

District of Columbia
Motorcoach Action Plan
Final Report

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Executive Summary

Introduction

Motorcoach operators provide an important service both for tourists and visitors that travel to Washington, DC, and for the region's workforce who commute into the city's employment centers. The high volume of motorcoaches that travel into the District on a daily basis creates several challenges to the effective management of this activity in the city. Main challenges include providing adequate and appropriate motorcoach parking, identifying appropriate motorcoach routes in the city, identifying appropriate curbside stop locations, and managing the implementation of regulations across the many enforcement agencies in the District.

Purpose

The purpose of the DDOT Motorcoach Action Plan is to effectively manage the various types of motorcoach services in the District by addressing the challenges created by this activity including traffic congestion, vehicle and pedestrian safety issues, curbside use conflicts, infrastructure impacts, and air quality concerns. To achieve this, the Plan will cover the following areas of motorcoach activity: parking, routing, regulations, enforcement, air pollution and communication. DDOT recognizes that the primary challenge to the management of motorcoach operations in the city is the lack of available motorcoach parking; the recommendations section of the Plan will outline strategic steps for meeting this demand.

Literature Review

To provide a strong basis for the recommendations included in this report, a comprehensive review was conducted of the existing literature on motorcoach operations in the District including: the 2003 Tour Bus Management Initiative, the Destination DC Domestic Motorcoach Travel Assessment, and the National Mall and Memorial Parks 2008 Visitors Study. In addition, the motorcoach management programs of several jurisdictions were reviewed for promising strategies that could be considered for implementation in the District. Jurisdictions reviewed include Atlantic City, Philadelphia and Alexandria, VA.

Motorcoach Service Overview

There are five distinct types of motorcoach service provided in the District on a regular basis: tour bus, Intercity, Commuter, Sightseeing, and Shuttle services. Tour buses, chartered to bring tour groups into the District either on day trips or as part of a multi-day itinerary, have been estimated to serve as many as one-third of the visitors to Washington's historical and cultural attractions. Intercity bus operators provide a low cost regional transportation alternative for

residents in the Washington metropolitan area, with point to point service between key destinations – primarily Washington to New York City. Commuter buses have been providing an important service to Metropolitan Washington area residents for over three decades. Annual ridership has risen from an estimated 1.9 million riders in 1999 to an estimated 6.6 million in 2009 and more than 300 commuter buses operate in the District on weekdays. Sightseeing operators provide scheduled hop-on/hop-off service between the District’s key attractions. Finally, shuttle services in the District primarily refer to vehicles used to transport employees between an organization’s multiple office sites or students between campuses.

Existing Motorcoach Management Activities

Motorcoach management activities primarily focus on parking, routing and the enforcement of laws governing motorcoach operations in the District. Providing adequate parking is the key challenge to managing motorcoach activity. There are currently 30 curbside motorcoach parking spaces, 611 off-street parking lot spaces at Union Station and RFK Stadium, and 199 motorcoach parking spaces for visitors to specific attractions such as the Washington Cathedral and the Zoo. In addition, there are 110 curbside drop-off and pick-up locations citywide, the majority of which are located on the National Mall. With an estimated 2,000 commercial motorcoaches entering the city during peak season, the existing parking inventory does not meet demand. As a result, motorcoach drivers park illegally or “cruise” which increases the likelihood of traffic accidents, adds to congestion and harms the city’s air quality through increased diesel emissions. Addressing the motorcoach parking deficit in the city is therefore the central focus of this plan.

Parking

The first step to providing additional parking capacity for motorcoaches in the city is to estimate the demand for curbside capacity in proximity to major attractions. The lack of data on motorcoach volume in the District is a key challenge to establishing the demand for parking. Much of the existing information regarding motorcoach activity is anecdotal; however, DDOT has drawn on all available resources to create a robust estimate for motorcoach parking demand. Where possible, concrete data have been utilized including visitor statistics, operator schedules, and DMV permits. Field observations have been conducted to supplement the existing data, and a survey was conducted with District attractions, restaurants and hotels to determine existing capacity for curbside motorcoach loading and unloading and gauge additional need. Finally, DDOT has worked closely with a number of industry stakeholders to review data and provide input.

DDOT has established a methodology for determining demand for curbside capacity in proximity to major attractions using visitor volume data, estimated motorcoach volume and peak months of tourist visitation. This methodology entailed creating 1,000 foot zones around major attractions – deemed to be a reasonable walking distance from motorcoach to attraction – and

determining if sufficient curbside space dedicated to motorcoach activity was available within this zone based on estimated motorcoach volume. The results of this analysis concluded that an additional 39 curbside spaces are required for motorcoach activity in proximity to major attractions.

Routing

Routing of motorcoaches in high density areas is challenging because of the infrastructure impacts that heavy vehicles have on roads that are frequently not designed for a high volume of commercial vehicle traffic. DDOT has developed a truck and bus route system which provides suggested routing in the District and is available to motorcoach operators on the goDCgo website. Plans for streamlining motorcoach routing in the District are discussed in the recommendations section of the report.

Regulations

DDOT has worked closely with industry representatives over the past year to make adjustments to the regulations governing motorcoach operations in the District. Under recently adopted regulations, intercity bus service providers will be required to apply for a permit to operate at curbside locations. The permit application will include a review process to address traffic, safety and neighborhood concerns. Adjustments are also pending for sightseeing and commuter bus regulations.

Enforcement

Coordinating the comprehensive enforcement of regulations governing motorcoach activity is challenging because of the number of agencies with jurisdiction in the city. This is compounded by the lack of staff dedicated to commercial vehicle enforcement. DDOT recently established a pilot program with two dedicated commercial vehicle enforcement personnel to address this issue. Plans for enhancing coordination between the agencies responsible for commercial vehicle enforcement are included in the recommendations section of the plan.

Recommendations

DDOT's approach to managing motorcoach activity in the District focuses on providing a centralized facility to accommodate motorcoach parking needs. It is anticipated that this will reduce the traffic, safety and environmental impacts of motorcoach "cruising" which currently results from a lack of available parking. The recommendations included in the report are separated into immediate term, mid-term and long-term actions.

Immediate Term

- Proposed curbside locations to meet the demand for an additional 39 spaces for motorcoach activity in proximity to major attractions; and
- An outline of the commuter bus management plan and proposed curbside locations to accommodate commuter bus staging.

Mid-Term

- Sourcing of an off-street parking facility to provide long-term and overnight motorcoach parking;
- Developing a robust and streamlined motorcoach routing system; and
- Enhancing coordination between the agencies with jurisdiction over motorcoach operations in the District.

Long-Term

- Developing a centralized intermodal bus facility that encompasses all tour bus, commuter and future intercity bus operations.

It is anticipated that the recommendations set forth in this plan will substantially improve the management of motorcoach activity in the District by creating improvements in the areas of traffic flow, pedestrian and road user safety, management of curbside public space, appropriate routing of motorcoach activity and diesel idle reduction efforts.

Introduction

The District Department of Transportation's (DDOT) mission is to ensure efficient and safe mobility of motorcoaches traveling in the District of Columbia while mitigating community impacts and preserving transportation infrastructure. Motorcoach operators provide an important service both for tourists and visitors that travel to Washington, DC, and for the region's workforce who commute into the city's employment centers. The high volume of motorcoaches that travel into the District on a daily basis creates several challenges to the effective management of this activity in the city. Main challenges include providing adequate and appropriate motorcoach parking, identifying appropriate motorcoach routes in the city, identifying appropriate curbside stop locations, and managing the implementation of regulations across the many enforcement agencies in the District. This document identifies existing challenges posed by the different types of motorcoach activity in the District, and outlines DDOT's plans for addressing each of these.

Purpose

Motorcoach activity in the District creates several challenges including traffic congestion, vehicle and pedestrian safety issues, curbside use conflicts, infrastructure impacts, and air quality concerns. The purpose of the DDOT Motorcoach Action Plan is to effectively manage the various types of motorcoach activity in the District to address these challenges. To achieve this, the Plan will cover the following areas of motorcoach activity: parking, routing, regulations, enforcement, air pollution and communication. DDOT recognizes that the primary challenge to the management of motorcoach operations in the city is the lack of parking and the recommendations section of the Plan will outline strategic steps for meeting this demand. Short-term recommendations focus on providing adequate curbside capacity for motorcoaches in proximity to major attractions. Mid-term recommendations focus on sourcing an off-street parking facility to provide adequate long-term daytime and overnight parking for the diverse types of motorcoach activity in the city. Long-term recommendations focus on the construction/implementation of an off-street parking facility, and the development of a strategic plan for the ongoing management of motorcoach activity including supporting regulations and programmatic capacity.

The steps outlined in this Plan will significantly increase the amount of motorcoach parking available in the city therefore addressing the key challenge to managing motorcoach activity in the District. Moreover, the recommendations will create improvements in the following areas: traffic flow, pedestrian and road user safety, management of curbside public space, appropriate routing of motorcoach activity and diesel idle reduction efforts. It is anticipated that the

implementation of the recommendations put forth in this Plan will significantly improve the management of motorcoach operations in the District.

Literature Review

Due to the important economic contribution that motorcoach activity makes to the District, several studies have been undertaken to identify ways in which the management of this activity can be improved. The following section offers an overview of the existing literature on motorcoach operations in the District, and highlights the key findings of each study as they relate to the development of a Motorcoach Action Plan for the city. Although the literature reviewed provides important insights, analysis and recommendations regarding motorcoach activity in the city, it is clear that an opportunity exists for further study. In addition to conducting a review of the existing literature, the bus management plans of several other jurisdictions were reviewed to identify promising practices that could be adapted for implementation in the District. Particular attention is devoted to the South Jersey Transportation Authority's Bus management Program for Atlantic City, which is supported by comprehensive regulations governing motorcoach operations in this high volume destination.

Tour Bus Management Initiative

In 2003, DDOT, along with the National Capitol Planning Commission, the Washington Convention and Tourism Corporation, the Downtown Business Improvement District and the Office of DC Council Member Sharon Ambrose, commissioned The District of Columbia *Tour Bus Management Initiative*. The objective of the report was to develop a plan to ameliorate the long-standing problems that negatively affect tour bus operations as well as traffic conditions, the visitor experience, and the environment in the city. The study consisted of an assessment of the problems associated with tour bus operations in the District of Columbia and analysis of potential solutions to those problems. Findings and recommendations were based on three major sources of information: a review of best practices in North American and European cities; interviews with tour bus operators and other stakeholders whose interests are affected by tour buses; and field observations of tour bus operations and impacts in the District.

Key findings

- Since the deregulation of private motor carriers in 1982, local government agencies have not maintained data that can be used to quantify tour bus operations. However, industry representatives estimate that approximately 1,000 tour buses enter the District daily during peak tourist season. Moreover, approximately one third of visitors to the District are estimated to arrive via tour bus.
- The major problems associated with tour bus operations in Washington, DC were found to consist of a shortage of parking and loading/unloading space – with the associated

traffic and safety problems - and adverse environmental impacts, including obstruction of view corridors, and intrusion into local neighborhoods, often as a result of parking and traffic problems near tour bus destinations.

- Recommendations for actions which would produce the most direct results to address the problems associated with tour bus operations include:
 - Additional parking, both in peripheral areas for longer term stays, and in central locations with convenient accessibility to core attractions to support the operational needs of tour bus operators;
 - A *Downtown Circulator* to complement tour bus operations by distributing visitors between points of interest. This would reduce the need for short-term parking in the high density city center;
 - Increased walking circulation among key attractions. This would be achieved through additional restrictions on tour bus activities on roadways around major attractions such as the National Mall, 10th Street at Ford's Theatre, and Georgetown. To support this recommendation, the study includes a proposed tour bus route system for the District;
 - Expansion of loading/unloading space near major attractions. The report identifies the need for additional curbside boarding locations as the primary factor contributing to traffic congestion during peak tour bus operation times. To address this need, the study includes a comprehensive plan for expanding loading/unloading space around the National Mall.

National Mall and Memorial Parks 2008 Visitors Study

In 2008, the National Park Service (NPS) commissioned a study to assess visitor behaviors and the socioeconomic impact of visitor spending on the greater Washington, DC metropolitan region. This study is pertinent to the development of the District's Motorcoach Action Plan as much of the tour bus and sightseeing activity in the city is located around the National Mall, and this study provides some insight into visitor distribution patterns within the monumental core.

Key findings

- The National Mall Visitors Study did not directly target those tourists who arrive in DC via motorcoach. However, the survey did capture information regarding the type of transportation visitors use to travel between their overnight accommodation and the National Mall. Responses indicated that nine percent of the 644 survey participants used a tour motorcoach to visit the Mall, while a further 11 percent used a sightseeing bus. These estimates are very low compared to industry estimates and, in large part because

the study does not focus on visitors that arrive by motorcoach, do not capture the true volume of motorcoach activity around the National Mall.

- Respondents were asked to provide open ended feedback regarding their visit to the District. Combined, Transportation/Parking/Walkways/Walking elicited the third highest number of comments. Of these, 21 percent referred to the need for a transit system to transport visitors between the memorials located on the National Mall. A further 10 percent recommended additional bike facilities including bike rental and bike paths, while 14 percent commented on the need for additional parking around the Mall area.
- The report estimates that every 1,000 new day-trip visitors bring \$34,260 per day to the Washington, D.C. economy; every 1,000 new overnight guests are estimated to bring \$93,370 per day/night into the city's economy in direct spending. With industry representatives estimating that one third of the visitors to the District arrive by motorcoach, it is clear that improvements to the management of motorcoach operations are warranted by the economic benefit motorcoaches bring to the city.

This study did not specifically focus on visitors' use of motorcoaches within the District and there is still a need for further research in this area. It is anticipated that the planned NPS Tour Bus Parking Study will address many of the existing gaps in the data surrounding motorcoach operations in the District.

Destination DC Domestic Motorcoach Travel Assessment 2010

Destination DC is the District's leading destination management organization, providing essential resources both to visitors and to industry stakeholders. To support their mission, Destination DC undertakes research on visitor patterns in the District. In 2010, they conducted the Domestic Motorcoach Travel Assessment. The information contained in the study was drawn from in depth qualitative interviews with six of the leading tour operators in the Washington area, and responses from a quantitative survey of 140 tour operators.

Key Findings

- The report estimates that 1,029,416 visitors arrived via 28,944 motorcoaches in 2009. While this is a significant number of motorcoaches, the figure was calculated using the number of trip permits issued by the Department of Motor Vehicles in 2009 and may actually underestimate the number of tour bus motorcoaches traveling into the District annually. Many companies have their vehicles' registration apportioned under the International Registration Plan and are therefore exempt from obtaining a trip permit. The estimated figure reported above does not include these vehicles and capturing this data is a key opportunity for further research on the volume of motorcoaches operating in the District.

- Destination DC estimates that 51 percent of the visitors that arrive in the District via motorcoach are participating in educational tours, 29 percent are seniors (65+ years) and 16 percent are the “Boomer Generation” (45-65 years). This information is critical for planning appropriate transportation service provision around the monumental core as many senior visitors require special mobility considerations.
- The availability of motorcoach parking was rated second only to popularity with customers in terms of the destination attributes that are most important to tour operators; 71 percent of respondents indicated that availability of motorcoach parking was of high importance when comparing different destination cities. An additional 59 percent of respondents indicated that a destination’s accessibility to major transportation routes was of high importance.
- Designated motorcoach loading/drop-off/parking areas at hotels were also listed as the second most important hotel attribute for tour operators, second only to room price. 86 percent of respondents indicated that motorcoach loading areas were of high importance.
- Perhaps most importantly for the purposes of this report, the survey found that the number one consideration for tour operators when selecting the attractions for inclusion on their itinerary is the availability of convenient drop-off/loading locations. 87 percent of respondents indicated that this was of high importance, in comparison to 79 percent of respondents who indicated that the price of the attraction was of high importance. This response highlights the critical importance of motorcoach facilities to tour operators and supports the need for improved management of the motorcoach system in the District.
- 43 percent of survey respondents indicated that the availability of motorcoach parking/loading/drop-off zones was an area of low satisfaction in terms of operating in the District.
- Top motorcoach parking areas identified in Washington, DC were Union Station, at hotels, and the National Mall. Additional locations included Maine Avenue/Water Street, Independence and 14th Street, RFK Stadium, Old Post Office on Pennsylvania Avenue, and Ohio Drive.

Atlantic City Bus Management Plan

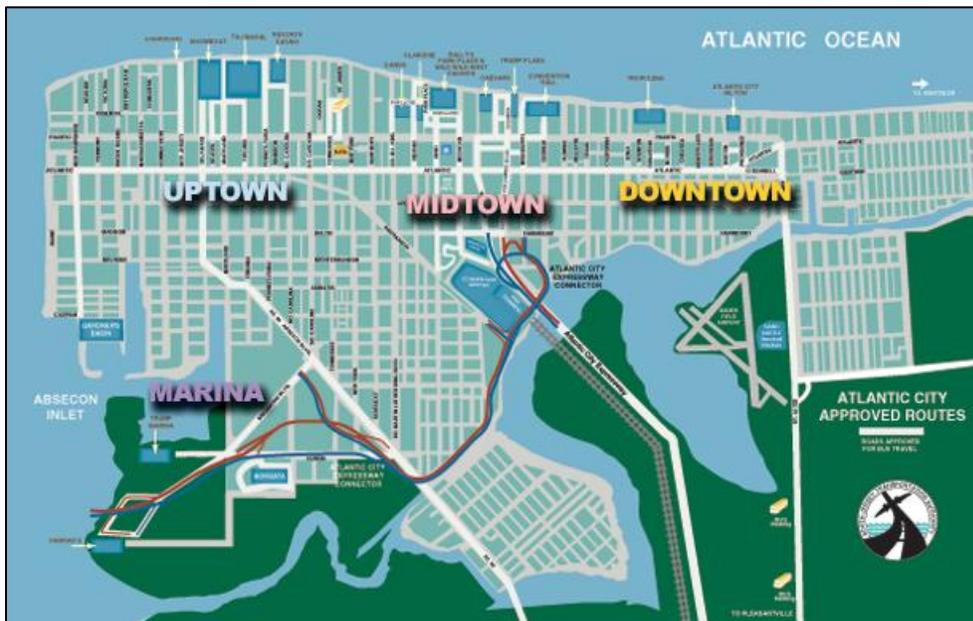
In addition to reviewing the above studies of motorcoach activity in the District, DDOT also reviewed the bus management plans of other jurisdictions to identify effective policies and procedures that could be adapted for implementation in the District. The Bus Management Program in Atlantic City was the most comprehensive plan identified in a high volume motorcoach destination. The South Jersey Transportation Authority (SJTA) developed a bus management program in response to the high volume of motorcoach travel generated by casino operations in Atlantic City. It is estimated that the city receives an average of 900 motorcoaches on a daily basis and at peak the volume was estimated to be approximately 1500 buses. The main

elements of the plan include a permit that is required for each bus entering the city, designated routes for motorcoaches to follow to each of the major generators of motorcoach travel, and a centralized bus parking facility where motorcoaches are required to park after off-loading their passengers.

Bus operators are required to purchase a permit for each trip into Atlantic County. Permits cost \$2.80 per trip and can be purchased in booklets from either the South Jersey Transportation Authority, or the bus parking facility. For operators who frequently travel into the jurisdiction, an annual medallion can be purchased for \$675 per bus that allows unlimited trips into the county and city. In addition, companies that have a high volume of buses making frequent trips into the jurisdiction can purchase a fleet medallion at an annual cost of \$40,500.

All buses operating in Atlantic City are required to follow designated routes to the major attractions and the bus parking facility. A map with the approved routes within Atlantic City is shown in Figure 1. The SJTA also provides smaller scale maps for the routes associated with each of the major attractions. Like the District, Atlantic City has historic neighborhoods with narrow streets that are not designed for a high volume of commercial vehicle travel. These designated routes ensure that the wear and tear on the infrastructure of these historic areas is minimized.

Figure 1: Atlantic City Bus Route Map



Atlantic City prohibits all curbside parking or pick-up and drop-off for motorcoaches. Operators are required to load and unload passengers on casino property and then follow the approved route to one of the SJTA parking facilities. There are two parking facilities available to

operators; the Atlantic City Transportation Center (ACTC) and John King parking garage. The ACTC is currently authorized to accommodate 550 buses, but has the capacity to accommodate 700. There is no reservation system for parking and if the facility is reaching capacity for the 550 buses they are permitted to accommodate, they will contact the SJTA for approval to receive additional buses up to their 700 bus limit. The facilities are privately owned and operated and the ACTC charges \$47 flat rate for up to 24 hours with in and out privileges and no reduced fee for day trip parking. Although the SJTA do regulate the volume of buses that the facility can accommodate, they do not regulate the fees charged for parking. In addition, it is possible to enter into a parking agreement with the owners of the ACTC and pay an annual parking fee for a fleet. Some bus parking was previously allowed at private casinos, however, there were safety and enforcement concerns around issues such as engine idling and now all buses are required to park at the approved facilities.

Per the SJTA Bus Management Plan, the bus parking facilities are required to offer specific amenities for drivers and the ACTC has a lounge, a game room, a card room and a 22 room hotel attached to the parking facility. John King is a much smaller facility approved to accommodate 20 buses only. The ACTC is located further from the main attractions than John King and is an average of 3.85 miles from major casinos and a maximum of 5.2 miles.

The Bus Management Program has three inspectors that enforce the regulations and the team report to the Transportation Services Director who is based in Camden, New Jersey. At the height of the casino activity when the city was experiencing its peak bus volume of an estimate 1500 buses per day, there were 16 inspectors enforcing the regulations. There are fines associated with each of the infractions including a \$200 fine for the first offence of curbside parking or pick-up drop-off and this fee doubles with each infraction. A licensing fee is also levied on attractions that generate motorcoach activity. Major attractions pay an annual fee based on the number of buses that they are able to accommodate for loading and unloading per day. These annual licensing fees range between \$300 and \$800 per casino. Finally, the SJTA has a toll free telephone number for the bus industry to call 24 hours per day, seven days a week to reach the Authority from anywhere in the United States and Canada

New York City

New York City is one of the top markets for motorcoach tourism and faces a high concentration of tourist attractions in a densely populated and highly developed urban environment. Despite these challenges, the New York City Department of Transportation (NYCDOT) has recently developed a comprehensive plan that designates drop-off/pick-up locations in proximity to major attractions in Lower Manhattan, short term metered parking areas, and longer term layover areas for buses.

Providing adequate curbside locations for passenger drop-off/pick-up ensures that tour buses are able to safely and efficiently connect visitors to major attractions without blocking travel lanes and inhibiting traffic flow. Recognizing this need, NYCDOT has created dedicated drop-off/pick-up locations for tour buses in proximity to major attractions including the Battery Park area, the World Trade Center area, and the South Sea Port area as shown in figure 2. Buses are prohibited from parking at these locations for any length of time and drivers may not leave their vehicle while passengers are loading and unloading. One area of concern for the District to consider is that the lack of time limits posted on the drop-off/pick-up locations means that the “No Parking” rule is difficult to enforce.

Until recently, there were approximately 70-80 unpaid bus parking spaces in Lower Manhattan. However, an estimated 90 percent of these have been lost in the past three years to ongoing development in the area. With the recent opening of the World Trade Center Memorial, the NYCDOT has worked to identify short term bus parking spaces to accommodate the increased demand in proximity to the Memorial. Seven locations for bus parking have been created in Lower Manhattan and these can be seen in figure 2. Bus parking locations on West and Barclay Streets are restricted to World Trade Center Memorial visitors. To utilize these locations operators must make a group reservation to visit the memorial and then contact the NYCDOT with their reservation number to obtain a permit. This process requires a two-three week lead time as the NYCDOT mails placards to be placed in the buses.

All bus parking spaces, including those spaces in proximity to the Memorial, are subject to meter rates of \$20 per hour for buses. Starting in September, 2011, meters are in effect daily from 7am-7pm and have a three hour time limit. This limit was selected because it represents the most common length of stay for tour buses in Lower Manhattan. Initial feedback from drivers indicates that there is some resistance to paying for bus parking in the downtown area which was previously free of charge. However, NYCDOT believes that by charging tour buses an hourly fee and establishing the three hour maximum stay, it will ensure turnover of these limited number of curbside spaces and their use by the maximum number of tour buses. To support these changes NYCDOT has passed new regulations which allow buses to park at specific metered locations¹.

Some of the areas that have been identified for metered parking were previously designated as tour bus or charter bus layover. New York City provides approximately 50 spaces for tour bus layover in 9 locations throughout the city, and an additional 82 spaces for charter bus layover in 16 locations throughout the city. There is no functional difference between the definition of tour buses and charter buses for parking purposes. These layover locations are provided at no charge to operators and only two or three locations have time restrictions of five or six hours. It is possible that based on the trial of metered bus parking spaces in Lower Manhattan, additional layover locations may be converted to metered bus parking in the future.

¹ http://www.nyc.gov/html/dot/downloads/pdf/notice_adoption_lower_manh_bus_parking_rule.pdf

Figure 2: New York City Bus Parking Map



Motorcoaches operating in New York City are required to follow the designated truck routes² or local bus routes. The only exception to this designated routing occurs when a bus driver is “required to travel on streets not designated as a truck route or a bus route for the purpose of arriving at his/her destination”³ More specific bus restrictions and routing in Lower Manhattan can be seen in figure 2.

Philadelphia Motorcoach Regulations

Philadelphia shares many similarities with the District in terms of the downtown monumental core in an area that has little capacity to accommodate large numbers of tour buses. However, it is important to note that the scale of the visitor numbers in Philadelphia is much lower than that of the District. Nonetheless, Philadelphia has taken important steps to address the issue of motorcoach parking in the city. The city has built the Independence Transportation Center (ITC) which consolidates bus passenger loading and unloading in one place and has 11 spaces. This is effective for the monumental core area in Philadelphia because attractions are located within a

² http://www.nyc.gov/html/dot/downloads/pdf/2011_truck_route_map.pdf

³ <http://www.nyc.gov/html/dot/downloads/pdf/trafrule.pdf>

confined area; however, it would not be feasible in the District where attractions are far more dispersed. To accommodate tour bus activity at attractions outside the monumental core, the city has identified an additional 10 curbside spaces for tour bus loading and unloading with a ten minute limit. Finally, the city allows motorcoaches to drop off and pick up at hotels, restaurants and attractions outside the historic District.

Philadelphia prohibits all curbside parking for motorcoaches⁴. To provide sufficient off street parking to accommodate motorcoach demand the city funded the construction of a long-term tour bus parking facility at Callowhill Street⁵. Buses are directed to the Callowhill Bus Center (CBC) after they have unloaded their passengers at the ITC or one of the designated curbside locations. This facility has 43 bus parking spaces and charges \$20 per day for parking. There is an additional \$10 fee charged for overnight parking and reservations must be made for overnight parking by 5pm. Although the CBC does not have overnight accommodation for drivers, it does offer an air-conditioned waiting area that features bathrooms and showers, televisions, sleeping lounges and vending machines.

Figure 3: Philadelphia Motorcoach Parking Map



⁴ <http://www.theconstitutional.com/news/inhp/City%20of%20Philadelphia%20Bill%20No%20050862%20-%20A%201-24-06.pdf>

⁵ Tour Bus Management Initiative pg. 22

When identifying areas in which motorcoach parking could be accommodated, the Task Force has considered areas that either have no current restrictions, or are signed “No parking”. In addition, locations considered for motorcoach parking are required to have amenities nearby for drivers. Counts were conducted to determine the volume of motorcoaches that the jurisdiction received on an average day and the demand for loading zone capacity. Video was used to conduct gateway counts of the buses traveling into and out of the city. In addition, in person counts were conducted at loading zones at different times throughout the day to gauge estimated demand⁶.

Like Atlantic City, Alexandria has also established a 24 hour hotline for operators to call for information on motorcoach operations in the jurisdiction. Alexandria have made the decision to have this hotline supply recorded information only as it is cost prohibitive to staff it 24 hours a day for the volume of motorcoaches the area receives. This is an alternative that may be considered in the District. Motorcoach operator information is currently available online, but industry feedback indicates that drivers may be more willing to access information in more traditional mediums. Moreover, very few drivers have access to a web enabled device when they are out of the office.

Existing Conditions

While many of the challenges posed by motorcoach operations in the District still exist, some of the recommendations contained in the previous section have been implemented. This section provides an overview of the existing efforts to manage motorcoach operations in the city.

Since the publication of the *Tour Bus Management Initiative*, DDOT, in partnership with the Washington Metropolitan Area Transit Authority (WMATA), has established a low cost city *Circulator* service to connect many of the main attractions in the city. While the *Circulator* service is not solely targeted at visitors, it does provide an important alternative mode of transportation for tour operators to connect points on their itinerary without the use of tour bus motorcoaches. The *Circulator*, which costs \$1.00 per trip, operates five routes in the District, providing transportation to major attractions such as Capitol Hill, the Waterfront and the historic neighborhood of Georgetown. Until recently, the *Circulator* also provided an important transit service around the National Mall; however, due to low ridership, this service has been discontinued with the intention of offering a new and improved service to key attractions in the monumental core at a later date.

⁶ <http://alexandriava.gov/uploadedFiles/tes/motorcoach/info/03-16-10%20Presentation.pdf>

The *Tour Bus Management Initiative* included several recommendations for motorcoach parking locations in the city and these, along with additional recommendations from industry stakeholders, will be reviewed for suitability as part of this action plan. DDOT has worked diligently to identify additional areas for motorcoach parking in the city and has successfully established a relationship with RFK stadium to accommodate 500 paid motorcoach parking spaces. While RFK stadium does provide an important venue for motorcoach parking for large events, it has not been well utilized by motorcoaches for daily parking. The stadium is located some distance from the downtown area and therefore does not meet the business needs of operators who require short term parking between stops on an itinerary. Furthermore, there are no facilities for drivers at the stadium which means that this is not seen as a feasible option for motorcoach parking by the majority of operators.

Parking in the downtown area continues to pose a challenge as surface lots are primarily located in areas that are planned for development and so, by definition, are temporary. For example, the City Center surface lot, a major source of motorcoach parking in the downtown area, has recently closed as development of that site has commenced. In addition to the temporary nature of many surface lots in the downtown area, there is often resistance from community residents to the location of motorcoach parking in their neighborhood. These barriers make the task of identifying appropriate motorcoach parking in the downtown area an ongoing challenge.

To improve the management of curbside public space, DDOT has developed several regulations pertaining to specific motorcoach operations in the city including commuter and sightseeing operators, and intercity service providers. These regulations, which will be discussed in greater depth in the recommendations section of the report, will establish a review process for public space stop locations and the routes that motorcoaches travel in the city as part of a permitting system. It is anticipated that adoption of these regulations will have a positive impact on traffic flow in the downtown core, provide safe and convenient locations for motorcoach operators to access the curbside, and reduce traffic violations as operators are permitted to operate at appropriate locations.

In an effort to establish an ongoing opportunity for dialogue between the District government and industry stakeholders, DDOT recently held the first Motorcoach Industry Forum in collaboration with Destination DC and the American Bus Association. The Forum provided an opportunity for industry stakeholders to identify their key concerns regarding motorcoach operations in the District, and supply feedback concerning potential solutions. The input received at the Forum has been used to inform the recommendations made in this report and DDOT looks forward to continuing to work closely with the motorcoach industry to ensure that the Motorcoach Action Plan is implemented successfully.

As the nation's capital, the District is host to constant flow of special events ranging from marathons and festivals to presidential inaugurations. Many of these events attract a large number of motorcoaches to transport attendees from outside the region. Consequently, DDOT

has significant experience coordinating with multiple agencies to provide appropriate routing, drop-off/pick-up locations and parking for a high volume of motorcoaches attending a single event. In order to continue to build on past success coordinating motorcoach activity for large events, DDOT engages in a thorough post event review process and there are several key lessons that have been identified.

The District has been successful in managing curbside parking for motorcoaches under a reservation system such as “Click and Park”. An example of this is the 56th presidential inauguration which took place in January, 2009; the city planned effectively to provide parking for an estimated 3,000 motorcoaches for this event. DDOT closed streets for bus parking and pedestrian walkways and prohibited private vehicle use in the District. The “Click and Park” system uses an online reservation system to allow operators to reserve parking in advance of an event. This provides certainty for operators that they will have a parking space waiting for them on the day of the event and removes the congestion and confusion that can arise in a “first come first served” parking environment. Moreover, it provides planners with information regarding the numbers of motorcoaches that are expected to attend the event and allows them to communicate routing and other critical information directly to operators.

Utilizing off-street parking capacity such as RFK Stadium is preferable for large events. Proximity to the Stadium/Armory Metro station makes this a good option for large groups traveling into events in the central city. It also mitigates community concerns caused by long-term curbside parking for motorcoaches and reduces congestion in the downtown core. However, at any large event there will always be “rogue buses” that arrive in the city without a permit or an understanding of the motorcoach parking and routing plan. To ensure the smooth operation of a major event it is essential to have a plan for directing and parking this element of motorcoach traffic. Directional signage is critical to communicating with drivers who may not be familiar with the District, or may not have been reached with the public outreach information regarding motorcoach parking.

Communication can be challenging for large events that attract motorcoach operators that are not familiar with District streets or the city’s rules and regulations. A comprehensive communication plan in conjunction with industry partners such as the American Bus Association, the United Motorcoach Association and Destination DC can help to ensure that information on motorcoach permitting, parking and routing are reaching the widest possible audience. In addition, as more operators become familiar with the motorcoach operators page on the goDCgo website, this will function as an important source of updates regarding major events. The website is already realizing success as a venue for special event information; during the weekend of the Martin Luther King memorial dedication goDCgo experienced a tenfold increase in the usual number of visitors, eighty-six percent of which were new to the site.

Motorcoach Services Overview

This section will address the specific issues for each of the following types of motorcoach operation in the District: Tour Bus, Intercity, Commuter Bus, Sightseeing, and Shuttle services. For each type of motorcoach operation, a brief description of the existing activity will be provided followed by a discussion of the issues associated with this type of service in the city.

Tour Bus/Motorcoach/Charter Service

Washington, DC attracts visitors, both domestic and international, to experience American heritage, culture and witness government in action. Tourism and hospitality is the second biggest industry in the District and is therefore a vital force in the local economy. Tour buses, which have been estimated to serve as many as one-third of the visitors to Washington's historical and cultural attractions, perform a function crucial to both the economic life of the city and its role as the nation's capital. For the purposes of this report, tour bus activity will refer to motorcoaches that are chartered to bring tour groups into the District either on day trips, or as part of a multi-day itinerary. Motorcoach operators may be locally contracted or long-distance, bringing groups from as far as the west coast and Canada. The key characteristics of tour bus operations are that the service is restricted to a chartered group and not available to the general public, the service does not offer a regular scheduled itinerary, and the bus is typically used to transport passengers between locations on their itinerary.

As noted above, tour buses are estimated to serve as many as one third of the visitors to Washington, DC. Given this important statistic, below are some brief facts relating to the economic contribution that tourism makes to the District⁷.

- DC welcomed 16.4 million visitors in 2009, including 14.8 million domestic visitors and 1.6 million international visitors.
- Travel & tourism supports more than 66,000 full-time jobs in DC, generating \$2.6 billion in wages.
- DC's hospitality industry generated an estimated \$5.25 billion in visitor spending on hotels, dining, shopping, transportation and entertainment in 2009.
- If tourism did not exist in Washington, DC, the District would need to generate an average of \$2,306 in local taxes from each of the 252,394 households in DC, in order to maintain the current level of tax receipts⁸

⁷ <http://washington.org/planning/press-room/corporate-and-convention-info/research-and-statistics>

Issues

While tour buses provide an important service by reducing the number of single occupancy vehicles operating in the District, the benefits related to tour bus operations currently come at a significant cost. The following are the principal problems associated with tour bus operations in the District of Columbia that were identified by the Tour Bus Management Initiative:

- traffic congestion caused by tour bus “cruising,” as a result of inadequate tour bus parking space;
- traffic congestion caused by a lack of space for loading/unloading tour buses at major points of interest;
- intrusion of tour buses into local neighborhoods by buses seeking parking spaces and waiting to pick up tour groups;
- air pollution caused by diesel fumes which is exacerbated by excessive mileage and traffic congestion related to the lack of parking and loading/unloading space, as well as idling in residential neighborhoods;
- noise, vibration and air pollution in District neighborhoods;
- obstruction of view corridors at major landmarks, especially when a “wall of buses” blocks sight lines; and
- impacts to neighborhood infrastructure/pavement conditions.

These issues can broadly be grouped into four main areas of concern: parking, loading/unloading zones, routing, and air pollution. This list corresponds with the key concerns raised by industry stakeholders at the 2011 Motorcoach Industry Forum. These issues will each be discussed in greater detail below.

The District currently offers a variety of parking options for motorcoach operators, a map of which can be found in Appendix A. However, ongoing requests for additional parking indicate that the existing inventory is insufficient to meet demand during peak tourist season. If tour bus drivers are unable to find suitable parking, they often resort to “cruising” until they are scheduled to collect their passengers, a practice which increases the risk of traffic accidents including potentially dangerous conflicts with pedestrians. Identifying appropriate parking locations for motorcoaches that provide tour bus service poses a unique challenge because of the expectations that are placed on operators by their clients. Under the prevailing business model, tour buses are expected to perform a taxi-cab function; dropping passengers off at one location and collecting

⁸ http://washington.org/images/marketing/2009_Visitor%20Statistics_FINAL.pdf

them a short time later to be transported to the next site on their itinerary. Moreover, free admissions at many of the District's museums serve as an incentive for short visits to multiple sites, resulting in relatively large impacts on traffic and the use of a large amount of curbside space. As a result, there is a high demand for parking locations close to the monumental core. Providing adequate parking suitable for accommodating motorcoaches is difficult because the destinations most frequently visited by tour buses are located in a high-density area where parking space is at a premium. Further exacerbating the parking shortage is lack of knowledge about the location of existing spaces, particularly among out-of-town drivers.

As indicated above, the prevailing business model for tour bus operations requires the motorcoach to operate as a taxi-cab between sites which results in significant demand for loading/unloading space at major attractions. Space is often constrained at points of interest in the historic and downtown core and the excess demand for loading/unloading locations results in queuing of motorcoaches and obstruction of traffic flows. The demand for loading/unloading locations is further complicated by the following two key factors: first, much of the demand is centered around the Monumental Core and on the National Mall – land which is owned and operated by the National Park Service (NPS). NPS policies seek to minimize tour bus activity on their property and avoid the “wall of buses” effect noted above which obstructs the line of site across the monuments; second, areas that are designated for tour bus loading and unloading are often found to have private vehicles parked in them in violation of the posted curbside restrictions.

Another key concern regarding tour bus operations in the District is routing between the city's many attractions. A frequent complaint from District residents is the use of neighborhood streets by tour buses, producing unacceptable levels of noise, pollution from diesel fumes, increased traffic volume, safety risks, illegal parking, visual blight, and wear and tear on residential roadways. The shortage of parking and loading/unloading spaces are frequently cited causes for tour buses to venture onto neighborhood streets as they “cruise” rather than park illegally and risk a fine. However, other causes include a lack of familiarity with the District's streets by long-distance operators, re-routing from the closure of major roadways, and specific routing decisions by tour operators to meet their customers' expectations of access to historic neighborhoods and key visitor attractions. The recommendations included in this plan will seek to effectively serve the industry and economy of the city yet also balance the needs of neighborhoods in respect to tour bus routing.

As mentioned above, air pollution from diesel engines is a major concern for District residents. The city has strict anti-idling laws for stationary vehicles of a maximum of three minutes, extended to five minutes if the temperature drops below freezing. However, many operators face considerable pressure from their customers to ensure that the vehicle is kept at a comfortable temperature both in the summer and winter months through the bus cooling and heating systems.

To operate these systems, drivers are required to keep their engines turned on even while the buses are stationary. This contributes to diesel emissions in the District and means that many drivers are in violation of the anti-idling laws and subject to fines of up to \$1,000. To address diesel idling in the region, DDOT has partnered with the Metropolitan Washington Council of Governments (COG) and other regional partners to conduct a Diesel Idle Reduction Campaign. This will be discussed in greater depth in the recommendations section of the report.

Intercity Bus Service

Intercity bus operators provide a low cost regional transportation alternative for residents in the Washington metropolitan area, with point to point service between key destinations. While the majority of the services operate between Washington and New York, there is increasing demand for service to other regional destinations including Richmond, Philadelphia, Roanoke and Raleigh/Durham. Several major carriers provide the bulk of the service: Bolt, Megabus, DC2NY and Washington Deluxe. The majority of the intercity bus activity occurs between 9:00am and 8:00pm; however, some of the larger carriers operate a 24 hour service. There are approximately 90 intercity buses traveling in the District daily providing intercity service. The majority of intercity drop-off/pick-up locations are in curbside public space. Figure 5 provides a map of the nine existing curbside locations that have been identified in the city (note that the North Capitol and K Street location is temporary). Figure 6 shows the volume of buses accessing curbside locations on a daily basis.

Figure 5: Intercity Curbside Bus Locations in Washington DC

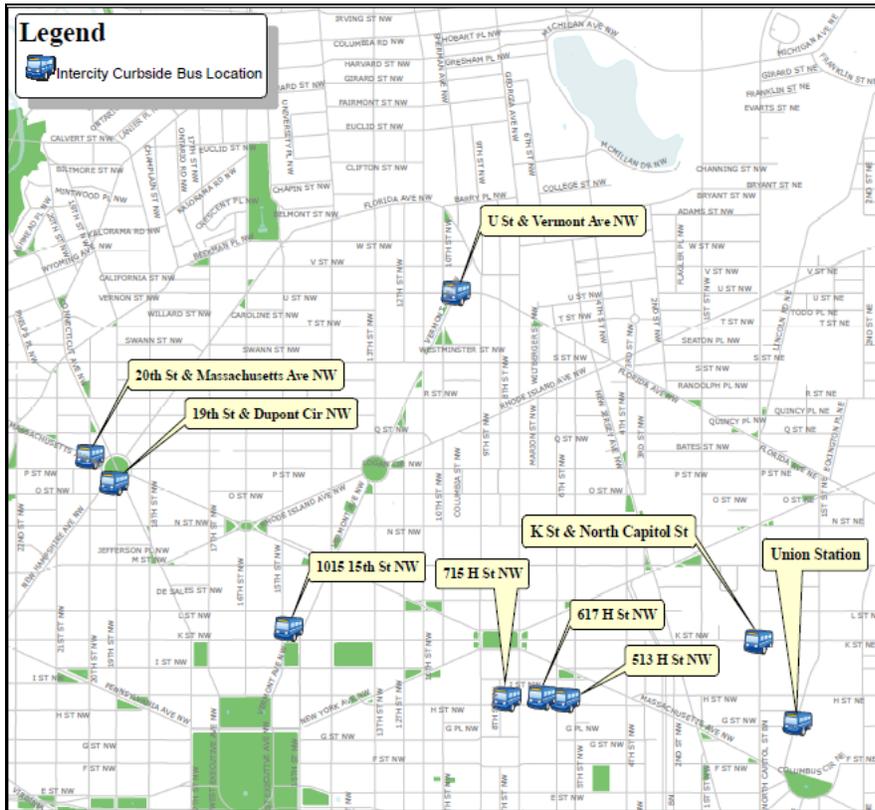
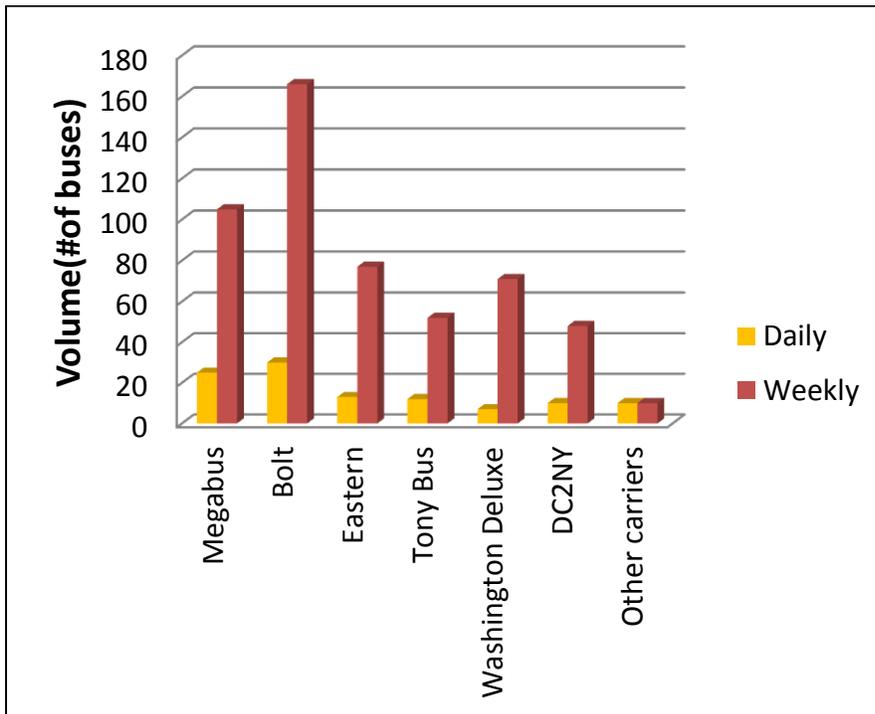


Figure 6: Bus Volume at Curbside Intercity Bus Locations



Issues

Many of the issues relating to intercity bus activity in the District are shared with other types of motorcoach operation including a lack of regulation, use of curbside space without a permit, and parking concerns. Historically, there has been no regulation governing intercity bus activity in the city. While rectifying this condition is a challenge in and of itself, the lack of regulation has had an impact on the way the service is provided in the District. Intercity bus activity primarily takes place in public space at the curbside in violation of existing curbside restrictions and results in traffic and safety impacts. In addition, this activity also causes conflicts with local residents and businesses in proximity to the stop locations. Finally, as with many of the other modes of motorcoach service providers in the District, parking is also an issue for intercity bus operators.

Until recently, the District has not had specific regulations governing intercity bus activity in the city. As a result, there has been no guidance or review process for the identification of appropriate stop locations, or appropriate routes for intercity buses to use within the District. Like many of the other motorcoach operators in the city, intercity service providers have therefore established curbside stop locations in areas where there is a perceived demand. These stops are frequently in violation of existing curbside restrictions and may create traffic and safety impacts.

In addition to the traffic and safety considerations of unregulated curbside stop locations, this activity also generates neighborhood impacts. Many of the existing locations are in the downtown core where both curbside and sidewalk space is at a premium. Long lines of passengers waiting to board buses can have a negative impact on sidewalk accessibility and create conflicts with businesses located in close proximity to the established stops. In an effort to address these issues, DDOT has established specific regulations governing intercity bus operations in the city. These will be discussed in the recommendations section of the report.

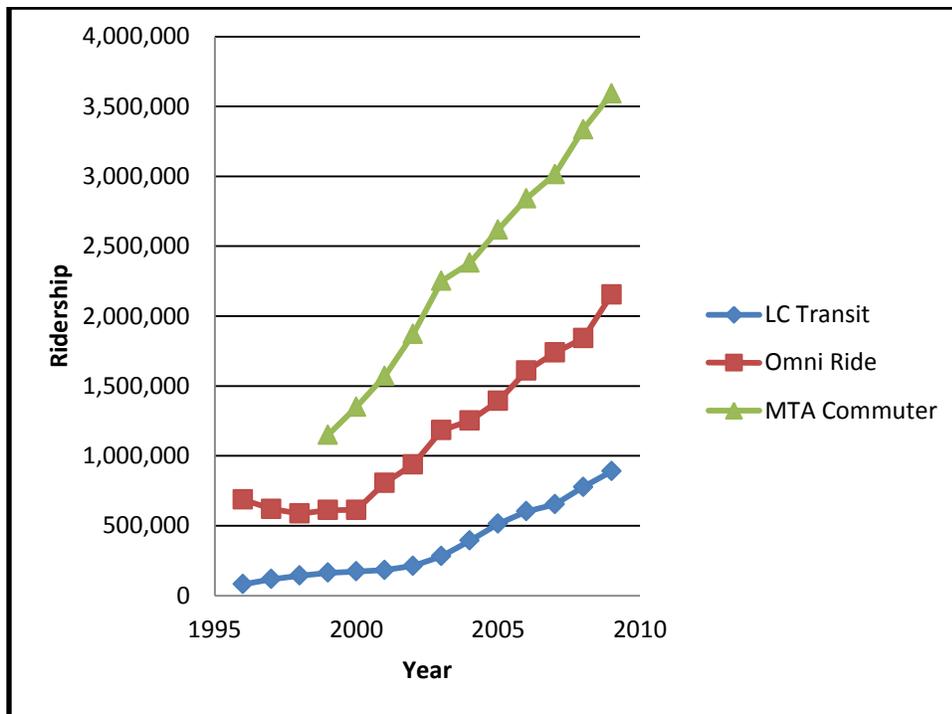
A final issue related to intercity bus activity in the District is the challenge of finding appropriate parking locations for motorcoaches to layover between trips. As indicated in the overview of intercity operations, the majority of the service is provided between the hours of 9:00am and 8:00pm. Outside these hours, and between daytime trips, the motorcoaches that provide intercity service require longer term parking.

Commuter Bus Service

Commuter buses have been providing an important service to Metropolitan Washington area residents for over three decades. This mode of transport is becoming increasingly popular with commuters with regional annual ridership rising from an estimated 1.9 million riders in 1999 to

an estimated 6.6 million in 2009 – an increase of 247 percent over ten years⁹. This rapid increase in ridership has placed greater strain on curbside usage on District streets as a variety of vehicles compete for curbside access. It is estimated that more than 300 commuter buses operate in the District on weekdays. There are currently three public agencies that provide the majority of commuter bus service into the District: The Maryland Transit Administration (MTA) is the biggest carrier and operates 12 routes; The Potomac and Rappahannock Transportation Commission (PRTC) operate eight “OmniRide” routes in the District; and Loudoun County Transit (LCT) operates five routes. In addition to the transportation agencies, there are two private companies providing commuter bus services in the District: Martz/Gray Line and Quick’s. The regional increase in annual ridership for the three public agencies providing commuter bus service in the City is shown in Figure 7.

Figure 7: Commuter Bus Ridership in the Washington Metropolitan Region¹⁰



⁹ MWCOG

¹⁰ Based on public agency data collected by MWCOG

Issues

The challenges posed by commuter bus operations in the District differ slightly from other forms of motorcoach operation because of the high volume of service that operates during peak commute hours. Challenges include identifying safe and appropriate curbside stop locations that minimize conflicts with other road users and maintain traffic flow; ensuring that stop locations are appropriately signed and permitted to effectively manage curbside usage; identifying appropriate parking locations for commuter buses between their morning and afternoon runs; and identifying appropriate staging locations for buses to ensure that they can maintain scheduled time points.

Historically, DDOT has not collected baseline information regarding commuter bus activity and stop locations in the District. Commuter bus companies and agencies have established stop locations based on requests from their riders and their own demand analysis. Although the majority of these stops are in suitable locations, there are several that conflict with existing curbside use restrictions, create traffic conflicts, and may not meet safety considerations for passengers, pedestrians and other vehicles. This informal procedure for the identification of stop locations has existed because, until recently, there has been no formal review or approval process for commuter bus stop locations in the District. It is DDOT's responsibility to ensure that curbside public space is effectively managed to balance the needs of all road users and represent the interests of District residents. Creating a process through which existing, and future, commuter bus stop locations can be approved is therefore crucial to guarantee safe and efficient commuter bus operation in the District.

As with other forms of motorcoach activity in the District, parking is a major issue for the commuter bus service providers. Commuter bus activity, by definition, follows the pattern of rush hour activity in the city with morning service bringing commuters into the District's employment centers, and afternoon service taking them home again. While some of the commuter bus service providers in the region are within close proximity to the city and can therefore have their buses "deadhead" without passengers to and from their point of origin during the day, other drivers will be required to remain in the city between routes to reduce fuel costs and maintain schedule adherence. In a densely populated area such as the District, identifying suitable locations for these buses to park between their morning and afternoon services is an ongoing challenge.

Another challenge closely related to parking is that of identifying suitable staging locations for commuter buses. Meeting on-time performance goals is critical for transit operators such as those that provide commuter bus service. In order to provide accurate and on-time service, buses must start their routes at the scheduled time. Because of variable traffic conditions, commuter buses require staging areas close to the first stop on their routes. There are currently several areas in the city where commuter buses are known to stage including Maine Avenue, SW, and the streets surrounding the State Department. Buses staging in these areas are doing so in violation of

existing curbside restrictions and DDOT is therefore committed to identifying appropriate alternative staging locations.

Sightseeing Bus Service

Sightseeing operators provide an important service to the millions of tourists who visit Washington DC every year, offering visitors a chance to see wide range of the city's key attractions without adding to the number of private vehicles on District streets. While sightseeing buses visit many of the same attractions as chartered tour buses, they differ in the type of service they offer. Sightseeing operators have a regular route with scheduled stops and the service is available to the public at each stop location. The three main companies that offer sightseeing service in the city are Open Top, Double Decker and Old Town Trolley.

Issues

Challenges concerning the operation of sightseeing buses in the District center around three key issues; traffic and safety concerns, public space curbside stop locations, and routing.

The way in which sightseeing bus services are currently offered pose safety concerns for both passengers and other road users. Many of the major attractions that are included on sightseeing routes are located downtown in high density areas of the city. In these areas, much of the curbside is metered parking and there is significant competition for curbside space by different road users. Because operators seek to provide convenient locations in close proximity to major attractions, many of their scheduled stops are in areas where they cannot gain access to the curbside. Therefore, operators frequently stop in the travel lane which impacts negatively on traffic flow in high congestion areas, creates conflicts with other road users and has clear safety implications for passengers. This situation is further compounded by the fact that several operators may share a particular stop location.

In addition to creating traffic and safety concerns, sightseeing operators are stopping in public space in violation of existing curbside restrictions. Operators publish scheduled stop locations at which members of the public can gain access to the vehicle. Under the existing business model, operators do not apply to reserve public space for their pick up and drop off locations. Moreover, without prior approval from DDOT – the agency responsible for managing the public space - companies have signs posted to identify stop locations. This informal establishment of sightseeing bus stops is a challenge which is being addressed in proposed regulations.

Another major challenge to the management of sightseeing bus operations in the city is determining appropriate routes for the vehicles to follow. Many of the sites that the operators

seek to visit are in historic areas and may lead buses to travel through residential streets that are unsuitable for large commercial vehicles. This is a concern for neighborhood residents as large motorcoaches traveling on unsuitable routes can increase the likelihood of traffic incidents involving other vehicles and pedestrians. Moreover, the existing infrastructure may not be able to support the regular passage of motorcoaches. A final issue related to the routing of sightseeing vehicles is the frequency with which major thoroughfares on their routes are closed for special events. If companies are not aware of road closures in advance, they are unable to identify appropriate alternative routes for their vehicles. This can exacerbate the routing of sightseeing buses onto unsuitable streets.

Shuttle Bus Service

Shuttle services in the District primarily refer to vehicles used to transport employees between an organization's multiple office sites. Several large federal agencies and private organizations have several office sites spread around the city and have established a private shuttle service to transport their employees between the various locations. In addition to shuttle services operated by large employers, many of the educational institutions located in the District also offer a shuttle service to their students to transport them between campuses or to connect campuses to major transit centers.

Shuttle services have several characteristics that differentiate them from other forms of transit. Major employers seeking to operate a shuttle service will contract with an outside company to provide the service; the two major shuttle service operators in the District are Reston Limousine and RHG Group. The service itself is operated on a closed circuit that may run between as few as two points, and rarely has more than three or four stops. The service is limited to employees only and is not available to the general public. Finally, the vehicles used to provide the service are generally smaller than those used to provide other types of transit service in the city; service is usually provided by vehicles of 20 to 33 feet in length, but vans are also used.

Issues

There are several issues associated with the operation of shuttles in the city. Under the existing business model, the shuttle operators do not apply to reserve curbside public space for their pick up and drop off locations. These stops are usually found in close proximity to the building entrance for the organization being served and the vehicles may be able to load and unload passengers in the curbside building entrance zone. However, field observations indicate that the shuttles frequently pull into driveways or freight vehicle loading zones. Moreover, vehicles are stopping in travel lanes to load and unload passengers because they are unable to access the curb. This activity occurs in violation of existing curbside restrictions, impacts negatively on traffic flow, creates conflicts with other road users and has clear safety implications for passengers.

Existing Motorcoach Management Activities

This section will provide an overview of existing motorcoach management activities in the District including parking, routing and enforcement. The parking section will provide comprehensive information regarding the existing parking available in the city and the methodology that has been established to determine the demand for additional capacity. The routing segment will discuss the particular challenges created by inappropriate routing by each of the motorcoach services provided in the city and the strategies that are in place to manage this activity. Finally, the enforcement segment will discuss the coordination challenges created by the existence of a large number of enforcement agencies with jurisdiction over motorcoach operations in the city.

Parking

Meeting the demand for parking within the city is the key challenge to the management of motorcoaches in the District. Providing adequate short-term curbside parking in the downtown core is crucial to meet the business needs of tour operators for whom it is not feasible to utilize longer term satellite parking facilities. There are currently only 30 designated curbside motorcoach parking spaces available in the city. This limited number of spaces falls far short of meeting demand for the estimated 2,000 buses which enter the city daily during peak season, and leads operators to resort to parking illegally or “cruising” with the attendant environmental and safety impacts. A complete inventory of the existing motorcoach parking capacity in the District is show in figure 8.

Figure 8: Motorcoach Parking Locations in Washington, DC

Location	Existing Restrictions	Cost	Approximate number of buses
Curbside Space			
700-900 block Maine Avenue, SW	Tour Bus parking 9.30am-4.00pm 4 hour limit	Free	7
900-1200 block Maine Avenue, SW	Sightseeing and Tour Buses Only	Free	4
1500 block Independence Avenue	2 Hour Tour Bus Parking 7am-6:30pm	Free	8
400 block New Jersey Avenue	1 Hour Tour Bus Parking	Free	1
200-400 block 15th Street, NW	2 Hour Tour Bus Parking 7am-6:30pm	Free	5
3500 block Water St., NW	Tour Bus Parking at all times	Free	4
1000 block 10th St, NW	1 Hour Tour Bus Parking 7am-6:30pm	Free	1
Curbside Space Total			30
Bus Parking Lots			
RFK Stadium, Lot 3	5:30am-10:00pm in and out privileges	\$30/day	100
RFK Stadium, Lot 8	Only open for excess demand and special events	\$30/day	400
Union Station Parking Garage	7:00am-7:00pm	\$20	100
Hains Point Parking Lot	7:00am-6:00pm	Free	11
Bus Parking Lot Total			611
Off Street Parking at Tourist Sites			
Basilica of the National Shrine of the Immaculate Conception - 400 Michigan Avenue, NE	Generally restricted to site visitors	Free	100
Frederick Douglass Memorial Home - 1411 W St, SE	Restricted to site visitors	Free	3
National Arboretum - 3500 Block New York Avenue, NE	Restricted to site visitors	Free	28
National Cathedral - 3101 Wisconsin Avenue, NW	Generally restricted to site visitors, reservation required, limited ability to accommodate non-visitor bus parking	No additional charge for visitors; approximately \$50 for non-visitors	18
National Zoo - 3000 block of Connecticut Avenue	Restricted to site visitors	Free	50
Off Street Parking at Tourist Sites Total			199
Total			840

There are a total of 840 spaces available for motorcoach parking in the District; however, approximately 200 of these are restricted to motorcoaches actually visiting the particular site such as the National Cathedral. Furthermore, the 100 spaces available at Union Station are regularly full to capacity and operators are required to unload passengers and seek parking at another location in the city. The largest number of parking spaces available to bus operators is at RFK Stadium; however, this lot has a very low occupancy rate as it is located far from major attractions and does not provide any facilities for drivers. For example, the operators of this lot estimate that during the entire month of June, only four buses parked at the stadium. In addition to the official motorcoach parking locations outlined above, there are two major areas where significant numbers of motorcoaches park: Ohio Drive/Hains Point and Maine Avenue SW.

The area around Hains Point and East Potomac Park has provided a key area for motorcoach parking in recent years. However, this has generated complaints about the “wall of buses” effect and has created conflicts with the National Park Police who are located in this area. Therefore, NPS are eliminating the curbside parking on this section of Ohio Drive in the first weeks of July, 2011. This will eliminate approximately 70 to 100 motorcoach parking spaces in the District and have a significant impact on the remaining parking capacity. The other unofficial area used for motorcoach parking is Maine Avenue, SW. This area does have limited curbside parking for motorcoaches as indicated above; however, the area frequently accommodates up to 20 or 30 buses that park in areas that are designated as private vehicle metered parking. There is ongoing development in the southwest waterfront area and the motorcoach parking generates regular complaints from residents and business owners.

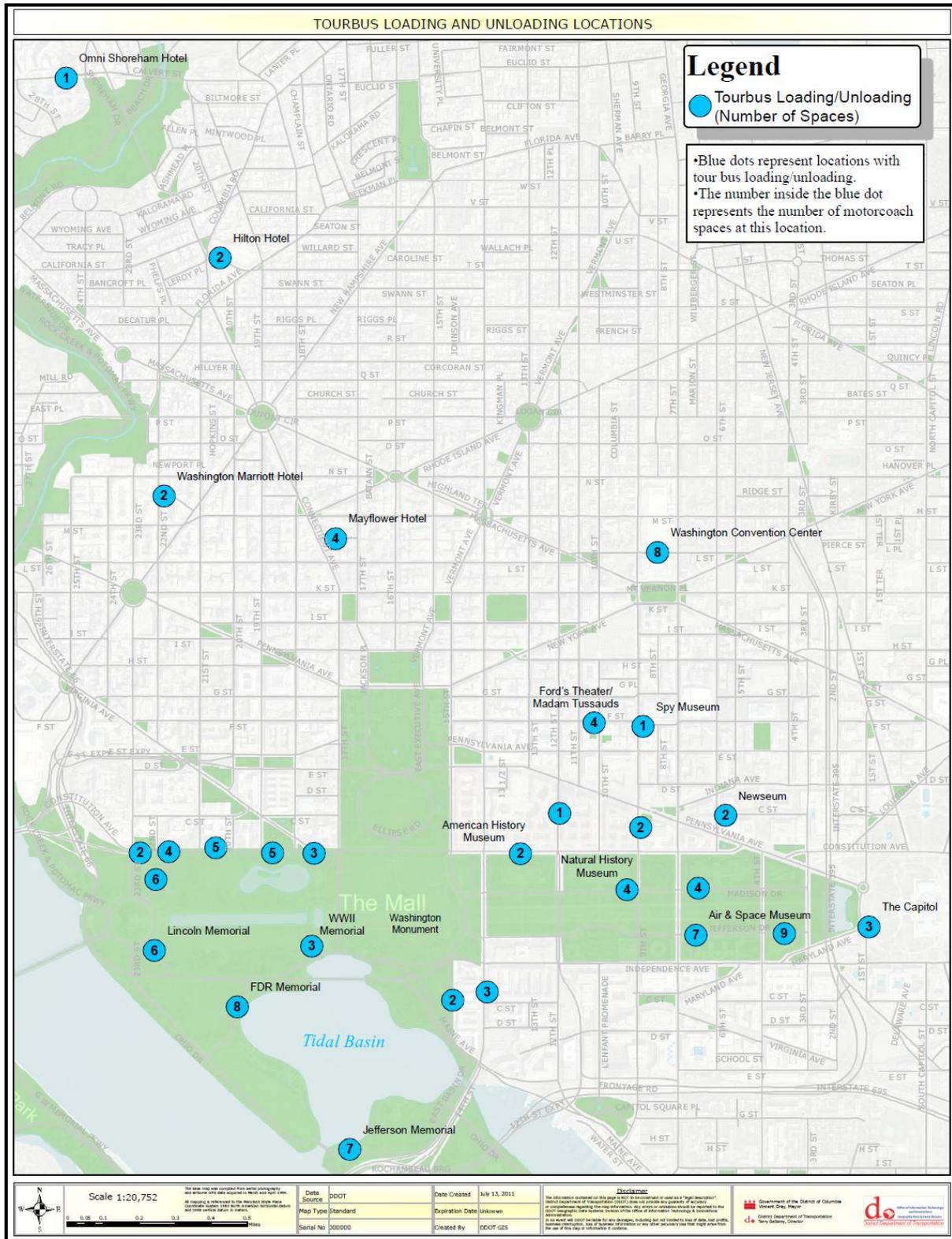
In addition to the existing parking available for motorcoaches, there are also a number of short term pick-up and drop-off locations for buses, the majority of which are located on NPS property. A complete list of these locations is shown in figure 9, and includes the existing signage posted at these locations. It should be noted that in some instances the signage is ambiguous and can lead to inconsistent enforcement across different agencies. Moreover, the lack of curbside parking in close proximity to major attractions means that motorcoaches often park in areas that are designated for passenger loading and unloading which can lead to safety issues if passengers are forced to board in the travel lane because their vehicle is unable to access the curb. A map of these locations is also provided in figure 10.

Figure 9: Tour Bus Pick-Up and Drop-Off Locations

Tour Bus Loading Zones						
Corridor	Direction of travel	Cross Street	Cross Street	Existing Signage	Approximate Length of Zone	Approximate number of buses
NPS Property						
Constitution Avenue, NW	EB	23rd	22nd	No Standing Bus Loading and Unloading	135	3
Constitution Avenue, NW	EB	22nd	Henry Drive	No Standing Bus Loading and Unloading	90	2
Constitution Avenue, NW	EB	Henry Bacon	21st	No Standing Bus Loading and Unloading	90	1
Constitution Avenue, NW	EB	19th	18th	No Standing Bus Loading and Unloading	300	5
Constitution Avenue, NW	EB	Virginia Ave	17th St.	No Standing Bus Loading and Unloading	200	3
Constitution Avenue, NW	WB	20th	21st	No Standing Bus Loading and Unloading	380	5
Constitution Avenue Total					1195	19
Jefferson Drive, SW	EB	3rd St	4th St.	No Standing Bus Loading and Unloading	530	9
Jefferson Drive, SW	EB	7th	4th St.	No Standing Bus Loading and Unloading	400	7
Jefferson Drive Total					930	16
Madison Drive, NW	WB	7th	4th St.	No Standing Bus Loading and Unloading	216	4
Madison Drive, NW	WB	9th and	12th	No Standing Bus Loading and Unloading	225	4
Madison Drive Total					441	8
Henry Bacon Drive, NW	SB	Constitution Avenue	23rd Street	Bus Loading and Unloading Only 9:30am-4pm & 7pm-1am	385	6
West Basin Drive, SW	EB	Independence Avenue	Ohio Drive	No Standing Bus Loading and Unloading	480	8
Ohio Drive/East Basin Drive, SW	WB	Inlet Bridge	Jefferson Monument	No Standing Bus Loading and Unloading	400	7
15th Street (Raoul Wallenberg), SW	NB	Independence Avenue	Maine Avenue	No Standing Bus Loading and Unloading	145	2
Daniel French Drive, NW	SB	Independence Avenue	23rd Street	No Standing Bus Loading and Unloading	355	6
Homefront Drive (WWII), SW	WB	17th St		No Standing Bus Loading and Unloading	200	3
					NPS Total	75
General						
14th Street, SW	NB	Opposite Holocaust	C Street	15 Minute Bus parking 9:30am-9:30pm	180	3

		Museum.				
De Sales St, NW	EB	Connecticut Avenue	17th St, NW	No parking Tour Bus Stand	240	4
C Street (Newseum), NW	EB	6th St	4th St.	Museum Visitor Bus Loading and Unloading	140	2
Garfield Circle., SW	NB	Maryland Ave.	First St	Bus Unloading Only	220	3
L St, NW	EB	9th St.	7th St.	No Parking Bus Stand	N/A	4
L St, NW	WB	9th St.	7th St.	No Parking Bus Stand	N/A	4
9th St, NW	NB	Constitution Avenue	Pennsylvania Ave.	No Parking Bus Stand	110	2
Constitution Ave, NW	EB	12th St	14th St	Loading and Unloading of Buses for American History	150	2
10th Street, NW	SB	E St	F St	No Parking or Idling of Buses Drop-off and Pick-up only 7am-6:30pm	130	2
10th Street, NW	SB	F St	G St	No Parking or Idling of Buses Drop-off and Pick-up only 7am-6:30pm & 15 Minute Parking Tourbus 7am-6:30pm (2 signs)	50	1
F Street, NW	EB	9th	8th	No Standing or Parking Tour Bus Stand 8am-10pm	45	1
F Street, NW	EB	10th	11th	No Parking or Idling of Buses Drop-off and Pick-up only 7am-6:30pm	45	1
T Street, NW	WB	Connecticut Avenue	Florida Ave	No Parking Sightseeing Limousine and Tour Bus Stand	2 x 60 feet	2
12th Street, NW	NB	Constitution Avenue	Pennsylvania Ave.	No Parking Pick up and Drop off only	60	1
Calvert St, NW	EB	28th St	Shoreham Drive	Omni Shoreham Hotel Bus Loading and Unloading only 6:30am-8pm	60	1
Ward Place, NW	EB	21st St.	22nd St.	No Parking Tour Bus Stand	120	2
					General Total	35
					Citywide Total	110

Figure 10: Map of Tour Bus Pick-Up and Drop-Off Locations



Parking Needs

Meeting the demand for motorcoach parking in the District is an ongoing challenge. There are several different types of motorcoach parking needs that must be addressed including short term curbside capacity, longer term off-street parking, and overnight parking. Moreover, proposed solutions must address the unique business needs of the different types of motorcoach operations in the District including tour buses, intercity buses, commuter buses, sightseeing buses and shuttle buses. DDOT's approach to managing motorcoach activity in the District focuses on providing a centralized facility to accommodate motorcoach parking needs. It is anticipated that this will reduce the traffic, safety and environmental impacts of motorcoach "cruising" which currently results from a lack of available parking.

The lack of data on motorcoach volume in the District is a key challenge to establishing the demand for motorcoach parking. Much of the existing information regarding motorcoach activity is anecdotal; however, DDOT has drawn on all available resources to create a robust estimate for motorcoach parking demand. Where possible, concrete data have been utilized including visitor statistics, operator schedules, and Department of Motor Vehicles (DMV) permits. Field observations have been conducted to supplement the existing data, and a survey was conducted with District attractions, restaurants and hotels to determine existing capacity for curbside motorcoach loading and unloading and gauge additional need. Finally, DDOT has worked closely with a number of stakeholders to provide input, and review data and locations including Destination DC, the Hotel Association of Washington DC (HAWDC), the Restaurant Association of Metropolitan Washington (RAMW), the Guild of Professional Tour Guides of Washington DC, and commuter bus agencies.

Determining Motorcoach Volume

Determining the number of motorcoaches that enter the city on an annual or daily basis is an ongoing challenge due to the lack of data collection. One way of attempting to generate this number is through the number of trip permits that are issued to motorcoaches by the Department of Motor Vehicles (DMV). In 2009, the DMV issued an estimated 29,000 trip permits for motorcoaches¹¹. While this is one of the only concrete data points available, it underestimates, perhaps significantly, the number of tour bus motorcoaches entering the city as it fails to account for the buses that are not required to apply for a permit such as school buses or those owned by a church or other non-profit organization. Moreover, this number does not account for the motorcoaches that participate in the International Registration Plan and are also exempt from obtaining a trip permit to operate in the city. This group is a key area of concern because operators with a large fleet who make frequent trips to the District often have an incentive to participate in this plan as it can result in cost savings for their business.

¹¹ Destination DC Motorcoach Assessment

Due to the lack of hard data on the number of motorcoaches entering the city, DDOT has identified alternative data points that could be used as a proxy to generate an estimate of motorcoach volume. One of the key data points for determining the demand for motorcoach parking in the District is the number of visitors to major attractions. By ascertaining the visitor volume at major attractions, an estimate can be made regarding the percentage of these visitors that arrive by motorcoach, therefore providing the basis for a calculation of demand for curbside space for motorcoaches.

Several sources were used to find data for annual visitor numbers. For the Smithsonian museums, visitor statistics were obtained from the Smithsonian Institution¹². For the memorials and monuments located on the National Mall, visitor statistics were sourced from the NPS statistics division¹³. It should be noted that there are attractions for which it was not possible to source visitor numbers; privately owned attractions were generally unwilling to provide annual visitor numbers, or did not respond to enquiries. Consequently, there are some gaps in the data available for generating an estimate of motorcoach parking demand. Where this is the case, attractions have been organized into tiers of visitor volume based on industry input and observations. A list of the attractions determined to be key generators of motorcoach activity in the District is shown in figure 11. Attractions with more than three million visitors annually were considered very high volume, those with between one and three million visitors annually were considered high volume and those with fewer than one million were considered medium volume.

Annual Visitor Volume Categories	
Medium	Less than 1 million
High	Between 1 and 3 million
Very high	More than 3 million

¹² <http://newsdesk.si.edu/about/stats>

¹³ <http://www.nature.nps.gov/stats/park.cfm>

Figure 11: Generators of Motorcoach Activity

Attraction Generators of Motorcoach Activity		
Name	Area	Annual Volume Category
Korean Veterans War Memorial	Mall	Very High
Lincoln Memorial	Mall	Very High
National Air and Space Museum	Mall	Very High
National Gallery of Art	Mall	Very High
National Museum of American History	Mall	Very High
National Museum of Natural History	Mall	Very High
Vietnam War Memorial	Mall	Very High
Washington Monument	Mall	Very High
WWII Memorial	Mall	Very High
Capitol	Capitol Hill	Very High
Verizon Center	Penn Quarter	Very High
Botanic Gardens	Capitol Hill	High
Library of Congress	Capitol Hill	High
Union Station	Capitol Hill	High
Corcoran Gallery of Art	Downtown	High
National Aquarium	Downtown	High
Ronald Reagan Building	Downtown	High
White House	Downtown	High
White House Visitors Center	Downtown	High
FDR Memorial	East Potomac Park	High
Jefferson Memorial/Tidal Basin	East Potomac Park	High
MLK Memorial	East Potomac Park	High
Holocaust Memorial Museum	Mall	High
National Archives	Mall	High
National Museum of the American Indian	Mall	High
Smithsonian Castle	Mall	High
National Zoo	Northwest	High
Portrait and American Art Museum	Penn Quarter	High
National's Ball park	Southeast	High
Folger Shakespeare Library	Capitol Hill	Medium
Postal Museum	Capitol Hill	Medium
Supreme Court	Capitol Hill	Medium
Daughters of The American Revolution Museum	Downtown	Medium
National Geographic Museum	Downtown	Medium
Old Post Office Pavilion	Downtown	Medium
Washington Harbor, Georgetown	Georgetown	Medium
Bureau of Printing and Engraving	Mall	Medium

Freer Gallery of Art	Mall	Medium
Hirshorn Museum and Sculpture Garden	Mall	Medium
National Museum of African Art	Mall	Medium
Sackler Gallery	Mall	Medium
National Cathedral	Northwest	Medium
Lincoln Theatre	Northwest	Medium
Ford's Theatre	Penn Quarter	Medium
International Spy Museum	Penn Quarter	Medium
Madam Tussauds	Penn Quarter	Medium
National Building Museum	Penn Quarter	Medium
National Museum of Crime and Punishment	Penn Quarter	Medium
Newseum	Penn Quarter	Medium
Arena Stage	Southwest	Medium
Entertainment Cruises	Southwest	Medium

Restaurants and hotels also generate a significant amount of motorcoach activity and although no data was available on visitor volume for these businesses, several sources were used to attempt to identify the high motorcoach volume locations. The Tour Guide Guild of Washington DC provided information regarding restaurants that are frequently used by tour groups arriving by motorcoach. This list provided a good baseline of restaurants and did include several eating establishments housed within major attractions such as the Smithsonian museums.

Hotels in the District generate motorcoach activity by accommodating large groups that arrive by coach or because they provide conference facilities. Information on hotels that cater to motorcoaches was generated based on feedback from tourism industry representatives and the Hotel Association of Washington DC (HAWDC). Although it was initially anticipated that this number would be restricted to large hotels, feedback indicates that some smaller hotels enter into contracts with tour operators to accommodate groups arriving by motorcoach and thus generate some volume of motorcoach activity. A list of all attractions, hotels and restaurants determined to generate a significant amount of motorcoach activity is available in Appendix B Finally, a survey was conducted in conjunction with Destination DC, the Restaurant Association of Metropolitan Washington (RAMW), and the Hotel Association of Washington DC (HAWDC) to gather information about existing bus pick up and drop off locations and determine the need for additional space.

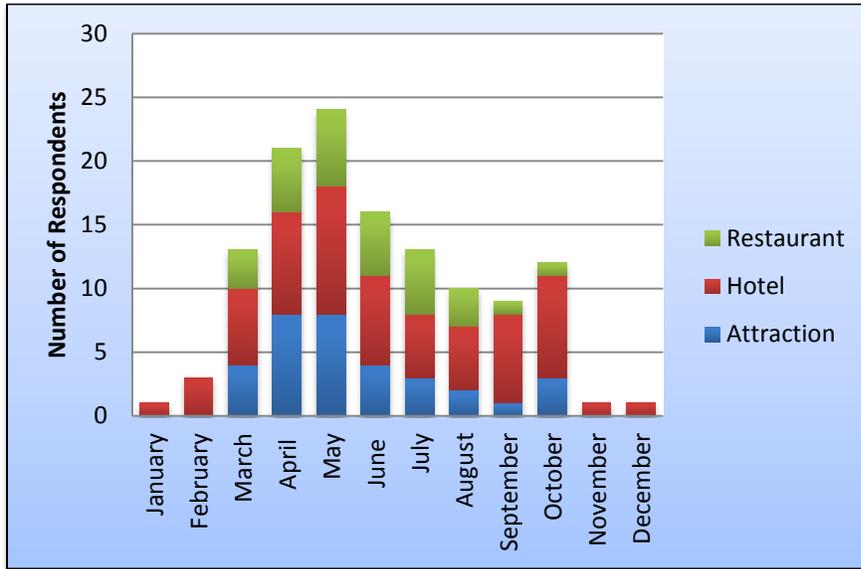
Motorcoach Curbside Capacity Survey Results

To address the lack of existing data on the demand for curbside motorcoach capacity, DDOT has conducted a survey of attractions, hotels and restaurants in the District to ascertain existing curbside capacity, and perceived demand for additional motorcoach space. To reach a wide audience and generate a robust response rate, DDOT partnered with Destination DC, HAWDC and RAMW to distribute the survey to their membership. The results of this survey are not exhaustive but do provide some useful information both on general motorcoach trends, and capacity at specific locations. A full outline of survey results can be found in Appendix C.

The survey asked respondents to indicate locations that are currently used by tour buses visiting their business to drop-off and pick-up passengers and park. As expected, hotels were the most likely to have an existing location for this activity as they are able to reserve curbside space for 15 minute guest loading adjacent to the hotel. Respondents indicated that motorcoaches were primarily using Union Station for parking now that the Center City lot is closed for construction. Perhaps the most significant survey results for the purposes of this plan is that approximately 50 percent of respondents indicated that their business would benefit from additional curbside space for motorcoach activity. Where survey participants indicated demand for additional space, they were asked to provide recommendations for suitable locations where motorcoach activity could be accommodated. DDOT will be reviewing these recommendations for feasibility.

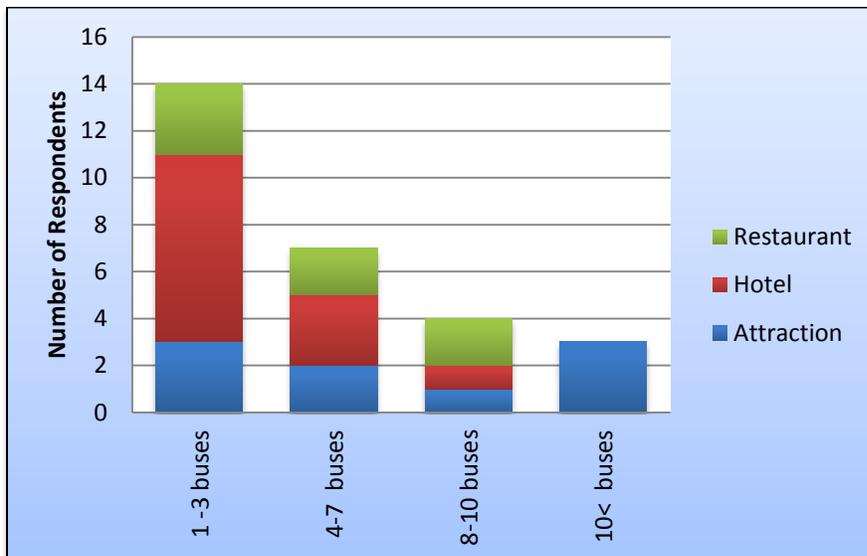
A majority of each type of business surveyed reported April and May as the months with the highest motorcoach activity as shown in figure 12. This feedback differs from other tourism industry estimates which indicate that March and April are the months with the highest volume of motorcoach activity due to the Cherry Blossom Festival. However, May is a high volume month for school groups to schedule visits to the District prior to the end of the school year and this could account for the survey results.

Figure 12: DDOT Survey Results - Peak Months of Motorcoach Activity



On average, attractions reported generating the highest volume of motorcoach activity with 32% of attractions reporting an average of 15-50 buses visiting their business per day in peak periods. In total, a majority of survey respondents report an average of one to three buses visiting their business per day as shown in figure 13.

Figure 13: DDOT Survey Results - Average Daily Bus Volume in Peak Months

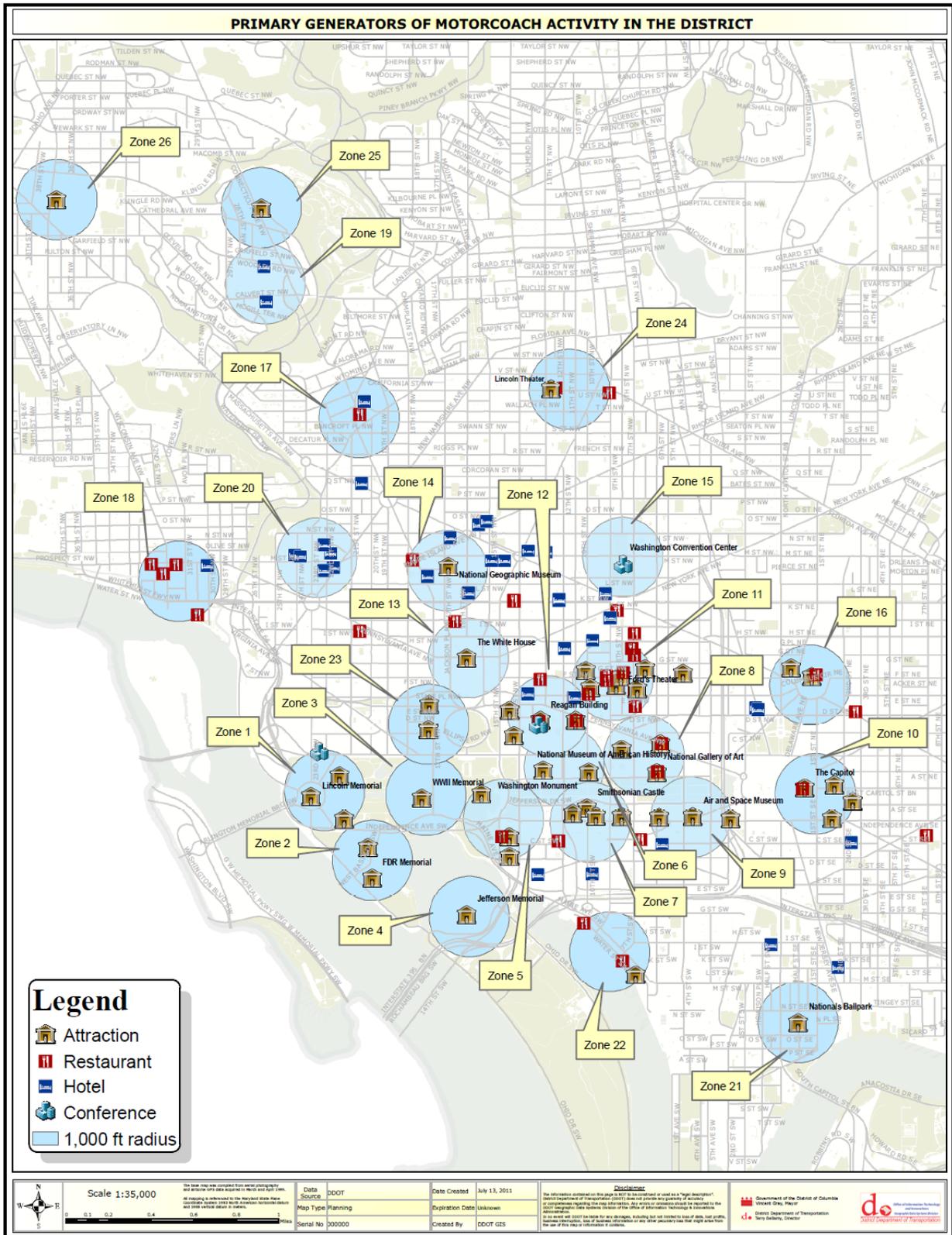


The survey also asked respondents to indicate both the days of the week, and the time of day, that they experience the highest volume of motorcoach activity. Hotels reported that they experience the highest volume of motorcoach activity on Fridays and Saturdays, and between the hours of 3pm and 7pm. This feedback is interesting as hotels were expected to have two peak periods of activity, morning and evening, for passenger pick-up and drop-off. In contrast, both attractions and restaurants report Thursday as their high volume day for motorcoaches. Attractions indicated that they receive the highest volume of motorcoaches between 9am and 1pm while restaurants indicated two peak times for motorcoach activity: between 11am and 1pm for the lunch period and between 5pm and 7pm for the dinner period.

Tour Bus Curbside Demand Methodology

To generate an estimate of the demand for curbside motorcoach spaces in key areas of the city, DDOT has developed a formula based on the number of visitors at major attractions. Major generators of motorcoach activity in the District were organized into 26 zones with a 1,000 foot radius – deemed to be a reasonable walking distance between motorcoach and attraction. A map of these zones is shown in Figure 14. Many of these zones contain multiple generators of motorcoach activity including attractions, hotels and restaurants. The methodology that DDOT has developed to estimate demand for curbside motorcoach space is based on visitor volume at District attractions. Where a zone does not include an attraction, demand is based on anecdotal reports as discussed in the preceding section.

Figure 14: Map of Motorcoach Activity Zones



To calculate the demand for curbside motorcoach space in proximity to major attractions, DDOT has developed the following equation. This equation is based on the variables outlined below in figure 15. The equation enables us to estimate “X” the number of motorcoaches arriving in a zone per hour which is taken as demand for motorcoach space in that given zone.

$$X = \frac{Y}{C}, \quad Y = \frac{N \times V \times M}{T}$$

The variables used to determine demand for curbside motorcoach space are outlined below in figure 15. To develop these variables, DDOT makes several assumptions about motorcoach activity in the District. For zones with more than one attraction, an assumption is made that approximately 40 percent of visitors will only visit one attraction within the zone and the remaining 60 percent will visit more than one attraction. This assumption was made based on visitor volume data from several zones with more than one attraction. In these zones, the second tier attractions attract an average of 60 percent of the volume of the highest volume attraction. Based on the available data, DDOT makes the assumption that approximately 20 percent of the visitors to attractions in the District arrive by motorcoach. This includes a margin of error of approximately five percent. Based on District wide annual visitor statistics, DDOT also assumes that July is the peak month for tourism in the city with an average of 12 percent of annual visitors arriving during this month¹⁴.

¹⁴ Destination DC Visitor Statistics - <http://washington.org/planning/press-room/corporate-and-convention-info/research-and-statistics>

Figure 15: Curbside Motorcoach Demand Variables

Variable	Description
<i>N</i>	The estimated annual number of visitors to a zone. This is calculated by taking the number of visitors for the highest volume attraction in a given zone as the baseline. 40 percent of the sum of the visitor volume from additional attractions in the zone is added to the baseline attraction volume to determine "Y" the total estimated visitor volume for the zone.
<i>V</i>	The estimated percentage of visitors arriving by motorcoach in an average month. Based on available data, approximately 20 percent of visitors are estimated to arrive by motorcoach: $V = 0.20$
<i>M</i>	The percentage of visitors arriving in the peak month for tourism. Based on available data, July is determined to be the peak month for tourism in the District with an average of 12 percent of annual visitors arriving in this month: $M = 0.12$
<i>T</i>	The number of business hours in the month of July calculated by factoring the number of days in the month by the number of business hours in a day: $T = 31 * 8$
<i>C</i>	The maximum capacity for an average tour bus motorcoach: $C = 55$
<i>Y</i>	The estimated number of people arriving per hour by bus in the peak month for tourism in the District.
<i>X</i>	The estimated number of motorcoaches arriving in a zone per hour in the peak month for tourism in the District.

The number generated from this calculation “X” indicates the number of bus spaces required in a 1,000 foot radius from the core attraction. To demonstrate the demand equation, an example is provided in figure 16 based on the available data for Zone 1, the area around the Lincoln Memorial.

Using this formula, DDOT has calculated the demand for curbside motorcoach capacity in each of the 26 zones. A comparison was then conducted of the estimated required number of bus spaces and the existing capacity within 1,000 feet. The table provided in figure 15 identifies core attractions, the additional attractions within the 1,000 foot zone, the estimated demand for motorcoach spaces and the existing availability of motorcoach spaces within each zone. Based on these calculations, it is estimated that the District requires an additional 39 additional curbside motorcoach spaces within the identified zones to accommodate the existing volume of motorcoach activity. Recommendations for locations to meet this additional demand are provided in a subsequent section of this report.

Figure 16: Motorcoach Curbside Demand Equation - Example

To demonstrate the curbside motorcoach demand equation, the following example is provided based on the information available for Zone 1 – the Lincoln Memorial.

Step 1 – Calculating N: Number of visitors in a zone

Zone 1 contains the following three attractions:

1. Lincoln Memorial – annual visitor volume 6,000,000
2. Korean War Memorial – annual visitor volume 4,500,000
3. Vietnam Veterans War Memorial – annual visitor volume 3,100,000

To calculate N , the annual number of visitors at the highest volume attraction is taken as the baseline. In this case, the Lincoln Memorial is the highest volume attraction with 6,000,000 visitors. Next the sum of the remaining two attractions is calculated.

$$\text{In this example: } 4,500,000 + 3,100,000 = 7,600,000.$$

This figure is then multiplied by 0.40 and added to the baseline.

$$\text{In this example: } 7,600,000 * 0.40 = 3,040,000$$

$$6,000,000 + 3,040,000 = 9,040,000$$

$$N = 9,040,000$$

Step 2 – Calculating Y: Number of people arriving by motorcoach per hour in the peak month for tourism

$$Y = \frac{9,040,000 \times 0.20 \times 0.12}{31 \times 8}$$

$$Y = 875$$

Step 3 – Calculating X: Number of Motorcoaches arriving per hour in the peak month for tourism

$$X = \frac{875}{55}$$

$$X = 16$$

It is estimated that a total of 16 motorcoach spaces are required in Zone 1 to meet demand for curbside motorcoach capacity in this area.

Figure 17: Curbside Motorcoach Demand

Demand for Motorcoach Spaces Near Primary Generators of Motorcoach Activity							
Zone	Core Attraction	Attractions within 1,000 foot radius	Annual Visitor Volume	Estimated number of buses during peak season	Required Bus Capacity Within the Zone	Existing Bus Capacity Within the Zone	Difference (demand for space)
1	Lincoln Memorial		6,042,315				
		Korean War Memorial	4,555,371				
		Vietnam War Memorial	3,072,716				
				128	16	17	
2	FDR Memorial		2,238,000				
		MLK Memorial	High				
				44	6	8	
3	WWII Memorial		3,964,351	56	7	11	
4	Jefferson Memorial		2,305,856	34	5	7	
5	Washington Monument		5,000,000				
		Holocaust Museum	1,500,000				
		Bureau of Printing and Engraving	750,000				
				83	11	13	
6	American History Museum		4,200,000				
		Natural History Museum	6,800,000				
				113	14	6	-8
7	Smithsonian Castle		1,800,000				
		Sackler/Freer Gallery	788,000				
		Hirshorn Museum	620,000				
				33	5	0	-5
8	National Gallery of Art		Very High				
		National Archives	Very High				
		Newseum	High				
				84	11	8	-3
9	Air and Space Museum		8,300,000				
		Museum of the American Indian	1,300,000				

		Botanic Gardens	1,000,000				
				129	16	16	
10	US Capitol		3,000,000				
		Library of Congress	1,700,000				
		Folger Shakespeare Library	Medium				
		Supreme Court	Medium				
				54	7	3	-4
11	Ford's Theater		1,000,000				
		National Portrait Gallery	1,100,000				
		Madame Tussauds	500,000				
		The International Spy Museum	750,000				
		Museum of Crime and Punishment	400,000				
		Verizon Center	High				
		The Hard Rock Café	Medium				
		District Chop House Restaurant	Medium				
		Carmine's Restaurant	Medium				
		Clyde's Restaurant	Medium				
		Nando's Restaurant	Medium				
		California Tortilla Restaurant	Medium				
				52	7	4	-3
12	Ronald Reagan Building		High				
		Old Post Office Pavilion	Medium				
		National Aquarium	High				
		White House Visitors Center	922,335				
		Marriot Hotel	Medium				
		Hotel Harrington	Medium				
		Harriet's Restaurant	Medium				
		Eat @ National Place Restaurant	Medium				
				42	1	6	-5
13	White House		High	28	4	0	-4
14	National Geographic Museum		Medium				
		Mayflower Hotel	Medium				
		Capitol Hilton	Medium				
		Sizzling Express Restaurant	Medium				
				22	3	4	

15	Convention Center		1,000,000	14	0	8	
16	Union Station		High				
		Postal Museum					
				N/A	N/A	N/A	N/A
17	Washington Hilton		Medium				
		Bucca di Beppo	Medium				
				20	3	2	-1
18	Georgetown		High	28	4	4	
19	Woodley Park	Omni Shoreham	High				
		Marriot Wardman Park	High				
				20	3	1	-2
20	West End	Renaissance	Medium				
		Ritz Carlton	Medium				
		The Fairmont	Medium				
		The Marriott	Medium				
				15	2	2	
21	Nationals Baseball Stadium		High	N/A	N/A	N/A	N/A
22	Arena Stage		300,000				
		Entertainment Cruises	Medium				
		Phillips Seafood Restaurant	Medium				
		Pier 7 Restaurant	Medium				
				11	2	13	
23	DAR Constitution Hall		600,000				
		Corcoran Gallery of Art	Medium				
				11	2	0	-2
24	Ben's Chili Bowl		Medium				
		The Lincoln Theater	Medium				
				11	2	0	-2
25	The National Zoo			N/A	N/A	N/A	N/A
26	The National Cathedral			N/A	N/A	N/A	N/A
						Total	-39

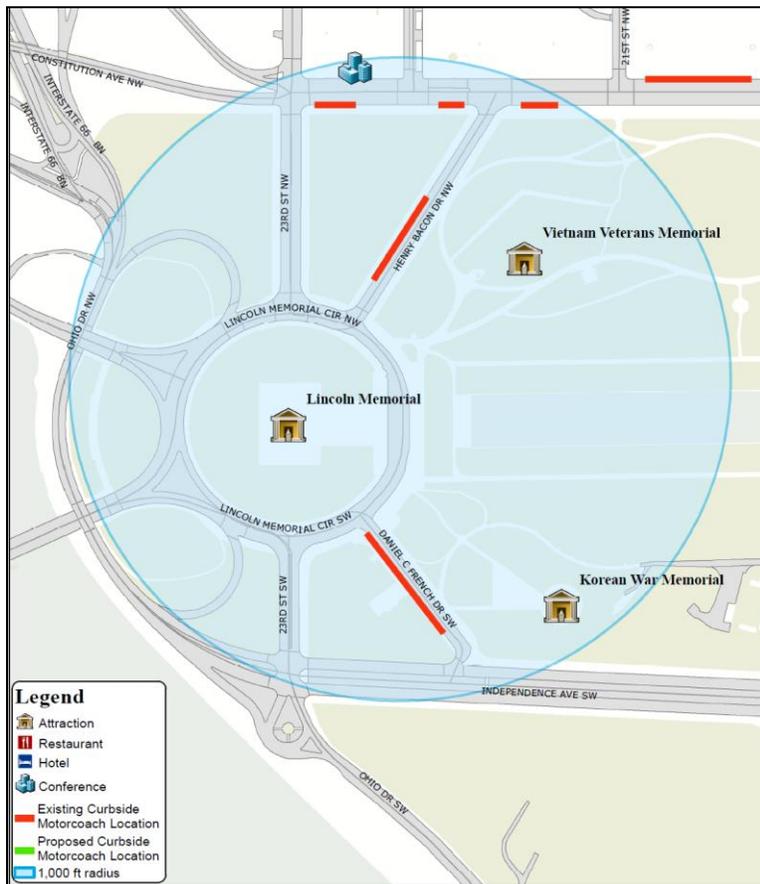
Zone Level Analysis

Each of the zones outlined in figure 17 has been analyzed to determine the existing motorcoach capacity, the need for additional motorcoach capacity, and locations that could be considered to meet this demand. This section will discuss the motorcoach activity in each zone in greater depth. Recommendations for locations to meet the estimated demand for additional curbside spaces in several of the zones are provided at the end of the section.

Zone 1 - Lincoln Memorial, Korean War Memorial and Vietnam Veterans Memorial

This area has one of the highest visitor volumes of the monumental core with tours operating here both during the day and in the evening. The principal attraction for this zone is the Lincoln Memorial with an estimated six million visitors in 2010. NPS currently provides curbside space for buses on Daniel French Drive and Henry Bacon Drive. In addition, there is some curbside capacity for buses on Constitution Avenue between 23rd Street and Henry Bacon Drive. In total, there are approximately 17 curbside bus spaces within 1,000 feet of the Lincoln Memorial. Based on the formula described in detail in the preceding section, this zone is determined to have sufficient curbside bus capacity to accommodate visitor needs.

Figure 18: Motorcoach Activity Generators Map – Zone 1



Zone 2 – Franklin D. Roosevelt Memorial and the Martin Luther King Memorial

This zone includes the Franklin D. Roosevelt Memorial (FDR) and the site of the new Martin Luther King Jr. Memorial (MLK). Accurate visitor numbers for this zone are more challenging to determine as the MLK Memorial will not open until August of 2011. Given the high level of interest and publicity that this memorial has received, it is assumed that visitor numbers will, at a minimum, equal those of the FDR Memorial which in 2010 received 2.2 million visitors. NPS currently provides eight curbside spaces for buses on West Basin Drive. Based on the projected visitor numbers for the MLK Memorial, this zone is determined to have sufficient curbside bus capacity to meet visitor needs. It should also be noted that this zone generates a significant amount of motorcoach activity during the Cherry Blossom Festival because of its proximity to the Tidal Basin. During this high volume event, the available motorcoach spaces are unlikely to meet the increased demand.

Figure 19: Motorcoach Activity Generators Map – Zone 2



Zone 3 – WWII Memorial

The WWII Memorial zone is a high volume location - hosting approximately four million people in 2010 - and does not include any other attractions. NPS currently provide 11 spaces to

accommodate buses within 1,000 feet of the Memorial. There are three spaces available on Home Front Drive, and an additional eight spaces on the 1700 and 1800 blocks of Constitution Avenue. Based on the available data it is estimated that this zone requires seven bus spaces to accommodate daily motorcoach activity. This calculation indicates that the zone actually has more spaces than required. However, because of the nature of the Memorial, it may experience a higher than average number of visitors arriving by motorcoach as a percentage of total visitation as seniors and veterans come to pay their respects. It should also be noted that only the three spaces on Home Front Drive are in close proximity to the Memorial for the loading and unloading of seniors and those with disabilities who make up a disproportionate percentage of the visitors to this attraction. In addition, the Memorial is host to events on Veterans' Day and Memorial Day that generate significant numbers of visitors arriving by motorcoach. Therefore, it is assumed that the existing availability of bus spaces in this zone meets the demand without exceeding it.

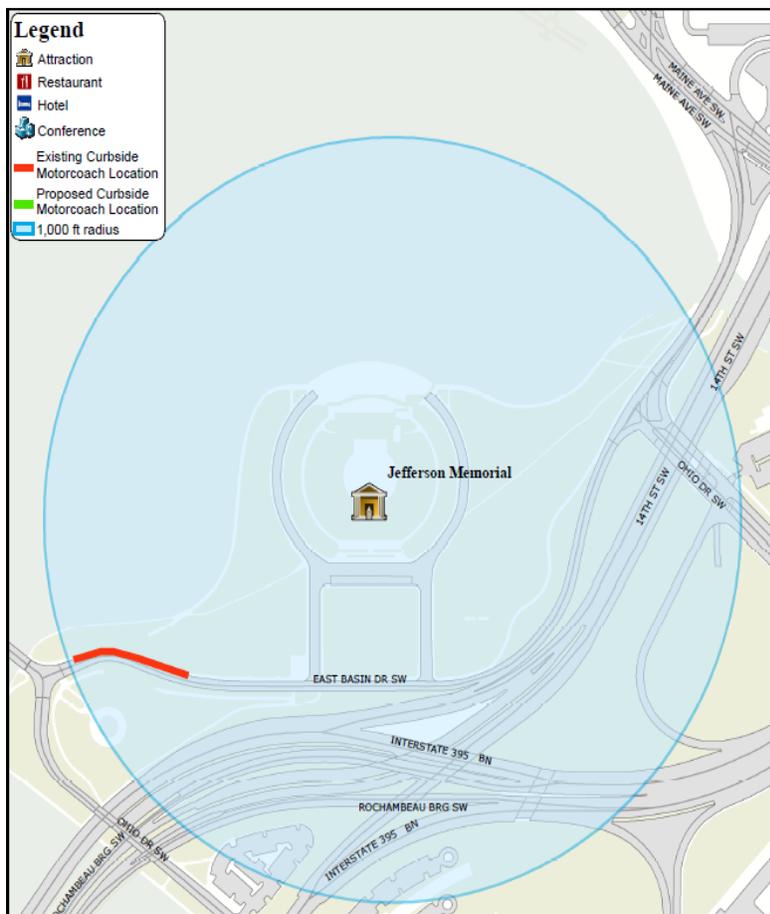
Figure 20: Motorcoach Activity Generators Map – Zone 3



Zone 4 – Jefferson Monument

The main attraction in this zone, the Jefferson Monument, has a moderate level of annual visitor volume with 2.3 million visitors in 2010. In addition to the visitor volume generated by the Monument itself, the tidal basin on which the Monument is situated is assumed to attract some level of visitor volume on any given day. Most significantly, in April/March the area is host to the annual Cherry Blossom Festival which attracts one of the highest levels of motorcoach activity in the calendar year. Within this zone, NPS currently provides seven spaces for motorcoaches located on East Basin Drive. Based on the available data, it is estimated that the existing motorcoach capacity is sufficient to meet average daily demand within this zone. However, this does not include the capacity required to meet demand during events such as the Cherry Blossom Festival. Furthermore, overflow parking for attractions in this area is primarily located on Maine Avenue and Ohio Drive/Hains Point and the recent elimination of motorcoach parking on Ohio Drive may negatively impact capacity in this zone.

Figure 21: Motorcoach Activity Generators Map – Zone 4

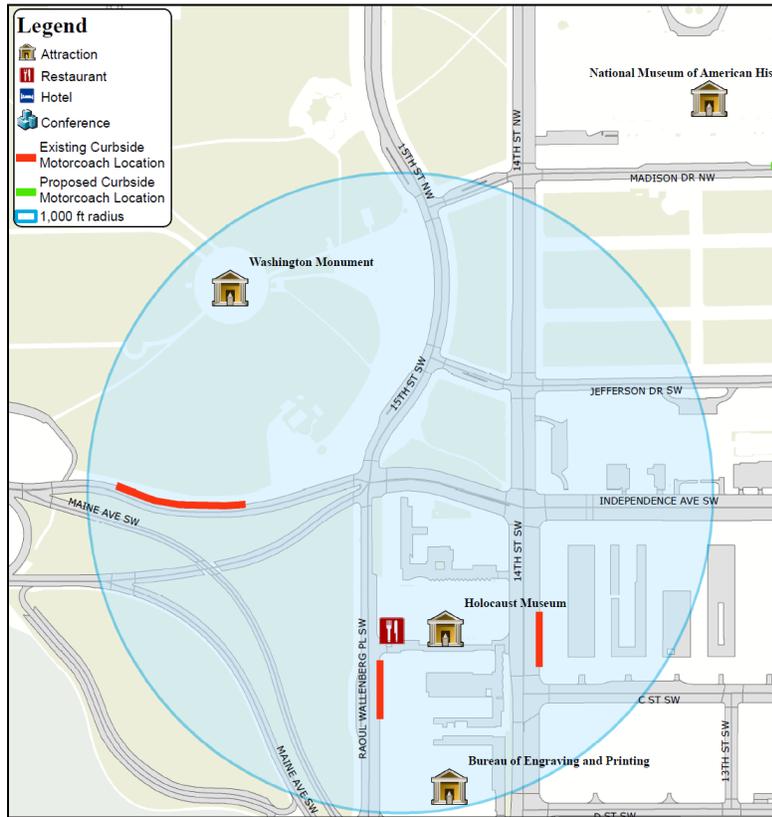


Zone 5 – Washington Monument, Holocaust Museum and Bureau of Engraving and Printing

The principal generator of motorcoach activity in this zone is the Washington Monument. Visitor volume data for the Washington Monument is generated differently to the data collected at other monuments and memorials throughout the National Mall. Unlike other attractions on the Mall, tickets are issued for visitors to enter the Washington Monument and the numbers that NPS publishes for visitation are based on the number of people entering with tickets rather than the scheduled counts that are made at other attractions. Based on these numbers, the annual visitation for the Washington Monument is a very low 628,000 for 2010. For the purposes of this report, the visitor volume for the Monument is estimated to be 5 million annually which includes those visitors who actually enter the Monument, and the additional visitors that come to the general site but do not enter. This number was estimated based on an average of the volume of visitors at comparable monuments such as the Lincoln Memorial and the World War II Memorial. Although this number is less robust than the data available for many of the other attractions, it is estimated to be significantly more accurate than relying solely on the number of visitors that actually enter the physical monument. In addition to the Washington Monument, this zone also includes the Holocaust Museum which attracts 1.5 million visitors and the Bureau of Engraving and Printing which is estimated to attract between 500,000 and 1,000,000 visitors annually.

NPS provides eight bus spaces on the 1700 block of Independence Avenue and two spaces on the 200 block of Raoul Wallenberg Place (15th Street), outside the Bureau of Engraving and Printing. In addition to the 10 bus spaces provided by NPS in this zone, there are three spaces on the 200 block of 14th Street SW for a total of 13 bus spaces within this zone. Based on the available data, it is estimated that the motorcoach activity generated by the attractions in this zone requires 11 bus spaces to accommodate visitor demand. While the existing number of spaces appears to be in excess of the demand, observations indicate that this is not the case. The eight spaces available on Independence Avenue are designated as short term parking for motorcoaches and therefore attract additional volume from other areas of the Mall where designated parking is not available.

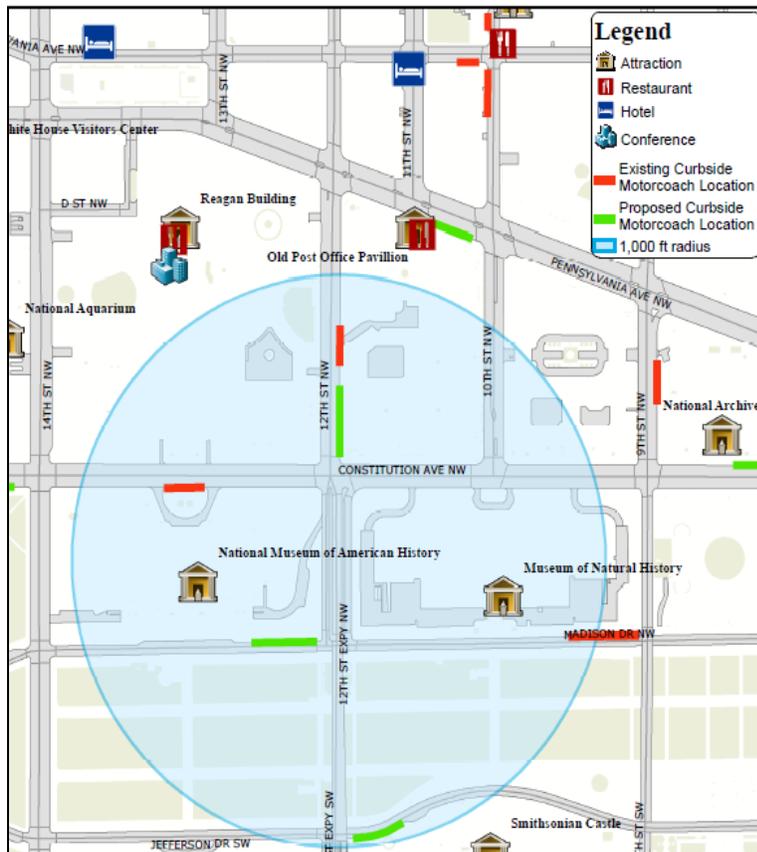
Figure 22: Motorcoach Activity Generators Map – Zone 5



Zone 6 – Museum of American History and Museum of Natural History

This area contains two high volume attractions: the Natural History Museum attracts the second highest number of annual visitors of any Smithsonian museum with approximately seven million visits in 2010; In addition, the American History Museum attracted over four million visitors in 2010, a number which can be expected to increase as the museum only reopened in November, 2008 after a two year closure for renovation. NPS currently provide four spaces for tour buses within this zone, located on the 900 block of Madison Drive outside the Natural History Museum. There are also an additional two spaces on the 1200 block of Constitution Avenue that have been unofficially signed as “Loading and Unloading of Buses for American History” for a total of six existing spaces in this zone and only four official spaces. Based on the data available, it is estimated that 14 bus spaces are required to accommodate the number of motorcoaches that the attractions in this zone generate. Recommendations for locations to accommodate this demand are provided at the end of this section.

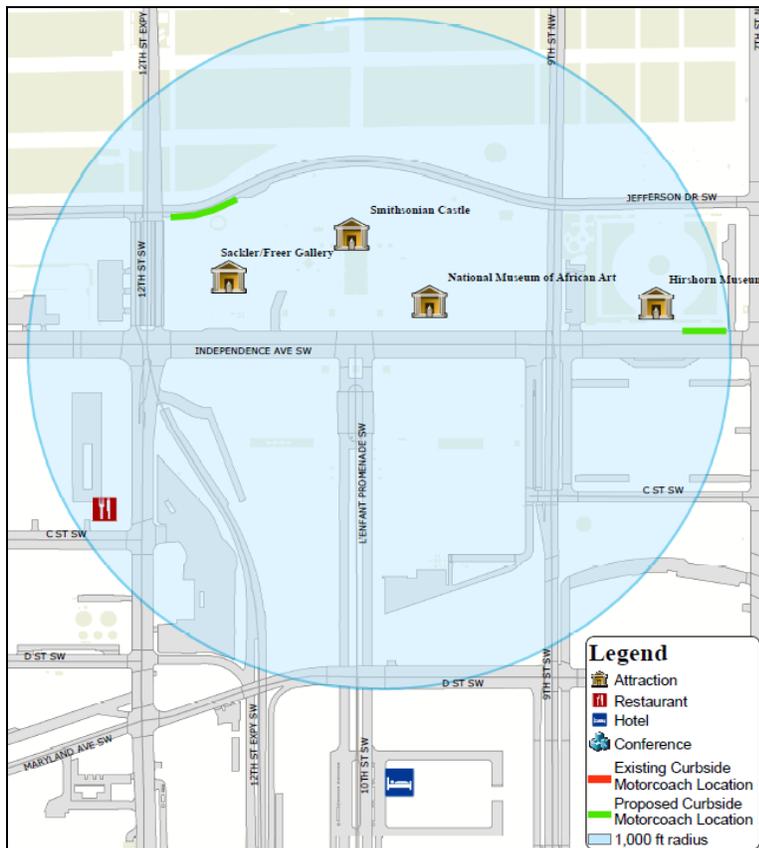
Figure 23: Motorcoach Activity Generators Map – Zone 6



Zone 7 – Smithsonian Castle, Sackler and Freer Galleries and the Hirshorn Museum

The Smithsonian Castle is the major generator of motorcoach activity in this area with an estimated 1.8 million visitors annually. In addition, this zone also includes the lower volume attractions the Sackler and Freer Galleries and the Hirshorn Museum and Sculpture Garden. Based on the available information, the zone requires five bus spaces to accommodate the motorcoach volume. However, there is no existing capacity within this zone provided to accommodate motorcoaches. Observations indicate that there is demand for spaces in this area as there are frequently buses parked in the no stopping or standing area outside the Castle on Jefferson Drive. Recommendations for locations to accommodate this demand are provided at the end of this section.

Figure 24: Motorcoach Activity Generators Map – Zone 7



Zone 8 – National Gallery of Art, National Archives and Newseum

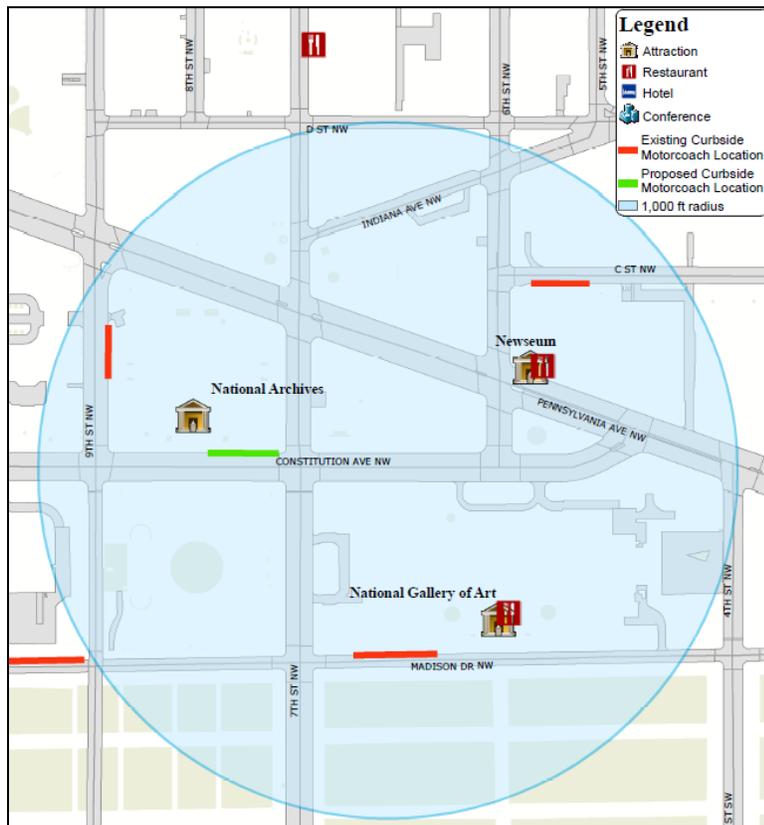
Visitation figures were not available for any of the attractions in this zone. The attractions have therefore been tiered based on the information received through the survey and assumptions generated from visitation data available for other high volume attractions. Both the National Gallery of Art and the National Archives have significant visitor volume and generate a large amount of motorcoach activity around the Mall area. The Newseum also attracts significant motorcoach activity. To accommodate the projected tour bus activity generated by the relocation of the Newseum to this new site in 2008, the Newseum applied for a tour bus loading and unloading area on the curbside adjacent to their property as part of their zoning application. This loading and unloading area was approved and is located on C Street behind the Newseum. It can accommodate approximately two motorcoaches. Although it is factored into the number of spaces available in this zone, it should be noted that this space is restricted to Newseum visitors which discounts its value within the parameters of this plan. NPS provides four spaces outside

the National Gallery of Art located on the 600 block of Madison Drive. There are an additional two spaces on the 100 block of 9th Street, adjacent to National Archives.

The two spaces on 9th Street are primarily used as short term parking by buses waiting for visitors to the National Archives, rather than to pick-up and drop-off passengers. Feedback from drivers indicates that enforcement at this location poses a challenge. The posted signage says “No Parking Bus Stand” which leaves some ambiguity as to whether it is private vehicle or bus parking that is prohibited. Moreover, the spaces are located directly north of a Metrobus zone; although this area is signed separately as “No Stopping or Standing Metrobus Zone”, some enforcement officials recognize the entire stretch as being designated for Metrobus use only. Pick-up and drop-off for the National Archives primarily takes place on Constitution Avenue in an area that is signed both as no parking entrance, and metered parking. Buses have also been observed parking in the metered areas while their passengers visit the Archives.

There are a total of eight spaces available for buses in this zone and there is an estimated need for 11 spaces based on the visitor numbers for the attractions. Recommendations for locations to accommodate this demand are provided at the end of this section.

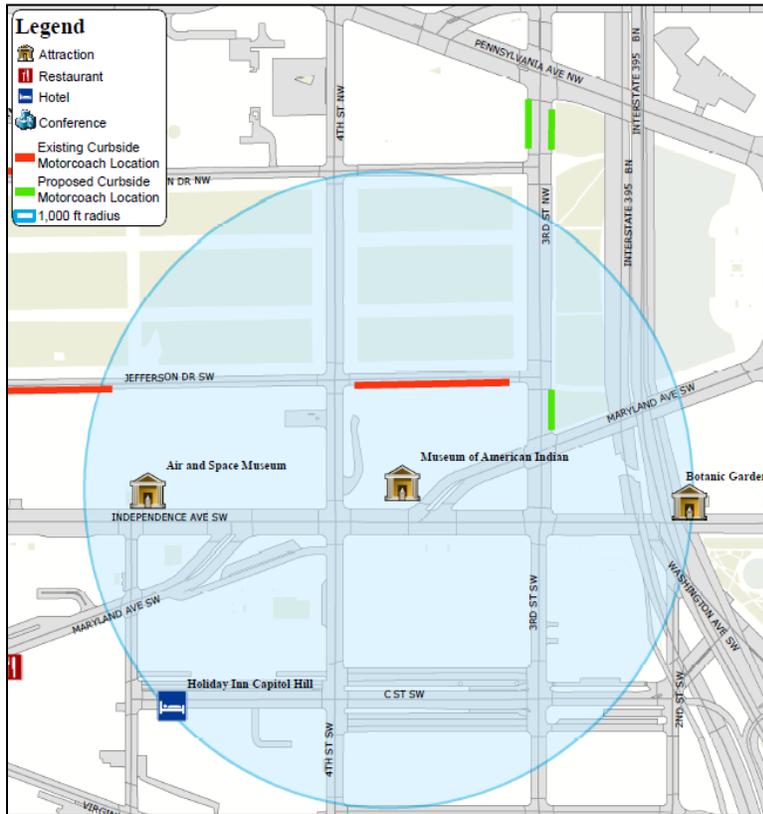
Figure 25: Motorcoach Activity Generators Map – Zone 8



Zone 9 – Air and Space Museum, Museum of the American Indian and the Botanic Gardens

This zone includes the Air and Space Museum which attracts the highest number of visitors to the Mall with an estimated eight million visitors in 2010. In addition, the Museum of the American Indian and the Botanic Garden each attract over 1 million visitors per year. In keeping with the high volume of motorcoach activity generated by this area, there are a significant number of bus spaces provided by NPS. There are seven spaces on the 600 block of Jefferson Drive and an additional nine spaces on the 300 block outside the Museum of the American Indian. Although they fall slightly outside the 1,000 foot radius of this zone, there are also an additional three spaces on Garfield Circle on First Street between Maryland and Pennsylvania. Including the spaces available on Garfield Circle there are 16 Spaces available for buses within this zone, which is equal to the number that is estimated to be required based on the available data. Observations indicate that there may in fact be additional demand in this area as there are frequently buses staged on Independence Avenue. Moreover, there is an issue with buses being ticketed in this area as the lack of parking in close proximity to the zone prompts drivers to stage on Jefferson Drive. One of the alternatives considered for creating a block of curbside space to accommodate motorcoaches would provide additional capacity for this zone. 3rd Street SW/NW between Pennsylvania Avenue and Maryland Avenue is currently two hour metered parking; however, as part of this plan, DDOT is considering the feasibility of creating metered tour bus parking in this area. This will be discussed in greater detail in the recommendations provided in the following section of this report.

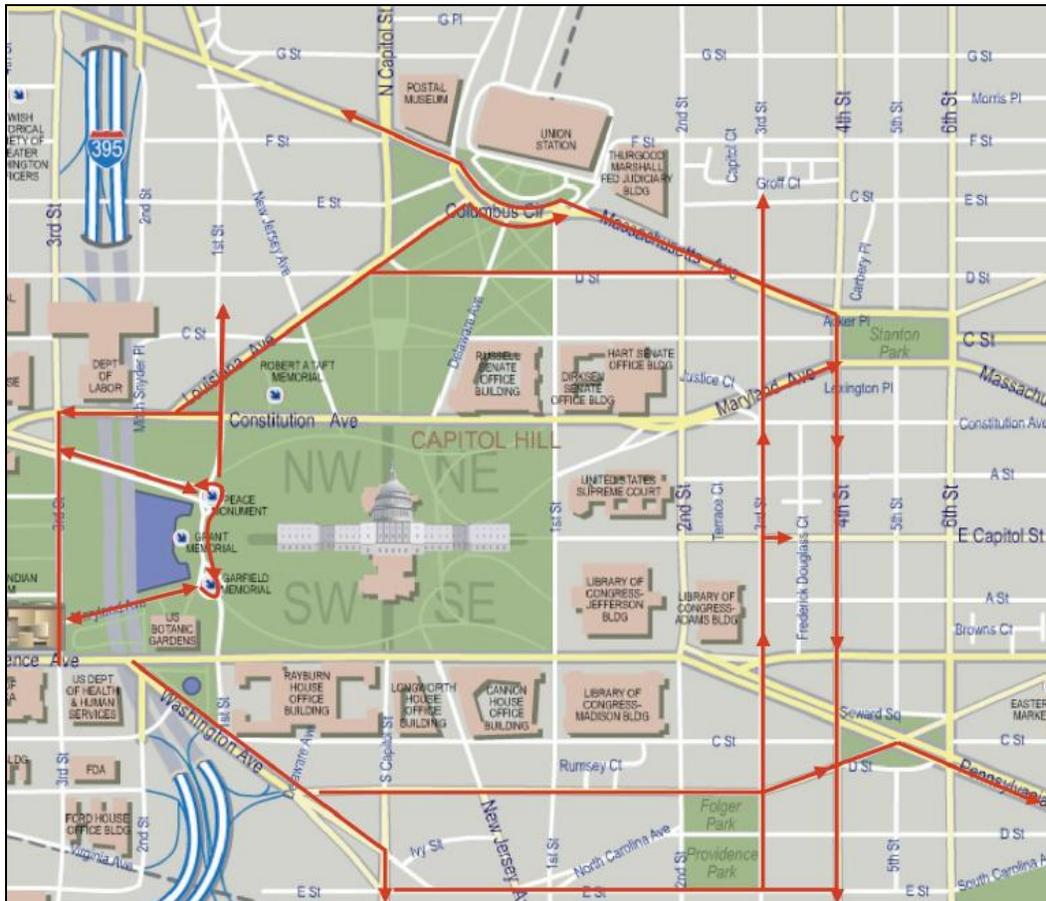
Figure 26: Motorcoach Activity Generators Map – Zone 9



Zone 10 – The US Capitol, Library of Congress, Supreme Court and the Folger Shakespeare Library

The Capitol is the principal generator of motorcoach activity in this zone with an estimated three million visitors per year. The Library of Congress attracts an estimated 1.7 million visitors per year and although no data were available for the Folger Shakespeare Library, this attraction is estimated to attract between 500,000 and one million visitors per year through both the museum and theatre guests. This zone differs significantly from the others identified in this plan because on the west it is subject to stringent restrictions for motorcoach routing around the Capitol as indicated in figure 27. On the east, the zone includes a portion of residential Capitol Hill where there are also restrictions in place to limit motorcoach traffic.

Figure 27: Motorcoach Restrictions on Capitol Hill



The motorcoach space demand formula indicates that this zone requires seven spaces to meet the existing demand. However, within the 1,000 foot zone there are no existing curbside spaces for motorcoaches. The closest available location to the US Capitol is Garfield Circle on First Street SW. The U.S. Capitol Police (USCP) provides guidelines for appropriate loading and unloading locations for motorcoach operators bringing groups to this zone. This information indicates that loading and unloading of passengers must occur at the east curb of the following locations:

- 1st and Maryland Ave., SW (east curb of Garfield Circle)
- 1st St., SW/NW between Pennsylvania and Maryland Avenues
- 1st and Pennsylvania Ave., NW (east curb of Peace Circle)¹⁵

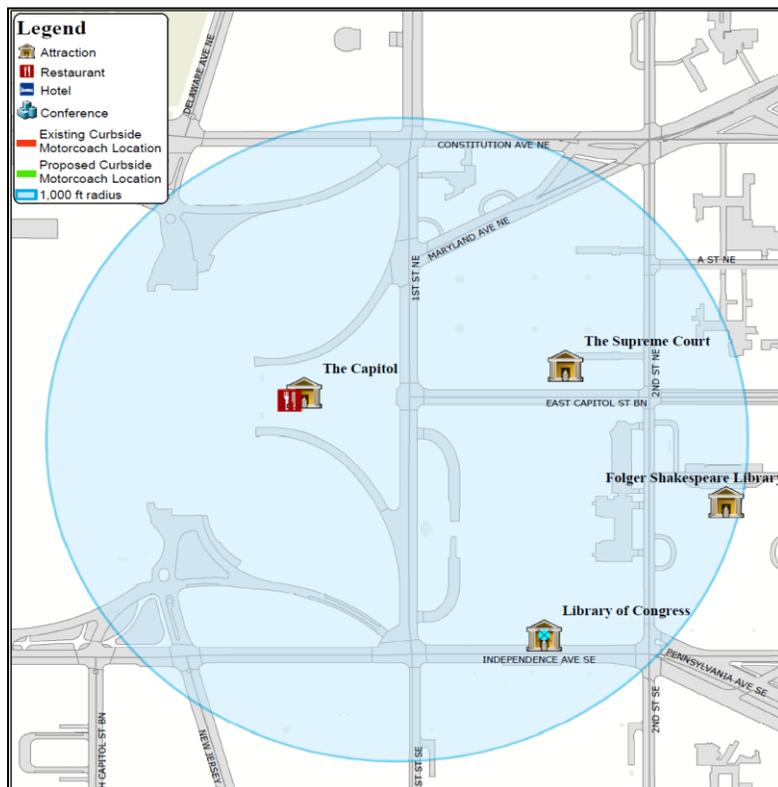
¹⁵ http://www.aoc.gov/cc/visit/bus_route_b.cfm

However, field observations show that the signage in these areas provides conflicting messages. Garfield Circle is signed for bus unloading only as shown below, and the areas around Peace Circle and First Street SW between Maryland and Pennsylvania signed as “No Parking or Standing Anytime”. This can lead to miscommunication with enforcement officials and result in operators being ticketed for unintentional violation of restrictions.



Identifying curbside locations for bus spaces within this zone is a particular challenge because of the restrictions discussed above. As a first step, DDOT will work with the USCP to clarify the information that is made available to drivers and ensure consistency with the signed restrictions. Proposed locations for additional curbside locations in this area are outlined in the recommendations matrix at the end of this section.

Figure 28: Motorcoach Activity Generators Map – Zone 10



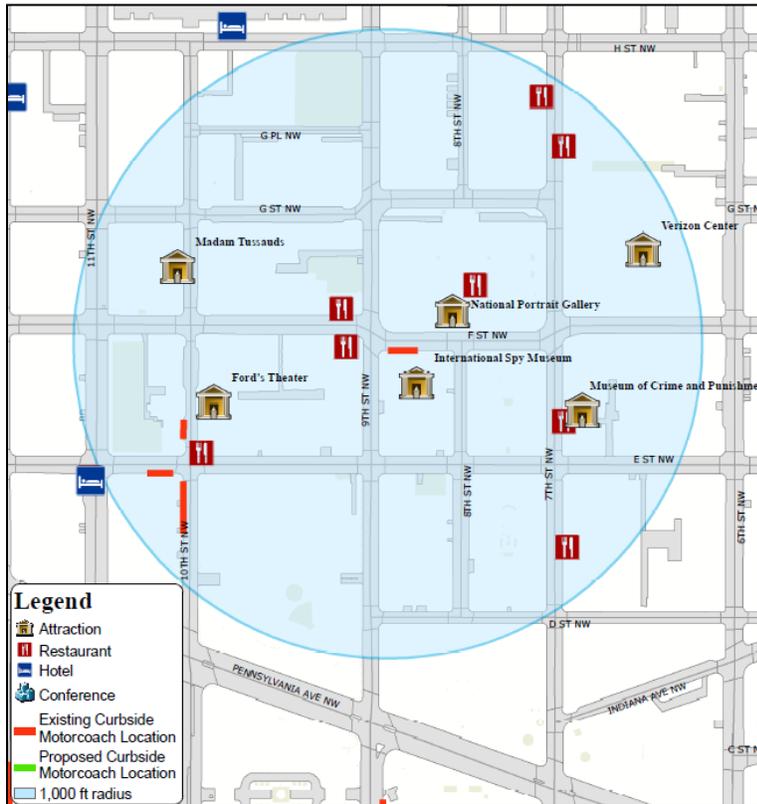
Zone 11 – Ford’s Theater, Madam Tussauds, the International Spy Museum, the Portrait Gallery and the National Museum of Crime and Punishment.

The principal generators of motorcoach activity in this zone are the private attractions around 10th Street. Ford’s Theater, Madam Tussauds, the International Spy Museum, the National Museum of Crime and Punishment, and the Hard Rock Café. As discussed in the methodology section, visitation data for private museums is not available at this time. The zone also includes the National Portrait Gallery and Museum of American Art which attracts 1.1 million visitors.

There are currently five bus spaces in this zone. Three are available on 10th Street between E and G Streets, and two are available on F Street, one on the 1000 block and the other outside the International Spy Museum on the 800 block of F St. There are currently no designated spaces for buses to load and unload outside the Portrait Gallery, however, observations and survey feedback indicates that this primarily takes place on G Street in the building entrance zone. An estimate has been made for the number of spaces required for this area based on assumptions about the number of visitors each of the attractions receives on an annual basis. Based on this number, the existing spaces should be sufficient to accommodate the volume of motorcoach activity. However, observations of this area indicate that this is not the case. The spaces available for operators to load and unload passengers have a very high occupancy rate as buses are often unable to find short term parking in proximity to this zone and therefore park in the loading areas. Additional pressure has been placed on the spaces available in this area since the closing of the City Center lot in 2010 where construction for the new convention center hotel is now underway. The construction of this hotel, which may or may not include bus parking spaces in the garage, will increase the number of visitors to the area and therefore demand on the existing spaces.

The motorcoach activity on this block is further complicated by the space that is designated for sightseeing buses. Double Decker and Old Town Trolley have stop locations on this block. This site has been the subject of several plans and reviews and it is too soon at this stage to make recommendations for the final designation of curbside use along 10th St. It is anticipated that the curbside spaces available for buses will be expanded in this zone to accommodate up to 10 bus during the daily and seasonal peak times.

Figure 29: Motorcoach Activity Generators Map – Zone 11

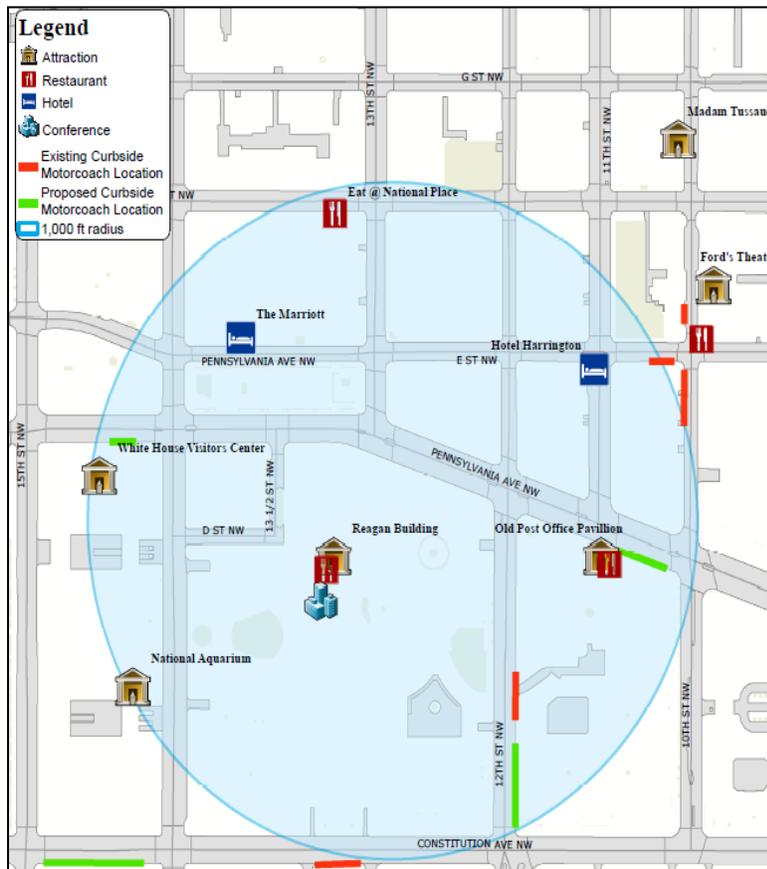


Zone 12 – Ronald Reagan Building (International Square), the Old Post Office Pavilion, the National Aquarium and the White House Visitors Center.

This area generates a significant volume of motorcoach activity in a section of the city that already has considerable competition for curbside space. Visitor numbers are only available for the Old Post Office Pavilion – 262,000 in 2010. This number likely underestimates the number of visitors to this attraction as it is based on the number of people that enter the tower rather than those who stop for lunch at the food court. For the purposes of this report, the number of visitors has been estimated at approximately 500,000. Both the Old Post Office Pavilion and the Ronald Reagan Building are identified as popular places for tour groups to eat. The National Aquarium is located on 14th Street inside the Department of Commerce and no space is designated for the loading and unloading of tour buses in this area. The final attraction in this zone is the White House Visitors Center which is estimated to attract a minimum of 1 million visitors each year based on the estimates of visitors that enter the White House on Tours – approximately 1 million in 2010. There is currently only one space available for buses in this zone. It is located on the 300 block of 12th Street at one of the entrances to the Old Post Office Pavilion. Based on the assumed number of visitors to these attractions, it is estimated that this zone requires six bus spaces to accommodate the volume of motorcoach activity generated.

There are several challenges to identifying appropriate bus spaces in this area. Much of the curbside on south side of the 1300 and 1400 blocks of Pennsylvania Avenue is permit parking for District Government and Council staff from the Wilson Building. Moreover, there was some capacity available for buses on Pennsylvania Avenue prior to the installation of the bike lanes. However, this was removed as the addition of the new bike lanes reduced the roadway capacity on this corridor. Finally, identifying locations on 12th or 14th Streets challenging because not only do these corridors have some of the highest traffic counts in the city, they are also subject to rush hour restrictions. Recommendations for locations to accommodate the demand for motorcoach curbside space in this zone are provided at the end of this section.

Figure 30: Motorcoach Activity Generators Map – Zone 12

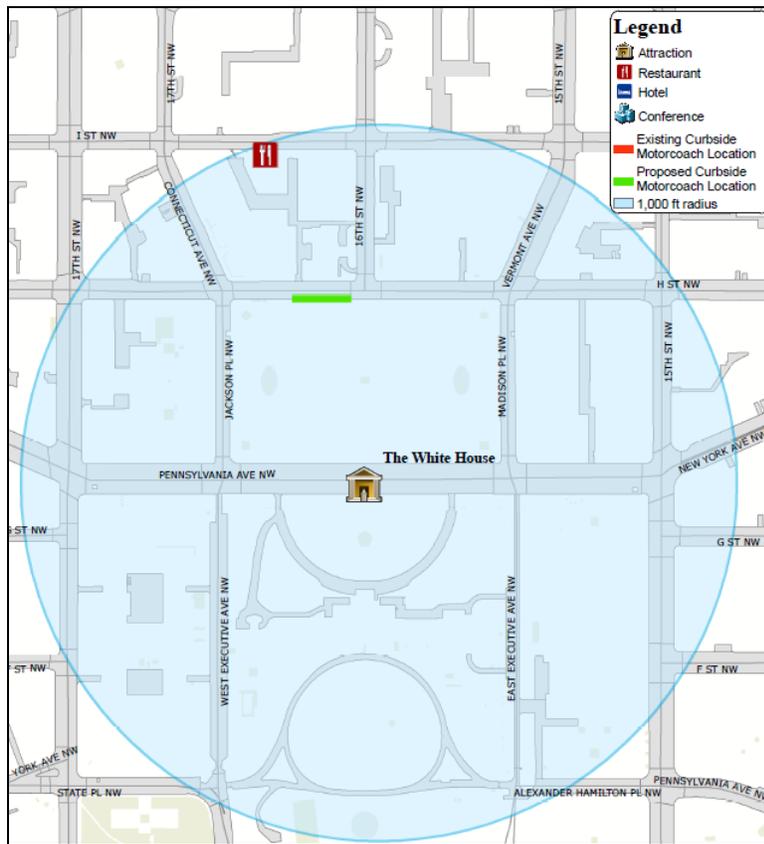


Zone 13 – The White House

The White House is one of the highlight attractions for visitors to Washington DC. Similar to the Washington Monument, the numbers that the NPS publish for annual visitation are based on the visitors that obtain tickets for a tour of the White House itself which in 2010 was approximately one million people. However, for the purposes of this report the visitor volume to the White House is estimated to be two million which includes those people that visit Lafayette Park and view the White House from this vantage point. Based on the demand calculation for bus spaces, this zone requires four spaces to meet the demand for motorcoaches generated by the White House.

Since 2001, Pennsylvania Avenue has been closed to traffic between 15th Street and 17th Street. H Street NW is therefore the preferred location for operators to load and unload passengers visiting the White House. This section of H Street suffers from significant congestion as it is one of the major eastbound corridors through the central business district. There are two Metrobus stops on this section of the corridor, one of which also functions as a Tourmobile stop and a commuter bus stop. The double parking and staging of tour buses along this section of H Street currently impacts traffic flow and may pose challenges to pedestrian and vehicle safety. To minimize the safety impacts to pedestrians, bus passengers and vehicles in this area, the recommendation of this plan is to establish a loading and unloading area for tour buses on the 1600 block of H Street directly east of the Metrobus Stop. This zone will accommodate three buses and mitigate the impacts caused by double parking in this area.

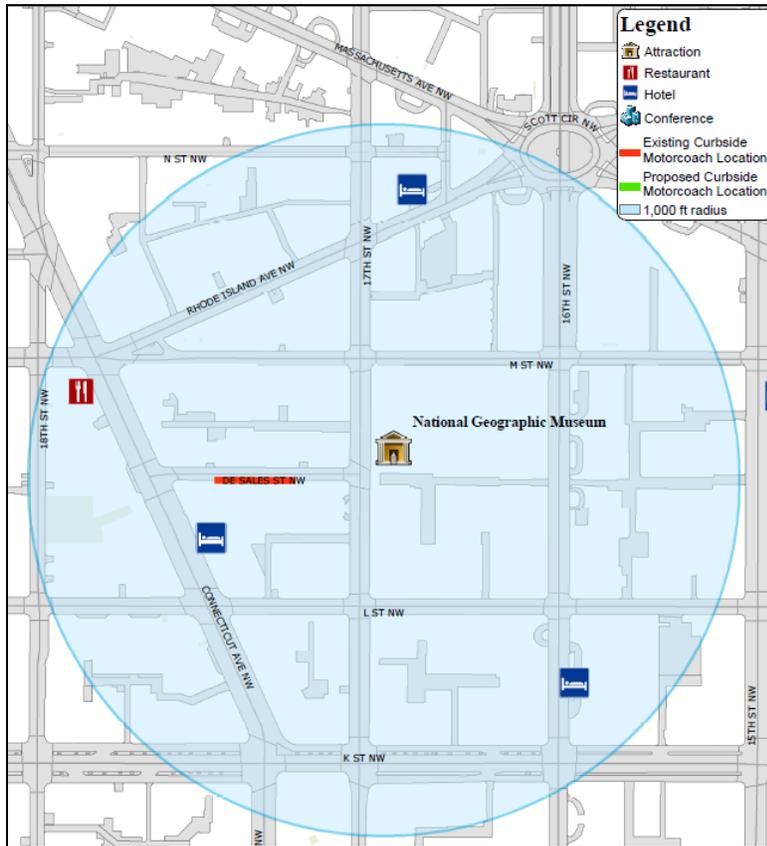
Figure 31: Motorcoach Activity Generators Map – Zone 13



Zone 14 – The National Geographic Museum, the Mayflower Hotel

The major generators of motorcoach activity in this zone are hotels. In addition, the National Geographic Museum is also considered to be a medium volume attraction. There are currently four spaces designated as a tour bus stand within this zone located on De Sales Street, outside the Mayflower Hotel. This should be sufficient capacity to meet the demand for motorcoach spaces in this zone; however, the Mayflower frequently has this curbside area blocked with cones to prevent motorcoaches that are not associated with the hotel from using the space. Establishing the accurate designation and usage of this existing location will be critical to ensuring there is adequate motorcoach capacity in this zone.

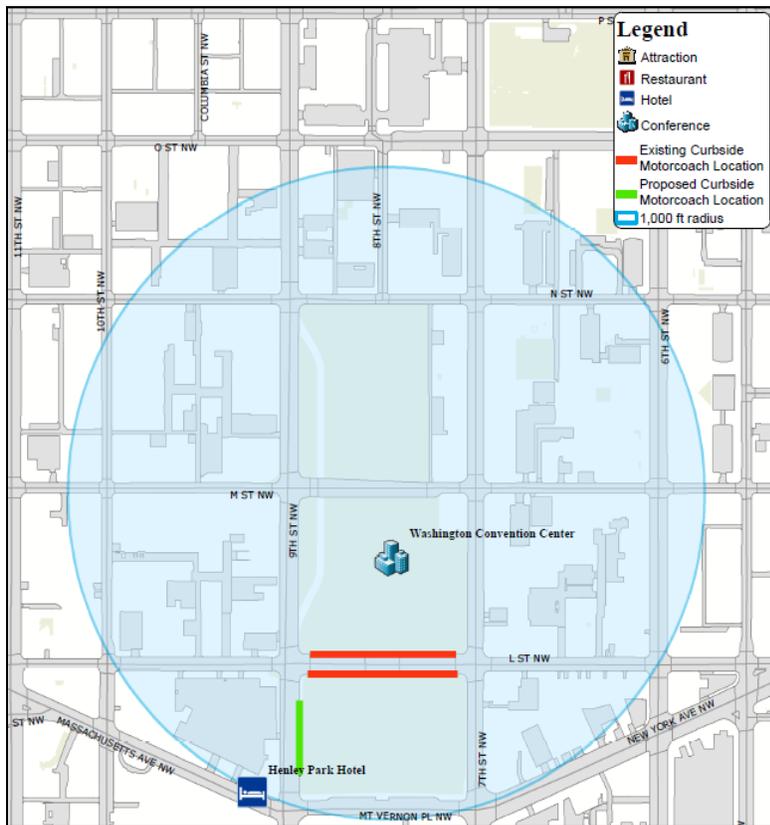
Figure 32: Motorcoach Activity Generators Map – Zone 14



Zone 15 – The Washington Convention Center

The Washington Convention Center is the largest convention space in the city and attracts a significant volume of motorcoaches at peak periods with scheduled conventions. The Convention Center provides spaces for buses to load and unload passengers on both the north and south sides of the 700 block of L St NW, however there are no areas provided for buses to park in the immediate vicinity. In addition to the existing volume of motorcoach activity in this zone, the new visitor center is projected to open at Mount Vernon Square which will generate additional motorcoach activity in this area. Recommendations for additional motorcoach capacity within this zone are provided at the end of this section.

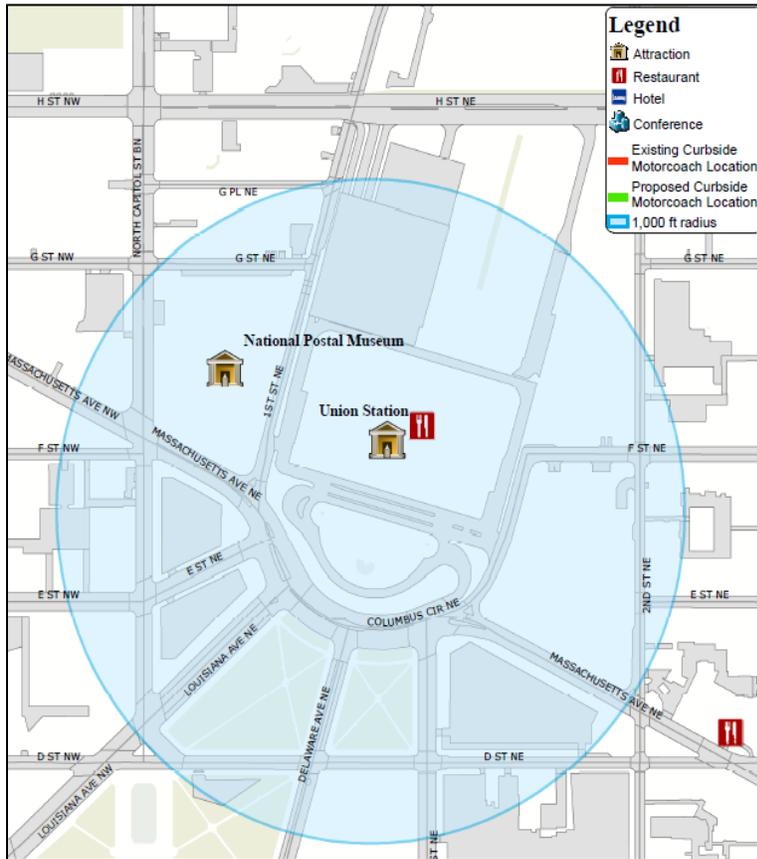
Figure 33: Motorcoach Activity Generators Map – Zone 15



Zone 16 – Union Station, the National Postal Museum

Union Station is a key generator of motorcoach activity in the city. It is a major transportation hub for visitors, offers a food court that caters to large groups, and the building itself is an attraction for its architecture and shops. In addition, this zone also includes the National Postal Museum – one of the only Smithsonian museums located outside the National Mall. This is a medium level attraction with an estimated 300,000 visitors in 2010. Although this zone is a major generator of motorcoach activity, it also includes one of the major sources of motorcoach parking in the city. Union Station is able to accommodate up to 100 motorcoaches in their parking garage. Moreover, there is capacity for motorcoach loading and unloading in the entrance to the Station. This zone is not considered to have additional demand for motorcoach capacity based on the existing data.

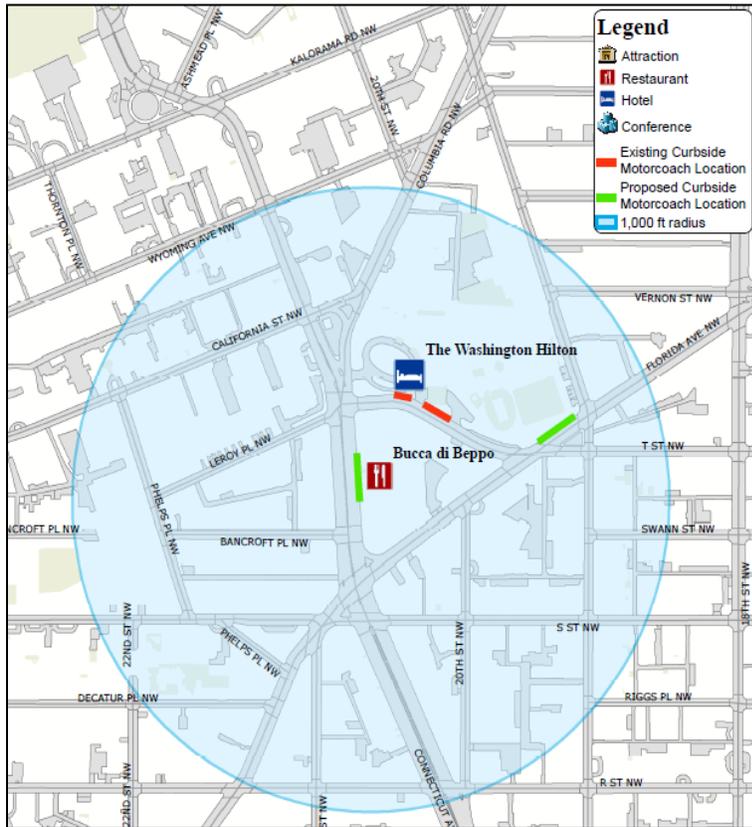
Figure 34: Motorcoach Activity Generators Map – Zone 16



Zone 17 – Washington Hilton, and Bucca di Beppo

This zone is located in the Northwest of the city and does not include any major attractions. However, both the Washington Hilton and Bucca di Beppo generate a significant amount of motorcoach activity at certain times during the day. Observations and discussions with restaurant representatives indicate that there is demand for at least one motorcoach space outside Bucca di Beppo. The restaurant estimates that it accommodates an average of between four and twelve motorcoaches between the hours of 4.30 and 8.30 pm per day. These buses currently stage outside the restaurant on Connecticut Avenue at metered parking spaces. There are currently two motorcoach spaces in this zone located on T Street outside the Washington Hilton. These spaces have a high rate of occupancy and hotel representatives indicate that there is demand for additional curbside space in proximity to the hotel. As evidence of this, buses are frequently staged in the commercial vehicle loading zone located on Florida Avenue and signage placed along Florida Avenue and 19th Street indicates that this area experiences a significant amount of motorcoach staging in violation of existing curbside restrictions. Recommendations for additional motorcoach capacity within this zone are provided at the end of this section.

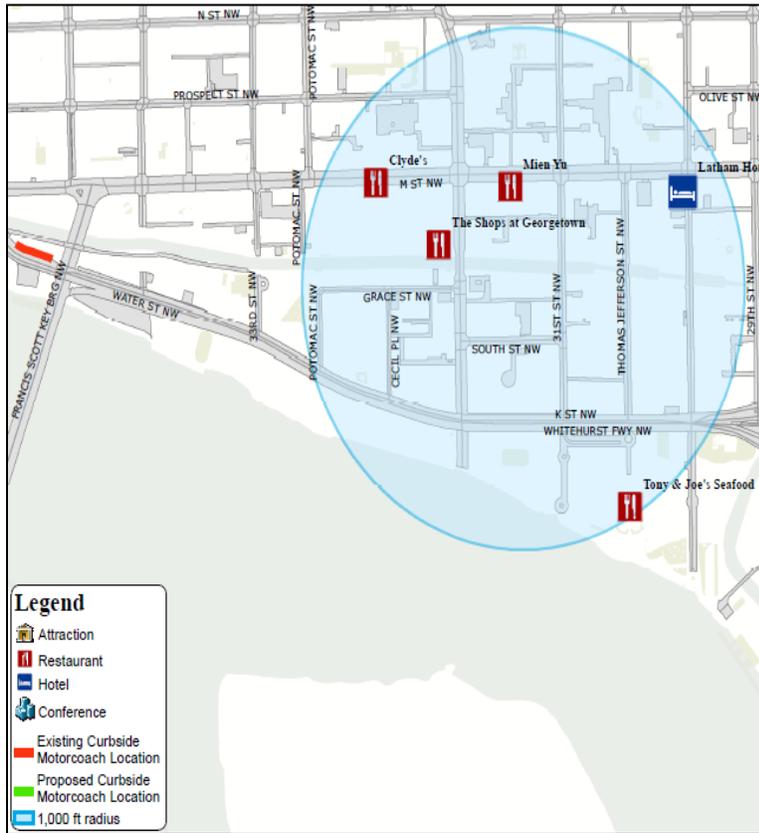
Figure 35: Motorcoach Activity Generators Map – Zone 17



Zone 18 – Georgetown

Georgetown differs from the other zones identified in this plan because motorcoach activity is generated by the area itself rather than specific attractions. Information obtained from tour operators, and through the motorcoach loading zone survey that DDOT recently conducted, indicates that there are a significant number of restaurants in this area that are used by groups arriving by motorcoach. Moreover, many tour itineraries may include a stop in the historic Georgetown area as a destination in its own right. Identifying appropriate spaces for buses in this area is a challenge because of the high volume of traffic on M Street which is the major corridor through Georgetown. Much of this area is also historic and the infrastructure is not appropriate for significant motorcoach volume. However, there are four spaces designated for tour bus parking at all times on Water Street NW under the Whitehurst Freeway. It is expected that this capacity should be sufficient to accommodate motorcoaches in this area.

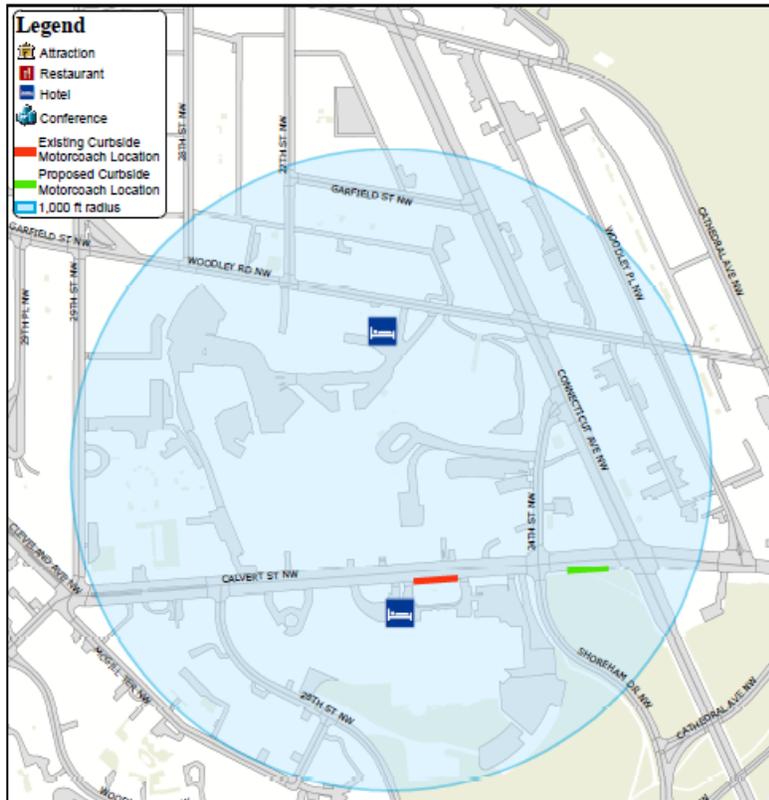
Figure 36: Motorcoach Activity Generators Map – Zone 18



Zone 19 – Woodley Park

This zone includes two hotels that generate a significant amount of motorcoach activity through group bookings and conference facilities: The Omni Shoreham and the Marriot Wardman Park. These hotels have some capacity for onsite loading and unloading of guests as they have reception areas on private property; however, observations indicate that during large events specifically, there is a considerable amount of motorcoach congestion created on 24th Street. Moreover, the District receives numerous complaints about motorcoach parking and idling from residents in this area. There is currently only one space provided for curbside motorcoach activity in this area and this is located outside the Omni Shoreham Hotel on Calvert Street.

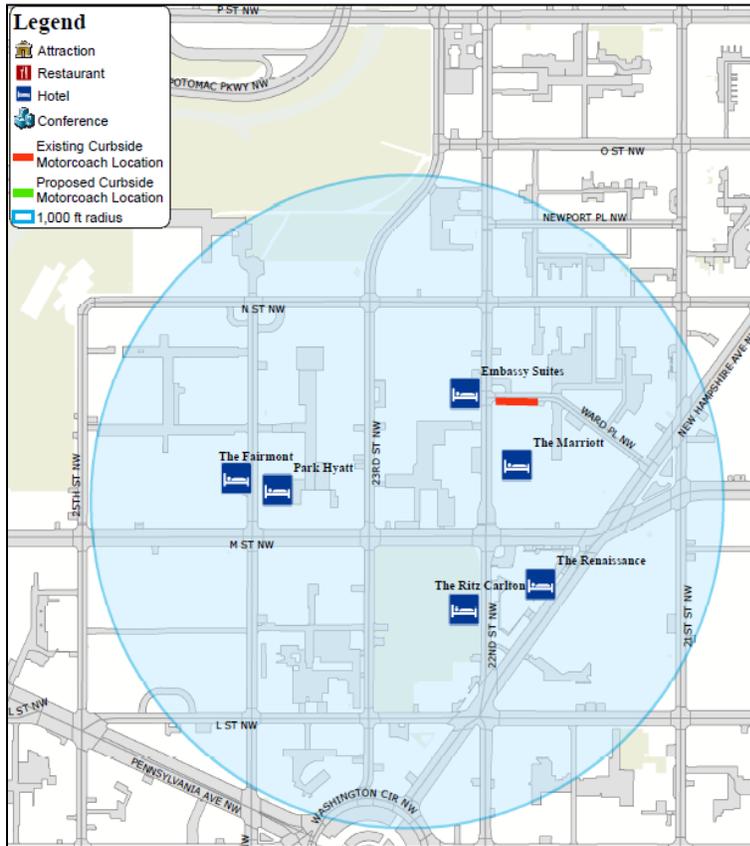
Figure 37: Motorcoach Activity Generators Map – Zone 19



Zone 20 – West End

There are several large hotels in this zone that are estimated to generate a significant amount of motorcoach activity both through group bookings and conferences. This concentration of hotels in a limited area creates competition for curbside motorcoach capacity in this area and generates considerable demand for parking. There are currently two motorcoach spaces available in this zone. They are located adjacent to the Marriott hotel on the 2100 block of Ward place NW.

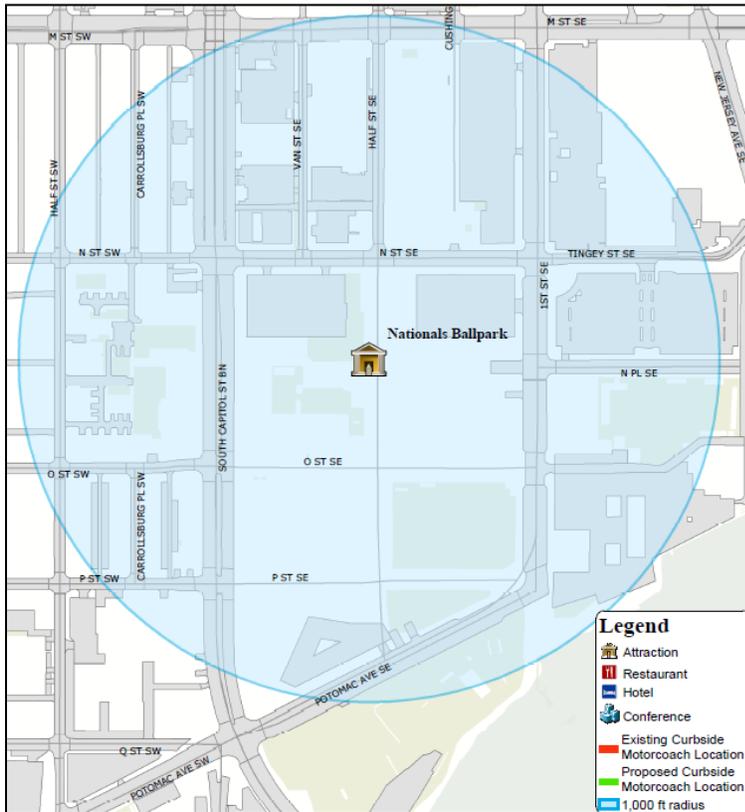
Figure 38: Motorcoach Activity Generators Map – Zone 20



Zone 21 – Nationals Baseball Stadium

The Nationals baseball stadium is the key generator for motorcoach activity in the southwest area of the city. The stadium has a capacity of over 41,000 and on game days the area is host to an influx of buses transporting fans from outside the jurisdiction. Currently, there is sufficient capacity for off street parking for motorcoaches in this area in surface lots. However, as with the southwest waterfront area, this neighborhood continues to experience significant development which may affect the availability of surface lots as construction commences on currently vacant lots.

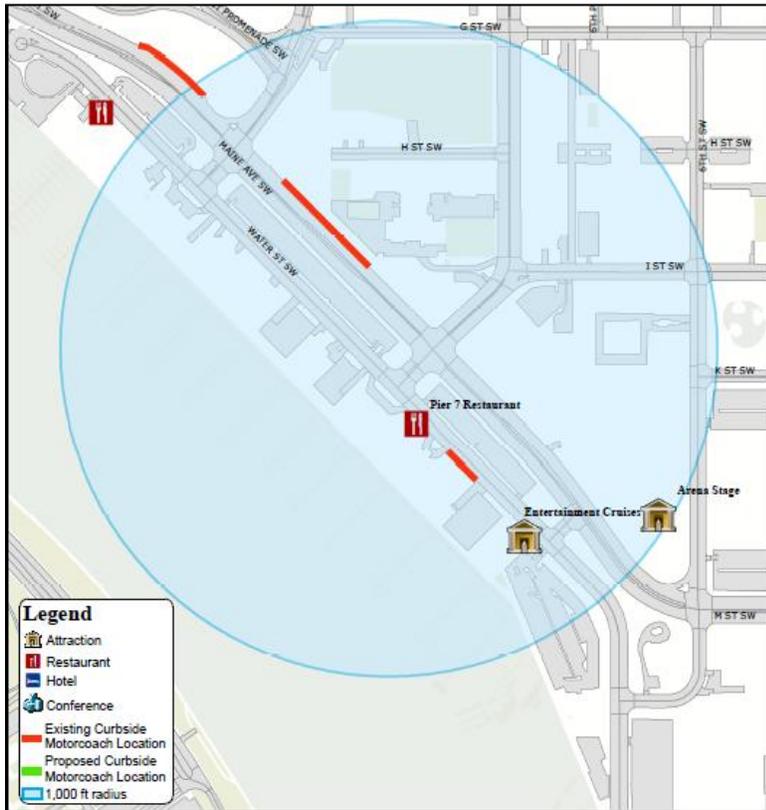
Figure 39: Motorcoach Activity Generators Map – Zone 21



Zone 22 – Arena Stage Theatre, Entertainment Cruises, Phillips Flagship, Pier 7 Restaurant and Channel Inn

This zone is located in an area that acts as a default overflow parking area for motorcoaches along Maine Avenue and Water Street, SW. The main generators of motorcoach activity in this area are the newly reopened Arena Stage Theatre, and the restaurants and cruise operators along the waterfront on Water Street. There are several options for motorcoach parking in this area. Colonial Parking offers off-street bus parking for \$25.00 Monday to Thursday and \$30.00 Friday to Sunday. This parking is only available to buses transporting groups to the Spirit of Washington Cruise. In addition, there are also several curbside areas for tour bus parking. There are two spaces available outside Pier 7 Restaurant and Channel Inn that are marked as a Tour Bus Stand. The NPS provides approximately four spaces for sightseeing and tour buses on the 900 block of Maine Avenue, adjacent to Banneker Overlook. Finally, there are approximately seven spaces designated as Four Hour Tour Bus Parking on the 700 Block of Maine Avenue.

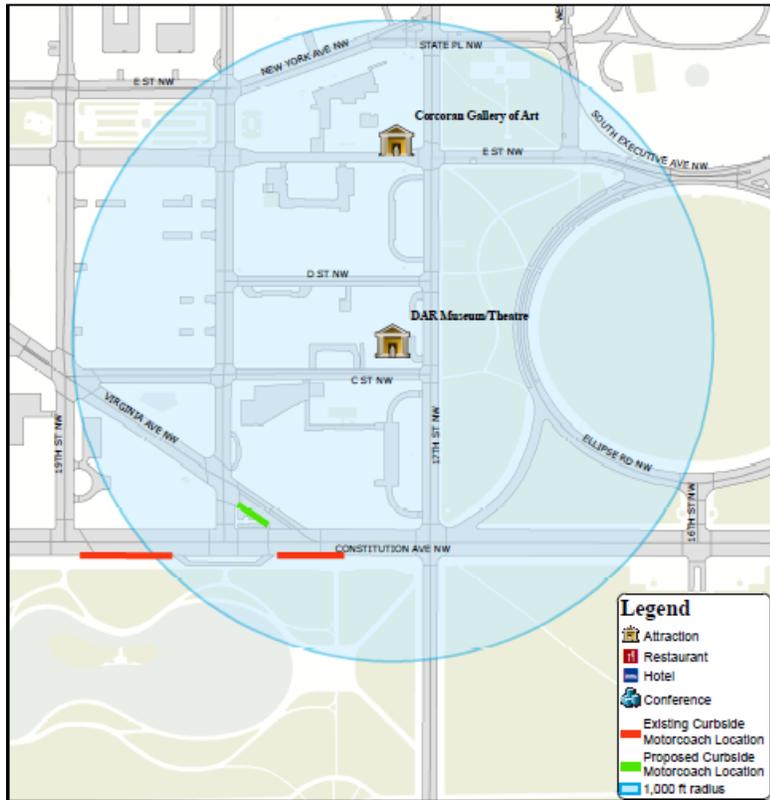
Figure 40: Motorcoach Activity Generators Map – Zone 22



Zone 23 – DAR Constitution Hall, Corcoran Gallery of Art

There are two major generators of motorcoach activity in this zone, the DAR Constitution Hall and the Corcoran Gallery of Art. Constitution Hall attracts approximately 600,000 visitors per year for concerts and other events while the museum attracts additional activity on a daily basis. No data were available for the Corcoran Gallery of Art; however, based on volume at similar attractions this is determined to be a medium volume generator of motorcoach activity. There are no curbside motorcoach spaces available in this zone; however, field observations indicate that curbside loading and unloading of passengers takes place on both the 300 block of 18th Street and the 1700 block of C Street adjacent to Constitution Hall. Based on the demand calculation for motorcoach space, this area requires two spaces. Recommendations for locations to accommodate this space are provided at the end of this section.

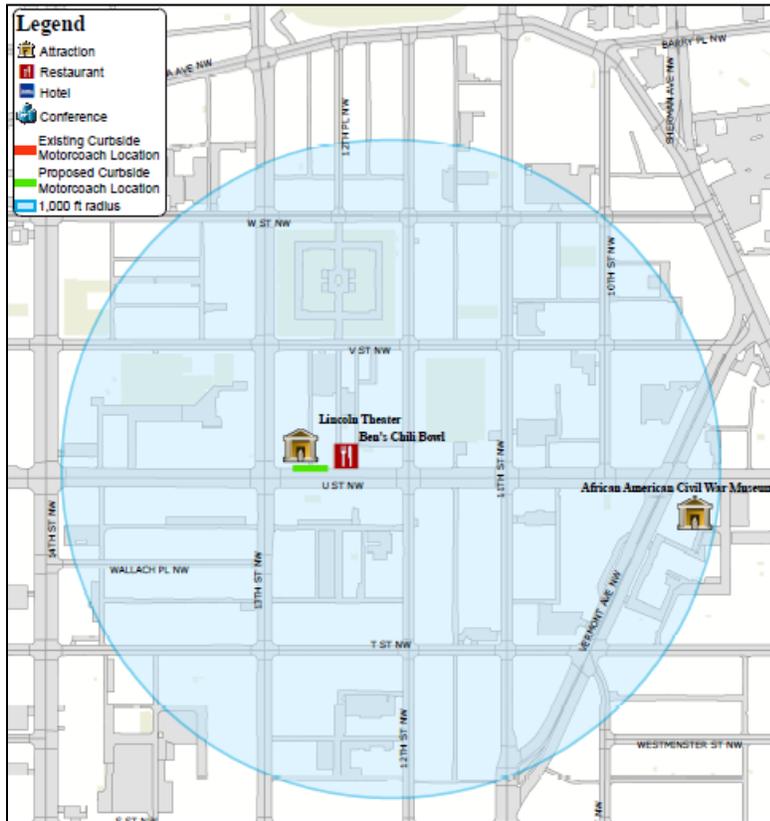
Figure 41: Motorcoach Generators Activity Map – Zone 23



Zone 24 – Lincoln Theatre, Ben’s Chili Bowl, and the African American Civil War Museum.

This zone is located on the historic U Street corridor and includes three major generators of motorcoach activity: the Lincoln Theatre, Ben’s Chili Bowl – located adjacent to one another - and the African American Civil War Museum. Ben’s Chili Bowl arguably has dual function as both a restaurant and an attraction in its own right as one of the District’s most iconic businesses. Moreover, groups are encouraged to visit the U Street corridor and take the self-guided tour through this historic neighborhood assisted by strategically placed informational signs. As promotion for this area increases among tour planners, it is anticipated that there will be increasing demand for curbside motorcoach spaces in this zone. There are currently no curbside motorcoach spaces available in this zone.

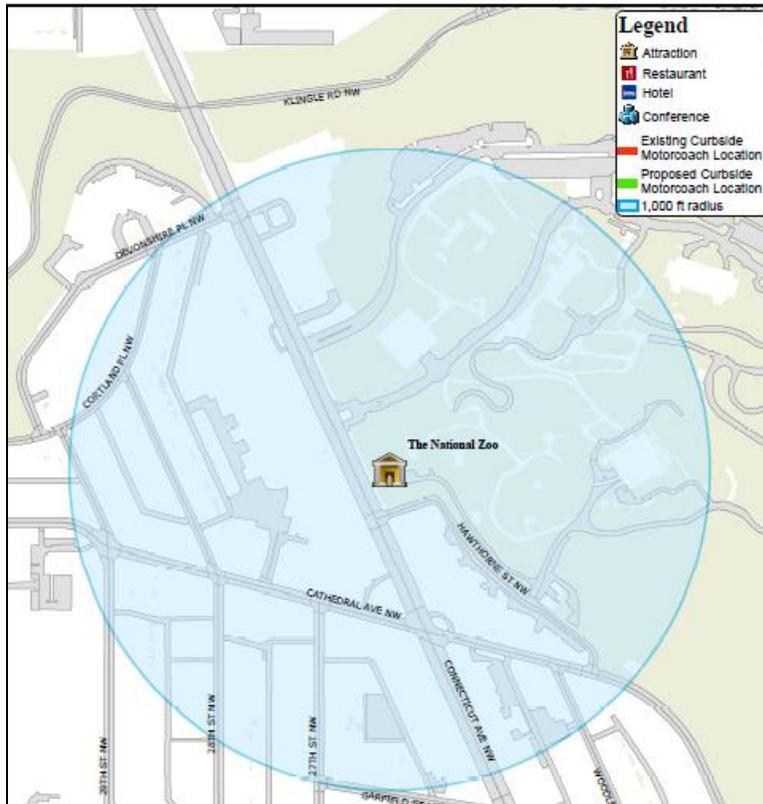
Figure 42: Motorcoach Generators Activity Map – Zone 24



Zone 25 – The National Zoo

This zone contains only one major generator of motorcoach activity – the National Zoo – which attracts approximately 2.3 million visitors on an annual basis. Tour bus passenger loading and unloading is strictly prohibited at the curbside adjacent to the Zoo on Connecticut Avenue. However, the Zoo does have an off-street parking facility which can accommodate approximately 50 motorcoaches. Official information indicates that this parking is available only for motorcoaches visiting the Zoo itself; however, several businesses in the northwest of the city have reported that drivers will park at the Zoo after disembarking passengers at restaurants or hotels in close proximity.

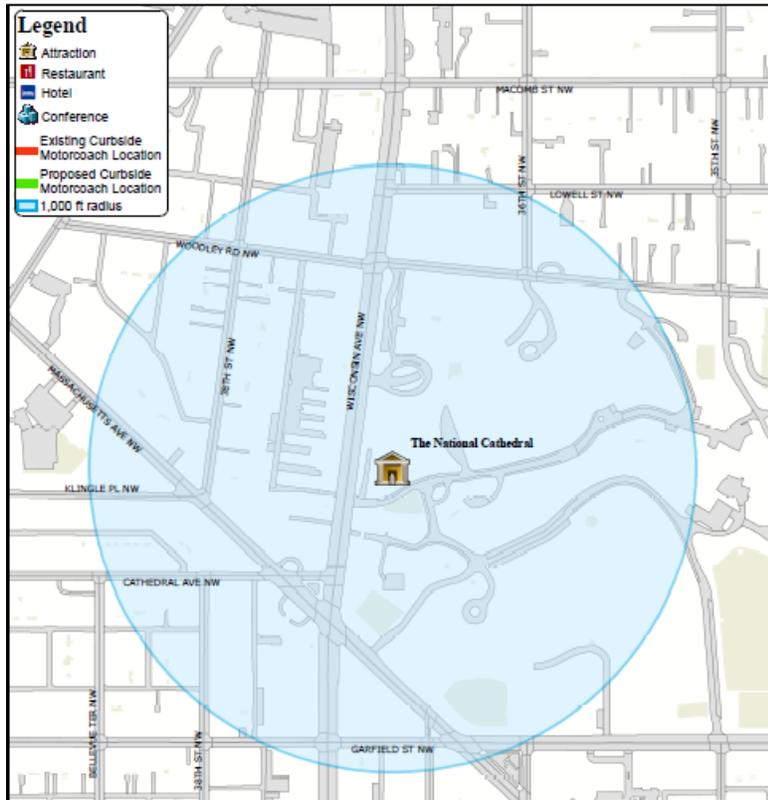
Figure 43: Motorcoach Activity Generators Map – Zone 25



Zone 26 – The National Cathedral

This zone also contains a single major generator of motorcoach activity – the National Cathedral. The Cathedral also has an off-street parking facility to accommodate motorcoach activity and passenger loading and unloading is prohibited on the curbside surrounding the Cathedral grounds. Parking at the Cathedral garage is generally limited to groups visiting the Cathedral itself; however, there is limited capacity to accommodate additional motorcoach parking for a fee.

Figure 44: Motorcoach Activity Generators Map – Zone 26



Routing

Routing of motorcoaches in high density areas is challenging because of the infrastructure impacts that heavy vehicles have on roads that are frequently not designed for a high volume of commercial vehicle traffic. The District has several major highways and arteries that provide direct routes for motorcoaches to access the downtown core of attractions. DDOT also provides guidelines for motorcoach routing throughout the city on major thoroughfares. In addition, there is a significant network of signage throughout the city restricting motorcoach access on specific streets.

DDOT has developed a truck and bus route system which provides suggested routing in the District and is available to motorcoach operators on the goDCgo website¹⁶. This map is based on main arteries that have the infrastructure to accommodate commercial vehicle traffic. Unlike other jurisdictions, the District does not require specific routing between major attractions and

¹⁶<http://godcgo.com/Portals/0/Content%20Images/Draft%20Truck%20And%20Bus%20Route%20System%20Map.pdf>

this map is a guideline of suggested routes rather than designated routing such as is required in Atlantic City. A copy of the Draft Truck and Bus Map is available in Appendix D.

Routing is a major issue for all types of motorcoach activity in the city. The specific routing challenges caused by each type of motorcoach activity are outlined below.

Tour Bus

Tour buses often follow an itinerary that focuses on attractions on or in proximity to the national mall. While much of this area is able to accommodate motorcoach traffic, there are specific areas, such as Capitol Hill, that have restrictions on motorcoach activity. Despite clear signage, there is still an amount of tour bus activity in this area. Many of the tour operators are domiciled within the region and drivers are familiar with the Districts motorcoach routing restrictions. However, other drivers are new to the area and a lack of familiarity with District traffic patterns and restrictions can lead these drivers to take inappropriate routes through residential or otherwise restricted areas. Managing routing for tour bus activity is a challenge because each operator creates a specific itinerary for individual groups. DDOT does not have any plans to prescribe tour bus routing at this stage; however, a detailed version of the truck and bus system map may be made available to tour bus operators as part of a planning tool kit provided to operators when they apply for a trip permit.

Sightseeing Bus

Sightseeing buses frequently take specific routes through historic and residential neighborhoods such as Georgetown that are tourist attractions in their own right. This causes traffic conflicts on narrow residential streets, negatively impacts infrastructure not suited to commercial vehicle traffic, and can lead to other environmental challenges such as foliage being cut to accommodate motorcoach passage. Sightseeing buses generally follow a prescribed route between stops on an itinerary which makes managing this type of activity easier than tour bus activity. Under proposed regulations, sightseeing bus companies will be required to submit their planned routes to DDOT for review as part of their application for a public space permit to load and unload passengers at the curb. This provides an opportunity for DDOT to ensure that this activity is confined to appropriate roadways and will not have an unduly negative impact on the infrastructure in residential and historic areas.

Intercity Bus

Intercity bus activity is primarily located in proximity to Union Station and the Chinatown area. This type of motorcoach activity has very time sensitive scheduling and drivers will often utilize residential streets to avoid congestion on major arteries and therefore have better schedule adherence. Under pending intercity bus regulations, companies will not be required to submit planned routes to DDOT for review.

Commuter Bus

Like intercity buses, commuter buses operate on time sensitive schedules and will often utilize residential streets to avoid congestion on major arteries. Commuter bus activity can create a significant concern on certain residential streets due to the volume of buses traveling a particular corridor during morning or evening commute times. Where DDOT is made aware of inappropriate routing by commuter buses, this concern is raised with the agency or company in question and signage and enforcement steps are taken to restrict this activity. Routing was not specifically addressed as part of the recent Commuter Bus Management Plan; however, commuter bus companies do publish their schedules and are largely in adherence with the truck and bus route system restrictions within the District.

Enforcement

Enforcement of the laws governing motorcoach operations in the District is carried out by over fifteen agencies that have jurisdiction in the city. This aspect of the District's unique environment impacts the coordination and comprehensive enforcement of regulations. A frequently expressed concern for motorcoach operators is a lack of consistent enforcement across agencies regarding posted traffic restrictions. This can lead to confusion and miscommunication between drivers and enforcement personnel. DDOT is committed to improving the communication between enforcement agencies, and this issue will be addressed in the recommendations section of the report.

As the nation's capital, the District has a unique regulatory environment which impacts motorcoach operations in several ways. Many of the city's major attractions are located on the National Mall on land that is owned and operated by the National Park Service (NPS). NPS land is governed by an overarching set of policies that apply to all NPS parks nationwide. Consequently, many of the policies are not tailored for an urban environment like the District of Columbia and this can have a major impact on areas of concern such as motorcoach parking. In an effort to mitigate this concern, DDOT will be working closely with NPS as they conduct their Tour Bus Parking Study in 2012.

Recommendations

DDOT has determined an action agenda of immediate-term, mid-term and long-term goals to effectively manage motorcoach operations in the District. The immediate-term recommendations focus on providing adequate curbside capacity for motorcoaches in proximity to major attractions, identifying staging locations for commuter bus activity and providing dedicated staffing for motorcoach management and enforcement. The mid-term recommendations focus on sourcing an off-street parking facility to provide adequate long-term daytime and overnight parking for the diverse types of motorcoach activity in the city, streamlining motorcoach routing and restrictions, and improving inter-agency coordination. The long-term recommendations focus on the construction/implementation of a centralized intermodal facility.

Immediate Term

The immediate-term focus of the Motorcoach Management Action Plan is to identify curbside locations to accommodate two key types of motorcoach activity: tour bus operations in areas with major attractions and commuter bus stop and staging areas. In addition to addressing curbside demand, the immediate-term recommendations include plans for dedicated staff for motorcoach management and enforcement.

To address the shortage of curbside motorcoach spaces available in proximity to major attractions, DDOT has conducted an analysis of the demand for spaces and surveyed the existing curbside space to identify possible locations to accommodate this demand. The methodology used to determine demand for spaces is based on visitor volume at major attractions and estimated motorcoach volume during peak tourist months. This methodology is discussed in detail in the preceding section. The immediate-term recommendations of this plan include an analysis of curbside locations that could be used to accommodate curbside motorcoach demand in proximity to major generators of motorcoach activity. This specifically addresses the needs of tour buses providing transport to groups between attractions on an itinerary. It does not capture the parking needs for motorcoaches that are dropping passengers off at a single location and then picking them up later in the day. To address the demand for staging areas for commuter buses, DDOT has worked with commuter bus agencies to identify areas where buses are currently staging, surveyed these locations, and provided recommendations of where this activity can be accommodated.

Curbside Tour Bus Motorcoach Location Recommendations

DDOT has conducted an analysis of demand for tour bus motorcoach parking in proximity to key generators of motorcoach activity including attractions, hotels and restaurants. As part of this analysis, key attractions in the city were sorted into 1,000 foot zones and demand for motorcoach capacity determined within these zones; 1,000 feet is deemed to be a reasonable walking distance between motorcoach and attractions. Based on this analysis, DDOT has determined that there is demand for an additional 39 curbside spaces for motorcoach activity in the downtown area. To meet this demand, DDOT has developed a list of 58 proposed curbside locations to accommodate motorcoach activity in proximity to major attractions. This section will outline recommendations for each zone determined to require additional capacity and figure 45 shows a feasibility matrix for all proposed curbside locations. Motorcoach activity accommodated at these locations may include some form of payment and or reservation system. This could be achieved through curb-side metering for motorcoaches, or through the permitting process similar to the system currently utilized in Alexandria, VA. As part of the process for identifying additional motorcoach spaces throughout the city, DDOT will also undertake a review to ensure that signage is clear and consistent across all locations.

Figure 45: Curbside Motorcoach Locations Alternatives Matrix

Recommendations for Additional Curbside Motorcoach Locations						
Zone	Estimated Demand (# of spaces required)	Proposed Locations	# of Spaces	Challenges	Benefits/Positives	Critical Path
6	8	Madison Drive, NW - 1200 Block	2	*Currently a Tourmobile zone	*Curbside space already designated for motorcoach use. * Close proximity to major attractions	*NPS have agreed to convert this space into a tour bus loading zone.
		Constitution Avenue, NW - 1400 Block	5	*Revenue loss from removal of meters *Conflict with vendor stands	* Close proximity to a concentration of attractions *Anticipates additional demand created by the construction of the African American History Museum * Reduce air pollution and congestion from motorcoach "cruising" between drop-off and pick up * DDOT owned land	*Meet with DCRA to review existing vendor permits * Meet with internal stakeholders to review estimated revenue loss from removal of meters *Meet with Smithsonian to review plans for the African American History Museum
		Madison Drive, NW - 900 Block	1	* Currently a Smithsonian Shuttle zone	*Curbside space already designated for motorcoach use. * Close proximity to major attractions	*NPS have agreed to consider converting this space into a tour bus loading zone.
7	5	Independence Avenue, SW - 700 Block	1	* The space may be required to be re-designated as metered parking *Conflict with vendor stands	*The location was previously a Circulator bus stop but is no longer in service and the space has not yet been re-designated *Close proximity to major attractions	*Review curbside designation with PTSA and IPMA
		Jefferson Drive, SW - 900 Block	3	* High traffic volume area	*Close proximity to major attractions	* Work with NPS to consider re-designation of this area for motorcoach loading/unloading.

				<ul style="list-style-type: none"> * Conflicts with vendor and delivery vehicles * NPS property 	<ul style="list-style-type: none"> *Area is already in use by motorcoaches *Provides motorcoach capacity in an area where there are currently no options for loading/unloading of passengers. 	
8	3	Constitution Avenue, NW - 700 Block	3	*Metered parking	<ul style="list-style-type: none"> * Capture meter revenue from motorcoaches that already park in this location without paying the meters. 	*Review meter occupancy rates internally and discuss possibility of converting these to motorcoach meters
10	4	3rd Street NW/SW - Unit/100 Block	13	<ul style="list-style-type: none"> *Ownership - Architect of the Capitol/ NPS? *Concerns about line of sight in front of the Capitol and National Mall *Security concerns about proximity to landmarks/Capitol *Revenue loss from removal of meters 	<ul style="list-style-type: none"> * Close proximity to a concentration of attractions * Reduce air pollution and congestion from motorcoach "cruising" between drop-off and pick up * Potential capacity of over 25 bus parking spaces 	<ul style="list-style-type: none"> * Meet with AOC/ Capitol Police/NPS * Meet with internal stakeholders to review estimated revenue loss from removal of meters * Review the regulatory changes necessary to charge motorcoaches for parking.
12	5	Pennsylvania Avenue, NW - 1000 Block	2	*Area was previously designated for motorcoach use but removed when bike lanes were installed and the travel lanes were reduced.	* Close proximity to major attractions	
		Pennsylvania Avenue, NW - 1400 Block	1	*Area is currently designated as permit parking for District government and council staff	<ul style="list-style-type: none"> *Reduces double parking in the travel lane and improves traffic flow. *Provides a curbside space for the sightseeing buses that already stop at this location 	<ul style="list-style-type: none"> *Determine existing permit details * Review locations with WMATA as there is a Metrobus stop on this block too.
		12th Street, NW - 300 Block	4	<ul style="list-style-type: none"> * Currently metered parking * Rush hour restrictions 	<ul style="list-style-type: none"> * Close proximity to major attractions * Doesn't impact permit parking on Pennsylvania Avenue 	* Review meter occupancy rates with TOA

13	4	H Street, NW - 1600 Block	3	<p>*This area has a volume of motorcoach activity including tour buses, commuter buses, sightseeing buses and Metrobuses.</p> <p>*The area is signed as no parking except Sundays 9am until 1pm to accommodate parking for the church at 16th and H.</p>	<p>*Creating curbside space for motorcoaches would reduce or eliminate the existing practice of double parking to allow passengers to board and alight.</p> <p>*Improve traffic flow and pedestrian safety</p>	<p>* Review existing restrictions internally and with the secret service.</p>
15	N/A	9th Street, NW - 1000 Block	4	<p>*Area may be designated for WMATA use</p>	<p>*Area may already be designated for motorcoach use</p>	<p>*Determine existing use with IPMA and WMATA.</p>
17	2	Connecticut Avenue, NW - 1800 Block	2	<p>* Currently metered parking</p>	<p>* Buses currently park in metered parking spaces so converting these to motorcoach spaces would capture revenue that is now being lost.</p> <p>* Meter times would only need to be changed for the evening as this is when the demand is generated</p>	<p>*conduct observations to determine demand</p> <p>* Meet with Bucca di Beppo to calculate demand.</p>
		Florida Avenue, NW- 1900 Block	2	<p>*Commercial vehicle loading zone</p>	<p>*Buses already use this location.</p> <p>*Doesn't involve revenue loss from meters</p>	<p>*Conduct observations at loading zone to determine usage</p> <p>*Meet with Hilton to discuss potential changes.</p>
19	2	Calvert Street, NW - 2400 Block	2	<p>* No Stopping or Standing</p> <p>* Land ownership - this may be NPS property</p> <p>* Potential of blocking the turn lane.</p>	<p>* Buses already use this location</p> <p>* No loss of revenue from meter removal</p> <p>* Not adjacent to residential area</p>	<p>*Review turn lane distance.</p> <p>*Review land ownership</p>
23	2	Virginia Avenue, NW - 1700 Block	3	<p>*This area has no current restrictions. The travel lane is striped as the road is only one way in this block of Virginia Avenue.</p>	<p>*This is already in use by buses</p>	<p>* Determine land ownership with NPS.</p>

				*The roadway abuts a small parcel of NPS property	* recognizing this as bus parking would not have any revenue impact * low impact on traffic flow.	*Determine whether this should be re-designated for commuter staging only or for motorcoach capacity more broadly.
24	2	U Street, NW - 1200 Block	1	* No Parking Entrance area adjacent to Lincoln Theatre	* No loss of revenue from meter removal *Directly adjacent to attractions	* Review re-designation of area with Lincoln Theatre/Ben's Chili Bowl
N/A	N/A	D Street, SW - 1300 Block	6	* Currently a commercial vehicle loading zone *Bureau of Engraving and Printing use this area for staging trucks and their trash containers	*This curbside space is being underutilized and would provide a good location for commuter bus staging and general motorcoach capacity. *More efficient use of the curbside	*determine the Bureau of Engraving and Printing demand for this space *Determine whether this should be re-designated for commuter staging only or for motorcoach capacity more broadly.
N/A	N/A	15th Street, NW - 300 Block	N/A	*Vendor stands	*This area is already tour bus parking. *Streamlining the signage so it is all consistent and continuous will improve functionality of this location	*Review the vendor stand with DCRA

Commuter Bus Stop and Staging Locations

To address the issue of appropriate commuter bus stops in the city, DDOT has undertaken a comprehensive study of commuter bus activity and stop locations and developed a Commuter Bus Management Plan. Existing commuter bus stop locations were identified through data collected in a previous study, a review of the five commuter bus carriers' maps and schedules, and additional documents supplied by the agencies and companies identified above. Field observations were conducted at each of the known locations and stops were assessed against a set of suitability criteria including: distance to preceding and subsequent stops; observed traffic or curbside use conflicts; proximity to major employment centers and; other vehicle, passenger, and pedestrian safety considerations. Based on this analysis, and a subsequent review process with the commuter bus agencies and companies, 145 AM stops and 140 PM stops have been identified for retention in the District. 80 percent of the approved stops are located at Metrobus stops, minimizing the impact on existing curbside use restrictions. A map and list of approved commuter bus stop locations is provided in Appendix E

To ensure that a process exists to effectively manage ongoing commuter bus activity in the District, DDOT is requiring commuter bus operators to undergo a review process for each stop location. Moreover, operators will be required to install signage at each of their approved stop locations, both AM and PM. As noted above, 80 per cent of the approved stop locations are shared with Metrobus stops. DDOT has worked closely with WMATA to ensure that each of the recommended locations is suitable for commuter bus activity and secure their approval. For the 20 per cent of approved locations that are situated in public space, operators will also be required to obtain an annual public space signage permit. Any planned changes to stop locations will be required to be submitted to DDOT for approval. If the planned changes involve a Metrobus location, the review process will include WMATA.

The goals of this process are threefold: first, by requiring signage at each location, stops will be easily identifiable by both drivers and riders which will minimize traffic conflicts that are currently caused by buses stopping at the most convenient location in proximity to their designated stop; second, for the approved locations, commuter bus operators will no longer be subject to fines associated with stopping in public space or Metrobus stops in violation of the existing curbside use restrictions; third, the permitting process and installation of signage at approved stop locations will assist enforcement personnel to identify approved commuter bus activity and minimize miscommunication.

In addition to establishing a process to manage commuter bus stop locations, there is also a demand for staging locations. Commuter buses stage in several key areas of the District prior to starting afternoon routes including Foggy Bottom, Southwest, and Union Station. Based on observations conducted in areas where commuter buses start their afternoon routes and currently stage it is estimated that to approximately 20 spaces are needed to accommodate this staging activity in the city. DDOT will consider providing curbside space at these locations, but the final

determination will be based on competing curbside needs as this is a service that is provided for non-District residents.

Many commuter bus routes start their evening service in the Foggy Bottom area. Observations were conducted between 2:30 and 5:30 pm in this area to determine the volume of commuter buses that currently stage prior to commencing their routes. These observations indicate that between four and fifteen buses stage in this area during the hours of observation with peak demand occurring between 3:00 and 4:30 pm. There are four locations in this area that are currently used by commuter buses to stage and could be reserved for this purpose without removing metered parking. Two of these areas have no parking restrictions during the staging period, another is designated as a Metrobus stand and the final area on Virginia Avenue has no existing restrictions.

In addition to the staging requirements in the Foggy Bottom area, there are also several routes that begin in the L'Enfant Plaza and M St SE areas. These buses currently stage on Maine Avenue prior to starting their routes. As discussed elsewhere in the recommendations, this area is undergoing development and will no longer be able to accommodate motorcoaches in the future. DDOT has worked closely with the commuter bus companies to identify an alternative appropriate staging location for these buses and the 1300 block of D Street southwest is under consideration. There is a commercial vehicle loading zone in this area that could accommodate commuter bus staging activity for approximately four bus spaces. Figure 46 outlines proposed locations that will be considered for commuter bus staging activity.

Figure 46: Commuter Bus Staging Alternatives Matrix

Recommendations for Commuter Bus Staging Locations				
Proposed Locations	# of Spaces	Challenges	Benefits/Positives	Critical Path
20th Street, NW - 300 Block	4	* This area is currently subject to No Standing or Parking Restrictions	*Area is already in use by commuter buses as a staging location * No meter revenue loss	* Review traffic operations with IPMA
Virginia Avenue, NW - 2000 Block	4	*Currently signed as a WMATA bus stand 3.30pm-6.30pm	*Area is already in use by commuter buses as a staging location * No meter revenue loss	*Review designation with WMATA. Initial indications are that this area is no longer used for staging.
21st Street, NW - 300 Block	2	*Currently signed as No parking 9:30am-4:00pm & No Stopping or Standing 4-6:30pm	*Area is already in use by commuter buses as a staging location * No meter revenue loss	* Review traffic operations with IPMA
Virginia Avenue, NW - 1700 Block	3	*This area has no current restrictions. The travel lane is striped as the road is only one way in this block of Virginia Avenue. *The roadway abuts a small parcel of NPS property	*This is already in use by buses * recognizing this as bus parking would not have any revenue impact * low impact on traffic flow.	* Determine land ownership with NPS. *Determine whether this should be re-designated for commuter staging only or for motorcoach capacity more broadly.
D Street, SW - 1300 Block	6	* Currently a commercial vehicle loading zone *Bureau of Engraving and Printing use this area for staging trucks and their trash containers	*This curbside space is being underutilized and would provide a good location for commuter bus staging and general motorcoach capacity. *More efficient use of the curbside	*determine the Bureau of Engraving and Printing demand for this space *Determine whether this should be re-designated for commuter staging only or for motorcoach capacity more broadly.

Program Staffing

The importance of appropriating resources to effectively manage motorcoaches in the District is vital. The subsequent steps will be to assign District staff through the motor carrier program to implement study recommendations. One point of contact will be responsible for all interstate bus related planning activities.

Mid Term: 1-2 years

The mid-term goals of the DDOT Motorcoach Action Plan are to source an off-street parking facility to meet the demand for motorcoach parking in proximity to the downtown area, streamline motorcoach routing and restrictions and enhance coordination between agencies responsible for motorcoach operations in the District.

Identifying curbside locations is a first step in addressing the need for motorcoach spaces in the city but does not adequately meet demand for parking. Motorcoaches require overnight parking and facilities for drivers including accommodation and restaurant amenities which cannot be provided through curbside locations. DDOT estimates that approximately 2,000 commercial motorcoaches operate in the District during peak season. This number includes between 1,000-1,500 tour buses, 300 commuter buses and 200 intercity buses. The inventory of existing motorcoach parking capacity provided in the existing motorcoach management operations section of this report indicates that there are currently 611 off street motorcoach parking spaces available to motorcoaches. This clearly falls short of meeting the estimated demand. Moreover, the facility with the largest motorcoach parking capacity, RFK stadium with 500 spaces, reports that they have very low occupancy rates; the operators of the facility estimate that in June, 2011, a total of four buses parked at RFK. This indicates that RFK is not meeting the need for motorcoach parking and is therefore not being utilized by drivers. This facility is primarily used for parking during large events such as the presidential inauguration. In comparison, Union Station has very high occupancy rates and is frequently full to capacity. This indicates that there is demand for a parking facility located in reasonable proximity to the central city. Identifying such a facility would be a major step in addressing the primary challenge for managing motorcoach operations in the District.

DDOT has been working diligently to identify a suitable off-street parking facility in reasonable proximity to the downtown core. It is anticipated that this facility will be able to provide significant motorcoach parking capacity and offer amenities to drivers including restroom facilities, quiet rooms and the opportunity to purchase food.

Figure 47: Off Street Motorcoach Parking Alternatives

Off-Street Motorcoach Parking Alternatives			
Location	Challenges	Benefits/Positives	Critical Path
Shared Loading Zones	<ul style="list-style-type: none"> * Conflict with commercial vehicle deliveries * Spaces may not be in convenient locations * Conflict with the proposed regulations governing payment for use of loading zones. 	<ul style="list-style-type: none"> * Maximizes the use of reserved curbside space for loading and unloading. 	<ul style="list-style-type: none"> * Meet internally to review potential for amending regulations to allow for the sharing/payment for this space
Parking Garage	<ul style="list-style-type: none"> *Cost of subsidy *Possible regulatory barriers 	<ul style="list-style-type: none"> * Reduces the need for curbside motorcoach parking. *Provides comprehensive solution to motorcoach parking shortage. 	<ul style="list-style-type: none"> * Identify potential developers/parking lot operators
Parking Facility on Banneker Overlook Parking Facility on Banneker Overlook	<ul style="list-style-type: none"> *Cost *Operational considerations 	<ul style="list-style-type: none"> *Location is in close proximity to major routes *Location is in close proximity to major attractions 	<ul style="list-style-type: none"> * Identify potential developers and additional coordination with DC office of Planning and future corridor plans

	* Other development in this area may mean there are community concerns.		
Nationals Baseball Stadium	*Only available on non-game days *No facilities for drivers	* Close proximity to major generators of motorcoach activity *Existing capacity	* Identify potential developers/parking lot operators

Long Term: 2 years +

The District will strive to establish a long term comprehensive parking facility dedicated for bus parking in the District. In addition, alternative methods for how tourist trips are being conducted in the District are being considered. Additional planning studies will be required to identify alternative tour bus parking needs.

Routing

DDOT recognizes that the inappropriate routing of commercial motorcoaches on residential and restricted streets can have negative traffic and infrastructure impacts, and create concern among residents. This section will provide an overview of plans to streamline routing guidelines in the city and outline plans to address routing for each of the types of motorcoach activity.

The issue of motorcoach activity in residential and otherwise inappropriate locations has historically been addressed through the placement of restrictive signage on specific streets. This has been a reactionary process in which signage is installed in response to citizen requests. Consequently, there is a significant network of bus restriction signage throughout the city that does not correspond to the truck and bus route system map. As part of the Motorcoach Management Action Plan, DDOT intends to streamline the routing and restrictive signage for motorcoaches throughout the District. A preliminary inventory of the truck and bus signage in the city has been undertaken and a map of the identified signage is available in Appendix F. Additional fieldwork will be conducted to ensure that this inventory is comprehensive and accurate. Steps will then be taken to ensure that this signage is complementary to the truck and bus route system map and accurately represents necessary restrictions in the District.

Another concern regarding routing is the number of road closures that the city experiences. Major roads in close proximity to key attractions are frequently closed for events such as marathons and festivals. Having access to timely and accurate information about road closures is essential for motorcoach operators to plan alternative routes for their trips into the District. Information regarding road closures is available on DDOT's website, and a link is provided on the Motorcoach Operators page on the goDCgo website. However, this continues to be a major challenge that operators raise with DDOT representatives. To address this issue, DDOT is planning to establish an email alert service for motorcoach operators that will provide timely information on issues such as road closures that will affect motorcoach activity in the city.

Enforcement

The District has a need to continue to coordinate on a comprehensive enforcement program for motorcoaches. Currently, the Metropolitan Police Department is the primary enforcer of motorcoach regulations. The Motor Carrier Safety Unit often performs commercial vehicle enforcement; however, the unit's primary focus is on vehicle and driver inspections. Although these activities are extremely important, additional enforcement is also needed in the areas of motorcoach routing, idling and parking. Thus, DDOT has begun a commercial vehicle taskforce which has solely focused on commercial vehicle operations in public space. The taskforce is staffed by one (1) traffic control officer and one (1) inspector. The primary responsibility is to enforce regulations where possible, in key focus areas in the city that often incur high motorcoach activity.

Since enforcement is always a premium demand, resources are often stretched to capacity. In order to create a more effective environment of enforcement, alternative methods could be implemented. One such method has been deemed the "Relative Evidence Law". This specific law, as used by the state of Minnesota, allows a state to issue a citation base on the evidence of improper operation of a vehicle without physically having an enforcement officer present. Minnesota uses this method of enforcement for commercial vehicles engaged in hauling forestry products to ensure carriers are abiding by the oversize/overweight regulations. The same concept can be deployed in the District, and similarly, the District Department of the Environment (DDOE), issues a "Notice of Infraction" (NOI) to those carriers caught idling beyond the prescribed time.

Regulations/Laws

Pending Sightseeing and Commuter Bus Regulation

Historically, the District has not had any regulations governing sightseeing or commuter bus activity. The impacts of the lack of regulation include the violation of existing curbside restrictions, unauthorized installation of signage on District property and traffic and pedestrian safety impacts. DDOT has developed regulations to govern these activities which will not only address safety and traffic flow concerns, but also provide operators with a mechanism through which they can apply for permits to conduct business in the District and be assured of the right-of-way.

Under the pending regulations, commuter and sightseeing bus operators will be required to apply for a Bus Right-of-Way Occupancy Permit from DDOT. At any location where an operator seeks to occupy public space to stop to pick up or discharge passengers, they will be required to post a sign in public space to notify passengers of the stop location. For signs affixed to an existing pole or structure in the public space, the annual permit fee will be \$250 per sign. For signs affixed to a new pole or structure in the public space, the annual permit fee will be \$500. Multiple operators will be able to obtain permission to install a single joint sign in one location and the fee will be the same for installing a single sign.

Operators will be required to provide the following documentation to DDOT with their permit application: The location of all stops in the District of Columbia at which passengers will be picked up or dropped off in the right-of-way, the location of any layover parking spaces in the District, the routes that the commuter or sightseeing buses will take between any stops within the District and the hours and days for which the operator proposes occupying the public right-of-way for the loading and unloading of passengers. DDOT will consider several criteria in determining the suitability of the proposed location including: the direct impact on pedestrian and vehicular traffic, including bicycle and other non-motorized vehicular traffic, the bus service schedule, peak hour concentration, and anticipated traffic conditions, the number of passengers expected to board or disembark at any given time, and the anticipated impact on nearby public transit systems.

Under these regulations there will also be fines associated with violations of the permit requirements. There will be a \$100 fine for the following infractions

1. Picking up or dropping off passengers in the right-of-way without a permit or outside of the stops approved as part of a valid permit.
2. Traveling on a route outside of the routes approved as part of a valid permit.
3. Installing a sign or pole in the right-of-way without a permit or outside of the locations approved as part of a valid permit.

Intercity Bus Regulations

Historically, the District has not had regulations governing the operation of intercity buses in the city. As discussed in the section of this report detailing intercity bus operations, this has led to traffic and safety impacts and conflicts with local residents and businesses in proximity to the stop locations. DDOT has been working to develop regulations to address these issues and recently published a second notice of proposed rule-making, which invites public comment on the proposed regulations. It is anticipated that these regulations will be entered into the District of Columbia Municipal Regulations (DCMR) in 2011.

Under the proposed regulations, intercity bus service providers will be required to obtain an annual public space occupancy permit to operate at curbside locations. Operators will be required to pay an annual permit fee between 5,000 and 21,000 dollars. In addition, they will also be required to pay for the lost parking meter revenue caused by the use of the public right-of-way for the intercity bus service passenger loading zone. Permits will be approved through DDOT public space committee and operators will be required to supply comprehensive documentation to support their application including: the proposed intercity bus service schedule and the hours of the day for which the applicant seeks to occupy the intercity bus passenger loading zone; a proposal for orderly queuing of waiting passengers so that pedestrian movement along the sidewalk will not be obstructed and so that pedestrian movement from the sidewalk into adjacent buildings will not be impeded; and a proposed plan for the removal of trash created by waiting or arriving passengers.

The Public Space Committee will consider several criteria in determining the suitability of the proposed location including: the direct impact on vehicular and pedestrian traffic; the intercity bus service schedule, peak hour concentration and anticipated traffic conditions; and the proposed size of the passenger loading zone. Locations approved for intercity buses to load and unload passengers will be a minimum of 100 feet in length. No permits will be issued to occupy the public right-of-way to load or unload passengers during a time when standing or parking on the roadway is prohibited, such as during rush hour. To minimize the impact on residential neighborhoods, no permits will be issued for locations that are on a block containing a predominantly residential building on either side of the block. Finally, permits will not be issued for locations that are requested on the same side of the block that contains an area designated as a Metrobus or Circulator zone.

DDOT has worked closely with intercity bus service providers and industry stakeholders to develop these regulations. It is anticipated that their implementation will improve vehicular and pedestrian traffic and safety conditions in areas with stop locations. Implementation of the regulations will also minimize impact on business adjacent to stop locations. Finally, the intercity bus service providers will benefit from having approved places in which they can safely load and unload passengers without receiving tickets for violating existing curbside restrictions.

Additional Programs

Anti-Idling Program

In 2010, DDOT partnered with COG, the District Department of the Environment (DDOE), the Maryland Department of the Environment (MDE), and the Virginia Department of Environmental Quality (VDEQ) to conduct a regional Diesel Idle Reduction Campaign¹⁷. The purpose of the campaign was to increase idle reduction awareness and reduce diesel emissions; promote idle reduction as a positive behavior that helps bus and truck drivers avoid fines, save money, cut fuel costs and reduce engine wear; and, improve public health and protect the environment. Existing District idling regulations permit drivers to idle for no more than three minutes, extended to five minutes if temperatures drop below freezing. If drivers are found to be in violation of the District's idling laws, they may be subject to fines of up to \$1,000 for a first infraction. This amount doubles with each subsequent infraction for a maximum fine of \$5,000. While there is a clear enforcement component to ensuring that drivers adhere to the District's idling laws, campaign participants also recognized the importance of taking an incentive based approach to encouraging drivers to turn their engines off.

To promote positive idling behavior, the Diesel Idle Reduction Campaign includes a Driver Recognition Program. Under this program, companies, public agencies, and members of the public are all able to nominate drivers that they see exhibiting positive idling behavior. Each nominated driver receives a letter of commendation, and is eligible to win a monthly prize donated by participating District restaurants and attractions. To support the nomination process, DDOT has partnered with COG to conduct outreach to motorcoach and truck operators in the city to raise awareness of idling regulations and nominate drivers who are found to be abiding by the District's laws. DDOT has also developed a partnership with the city's destination management organization, Destination DC, and the American Bus Association (ABA) to expand the scope of the outreach efforts of this innovative program.

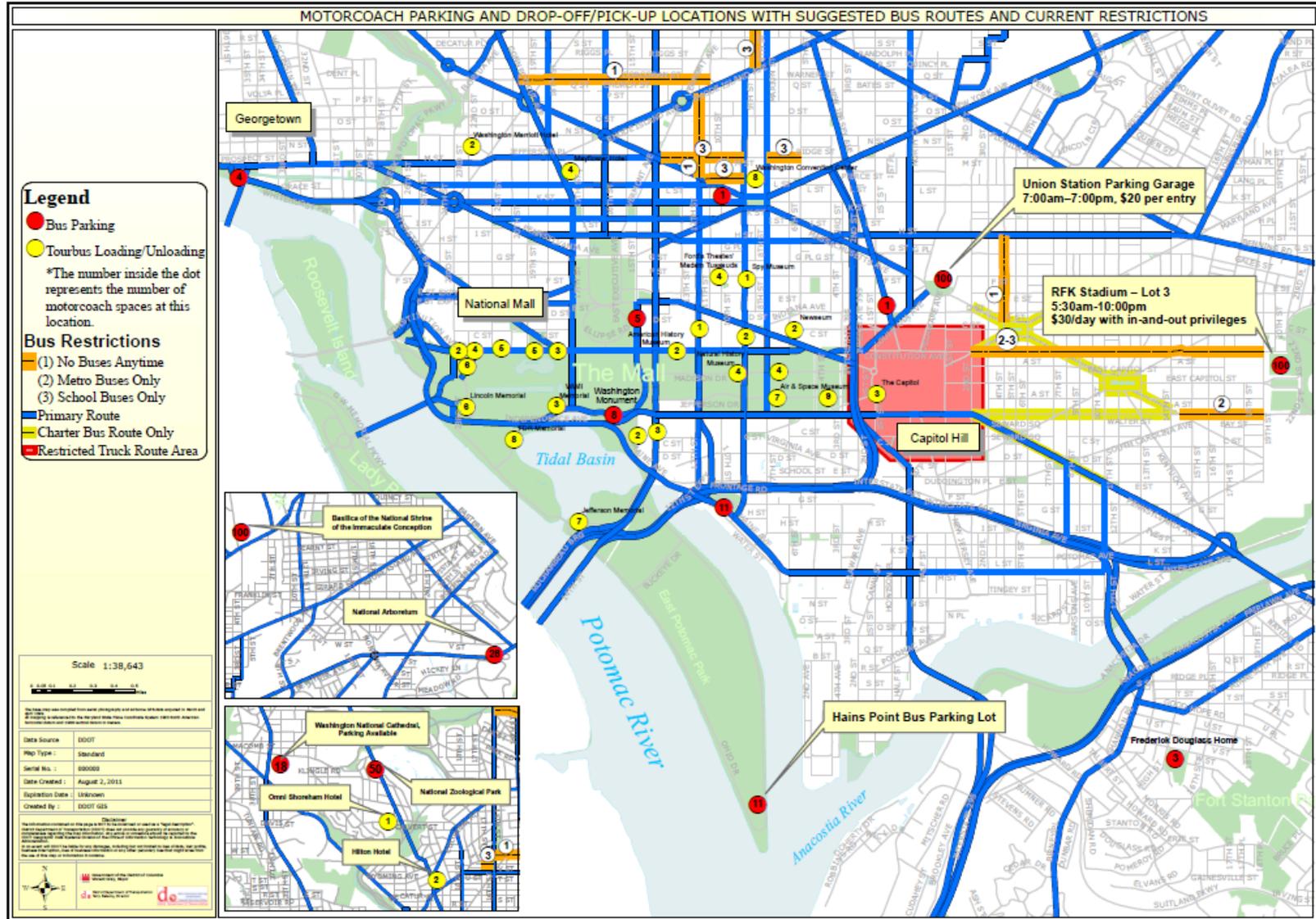
Through the partnership with Destination DC, local attractions have donated gifts to be distributed to drivers who are aware of, and abide by, the District's idling laws. This program has been well received by motorcoach operators who are pleased to be recognized by the city government. Since the program's inception in December 2010, over 200 drivers have been recognized and rewarded for exhibiting positive diesel idle reduction behavior. Several companies have also registered with the program and are recognized as diesel idle reduction partners. To enhance outreach efforts, a Driver Thank You Day was conducted on June 30, 2011,

¹⁷ <http://www.turnyouengineoff.org/home.html>

with representatives from DDOT, DDOE, Destination DC, ABA, and local attractions, restaurants and hotels. This event also provided an opportunity to nominate drivers who were observed abiding by the District's idling laws and over 80 drivers were nominated on this day alone.

In an additional effort to reduce diesel engine idling in the District, DDOT has partnered with DDOE to establish idling free zones in the city through the installation of "No Idling" signage. Approximately 450 signs have been installed throughout the city and additional signage will be distributed to DCPS and private organizations for installation on their property. An example of the sign and a complete list of the signage locations are included in Appendix G

Appendix A - Motorcoach Parking Locations in the District Map



Appendix B - Key Generators of Motorcoach Activity

Generators of Motorcoach Activity				
Name	Type of Activity	Area	Annual Volume	Annual Volume category
Folger Shakespeare Library	Attraction	Capitol Hill	N/A	Medium
Botanic Gardens	Attraction	Capitol Hill	1 Million	High
Library of Congress	Attraction	Capitol Hill	1.7 Million	High
Supreme Court	Attraction	Capitol Hill	N/A	Medium
Union Station	Attraction	Capitol Hill	N/A	High
Postal Museum	Attraction	Capitol Hill	343,000	Medium
Armand's Chicago Pizzeria	Restaurant	Capitol Hill	N/A	N/A
Capitol Visitor Center Restaurant	Restaurant	Capitol Hill	N/A	N/A
Eastern Market	Restaurant	Capitol Hill	N/A	N/A
Library of Congress Cafeteria	Restaurant	Capitol Hill	N/A	N/A
Thunder Grill [at Union Station]	Restaurant	Capitol Hill	N/A	N/A
Union Station Food Court	Restaurant	Capitol Hill	N/A	N/A
Uno Chicago Grill [Union Station]	Restaurant	Capitol Hill	N/A	N/A
Hyatt Regency	Hotel	Capitol Hill	N/A	N/A
Washington Court Hotel	Hotel	Capitol Hill	N/A	N/A
Holiday Inn Capitol Hill	Hotel	Capitol Hill	N/A	N/A
Liaison	Hotel	Capitol Hill	N/A	N/A
Capitol Hill Suites	Hotel	Capitol Hill	N/A	N/A
Capitol	Attraction	Capitol Hill	3 Million	Very High
National Geographic Museum	Attraction	Downtown	N/A	Medium
Old Post Office Pavilion	Attraction	Downtown	262,000 +	Medium
Ronald Reagan Building	Attraction	Downtown	N/A	High
Corcoran Gallery of Art	Attraction	Downtown	N/A	High
National Aquarium	Attraction	Downtown	N/A	High
White House	Attraction	Downtown	922,335	High
White House Visitors Center	Attraction	Downtown	922,335	High
Daughters of The American Revolution Museum	Attraction	Downtown	600,000	Medium
Bertucci's	Restaurant	Downtown	N/A	N/A
Black Finn Saloon	Restaurant	Downtown	N/A	N/A
eat@national place [food court]	Restaurant	Downtown	N/A	N/A
Fresco the Italian Eatery	Restaurant	Downtown	N/A	N/A
Lima Restaurant	Restaurant	Downtown	N/A	N/A
Newseum Food Section	Restaurant	Downtown	N/A	N/A
Old Post Office Pavilion Food Court	Restaurant	Downtown	N/A	N/A
Ronald Reagan Building Food Court	Restaurant	Downtown	N/A	N/A
Sizzling Express	Restaurant	Downtown	N/A	N/A
Capitol Hilton	Hotel	Downtown	N/A	N/A
Beacon Hotel	Hotel	Downtown	N/A	N/A

Double Tree Hilton	Hotel	Downtown	N/A	N/A
The Fairmont	Hotel	Downtown	N/A	N/A
Four Points by Sheraton	Hotel	Downtown	N/A	N/A
Grand Hyatt	Hotel	Downtown	N/A	N/A
Marriott	Hotel	Downtown	N/A	N/A
The Madison	Hotel	Downtown	N/A	N/A
Marriot at Metro Center	Hotel	Downtown	N/A	N/A
The Mayflower Renaissance	Hotel	Downtown	N/A	N/A
Renaissance Washington, Dupont	Hotel	Downtown	N/A	N/A
Renaissance Washington, Downtown	Hotel	Downtown	N/A	N/A
Ritz Carlton	Hotel	Downtown	N/A	N/A
Washington Marriot	Hotel	Downtown	N/A	N/A
Washington Plaza Hotel	Hotel	Downtown	N/A	N/A
The Westin, City Center	Hotel	Downtown	N/A	N/A
Holiday Inn Central	Hotel	Downtown	N/A	N/A
Hotel Harrington	Hotel	Downtown	N/A	N/A
Henley Park Hotel	Hotel	Downtown	N/A	N/A
Comfort Inn Convention Center	Hotel	Downtown	N/A	N/A
Embassy Row Hotel	Hotel	Downtown	N/A	N/A
The American Pharmacists Association	Conference	Downtown	N/A	N/A
Reagan Building	Conference	Downtown	N/A	N/A
Jefferson Memorial/Tidal Basin	Attraction	East Potomac Park	2,305,856	High
MLK Memorial	Attraction	East Potomac Park	N/A	High
FDR Memorial	Attraction	East Potomac Park	2,238,000	High
Washington Harbor, Georgetown	Attraction	Georgetown	N/A	Medium
Clyde's	Restaurant	Georgetown	N/A	N/A
The Shops at Georgetown Park	Restaurant	Georgetown	N/A	N/A
Tony & Joe's Seafood Place	Restaurant	Georgetown	N/A	N/A
Mie N Yu	Restaurant	Georgetown	N/A	N/A
The Latham Hotel	Hotel	Georgetown	N/A	N/A
National Archives	Attraction	Mall	N/A	High
Holocaust Memorial Museum	Attraction	Mall	1.5 Million	High
Bureau of Printing and Engraving	Attraction	Mall	N/A	Medium
National Gallery of Art	Attraction	Mall	N/A	Very High
National Air and Space Museum	Attraction	Mall	8.3 Million	Very High
National Museum of Natural History	Attraction	Mall	6.8 Million	Very High
National Museum of American History	Attraction	Mall	4.2 Million	Very High
National Museum of the American Indian	Attraction	Mall	1.3 Million	High
National Museum of African Art	Attraction	Mall	310,000	Medium
Hirshorn Museum and Sculpture Garden	Attraction	Mall	621,000	Medium
Freer Gallery of Art	Attraction	Mall	488,000	Medium
Smithsonian Castle	Attraction	Mall	1.8 Million	High

Sackler Gallery	Attraction	Mall	308,000	Medium
Washington Monument	Attraction	Mall	628,665	Very High
Lincoln Memorial	Attraction	Mall	6,042,315	Very High
Vietnam War Memorial	Attraction	Mall	4,555,371	Very High
WWII Memorial	Attraction	Mall	3,964,351	Very High
Korean Veterans War Memorial	Attraction	Mall	3,072,716	Very High
National Gallery of Art	Restaurant	Mall	N/A	N/A
USDA South Building Cafeteria	Restaurant	Mall	N/A	N/A
US Holocaust Museum Café	Restaurant	Mall	N/A	N/A
Vie De France Bakery Café Capital Gallery	Restaurant	Mall	N/A	N/A
Restaurant Associates (American History Museum)	Restaurant	Mall	N/A	N/A
National Zoo	Attraction	Northwest	2.3 Million	High
National Cathedral	Attraction	Northwest	350,000	Medium

Buca di Beppo	Restaurant	Northwest	N/A	N/A
Omni Shoreham	Hotel	Northwest	N/A	N/A
Washington Hilton	Hotel	Northwest	N/A	N/A
Marriot Wardman Park	Hotel	Northwest	N/A	N/A
Days Inn	Hotel	Northwest	N/A	N/A
Newseum	Attraction	Penn Quarter	N/A	Medium
International Spy Museum	Attraction	Penn Quarter	500,000+	Medium
Ford's Theatre	Attraction	Penn Quarter	663,000	Medium
National Museum of Crime and Punishment	Attraction	Penn Quarter	N/A	Medium
National Building Museum	Attraction	Penn Quarter	475,376	Medium
Madam Tussauds	Attraction	Penn Quarter	N/A	Medium
Verizon Center	Attraction	Penn Quarter	N/A	Very High
Portrait and American Art Museum	Attraction	Penn Quarter	1.1 Million	High
California Tortilla	Restaurant	Penn Quarter	N/A	N/A
Carmine's	Restaurant	Penn Quarter	N/A	N/A
Clyde's	Restaurant	Penn Quarter	N/A	N/A
District Chop House	Restaurant	Penn Quarter	N/A	N/A
Hard Rock Café	Restaurant	Penn Quarter	N/A	N/A
Harriett's Family Restaurant	Restaurant	Penn Quarter	N/A	N/A
McCormick & Schmick's	Restaurant	Penn Quarter	N/A	N/A
Nando's Peri Peri	Restaurant	Penn Quarter	N/A	N/A
Gordon Biersch Brewery	Restaurant	Penn Quarter	N/A	N/A
Kogod Courtyard Café	Restaurant	Penn Quarter	N/A	N/A
Washington Convention Center	Conference	Penn Quarter	N/A	N/A
Courtyard by Marriott - Navy Yard	Hotel	Southeast	N/A	N/A
National's Ball park	Attraction	Southeast	N/A	High
Entertainment Cruises	Attraction	Southwest	N/A	N/A
Phillips Flagship	Restaurant	Southwest	N/A	N/A
Pier 7 Restaurant	Restaurant	Southwest	N/A	N/A

Capitol Skyline Hotel	Hotel	Southwest	N/A	N/A
L'Enfant Plaza Hotel	Hotel	Southwest	N/A	N/A
Mandarin Oriental	Hotel	Southwest	N/A	N/A
Nellie's Sports Bar	Restaurant	U Street	N/A	N/A
Ben's Chili Bowl	Restaurant	U Street	N/A	N/A
Lincoln Theatre	Attraction	U Street	N/A	Medium

Appendix C – Motorcoach Pick-Up/Drop-off Locations Survey Results

DDOT Motorcoach Pick-Up/Drop-Off Location Survey Results

Determining the demand for curbside motorcoach spaces in the District of Columbia is an ongoing challenge due to the lack of data available on motorcoach volume in the city. To address the lack of existing data, DDOT has conducted a survey of attractions, hotels and restaurants in the District to ascertain their existing curbside capacity to accommodate motorcoach activity, and their perceived demand for additional space. To publicize the survey and generate a robust response rate, DDOT partnered with Destination DC, The Hotel Association of Washington DC (HAWDC) and the Restaurant Association of Metropolitan Washington to distribute the survey to their membership. This survey is not exhaustive but does provide some useful information both on general motorcoach trends, and capacity at specific locations.

Key Findings:

- 39% of respondents were hotels, 36% were attractions, 20% were restaurants and the remaining 5% were organizations interested in motorcoach activity in the District.
- A majority of each type of business reported April and May as the months with the highest motorcoach activity.
- 25% of survey respondents report an average of 2 buses visiting their business per day during peak months. Attractions generate the highest volume of activity with 32% of attractions reporting an average of 15-50 buses visiting their business per day in peak periods.
- Hotels reported that they experience the highest volume of motorcoach activity on Fridays and Saturdays, while both attractions and restaurants report Thursday as their high volume day for motorcoaches.
- Hotels reported that the time of day with the highest volume of motorcoach activity is between 3pm and 7pm, attractions indicated that they receive the highest volume of motorcoaches between 9am and 1pm while restaurants indicated two peak times for motorcoach activity: between 11am and 1pm for the lunch period and between 5pm and 7pm for the dinner period.
- Approximately 50% of the survey respondents indicated that their business would benefit from additional curbside space for motorcoach activity.

Figure 1: Peak Months of Motorcoach Activity

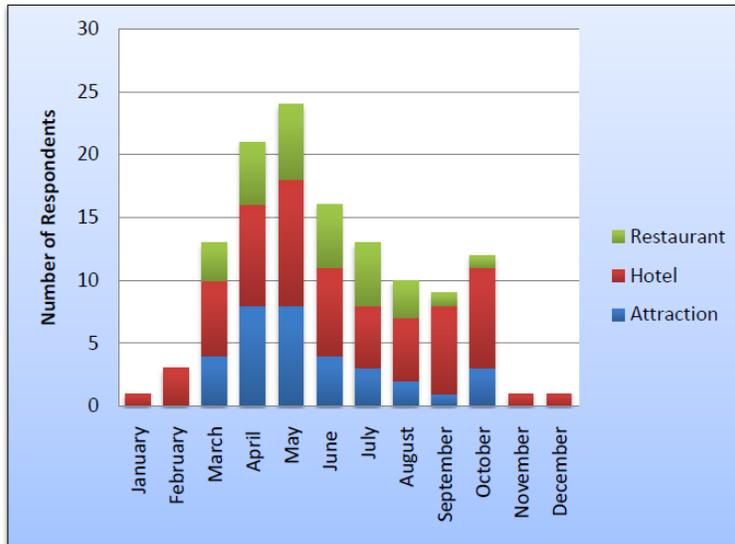
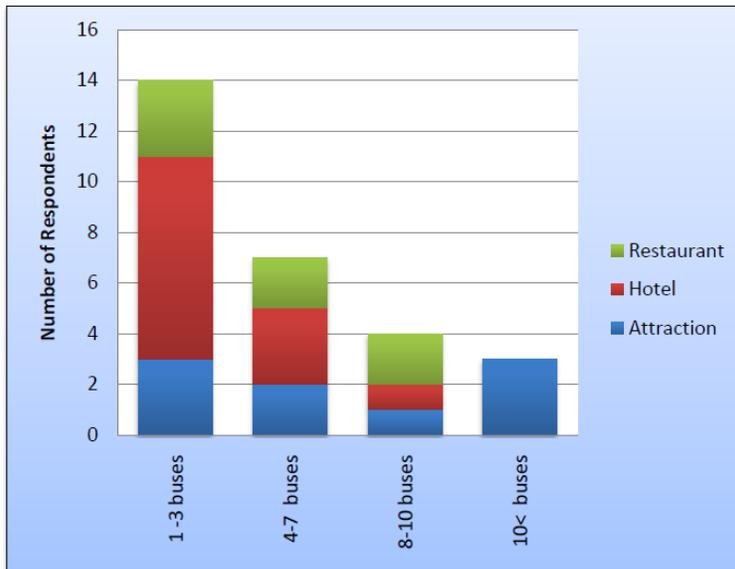


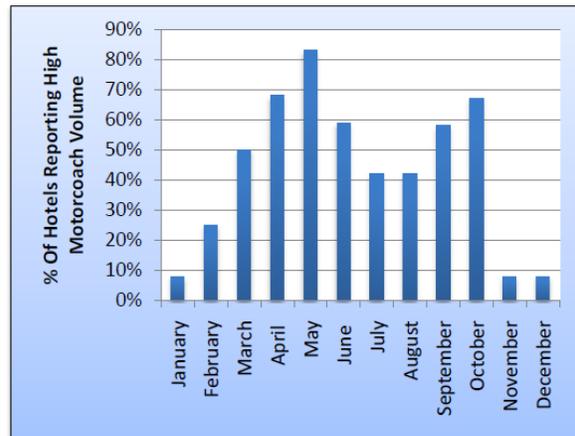
Figure 2: Average Daily Bus Volume in Peak Months



Hotels

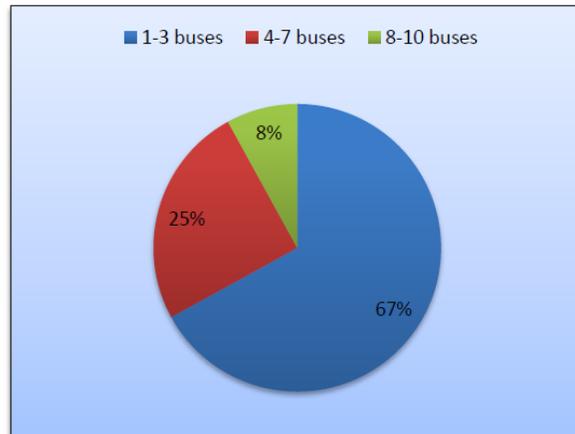
Hotels generate motorcoach activity through two primary means; conference facilities and accommodating group bookings. While those offering conference facilities are generally larger hotels, the same is not necessarily true for hotels that host a large number of groups. Smaller hotels may enter into contracts with tour operators and therefore generate motorcoach activity also. This section provides an overview of the data generated on motorcoach activity at District hotels. Based on survey responses, peak time for motorcoach activity at hotels is estimated to be in the month of May, on a Friday or Saturday between the hours of 3pm and 7pm.

Figure 3: Peak Months of Motorcoach Activity- Hotels



- Respondents indicated that May was the month with the highest level of motorcoach activity (88%) with April and October having the second highest volume at 67%

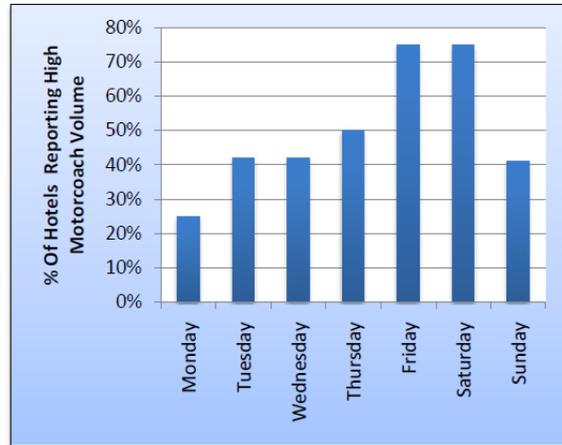
Figure 4: Average Volume of Motorcoach Activity in Peak Months- Hotels



- During the peak months identified in the previous question – April, May and October – 42% of hotels report receiving an average of two buses per day, 25% report receiving an average of four buses per day and 8% report receiving an average of 10 buses per day. This final number may be representative of conference activity.

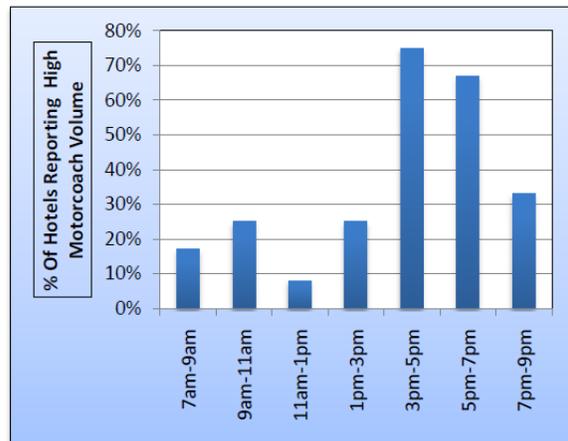
- Respondents indicated that Friday and Saturday are the days with the highest volume of motorcoach activity with 75% identifying these days.

Figure 5: Peak Days for Motorcoach Activity - Hotels



- Respondents indicate that they experience the highest volume of motorcoach activity between the hours of 3pm to 5pm (75%) and 5pm to 7pm (67%).

Figure 6: Peak Times for Motorcoach Activity – Hotels



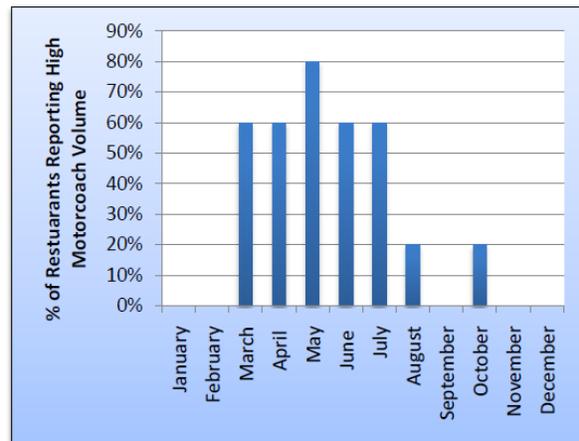
The survey also sought to capture information about existing curbside pick-up/drop-off locations used by motorcoaches in proximity to hotels. Of the business types surveyed, hotels are the most likely to have existing curbside space for motorcoaches to pick-up/drop-off passengers as they are able to reserve curbside space for hotel guest loading and unloading. However, this space is not able to be used for parking which means there is still demand for this type of capacity. Of the hotels that responded to the survey, 42% reported that they would benefit from the establishment of additional motorcoach capacity in proximity to their hotels, while 58% reported that they did not feel they would benefit from the

establishment of such a space. Where respondents indicated that they would benefit from additional curbside capacity for motorcoaches, the survey asked for recommendations of where this space could be located. Most respondents indicated that they would like additional capacity on the curbside outside their hotel entrance. Respondents also indicated that Union Station is the preferred location for motorcoach parking now that the Center City Lot has been closed due to construction.

Restaurants

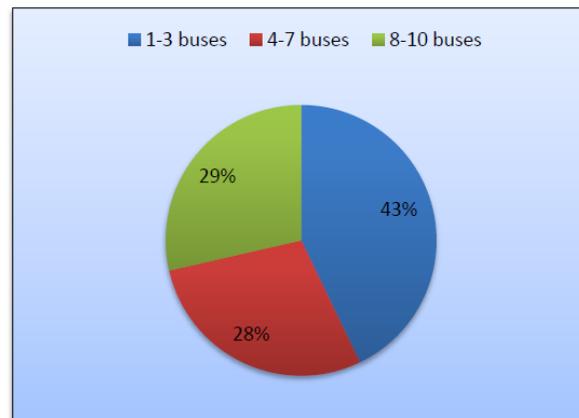
Restaurants that are able to cater to large groups of patrons often generate significant motorcoach activity both through dropping-off and picking-up passengers and through trying to source short term curbside parking in proximity to restaurants. In addition, some restaurants may generate motorcoach activity through the hosting of special events. Based on survey responses, the peak time for motorcoach activity at restaurants is in the month of May on Thursdays between 11am-1pm and 5pm-7pm.

Figure 7: Peak Months for Motorcoach Activity - Restaurants



- Respondents indicated that May is the top month for motorcoach activity (80%) with 60% of respondents indicating March, April, June and July as months with the second highest volume.

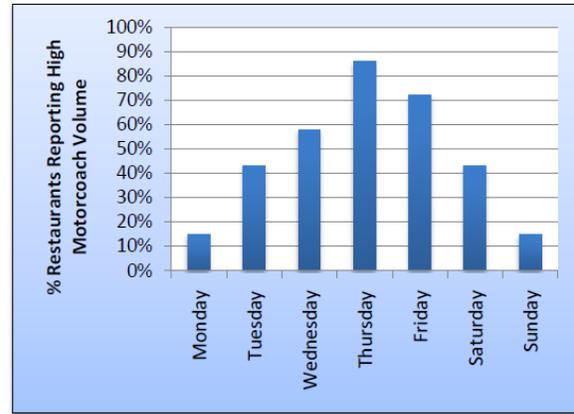
Figure 8: Average Volume of Motorcoach Activity in Peak Months - Restaurants



- During the peak months identified in the previous question – March, April, May, June, July – 43% of respondents report receiving between one and three buses per day, 29% of respondents report receiving between eight and ten buses and a further 28% report receiving between four and seven buses per day.

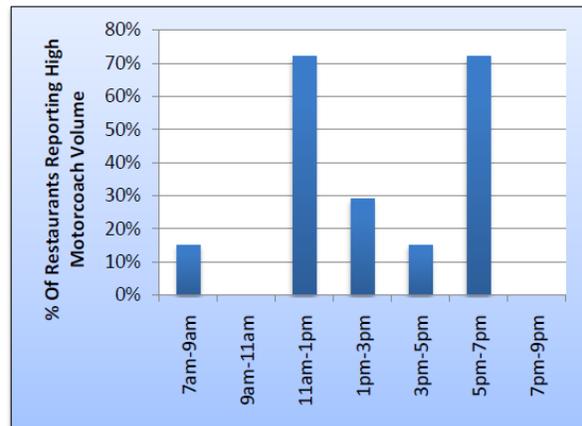
- Restaurants indicate that the days of the week in which they experience the highest volume of buses is Thursday (86%). Friday has the second highest volume with 72% of respondents indicating that this is a day of the week that typically has high bus volume.

Figure 9: Peak Days for Motorcoach Activity - Restaurants



- Restaurants report two peak times during which they typically experience a high volume of motorcoach activity during the day. Both the 11am-1pm and 5pm-7pm time periods were reported as high volume times by 72% of respondents. This is perhaps unsurprising as these times correspond with lunch and dinner times.

Figure 10: Peak Times for Motorcoach Activity - Restaurants



The survey also sought information about existing pick-up and drop-off locations for motorcoaches in close proximity to restaurants. The survey respondents provided information both on existing locations and also recommendations for possible curbside location that could accommodate motorcoach activity if they reported that they could benefit from additional capacity. 100% of the restaurants that answered the question about additional demand for motorcoach parking indicated that they would benefit from the provision of additional space.

Attractions

Major attractions in the city including museums and monuments, and political institutions are estimated to generate the largest amount of motorcoach activity in the District. Many of these attractions are located in congested downtown areas where motorcoaches must compete for valuable curbside space with other types of vehicle activity. Based on the survey results, the peak time for motorcoach activity at attractions is during the months of April or May, on a Thursday between the hours of 9am and 11am.

Figure 11: peak Months for Motorcoach Activity - Attractions

- 89% of attractions that responded to the survey indicate that April and May are the months with the highest volume of motorcoach activity.

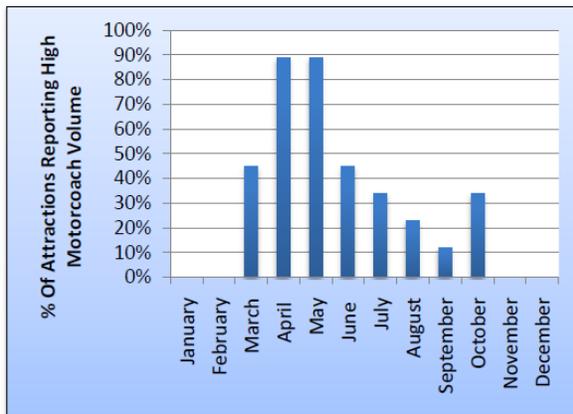
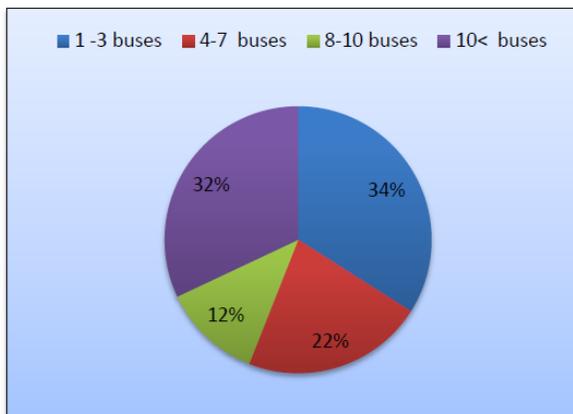


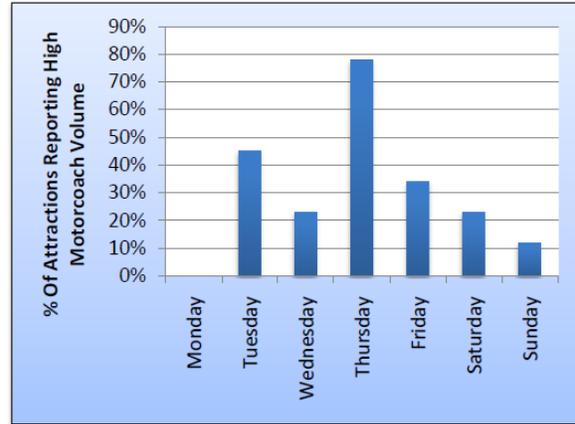
Figure 12: Average Volume of Motorcoach Activity in Peak Months – Attractions

- During the months of peak motorcoach activity identified in the previous question – April and May – 32% of attractions report receiving between 15 and 50 buses per day. A further 22% report receiving 2 buses and the remaining 46% report receiving a maximum of ten buses per day.



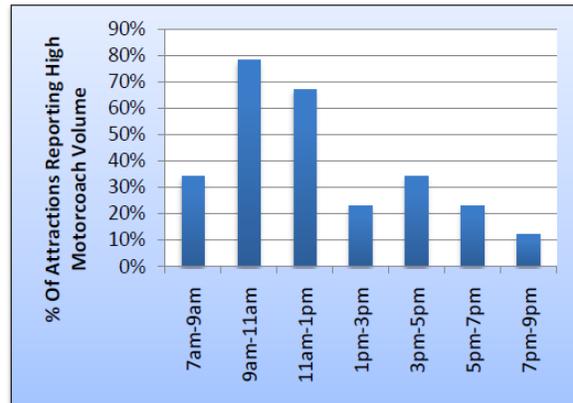
- Attractions that responded to the survey report the highest number of motorcoaches visiting on Thursdays (78%). The second highest volume day is Tuesday with 45% of respondents reporting that they experience a high volume of motorcoach activity on this day of the week.

Figure 13: Peak Days for Motorcoach Activity - Attractions



- Attractions report the highest volume of motorcoach activity between 9am and 11am (78%). The second highest period of activity is between 11am and 1pm with 67% of attractions reporting that this is a high volume time for motorcoach activity.

Figure 14: Peak Times for Motorcoach Activity - Attractions



The survey also sought information about existing pick-up and drop-off locations used by motorcoaches visiting attractions in the District. Some of the attractions surveyed have designated tour bus loading and unloading areas in proximity to their business. For many others, motorcoaches are stopping to load and unload passengers in areas that are metered parking or in some cases even Metrobus stops. There was an even split between the attractions surveyed as to their demand for additional curbside spaces for motorcoaches with 50% indicating that they had sufficient space and the other 50% indicating that their business would benefit from additional space.

General Comments

Buses should be offered a rebate for parking at RFK.

Buses could drop off in front of the Verizon center on F Street. This would not be possible during big events.

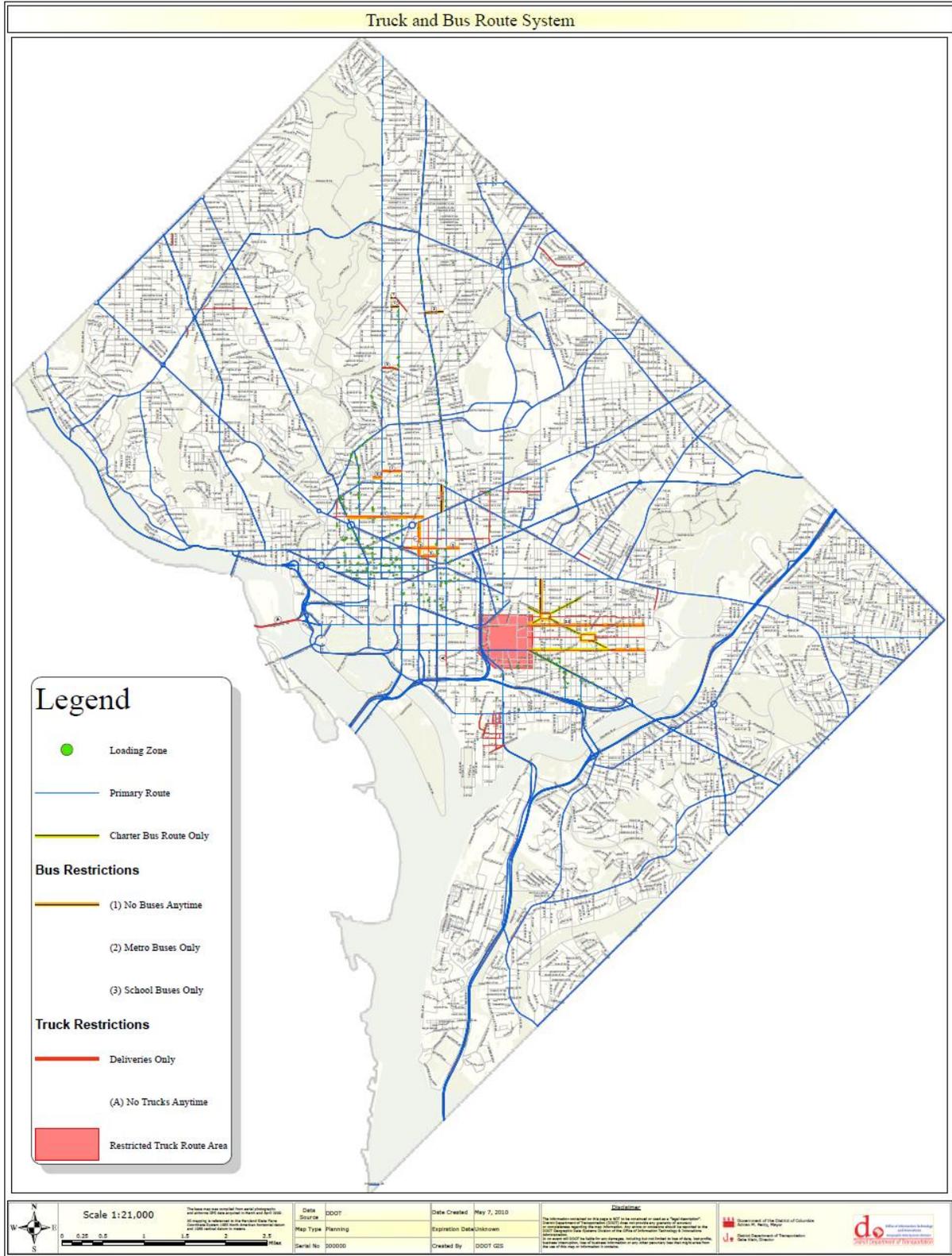
Having a curbside bus pick-up/drop-off has been very helpful for our business. I would recommend in the high season that we add one or two more to the location as Ford's Theatre and Hard Rock are all very busy.

The bike lane on Pennsylvania Avenue should be widened so that the tour buses could share these lanes with the few bikes that use them.

Overnight parking closer to the downtown core than Union Station would be useful. Many motorcoaches used to park at the Center City lot which was very convenient.

There is significant amount of motorcoach activity on 10th Street between K and Massachusetts. This area is being used for bus parking and possibly to allow passengers to visit the souvenir shop on this block. Buses frequently double park on this block which can impact traffic flow.

Appendix D – Draft Truck and Bus Route System Map



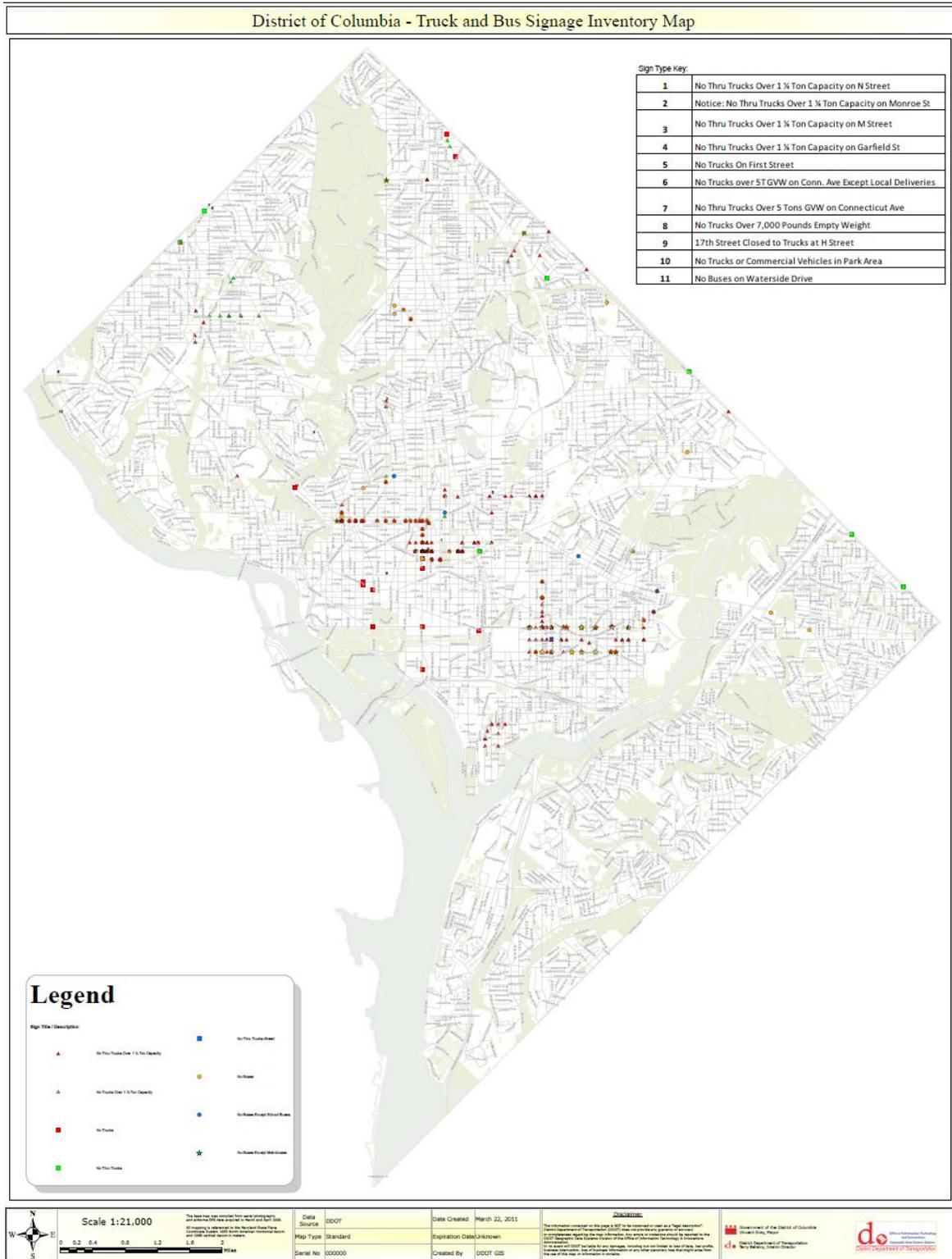
Commuter Bus Stop Locations in The District	
Location	Carrier
11th and E, NW	MTA & PRTC
11th and H, NW	MTA
11th and New York, NW	MTA
12th and C, SW	PRTC
12th and Constitution, NW	MTA & Quicks & Martz
12th and E, NW	MTA
12th and G, NW	MTA & Quicks & Martz
12th and Independence, SW	PRTC
12th and M, SE	PRTC
13th and H, NW	MTA
13th and I, NW	Martz
14th and Constitution, NW	LCT & MTA
14th and D, NW	Martz & PRTC
14th and E, NW	MTA
14th and F, NW	LCT & MTA & PRTC
14th and G, NW	MTA & Martz
14th and Independence, SW	PRTC & Martz & Quicks
14th and New York, NW	PRTC & Martz
14th and Pennsylvania, NW	MTA
15th and M, NW	MTA
15th and New York, NW	PRTC
16th and Alaska, NW	MTA
16th and Harvard, NW	MTA
16th and M, NW	MTA
16th and P, NW	MTA
18th and C, NW	MTA
18th and E, NW	MTA & LCT
18th and F, NW	MTA & PRTC
18th and G, NW	LCT
18th and K, NW	MTA & LCT
18th and M, NW	MTA
18th and Massachusetts, NW	MTA
18th and Pennsylvania, NW	MTA & PRTC
19th and E, NW	MTA & LCT
19th and F, NW	PRTC & Martz
19th and H, NW	MTA & LCT & PRTC
19th and K, NW	MTA
19th and M, NW	MTA
1st and D, NW	Quicks
20th and E, NW	MTA & Martz
20th and I, NW	MTA & Martz

21st and M, NW	MTA
23rd and I, NW	MTA
2nd and E. Capitol, NE	MTA
3rd and C, NW	PRTC
3rd and C/Constitution, NW	PRTC & LCT
3rd and Constitution, NW	MTA & LCT
3rd and E, NW	Quicks
4th and C, NW	MTA
4th and E, NW	MTA
4th and Independence, NW	PRTC
4th and Madison, NW	PRTC
6th and F, NW	Quicks
6th and G, NW	Martz
7th and C, SW	PRTC
7th and Constitution, NW	MTA
7th and E, SW	MTA
7th and Independence, NW	MTA & Martz
7th and Maryland, SW	MTA & PRTC
C and 14th, SW	PRTC & Martz
C and 21st, NW	MTA
Constitution and 10th, NW	MTA
Constitution and 12th, NW	PRTC & Quicks
Constitution and 14th, NW	MTA
Constitution and 15th, NW	MTA
Constitution and 3rd, NW	MTA
Constitution and 7th, NW	PRTC
Constitution and 9th, NW	MTA & Martz
D and 7th, SW	PRTC
D and 9th, SW	PRTC
E and 4th, NW	Quicks
E and New Jersey, NW	LCT & PRTC
E and North Capitol, NW	Quicks
H and 11th, NW	PRTC
H and 14th (13th), NW	PRTC
H and 4th, NW	LCT & Martz
H and 7th, NW	Quicks
H and 8th, NW	LCT
H and 9th, NW	LCT & Martz & Quicks
H and Jackson Place, NW	PRTC
H and North Capitol, NW	LCT
I and 15th, NW	LCT & PRTC
I and 17th, NW	LCT
I and 18th, NW	PRTC

I and 19th, NW	LCT
Independence and 12th, SW	MTA & Martz & LCT & Quicks
Independence and 14th, SW	MTA & Martz
Independence and 1st, SE	MTA
Independence and 3rd, SW	MTA & LCT
Independence and 4th, SW	MTA & PRTC & Quicks
Independence and 6th, SW	MTA & LCT & Quicks
Independence and 7th, SW	PRTC & Quicks
Independence and 9th, SW	MTA & LCT
Independence and L'Enfant, SW	MTA & LCT & Martz
Independence and New Jersey, SE	MTA
K and 13th, NW	MTA & Martz
K and 14th, NW	MTA & LCT & Martz
K and 15th, NW	MTA & Martz
K and 16th, NW	MTA & LCT
K and 17th, NW	MTA & LCT & Martz
K and 18th, NW	MTA & Martz
K and 19th, NW	MTA & Martz
K and 20th, NW	MTA
K and 21st, NW	MTA
K and 7th, NW	MTA
K and 1st NE	MTA
L and 21st, NW	MTA
L and 25th, NW	MTA
Louisiana and 1st, NW	PRTC
Louisiana and D, NW	MTA & PRTC
M and 10th, SE	MTA
M and 10th, SE	PRTC
M and 1st, SE	MTA
M and 21st, NW	MTA
M and 25th, NW	MTA
M and 2nd, SE	Quicks
M and 3rd SW	PRTC & LCT
M and 4th, SE	MTA & PRTC
M and 8th, SE	MTA
M and 9th, SE	MTA & PRTC
M and 9th, SE	MTA
M and Half, SE	PRTC
M and Isaac Hull, SE	MTA & PRTC
M and New Jersey, SE	MTA & PRTC & Quicks
Maine and 6th, SW	PRTC
Maine and 9th, SW	PRTC

Maryland and 7th, SW	MTA
Massachusetts and 5th, NW	MTA
Massachusetts and Columbus Circle, NW	MTA
New Hampshire and Dupont Nth., NW	MTA
New Jersey and M, SE	LCT & Martz
North Capitol and H, NW	MTA
North Capitol and Massachusetts, NW	LCT
Nth. Capitol and E, NW	MTA & Quicks
Overlook Ave. and Laboratory Rd, SE	MTA
Pennsylvania and 10th, NW	MTA & PRTC & Martz
Pennsylvania and 12th, NW	MTA
Pennsylvania and 13th, NW	MTA & Martz
Pennsylvania and 4th, NW	MTA & PRTC
Pennsylvania and 6th, NW	MTA & PRTC
Pennsylvania and 7th, NW	MTA & PRTC
Pennsylvania and 9th, NW	MTA & Martz
Sth. Capitol and Malcolm X Blvd. SE	MTA
Virginia and 21st, NW	LCT & PRTC
Virginia and D, NW	Martz

Appendix F – Truck and Bus Signage Inventory Map



Appendix G – Anti Idling Signage Example and Locations



Anti-Idling Signage Locations		
Ward	Corridor	Boundaries
1	14th St, NW	Columbia Rd, NW & Spring Rd, NW
1	18th St, NW	U St, NW & Columbia Rd, NW
1	U St, NW	18th St, NW & 9th St, NW
2	M Street, NW	30th Street, NW & 35th Street
2	30th Street, NW	M Street, NW & K Street
2	K Street/Water St, NW	30th Street, NW & 34th Street
2	Virginia Avenue, NW	18th St, NW & 21 St, NW
2	20th St, NW	Virginia Ave, NW & E St, NW
2	15th St, NW	Constitution Ave, NW & E St, NW
2	14th St, NW	Constitution Ave, NW & Massachusetts Ave, NW
2	H St, NW	Connecticut Ave, NW & Vermont Ave, NW
2	I Street, NW	New York Ave, NW & 21st St, NW
2	K Street, NW	10th St, NW & 20th St, NW
2	L St, NW	14th St, NW & 22nd St, NW
2	Connecticut Avenue	M St, NW & L St, NW
2	De Sales St. NW	Connecticut St, NW & 17th St., NW
2	Pennsylvania Avenue, NW	13th St, NW & 3rd St. NW
3	Wisconsin Ave, NW	Nebraska Ave, NW & Western Ave, NW
3	Connecticut Avenue	Tilden St., & Yuma St.,NW
3	Connecticut Avenue	Calvert St, NW & Devonshire Place
3	Calvert St, NW	24th St, NW & 29th St, NW
3	24th St, NW	Connecticut Avenue, NW & Calvert St, NW
4	Farragut Place, NW	North Capitol St, NW & Gallatin St, NW
4	Gallatin St, NW/NE	Farragut Place, NW & Fort Totten Drive, NE
4	Rock Creek Church Rd, NE	North Capitol St, NW & Gallatin St, NE
5	Florida Avenue, NE	New York Ave, NE & 4th St, NE
5	4th St, NE	Penn St. NE & Florida Ave NE
5	5th St, NE	Penn St. NE & Florida Ave NE
5	Morse St, NE	6th St, NE & 4th St, NE
5	6th St., NE	Penn St. NE & Florida Ave NE
5	W Street, NE	Brentwood Rd, NE & W Place, NE
5	Kendall St, NE	New York Ave, NE & Capitol Ave, NE
5	Fenwick St, NE	New York Ave, NE & Capitol Ave, NE
5	Okie Street, NE	Kendall St, NE & Fenwick St, NE
5	Capitol Ave, NE	Kendall St, NE & Fenwick St, NE
5	Bates Rd, NE	John McCormack Drive & Fort Totten Drive, NE
6	Maine Avenue, SW	E Street & 6th Street
6	M Street, SW/SE	6th Street, SW & 12th Street, SE
6	Potomac Ave, SW	1st Street SE & Half Street SW

6	South Capitol Street	Potomac Ave & S Street, SW
6	Half Street, SW	Potomac Ave & S Street
6	S Street, SW	Half Street, SW & South Capitol Street
6	Pennsylvania Avenue, SE	3rd St, SE & Potomac Avenue, SE
6	8th St, SE	Independence Ave, SE & G St SE
6	Constitution Avenue, NW/NE	3rd St, NW & 2nd St, NE
6	3rd St, NW/SW	Constitution Ave, NW & D Street, SW
6	2nd St, NE/SE	Constitution Ave NE & D St, SE
6	D St SE/SW	3rd St, SW & 2nd St, SE
6	1st St, NW	Constitution Ave & H St, NW
6	2nd St, NE	Constitution Ave & H St, NW
6	H St, NW, NE	1st St, NW & 2nd St, NE
6	F St NW	1st St NW, & North Capitol St.
2&6	7th St, NW	Pennsylvania Ave, NW & Massachusetts Ave, NW
2&6	John McCormack Drive, NE	Bates Rd, NE & Taylor St, NE
8	Frederick Douglass House	14th St. & 15th St.
8	The Big Chair	V St.& Howard Road
8	South Capitol St.	MLK Jr. Ave & Brandywine Ave.
NPS Property		
2	Madison Drive	4th St, NW & 14th St, NW
2	Jefferson Drive	4th St, NW & 14th St, NW
2	Constitution Avenue, NW	17th St, NW & 23rd St. NW
2	Independence Avenue, SW	15th St, NW & 17th St., NW
2	Ohio Drive	Near Inlet Bridge, Behind Jefferson Monument
2	Henry Bacon Drive	Constitution Ave, NW & 23rd St.
2	Daniel French Drive	Independence Ave., & 23rd St.
2	West Basin Drive	Independence Ave & Ohio Drive
2	Bus Parking Lot	Hains Point