

Section 5

Mark Center/Beauregard Street



Mark Center/Beauregard Street Activity Center

The Mark Center/Beauregard Street activity center study area consists of the area bounded by Beauregard Street, Sanger Avenue, Seminary Road, and Shirley Highway (I-395).

Located in Alexandria, Virginia, Mark Center/Beauregard Street is a suburban employment center generally characterized by the upscale corporate campus environment of the Mark Center, high-density residential at Southern Towers, medium-density residential on either side of Beauregard Street southwest of Rayburn Avenue and north of Southern Towers, and the NVCC campus at the northeast corner of the study area. Figure 5.1 displays the various major land uses in the study area. Streetscapes are generally well-maintained, with the shelters and landscaping along the Mark Center especially well designed. The Southern Towers street-front parking and low-density retail along Seminary Road are of a different character, somewhat, from the overall character of this activity center.

The predominant land use in the study area is office. However, it is projected in the next twenty years that there will be a significant increase in housing in the study area. According to the 2000 census as analyzed by the Metropolitan Washington Council of Governments (COG), there should be a 25 percent increase in households to 10,000 in 2025, and a similar percentage increase in jobs to 16,700 in the Mark Center area.

Alexandria's Economic Development Partnership shows only a few commercial opportunities in the area, all of them within Mark Center. The land use map and predictions for future development all focus on Mark Center. It is projected to add 1.7 million square feet of office space in the next few years.

Summary center characteristics:

- Significant number of jobs, 12,057 in 2000, and nearly 9,000 households.
- Excellent access to Shirley Highway (I-395) HOV lanes.
- Unified concentration of employment.

Mode share data for the Mark Center study area shows that for both work and home end, driving alone constitutes approximately 60 percent of mode share. Transit share of home end trips is at least twice that of work end, 13 percent compared to 5 percent, attributable, in part, to the high density housing with bus service at Southern Towers.

Table 5-1 Mark Center/Beauregard Street Mode Share

	Home End			Work End		
	Transit	Drive Alone	Walk/Bike	Transit	Drive Alone	Walk/Bike
Mark Center	13%	65%	0%	5%	61%	3%

Source: 2000 Census Transportation Planning Package



Figure 5-1 Mark Center/Beauregard Street



Transportation System Characteristics

Traffic congestion during the peak periods backs up on the three major streets: Seminary Road, King Street, and Beauregard Street. Major intersections include the on/off ramps to I-385 from Seminary Road, Seminary Road/Beauregard Street, and King Street/Beauregard Street. During observation, off-peak traffic was generally at a good level of service, with minimal restrictions and no back ups.

Pedestrian Environment

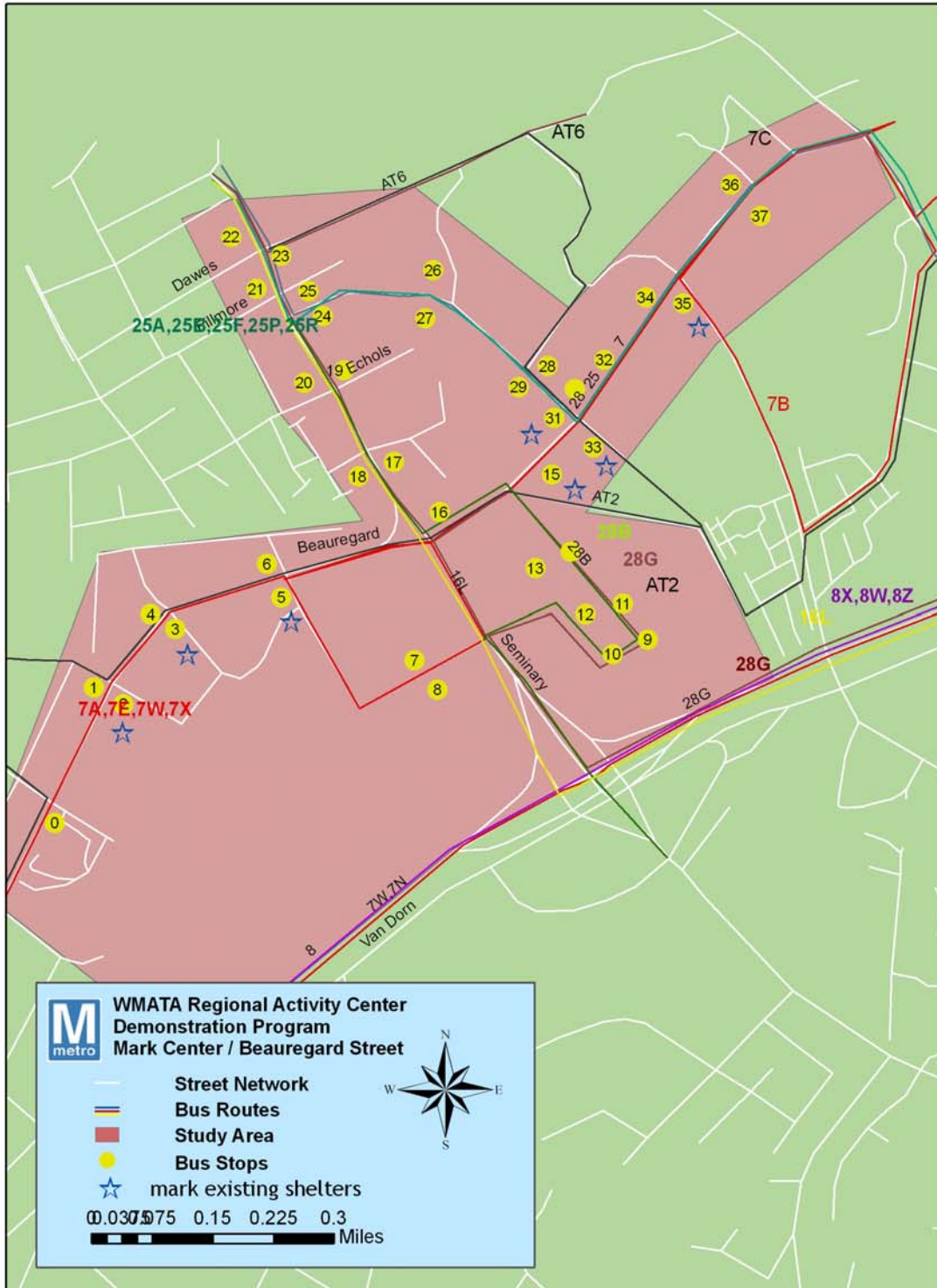
The office buildings in the Mark Center do not generate a significant amount of pedestrian activity, so pedestrian activity within the Mark Center campus is modest. There is an extensive sidewalk network and some short paths intended for recreational activities, as well as a connection to a nature trail. The mature trees and abundant lawns create a relaxed, wooded feel throughout most of the campus. Most of the bus stops within the activity center are connected to major buildings by sidewalks.

Due to the number of apartment units along Beauregard Street and a complete sidewalk network, there is some pedestrian activity along Beauregard Street, particularly nearer the NVCC campus, and the shopping at Reading Avenue.

Within the Mark Center office campus, some sidewalk connections are illogical or incomplete. Undeveloped parcels lack sidewalks, leading to disruption in the pedestrian network, and causing pedestrians to cross center roadways at intersections lacking stop signs or any signage indicating pedestrian activity. At one intersection, pedestrians must cross the road to continue on a sidewalk. However, there is no stop sign for on-coming traffic, and no warning of the pedestrian crossing. Grades at this location create poor sight-lines and there is high potential for pedestrian and automobile conflicts. While in the long term the pedestrian network will be filled out and regularly maintained, in the short term this may continue to be still another disincentive for area workers to walk to the bus.

Parking in the entire study area center is generally well landscaped and concentrated within parking structures, with the exception of the parking lots that front Seminary Road at Southern Towers. The lack of a crosswalk and pedestrian signal at the entrance to Mark Center from Southern Towers may limit or discourage those residents from accessing the restaurant and services at the Hyatt Hotel, and the incomplete sidewalk connections between the Mark Center to the rest of the activity center may discourage pedestrian activity between major uses. Mark Center's owner, the Mark Winkler Company, is working with the City of Alexandria to create a pedestrian crossing at Seminary Road, and has offered various upgrades to the roadways and sidewalks within the center to improve circulation.

Figure 5-2
 Mark Center/Beauregard Street
 Bus Routes & Stops



Transit Facilities and Operations

The primary streets within the study area contain 38 bus stops, as displayed on Figure 5-2. Of those, only nine stops have shelters. The majority of bus shelters serving the Mark Center along Beauregard Street are well-designed, attractive shelters that fit with the upscale character of the surrounding development. Many of these shelters include columns and fascia detailing and attractive landscaping. The remaining bus stops in the study area are either without shelters or use the standard WMATA design.



Several bus stops along Beauregard Street serving the Mark Center have pull-offs and concrete pads. The majority, however, are standard on-street stops. It should be noted that on-street stops are preferred for transit operations as buses do not have to wait to merge back into traffic.

Transit services consist of two Alexandria DASH bus routes and four Metrobus routes, including eight routings of the No. 7 line, three routings of the No. 28 line, and two routings of the No. 25 line. Mark Center runs a shuttle from its residential and commercial properties to the Pentagon Metrorail Station. Bus lines and routings within the study area are shown in Table 5-2 and Figures 5-2. Figure 5-3 shows the route for the Mark Center Shuttle.

The closest Metrorail stations to Southern Towers are the King Street Metrorail station, with a bus travel time of 18 minutes, and Ballston Metrorail station, with a bus travel time of 21 minutes. The Pentagon Metrorail station is also a popular destination, with a bus travel time of 20 minutes.

**Table 5-2
Existing Bus Service within the Mark Center/Beauregard Street Study Area**

<u>WMATA</u>	Headway	
	<u>Peak</u>	<u>Off-Peak</u>
Line 7 -Pentagon Metro-North Fairlington (via Shirley Hwy)		
7A - Pentagon Metro/Nottingham/Mark Center/Beauregard St.	n/a	60
7B - Pentagon Metro/King Street/Braddock Rd/Southern Towers	30	n/a
7C - Pentagon Metro/King Street/Park Center	20	n/a
7D - Pentagon Metro//Southern Towers	n/a	40
7E - Pentagon Metro//N. Fairlington/Southern Towers	7	n/a
7F - Pentagon Metro/Southern Towers/Nottingham/Mark Center	n/a	60
7P - Pentagon Metro//King St./Park Center	n/a	30
7W - Pentagon Metro/Southern Towers/Mark Center/Beauregard St.	8	n/a
7X - Pentagon Metro/ Southern Towers/Mark Center/Beauregard St.	15	n/a
Line 28A/B - Alexandria-Tysons Corner Line		
King Street Metro/Southern Towers/NVCC/Tysons Corner	30	30
Line 28F/G - Skyline City Line (via Shirley Highway)		
Skyline City/Southern Towers/Pentagon Metro	20	n/a
Line 25B - Landmark-Ballston Line		
Van Dorn Metro/Southern Towers/NVCC/Ballston Metro	30	60
Line 25F/P - Ballston-Bradlee-Pentagon Line		
Ballston Metro/NVCC/Pentagon Metro	30	60
 <u>DASH</u>		
Route AT-2 - Van Dorn Metro to Braddock Metro	20	30
Route AT-6 - King Street Metro to NVCC Alexandria campus	30	60
 <u>Shuttle</u>		
Mark Center to Pentagon Metrorail station	15	15

Figure 5-3 Mark Center Shuttle Map



Transit Ridership

The heaviest passenger volumes in the study area occur at Southern Towers, five large high-rise residential towers on the northeast quadrant of I-395 and Seminary Road. The stops there have 820 daily weekday boardings. Other high-volume stops include the NVCC stops on Fillmore Avenue (185 daily weekday boardings) and on Beauregard Street (80 daily weekday boardings). Several stops along Beauregard Street near the residential communities and retail on the west side of Mark Center also have significant boardings, with approximately 85 daily weekday boardings each. On the east end of Beauregard Street, the stops at Branch Avenue (70 daily weekday boardings) both have sufficient volume to warrant shelters. Of note, bus ridership at the employment centers, particularly Mark Center, is quite low. Figure 5-4 shows daily weekday ridership at each stop.

Mark Center Shuttle ridership is reported to be high. The vehicles have a capacity for 20 riders per trip, and are generally full during the morning and evening peak hours.

**Table 5-3
Bus Ridership by Route within the
Mark Center/Beauregard Street Study Area**

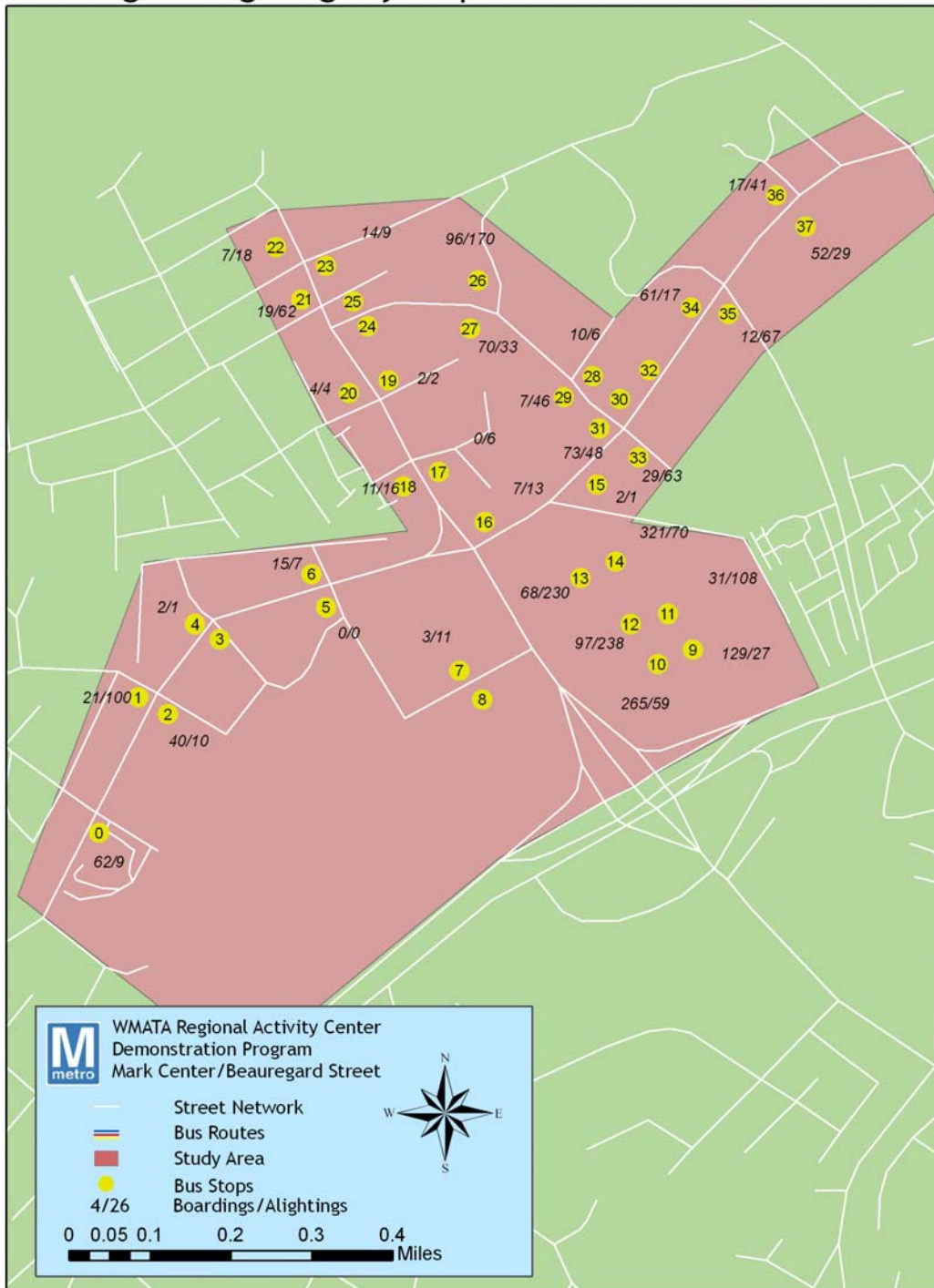
WMATA

Route	Ave 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
7A,B,C,D,E,F,H,P,W,X Northbound	2,559	1,722	278	78%	Jan-01
7A,B,C,D,E,F,H,P,W,X Southbound	2,291	212	1,445	72%	Jan-01
25A,F,G,J,P,R Eastbound	833	419	219	77%	Feb-00
25A,F,G,J,P,R Westbound	725	169	366	74%	Feb-00
25B Northbound	771	299	220	67%	Mar-02
25B Southbound	690	157	322	69%	Mar-02
28A,B Eastbound	2,148	363	757	52%	Mar-00
28A,B Westbound	2,139	892	419	61%	Mar-00
28F,G Northbound	288	225	63	100%	Mar-00
28F,G Southbound	221	80	141	100%	Mar-00

DASH

Route	Ave Weekday Ridership	AM Peak Riders	PM Peak Riders	Percentage of Daily Riders During Peak
2 Eastbound	1,977	629	595	0.62
2 Westbound	1,923	603	605	0.63
6 Eastbound	386	78	135	0.55
6 Westbound	328	88	102	0.58

Figure 5-4
 Mark Center/Beauregard Street
 Boardings & Alightings by Stop



Needs and Opportunities

The specific conditions at Mark Center/Beauregard Street suggested a few possibilities for improvements. Significant needs and opportunities were identified during a field review and stakeholder interviews. Both capital and operational issues are identified below, and matched up with improvements strategies to address these needs and take advantage of opportunities.

Capital Improvement Issues

Several high-volume stops in the activity center do not have shelters, including two at the NVCC campus and the area's highest volume stops at Southern Towers. At two NVCC stops, passengers wait under trees for shade and protection. At Southern Towers, with 820 passenger boardings per weekday (total for three stops), during inclement weather waiting passengers stand under building entrance awnings and dash out to the bus through the rain.

Transit Operational Issues

Buses operate slowly through the Southern Towers parking area, making one stop in front of each of the three buildings fronting Seminary Road, within a loop between Beauregard Street and Seminary Road. As shown in Figure 5-5, many auto/bus and pedestrian/auto conflicts occur as the buses operate along the primary vehicular access to the Towers' parking lot. Boarding passengers usually wait under the entrance awning to each tower building, walking across the drive lane when their bus approaches. Alighting passengers walk in front of the bus to cross to the building entrance, conflicting with autos driving around the stopped buses.

Buses on Seminary Road use the "service" road to the I-385 ramps to cross I-395 to remain in the right lane as they approach the other side. The traffic signals controlling movements delay the crossing by several minutes. Optimizing the traffic signal could improve bus travel time.



Figure 5-5 Southern Towers detail



Bus routes

Buses use ramp access road rather than overpass

Recommended Actions

The Mark Center/Beauregard Street area does suggest some elements of a transit-oriented neighborhood. Given the low level of ridership now, and the primacy of the automobile for most trips, it is not. However, it does have the potential to become so, given its proximity along a limited access highway to the regional rail system and fairly concentrated employment and residential nodes. The recommended actions below are intended to improve transit service and increase ridership in the short term, at low cost. Some of them depend upon land use changes and more significant transit investments, in the form of transit centers, that could considerably improve the function and appeal of transit service in the area, and, in the longer term, lead to enhanced mobility in the center.

Proposed Bus Service and Capital Enhancements

Service

Recommendations from the Regional Bus Study

- **Metrobus Route 7**

The recommended service changes to Metrobus route 7 are taken from the Regional Bus Study. The Metrobus route 7 Line consists of a number of branches that provide service from multiple terminal points in Alexandria and southern Arlington to the Pentagon. The proposed service change is to simplify the route structure by having fewer branches and terminal points. The recommended service changes would also improve off-peak headways to 30 minutes. Saturday headways would be 30 minutes all day and Sunday headways would be 60 minutes all day. Field work from this demonstration program suggested that more aggressive headways could significantly improve ridership at Southern Towers.

As noted in the Regional Bus Study, this recommendation depends on a significantly expanded transit facility at Landmark Mall. Such a recommendation is included in the facilities element of the Regional Bus Study. The capital cost of this facility is not included in this Activity Center Report.

- **Metrobus 28A, B**

The recommended package of service changes included in the Regional Bus Study referred to modifications to Metrobus routes 28A, B, and C. Route 28C has been eliminated and 28A and B service is now terminated at the King Street Metrorail station rather than continuing into Old Town. The Regional Bus Study recommendation included the extension of the 28C service to the proposed Bailey's Crossroads Transit Center. The capital cost of the proposed transit center facility is not included in this Activity Center report. In general the Regional Bus Study recommendations appear to have been incorporated into the current Metrobus service, therefore the cost of the service enhancements are not included in this report.

Other Recommendations

- **Dash AT-2**

The frequency of the Dash AT-2 route should be increased from three to four buses per hour in the peak periods, and from two to three buses per hour in the off-peak. Metrobus service frequencies appear adequate for the densities within this study area, with approximately 30 buses serving the Southern Towers in the peak hour. The operating model estimates are based on typical weekday peak and off-peak service in order to demonstrate the difference between the existing and proposed service. No changes to the Dash AT-2 weekend service are recommended.

Capital

In addition to service improvements that were based directly upon the recommendations of the regional bus study, small scale capital improvements were considered as a part of the demonstration program. Providing basic shelters at each of the locations listed below would improve the transit experience for riders who use these stops daily.

Stop #2	EB Beauregard St. at Rayburn Ave.
Stop #27	NB Fillmore Street at NVCC
Stop #35	WB Beauregard Street at NVCC
Stop #38	EB Beauregard Street at Branch Ave.
Stops 9-13	Southern Towers Stops

Summary

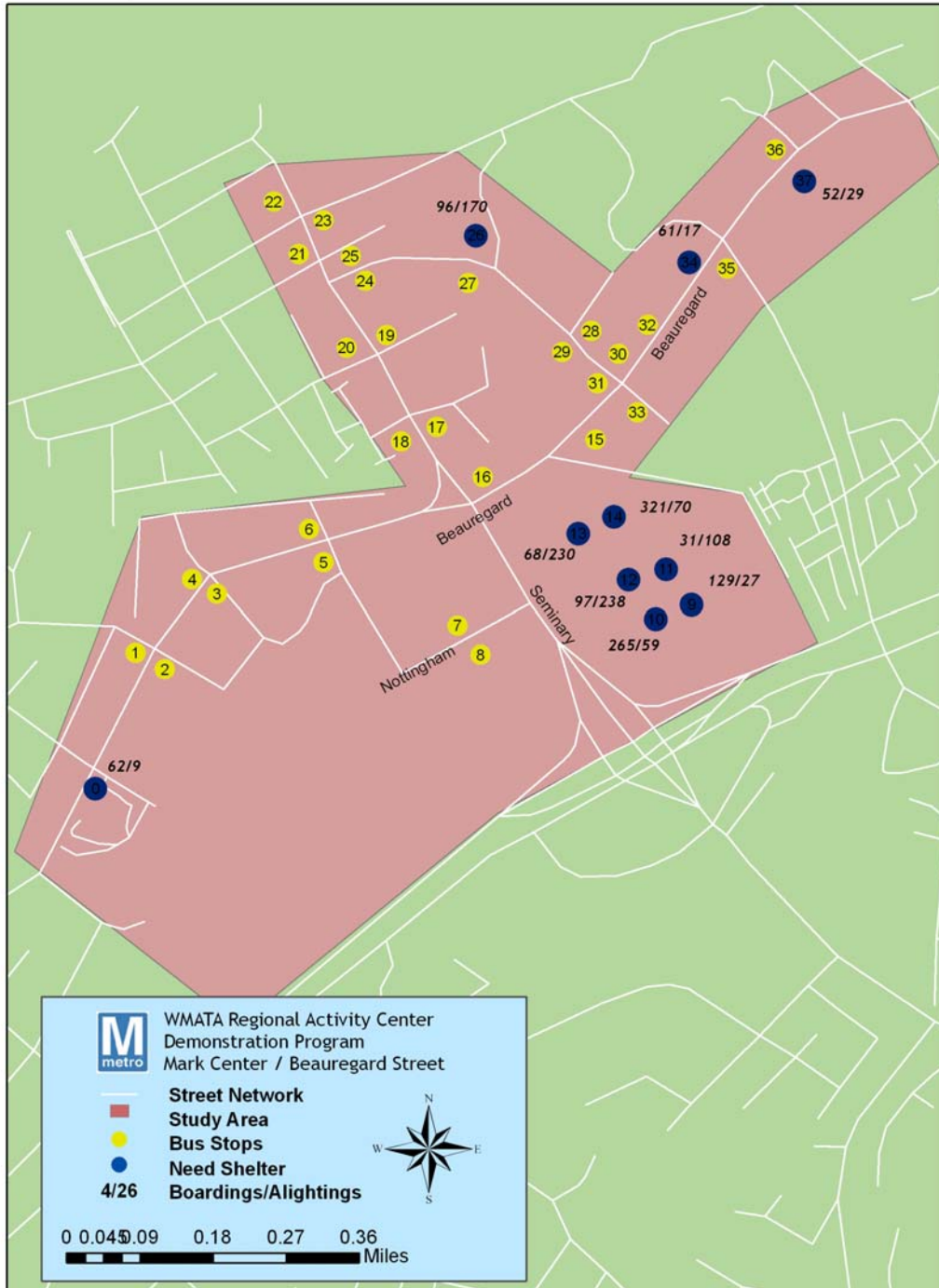
The recommended service changes in the Mark Center/Beauregard Street activity center are aimed at streamlining the existing bus service to facilitate more efficient service at higher frequencies. Most of the Metrobus route 28 recommendations originating from the Regional Bus Study have already been implemented as outlined above. Additional proposed enhancements include significant changes to Metrobus route 7 and higher levels of service for Dash route AT-2. These service modifications would require five additional peak buses at a cost of about \$1.8 million. The increased annual operating cost would be about \$3.2 million, which corresponds to about 30,000 additional vehicle revenue hour.

The service improvements operations matrix is shown on the next page. Costs shown are in 2005 dollars. Service and capital improvements are shown on Figure 5-6.

Mark Center/Beauregard Street Operating Plan matrix

Proposed Service Enhancements		Additional Annual Vehicle Revenue Hours (VRH)	Additional Daily Peak Vehicles	Additional Annual Operating Cost	Additional Annual Operating Cost/VRH	Annual Ridership Change	Additional Capital Cost - Buses	Service Effectiveness: Ridership/ Revenue hours
Metrobus 7	Regional Bus Study Enhancement	16,400	2	\$2,355,700	\$144	153,400	\$726,700	9
Proposed DASH AT-2: Only Typical weekday service calculated	Proposed Service	13,500	3	\$1,080,000	\$80	159,900	\$1,090,100	12
Center Total		29,900	5	\$3,150,600	\$106	313,200	\$1,816,800	10

Figure 5-6
 Mark Center/Beauregard Street
 Bus Stops Recommended for Shelters



Supportive policies to promote transit use

Given the current nature of land use in the Mark Center/Beauregard Street area, an ample supply of parking, limited numbers of pedestrian-oriented amenities, and close access to regional arteries, there are not many simple options for improving transit use within the study area. Certainly, as has been noted elsewhere in this document, improving service is the surest way to improve transit usage. To complement the improvements to service, there are a few policies that would, as part of a package, support the implementation of service improvements at the Mark Center/Beauregard Street area. After discussion with Mark Center managers concerning the successful operation of their shuttle, and various outreach and transit information materials they extend to the activity center residents and employees, a few policies could be implemented to complement the improved transit service proposed above:

- Ensure that information at area bus stops is regularly updated, along with increased marketing of transit service for the center, particularly at the Southern Towers complex.
- Provide multimodal access guides demonstrating how to access nearby shopping and educational uses via transit, including information about bike and pedestrian linkages and car sharing.
- Work with local business and residential managers (Mark Center and Southern Towers) to distribute information.
- Operate transit incentive program for employers and dense residential communities, such as those at Southern Towers.

Phasing and Timing of Activities

The service and capital improvements could be carried out whenever sufficient funding is identified. This would help improve transit service in particular at Southern Towers, and provide improved transit facilities and information to users throughout the study area. As the final pieces of Mark Center development are carried out in the next few years, continued involvement with center managers, Alexandria planners and traffic engineers, would ensure that the proper transit facilities, such as dedicated lanes, bulbouts, and a continuous sidewalk network, are in place as employees and residents in the center increase.

Short-Term Actions

2006	Implement service improvements in next round of operations adjustments
2006-2007	Implement shelter improvement with the next round of capital improvements
2006	Provide updated route maps and schedules at all area bus stops
2006	Create and distribute access guide
2006-2010	Develop transit incentive program for residents at Southern Towers and other high density residential areas

Long-Term Actions

Work with Alexandria planners and Mark Center managers to upgrade pedestrian facilities and on potential future transit service improvements in the center.

Potential costs and Jurisdictional Responsibilities

As stated above, the service modifications would require five additional peak buses at a cost of about \$1.8 million. The increased annual operating cost would be about \$3.2 million, which corresponds to about 30,000 additional VRH. The capital improvements in the center are relatively modest, consisting of, principally new shelters at 6 stops, and some information and marketing materials.

Table 5-4 Potential Costs

Improvements	unit	Unit cost	Estimated Dollar Amount	WMATA	Alexandria	Private
Capital						
Vehicles	2 buses	260,000	\$ 520,000	x		
New Shelters	10 shelters	10,000	\$ 100,000	x		
Maps & signs at bus stops	37 stops	500	\$ 18,500	x		
ITS Displays	4 displays	25,000	\$ 100,000	x		
Crosswalk painting	10 crosswalks	120	\$ 1,200		x	
Transit guides for area residents	8,000 guides	2	\$ 16,000	x		
total			\$ 755,700	\$ 754,500	\$ 1,200	
Maintenance -- annual						
Shelters	10	200	\$ 2,000			x
Information	37	100	\$ 3,700	x		
Buses	2	1000	\$ 2,000	x		
crosswalks	10	100	\$ 1,000		x	
total			\$ 8,700	\$ 5,700	\$ 1,000	\$ 2,000
TOTAL			\$ 764,400	\$ 760,200	\$ 2,200	\$ 2,000

Measuring Performance

Establish base level ridership for each stop.

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

Determine base level participation in the MetroChek program.

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

Conclusion

The Mark Center, like Rock Spring Park, is a classic auto-oriented office campus. The principle users are the professional employees who, per their profile, enjoy driving to work, and have only incentives for doing so, given the ample amount of free parking and the proximity to HOV lanes on 1-395. There are almost no opportunities for improving transit service in the center, except for supplying patrons with amenities and improving the distribution and the accuracy of information about transit service in the immediate center and the surrounding area. Beyond the office campus, which is quite well served by the free shuttle service supplied by the Mark Center management, the apartment buildings in the area, particularly Southern Towers which already demonstrates a high number of transit riders, could be better served with more aggressive headways or more express service to nearby Metrorail stations. In addition, there is the opportunity to improve the transit experience for existing riders and attract new riders by supplying pedestrian amenities such as shelters and benches at the Southern Towers bus stops.

