

Section 1

M Street SW-Southeast Federal
Center



M Street SW

M Street SW and the Southeast Federal Center, located in Southeast and Southwest Washington, DC, comprise an activity center area that is an established employment center with some dense residential blocks within it. It can be characterized as an extension of the downtown core. There is a high concentration of employment, housing and future retail and entertainment uses. The center is served by several modes of transit including Metrorail, Metrobus, and commuter bus.

Other center highlights:

- Extensive programmed growth in the immediate future and is already a booming employment center; the employment density is second only to downtown Washington.
- GSA and Navy have TDM programs that can be leveraged.
- Mixed-income residential communities nearby.
- Metrorail stations and bus connections to be improved to accommodate planned redevelopment along M Street SE.
- Potential to increase ridership and potential for ease of implementation with federal partner.

The center is characterized by poorly maintained, vandalized, and unkempt bus stops within a well-traveled corridor that is undergoing redevelopment. The study area is bounded by the Navy Yard on the east end and the Waterfront on the west. While there is some high- and medium-density residential along M Street, the majority of land uses are office and light industrial. Using the best available data from the 2000 census, there were 7,800 households in the study area and 12,000 jobs.

With the move of 4500 more staff to the Navy Yard (raising the total to over 11,000), the start of construction of the SE Federal Center adjacent to it, and the construction of a new US Department of Transportation headquarters, there has been an increase in development of office construction to house businesses that serve those governmental agencies. The District Government would like to encourage the continued redevelopment of the large industrial lands to the south of M Street in conjunction with its ambitious Anacostia Waterfront Initiative.

Significant activity in the area relates to reconstruction of public housing at Arthur Capper-Carrollsborg, construction of USDOT and other offices, planning related to Waterfront revitalization, and refurbishment of South Capitol Street. This development, including the construction of a ballpark, a significant regional destination, in the study area underscores the need to meet growing demand with flexible, useful transit service. See Figure 1-1 for an aerial view of the study area.

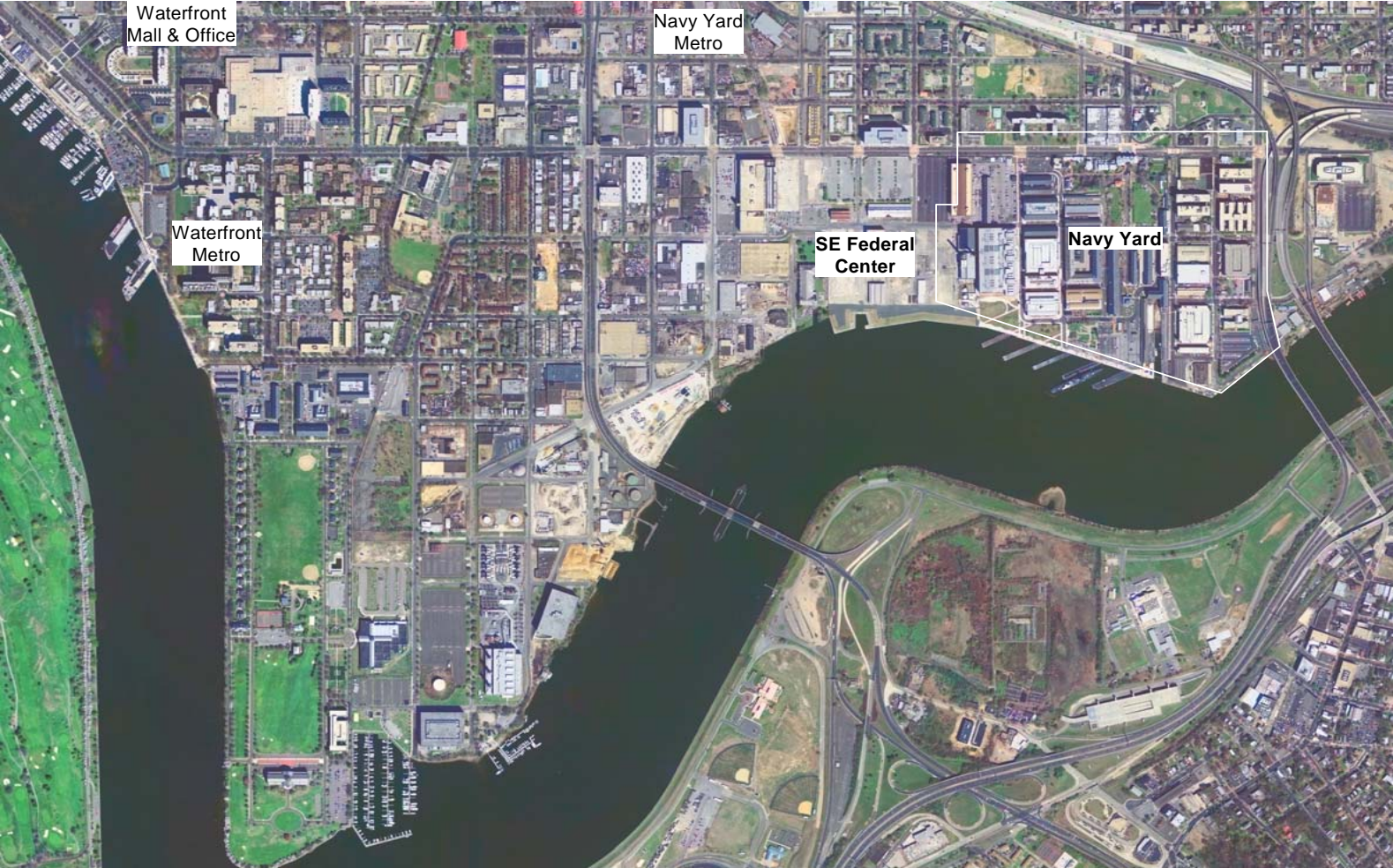
Census data from 2000 demonstrates that home end transit mode share for the study area edges out driving alone slightly. Home and work end mode share for the study area are shown in Table 1-1.

Table 1-1
M Street Mode Share

	Home End			Work End		
	Transit	Drive Alone	Walk/Bike	Transit	Drive Alone	Walk/Bike
M Street	40%	36%	19%	19%	58%	4%

Source: 2000 Census Transportation Planning Package

Figure 1-1 M Street SW/Southeast Federal Center Land Use



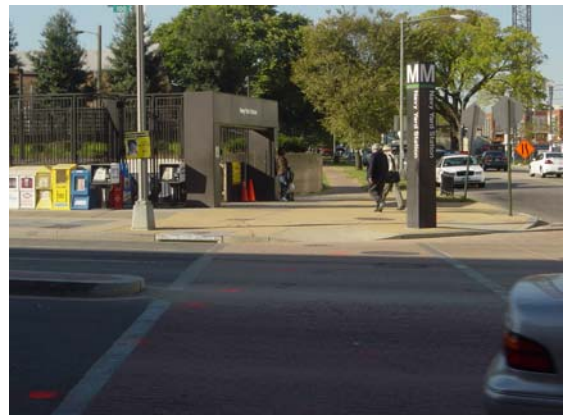
Transportation System Characteristics

While traffic congestion on M Street is heavy during peak periods, on the various observation days travel times did not vary as much as had been anticipated. Traffic congestion on M Street is centered near the South Capitol Street intersection. Traffic build-up lessens as cars travel away from the intersection in either direction. There is a heavy volume of pedestrian traffic in and around the Waterside Mall area, and along M street from the Navy Yard to the Metrorail station. Diamond lanes exist eastbound between Canal Street SW and South Capitol Street, and westbound between 5th Street SW and South Capitol Street SW. Volume during peak hour traffic was moderate without any real congestion concerns.

Pedestrian Environment

There is a high volume of pedestrian activity in the study area, specifically during the morning and evening peak and the lunch hour, concentrated on M Street. Although there is a consistent network of sidewalks in the study area, in keeping with its urban setting, construction activities have disrupted some of the sidewalks. The Navy Yard Metrorail station is a five-minute walk, approximately, from the current office buildings, including the new USDOT headquarters under construction, and one entrance to the Navy Yard. However, there are relatively few signalized pedestrian crossings. The crossing at the Metrorail entrance, while distinguished with distinctive paving, does not have a signal.

During times of heavy pedestrian activity, jaywalking and walking along the median are common. Even during off-peak hours, pedestrians have a significant wait to cross M Street, encouraging many to cross against traffic, especially to catch buses. Additionally, although the Navy Yard is within what is generally considered an acceptable walking distance, less than a quarter-mile, the more distant portions of the Yard are a considerable walk. There are very few pedestrian amenities, and no benches, trees, or planters buffering pedestrians from traffic along M Street. There are benches and bike racks at the Navy Yard Metrorail entrance at New Jersey Avenue, but during each observation period (morning, midday, afternoon, and evening) the bike racks were not in use and the benches were occupied by transients.



Transit Facilities and Operations

Transit services include two Metrorail stations, three Metrobus routes on M Street, and three Metrobus routes that cross M Street, and several MTA routes. Maritime Plaza runs its own shuttle from the Navy Yard Metrorail station to the Navy Yard that is able to enter the Navy Yard because the riders are from a pre-cleared group, identified before boarding. The Department of Defense began running a shuttle from Crystal City after relocating several thousand employees to the Navy Yard.

There are two Metrorail stations along M Street: Waterfront on the west end and Navy Yard on the east. There are 27 bus stops along M Street between 7th Street SW and 12th Street SE, as shown in Figure 1-2. Of those, 12 have shelters. Transit information is posted at many stops, but usually is not complete. Effective dates of the schedules are not shown, so whether the schedules are up-to-date is not known. The bus stops at the Navy Yard Metrorail station do not have shelters or schedules.

A large number of the bus stops along M Street have been vandalized, with the majority of shelters missing glass panels. Trash and graffiti cover many shelters, with poor landscaping and unkempt surroundings. Streetscape improvements, with improved bus shelters and surroundings, have been made in a few locations on the east end as part of recent redevelopment.

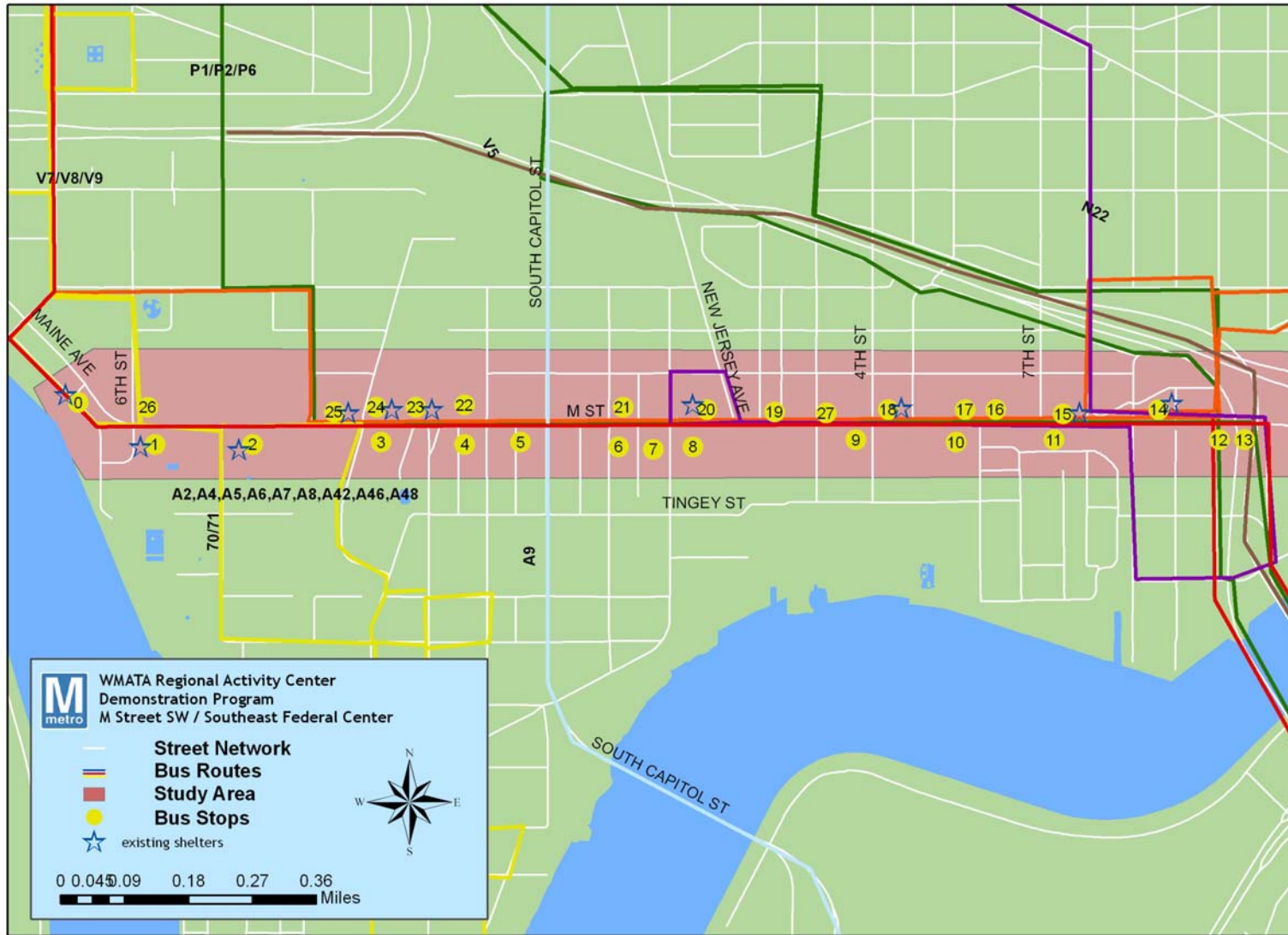
WMATA operates six bus lines through the study area, with several routings. Bus lines and routings within the study area are shown in Table 1-2 and Figure 1-3.



Table 1-2
Existing Bus Service within the M Street Study Area

<u>WMATA</u>	<u>Headway</u> <u>Peak Off-Peak</u>	
Line N22 - Navy Yard Shuttle Line		
Union Station/Eastern Market/Navy Yard	9	18
Line P1/2/6 - Anacostia-Eckington Line		
Line P1/2 - Anacostia/Navy Yard/SW Federal Center/Archives	20	30
Line P6 - Anacostia/Navy Yard/Archives	20	30
Line P17/18/19 - Oxon Hill-Fort Washington Line runs along S. Capital St.		
Line V7/8/9 - Minnesota Ave-M Street Line		
Potomac Ave Metro/Navy Yard/Waterfront Mall/L'Enfant Metro	8	30
Line 70/71 - Georgia Ave.-7th Street Line		
L'Enfant Metro/Waterfront Mall/ M St. SW	10	10
<u>MTA Commuter Bus Routes</u>		
901 La Plata/Waldorf - Washington, D.C.	10	1 Trip
902 St. Leonard/Prince Frederick - Washington, D.C.	10	1 Trip
903 Charlotte Hall/Waldorf - Washington, D.C.	30	None
904 Pindell/North Beach - Washington, D.C.	15	1 Trip
905 Charlotte Hall/Waldorf - Washington, D.C.	15	1 Trip
907 La Plata/Waldorf - Washington, D.C.	20	None
909 California/Charlotte Hall - Washington, D.C.	30	None
915 Columbia/Silver Spring - Washington, D.C.	Varies	None
922 Annapolis - Washington, D.C.	Varies	None
929 Columbia - Silver Spring/Washington, D.C.	20	1 Trip

Figure 1-2
M Street SW/Southeast Federal Center
Bus Routes & Stops



Transit Ridership

The heaviest bus passenger volumes in the study area occur at the Navy Yard Metrorail and at the multiple entrances to the Navy Yard proper. Other high-volume stops include the office development on the north side of M Street across from the future USDOT building and the SW business development at Delaware Avenue. Figure 1-3 shows daily weekday ridership at each stop in the study area and Table 1-3 shows total ridership by bus route that serve the M Street study area, including the ridership for MTA commuter bus routes which have stops in the study area (either the Navy Yard directly or Capitol Hill).

Table 1-3 Ridership by Route

Metrobus

Route	Average Weekday Ridership	AM Peak Riders 5:30 AM - 9:29 AM	PM Peak Riders 3:00 PM - 6:59 PM	Percentage of Daily Riders during Peak	Check Date
N22 Northbound	884	453	244	79%	Jan-03
N22 Southbound	563	272	157	76%	Jan-03
P1,2,6 Northbound	2,489	903	638	62%	Jan-00
P1,2,6 Southbound	2,691	766	950	64%	Mar-01
P17,18,19 Northbound	600	502	NA	84%	May-01
P17,18,19 Southbound	514	NA	472	92%	May-01
V7,8,9 Eastbound	2,745	613	1,261	68%	May-01
V7,8,9 Westbound	2,768	1,166	742	69%	May-01
70,71 Northbound	8,332	1,693	2,671	52%	Jan-99
70,71 Southbound	7,700	1,700	2,320	52%	Jan-99

MTA Commuter Bus

Route	Average Weekday Ridership	Average Boardings/Trip
901	1,527	32
902	812	34
903	295	25
904	675	27
905	1,214	33
907	173	21
909	120	20
915	421	22
922	623	30
929	603	22

Rail ridership for the Metrorail stations in the M Street study area, Navy Yard and Waterfront, is shown in Table 1-4.

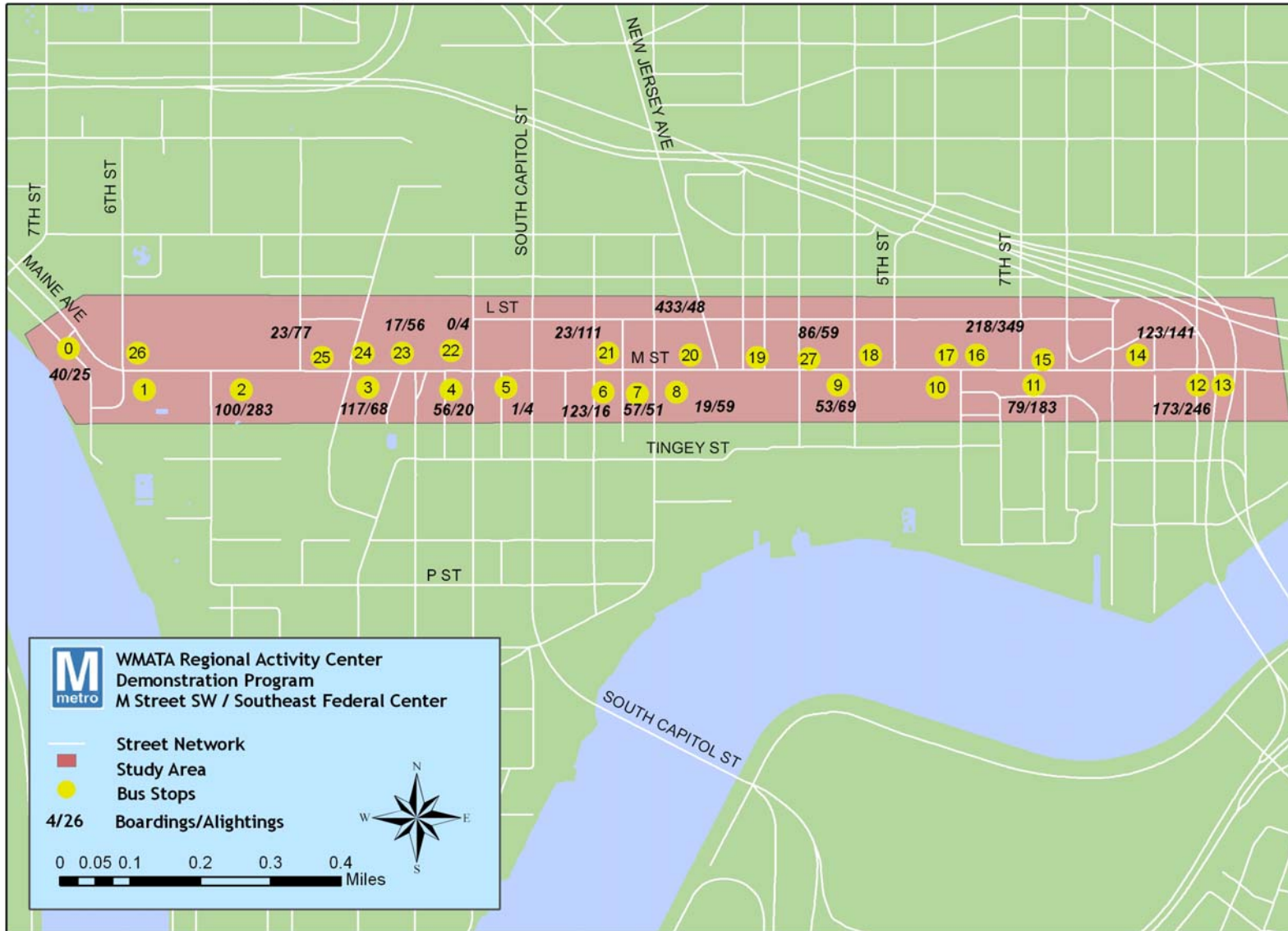
**Table 1-4
Rail Ridership, Trip Purpose, and Mode of Access by Station**

Ridership	AM Peak	PM Peak	Daily Total
Navy Yard	530	1,416	6,016
Waterfront	1,225	1,385	3,814

Reason for Trip	Work	Home
Navy Yard	35%	5%
Waterfront	30%	50%

Mode Access	Metrobus	Other Bus	Walk	Bike	Auto	Dropped Off
Navy Yard	3%	<1%	43%	0%	3%	3%
Waterfront	3%	1%	88%	<1%	3%	2%

Figure 1-3
M Street SW/Southeast Federal Center
Boardings & Alightings by Stop



Needs and Opportunities

The M Street Corridor is heavily serviced by transit, but given the physical and operational limitations on the pedestrian circulation network, it is likely that this issue may be the most critical in terms of improving transit usage. Future plans call for still more dense development, and it is possible that with the redevelopment of the Southeast Federal Center, the completion of the new USDOT headquarters, and the construction of a new regional ballpark just off the corridor, the demand for transit service will increase considerably.

Covering the basics, ensuring that shelters are maintained, transit information is accurate, and service covers the necessary time-span for the corridor, will be critical. During field work and stakeholder reviews for this demonstration program, the following significant needs were identified:

Capital Improvements

Bus shelters throughout the study area were in poor condition during each field observation. Some of these were the shelters installed by a federal agency in conjunction with the transfer of federal employees to the area. However, currently no agency claims ownership/responsibility for the shelters, and they are not maintained. Putting shelters at high-volume stops and ensuring that they and existing shelters are properly maintained is a significant corridor need.

While the Navy Yard station has a clearly visible entrance the Waterfront station entrance is difficult to see from the street, and pedestrians must walk through a parking lot to enter. The sidewalk on the south side of M Street is too narrow for shelters.

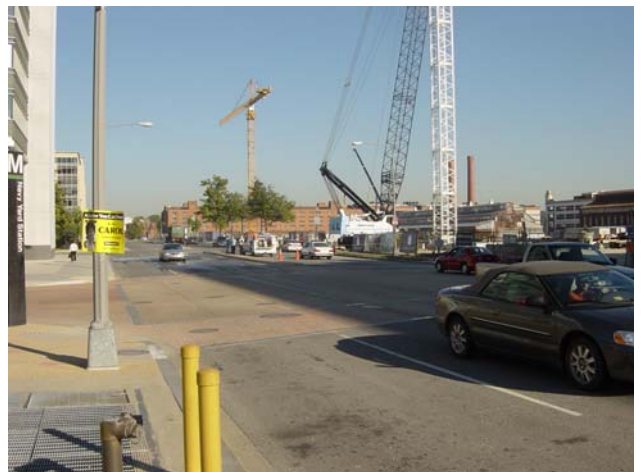
In addition, pedestrian circulation along M Street is hampered by physical conditions, namely narrow sidewalks, few signalized crossings, and a wall. During every period of observation, jaywalking was a regular practice. During the afternoon and morning peak periods, mid block crossings, using medians as a pedestrian path, and groups of waiting transit passengers blocking the path of other pedestrians, were significant.

Transit Operational Issues

The N22 shuttle, which operates between Union Station and the Navy Yard Metrorail station via Eastern Market Metrorail station, used to enter the Navy Yard. Ridership significantly reduced when the N22 was no longer allowed to enter Navy Yard after 9/11. While the Navy Yard Metrorail is within walking distance of the Navy Yard entrance, the southeastern portion of the Yard is more than 1/2 mile walking distance, apparently beyond the means of many potential transit riders. The District of Columbia Government wants to extend N22 to M Street SW, to serve redevelopment there.

A downtown circulator is proposed to operate down 7th Street SW to Waterfront. One option to consider is to combine that route with the N22 to make a complete circuit. Currently, the Union Station N22 extension serves Eastern Market, Barracks Row, and general Capitol Hill traffic. It has good schedule reliability, due to its short route, but could serve the area better with increased headways.

Apart from this concern, no serious operational issues were observed other than the normal traffic congestion for an urban area with many traffic signals. The proposal to remove the grade-separation of South Capitol Street with M Street is of concern, as the traffic volume on South Capitol is quite high.



Recommended Actions

With the understanding that transit ridership in the M Street area was relatively high, given the already high-level of transit service in the corridor and dense concentration of employment, the recommended actions for the M Street area lean more toward the supportive policy side. Low-cost service improvements are unlikely to make much a dent in transit ridership in the area. Rather, given the projected redevelopment and greater density for the area in the coming few decades, a new mode, such as bus rapid transit or streetcar, with a higher capital cost and longer project development horizon than was considered appropriate for this demonstration program, is likely to be both necessary and desirable.

Proposed Bus Service and Capital Enhancements

Service

- Extend Navy Yard Shuttle
The Regional Bus Study recommended extending the Navy Yard shuttle to serve Union Station, the Convention Center and SW Waterfront. The expansion to Union Station already has been put in service and therefore its operating and fleet costs are not included in this report. Because of the high concentration of bus service provided in this area, no other service enhancements are recommended.

Capital Enhancements

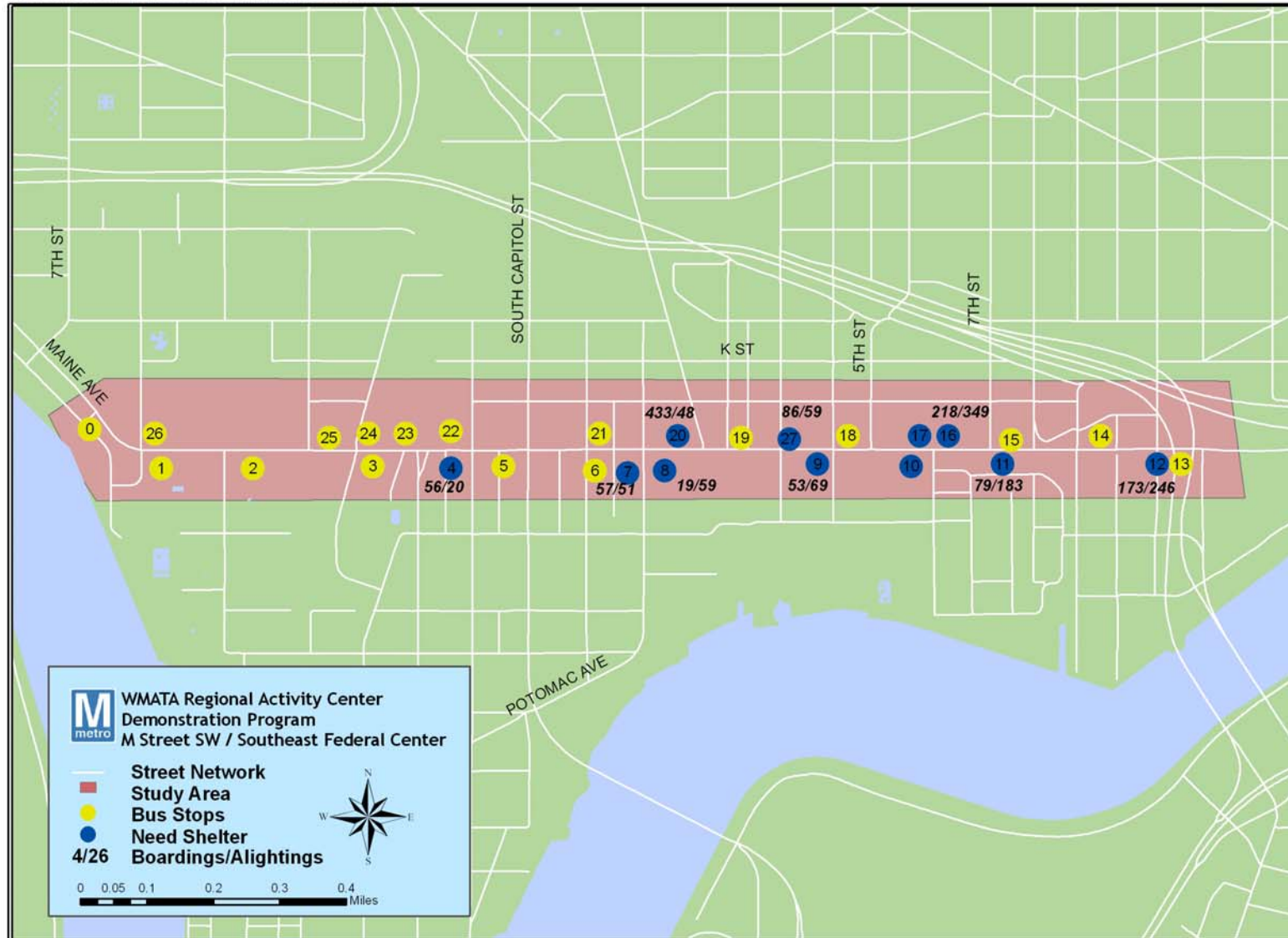
One way to demonstrate a commitment to quality transit service is to provide shelters at high-volume bus stops, those with more than 50 daily boardings. The District of Columbia, in partnership with WMATA, is initiating a shelter program, its first in over a decade. The District currently has a contract with a private advertising firm to replace and maintain shelters. The stops listed below are potential candidates for shelters. See Figure 1-4 for their locations:

Stop #4	EB M Street St. at Half Street
Stop #7	EB M Street St. at 1st Street
Stop #8	EB M Street St. at New Jersey Ave.
Stop #9	EB M Street St. at 9th Street (overhang)
Stop #10	EB M Street St. at 5th Street (overhang)
Stop #11	EB M Street St. at 7th Street (overhang)
Stop #12	EB M Street St. at 9th Street (overhang)
Stop #16	WB M Street St. at 7th Street
Stop #17	WB M Street St. at 6th Street
Stop #27	WB M Street St. at 3rd Street
Stop #20	WB M Street St. at Navy Yard Metro Station, 2-3 shelters
Stop #21	WB M Street St. at Van Street

- Update and regularly maintain transit information at all major stops. Remove outdated information at all stops.
- Improve signage and pedestrian access to the Waterfront Metrorail Station.

- Convert the right lane in both directions of M Street to a diamond lane for the entire length between 7th Street SW to the 11th Street SE bridge, limited to buses and right-turning traffic during peak periods. Restrict on-street parking to off-peak hours only.
- Pursue the construction of the planned pedestrian tunnel from the existing Navy Yard Metrorail station to the new USDOT headquarters.

Figure 1-4
M Street SW/Southeast Federal Center
Shelter Recommendations



Supportive policies to promote transit use

In the near term, major capital expansion of transit service in the corridor is not consistent with the charge of this study: to determine low-cost, quickly implementable improvements to activity center transit service. However, there are some policies to complement the service and small-scale capital improvements shown above. Together, these could enhance the use of transit service in the M Street corridor. Specifically, providing better information at all stops in the area, including updated route maps and schedules, would benefit the bus transit users in the area. Additionally, carrying out regular maintenance of stop amenities including cleaning graffiti from shelters, regular trash removal, regular repair of shelters, and seating would enhance and improve the experience and safety of riding transit in the corridor. The new contract between the District of Columbia and ClearChannel Adshel will provide shelters and ad panels at throughout the District. These will be made of vandal and graffiti resistant materials.

These recommendations are based on the field observations and informal survey of transit users in the corridor. These field observations are listed in more detail in the Field Observations report, July 2004.

Downtown core areas, such as the M Street area, have high potential to see the greatest impact from TDM practices to support transit ridership. Items such as parking pricing and land use may be beyond WMATA's purview, but other supportive actions to encourage transit usage in the corridor including those listed below, are all strategies that WMATA could reasonably pursue.

- Ensure that information and signage throughout the corridor is up-to-date and accurate.
- Begin information campaign for Metrocheck program at new facilities and new development at SE Federal Center.
- Prioritize ITS at the high-volume stops and for the high-volume routes in the corridor.
- Work with District Department of Transportation (DDOT) and Office of Planning (OP) to ensure that walking paths in the area are maintained as development moves forward, so that transit patrons can continue to safely and easily walk to and from transit stops.
- Work with OP to support policies that advocate minimum or decreased parking requirements at new development and provide these developments with adequate transit service.

Phasing and Timing of Activities

Short-Term Actions

2006	Provide updated route maps and schedules at all area bus stops
2006-2008	Begin MetroChek information campaign at new office buildings
2005	Participate in Anacostia Waterfront Initiative planning activities to monitor new development in the corridor.
2007	Prioritize corridor among those that will be considered for ITS

Long-Term Policy Actions

2006-2015 As new development is approved and construction completed, WMATA's marketing department should coordinate with new employers to be certain that they are aware of WMATA service in the area, and determine any new service that might enhance transit ridership for the area's new employees and residents.

2006-2010 Review planning for transit service in the corridor in detail to determine any particular need for service upgrading or new service to serve the planned and approved development in the corridor.

Potential Costs and Jurisdictional Responsibilities

Costs for service improvements in the M Street study area are low. The extension of the Navy Yard shuttle was the primary service recommendation, already implemented. Upgrading bus shelters and providing basic information at each stop should cost within the range specified below.

Table 1-5 Potential Costs

Improvement	Unit	Unit cost	Estimated Dollar Amount	WMATA	District of Columbia	Private
Capital						
New Shelter	11 shelters	10,000	\$ 110,000			x
Maps & Signs at each stop	27 stops	500	\$ 13,500	x		
Sidewalk upgrades and installation along M Street	10520 feet	21	\$ 220,920		x	
ITS Displays at highest volume stops along M Street, 3 in each direction	6 displays	25,000	\$ 150,000	x		
Crosswalk painting	2 crosswalks	120	\$ 240		x	
Transit guides to be distributed to new area employees	4000 guides	2	\$ 8,000	x		
total			\$ 502,660	\$ 171,500	\$ 221,160	\$ 110,000
Maintenance -- annual						
Shelters	11 shelters	200	\$ 2,200			x
Map & Sign upkeep	27 stops	100	\$ 2,700	x		
Crosswalks	2 crosswalks	120	\$ 240		x	
total			\$ 5,140	\$ 2,700	\$ 240	\$ 2,200
TOTAL			\$ 507,800	\$ 174,200	\$ 221,400	\$ 112,200

Measuring Performance

Establish base level ridership for each stop/route and Navy Yard Metrorail Station prior to implementation.

- Do counts after improved information and signage are carried out.

Determine base level participation in the Metrocheck program.

- Recount after information campaign and Metrocheck outreach to new employers in the area.

Conclusion

The M Street Corridor is an ideal activity center to target with transit, given its dense concentration of employees with predictable work patterns and an employer, the federal government, with pre-existing policies to promote transit use among its workers. Given the high level of service that WMATA already provides to the center, the successful levels of dense employment, and the promise of mixed-use development in the near future, transit's success here is not surprising. But this already high quality of service means that improving it still further, in particular improving circulation within the activity center, would require significant capital investment in the form of a new transit mode, such as limited stop bus service or streetcar. Consequently, the greatest opportunity for low-cost improvements in the M Street area, or other centers like it, rests with improving information for existing riders, working closely with the District Government to ensure that the pedestrian network continues to improve so that more riders are comfortable walking in the corridor, and improving the quality of the transit experience by ensuring that existing amenities, such as shelters, benches, and bike racks, are properly maintained.