐Produce ☐Ice Cream ☐ Whole Fish ☐Hot foods
☐Processed Seafood ☐Cold foods ☐Meat products
☐Other _____

FOOD SUPPLY INFORMATION: Provide food supplier information for Prepared Food not prepared on the mobile food unit and information for each food item if more than one food establishment provides prepared food, use the back of this paper if needed.

Business Name of the Prepared Food Supplier: _____

St. Address, City, State, Zip: _____ Phone:_____

Address where purchase receipts are kept available for inspection at all times:

Contact Name: _____ Phone: _____

St. Address, City, State, Zip:_____

Commissary / Servicing Area Business Commissary Owner's Name:_____

Address, City, State, Zip: _____

Phone:_____

The above Commissary is used for the following:
☐ Food ☐ Water ☐ Supplies ☐ Cleaning of equipment/utensils ☐ Storage of vendor unit
☐ Waste disposal ☐ Repairs of vendor unit

Date: _____ Signature of Commissary Owner/Operator: _____

NOTICE: COPY OF COMMISSARY AND/OR INSPECTION REPORTS MUST BE AVAILABLE FOR HEALTH DEPARTMENT REVIEW

Publication Title: Finding Space: Balancing Parking Needs and Urban Vitality in the City of Camden

Publication Number: 11030

Date Published: August 2011

Geographic Area Covered: City of Camden, NJ

Key Words: Parking, on-street, off-street, structured, garages, surface lots, angle parking, reverse angle parking, pedestrians, cyclists, public realm, management, operations, smart growth, zoning, shared parking, crashes, vehicular volume, TransitChek, walking school bus, parking benefit districts, enforcement, revenue, sustainable design, performance-based pricing, valet parking, stormwater

Abstract: This study was prepared for selected areas of the City of Camden, NJ to accommodate the city's parking needs as it moves forward with new development. Following an analysis of existing parking facilities, traffic circulation patterns and crashes, future development plans, zoning and policy requirements, and interviews with key stakeholders, recommendations were generated. The recommended actions, if implemented, will increase and upgrade the parking supply to meet demand sustainably, increase parking revenue and compliance with parking regulations, increase pedestrian and cyclist safety and reduce crashes, and encourage the development of parking policy that supports smart growth.

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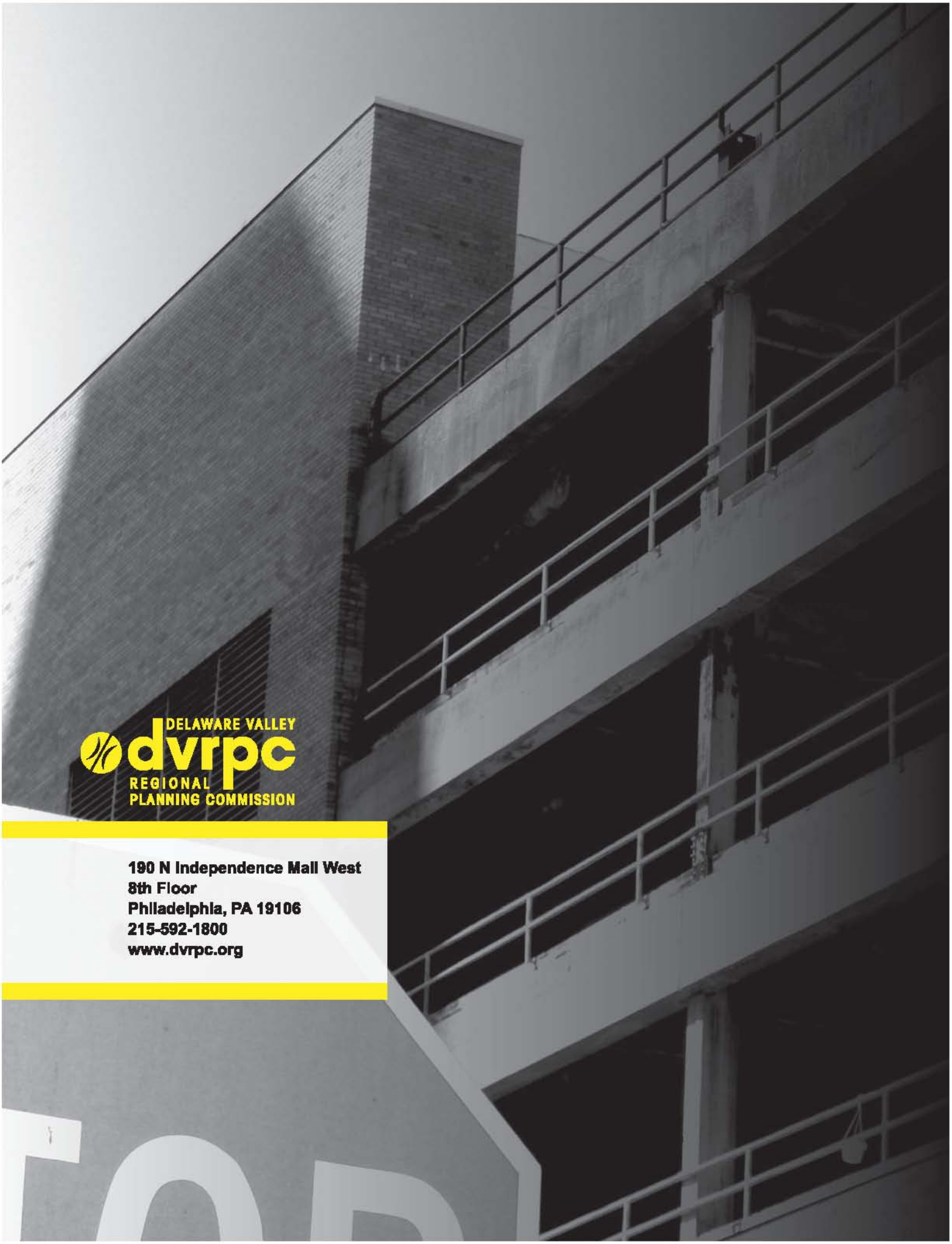

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