

# Implementation

The Plan's recommendations will be achieved through redevelopment shaped by rezoning and by land uses and urban design guidance. The zoning recommendations allow mixed uses and provide development standards appropriate to densely developed areas near transit. The density levels, mixed uses, and design guidance are intended to make the best use of Metro and to contribute to an active, pedestrian-scaled community.

Applying the mapped TOMX zones to areas closest to Metro rather than the current floating zones will more closely direct redevelopment, while still allowing market flexibility with mixed uses. TOMX in Twinbrook increases the potential for housing to encourage a mixed-use community. The urban design requirements and Plan guidance create extensive improvements in the public realm to create a walkable, urban style community.

Twinbrook's existing service and retail industrial uses are an important support function for residents and businesses. This Plan proposes amending the I-4 Zone in Transit Station Development Areas (also in White Flint and Silver Spring) to support the existing service and retail businesses by allowing smaller lot sizes and ancillary housing. These changes respond to the dense, more urban character of transit station industrial development that can flourish on smaller lots and be supported by complementary residential uses.

Implementation will also be accomplished through capital improvements projects and through the development review process, ensuring that public facilities will be supplied in a timely manner. The capital improvements projects are intended to create the public sector pedestrian links and spaces to complement and connect improvements made through private redevelopment.

The Plan's goals will also be implemented by applying its recommendations and guidelines through the development review process. Environmental, urban design, transportation, and park recommendations will improve environmental function, create a complete pedestrian system, create a street, trail, and sidewalk network, and connect the community to the park system.

## ZONING RECOMMENDATIONS

The application of the mixed-use, higher intensity TOMX zones reflects the Plan's intent to provide a high quality, mixed-use community offering services and amenities for residents and employees. The zones are recommended at varied intensities, reflecting proximity to the Metro station, the character of adjoining uses, and the existing zoning.

All the TOMX zones allow the transfer of public use space, density, and uses between lots within the same transit station development area. In Twinbrook, transfers would be appropriate to maximize visible and accessible public open spaces and to cluster retail uses. Transfers could also distribute density between sites to create public open spaces, a mix of uses, and the desired urban pattern and character.

- Rezone sites as mapped to the TOMX-2 and TOMX-2/TDR zones.

These Euclidean zones are recommended to allow flexible redevelopment in Metro station areas outside Central Business Districts (CBDs) with densities and development standards appropriate for a transit station area. Their standards recognize the character of suburban Metro stations, suitable for a higher intensity mixed-use development, and the opportunity station-area development offers for increasing transit ridership.

These zones' standards and incentives create a mix of uses that includes housing, office space for advanced technology and biotechnology uses, and retail that offers jobs and meets the service needs of residents and employees ranging from an FAR of .5 to 2. The zones encourage an urban pattern through density, building coverage, and development standards, and ensure that mixed-use development is served by appropriate public facilities and amenities.

The TOMX-2 and TOMX-2/TDR zones are applied to sites closest to the Metro station with the TDR option to encourage residential development. In this zone, TDRs will be required for density used for any purpose exceeding 1 FAR; they will be valued at 1,200 square feet of buildable residential area.

## ZONING ORDINANCE AMENDMENTS

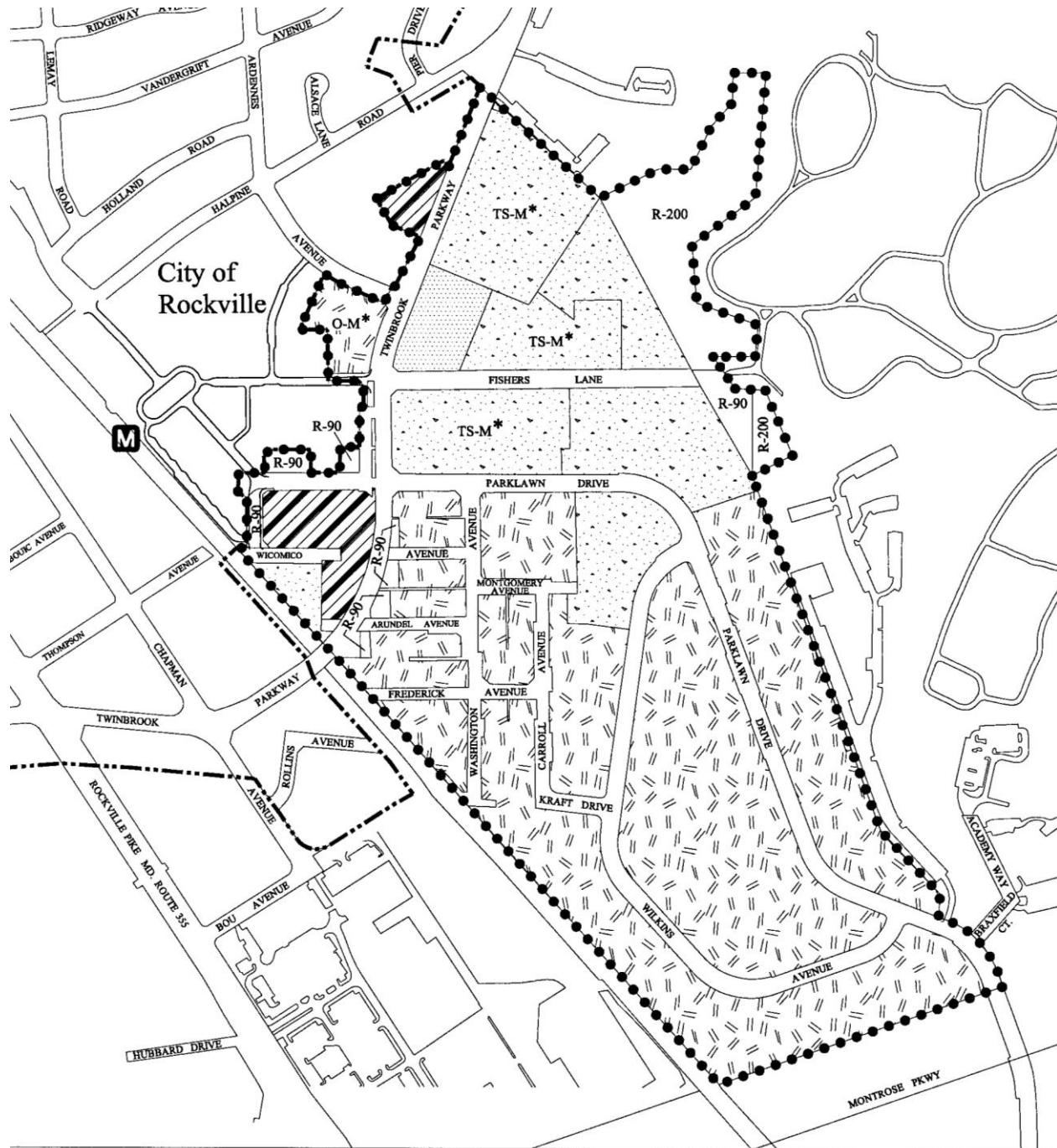
The Twinbrook Plan is an appropriate location for the TOMX-1/TDR Zone, which will be written as an amendment to the Zoning Ordinance.

- Establish and map the TOMX-1/TDR Zone as indicated.

The TOMX-1/TDR Zone encourages mixed uses and a complement of public amenities, but in areas farther from transit and at a lower density, ranging from .5 to 1 FAR. It is appropriate for sites bordering residential areas, and farther from the Metro station, but still with redevelopment potential. In Twinbrook, TOMX-1/TDR is proposed for the Plan's northeast corner on a site abutting existing garden apartments developments.

This zone introduces the option of commercial TDRs, based on FAR rather than a dwelling unit cap and governed by plan recommendations. On this site, TDRs are required for any development above .3 FAR and for any residential development above .5 FAR. Also on this site, commercial development is capped at .5 FAR.

## Existing Zoning



**M** Metro Station

●●●● Sector Plan Boundary

--- City of Rockville

R-200 Residential, One-Family

R-90 Residential, One-Family

I-4 Light Industrial, Low Intensity

I-4 Light Industrial, Low Intensity/Recommended for O-M

I-1 Industrial

I-1 Industrial/Recommended for TSM

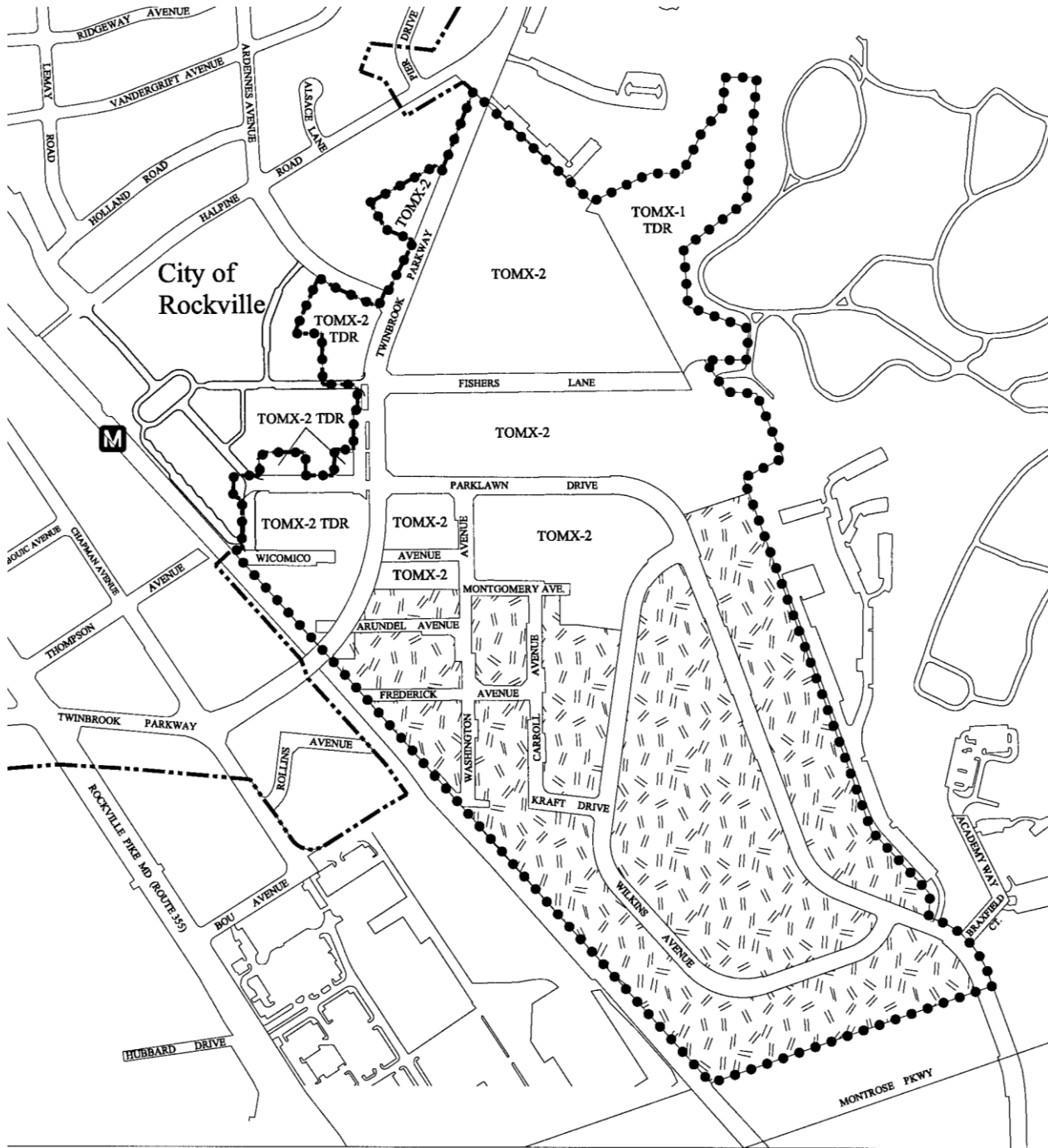
O-M Office Building, Moderate Intensity

C-O Commercial Office Building



0 600'

# Proposed Zoning



Metro Station



I-4

Light Industrial, Low Intensity



Sector Plan Boundary

TOMX-2/TDR

Transit-Oriented Mixed Use, TDR

TOMX-1/TDR

Transit-Oriented Mixed Use, TDR



City of Rockville

TOMX-2

Transit-Oriented Mixed Use



0 600'

- Amend the I-4 Zone in Transit Station Development Areas with densities, uses, and setbacks appropriate to a transit-accessible area.

The Plan proposes modifying the I-4 Zone to allow development flexibility and provide limited accessory residential uses. The Plan's goal to maintain the area's existing light industrial/service use character is supported by recommendations for optional method standards and review that are less cumbersome than the special exception requirements that currently apply.

To support small businesses, the proposed modifications require site plan review for all development, but allow development on properties smaller than one acre, or multiple buildings on a lot with the approval of the Planning Board.

With proximity to transit comes the potential for limited live-work structures, providing upper floor housing for business owners, managers, or employees – if clearly subordinate to the main business. This type of unit will support the primary economic function of the area, not create significant housing resources.

Because the live-work units would be allowed by special exception only, additional standards would address compatibility, ownership, parking, and the units' share and location in a given building.

### Proposed Amendments to the I-4 Zone in Transit Station Development Areas

	Existing I-4	Proposed TSDA I-4
Minimum lot size	1 acre	Less than 1 acre
Setbacks	100' from adjacent single family residential	n.a. in Twinbrook
	10' from adjacent commercial uses	No change
	50' from rail, utility r.o.w. or arterial road separating from residential	No change
	25' from arterial road separating from commercial	May be reduced to 10' at Planning Board's discretion, and under optional method standards
Green space	20%	10%
Parking requirements	Per article 59.E: 1.5 spaces per 1,000 sf of building	Setbacks reduced to 10'
Building height	3 stories/42'	No change
Uses	Light industrial uses	Adds live/work accessory units
FAR	1 FAR	1 FAR

## Proposed Zoning

District	Existing Zoning	Proposed Zoning	Comments
<b>Metro Station Area</b>			
Area 1, Wicomico Avenue 6 acres	R-90, O-M, I-1	TOMX-2/TDR	Cap commercial at 1.5 FAR. Above 1.6 FAR 20% use of TDRs. Foster residential near Metro in Twinbrook Station pattern
Area 2, north of Fishers Lane 2 acres	I-4	TOMX-2/TDR	Cap commercial at 1.5 FAR. Above 1.6 FAR 20% use of TDRs. Foster residential near Metro in Twinbrook Station pattern
Area 3, north of Ardennes Avenue 1 acre	O-M	TOMX-2	Cap FAR at 1.5. Comparable to adjacent uses in Rockville
<b>Technology Employment Area</b>			
Area 4, USP	C-O	TOMX-2	Recently developed at 1.83 FAR
Area 4, Fishers Place, Pollinger, parking lot	I-1	TOMX-2	Cap at 1.5 FAR to balance redevelopment with infrastructure. Cap Fishers Place at recently developed 1.5 FAR
Area 5, Northern HHS Parking Lot 9 acres	R-200	TOMX-1/TDR	Cap commercial at .5 FAR to encourage housing. Lower density farther from Metro
Area 6, between Fishers Lane and Parklawn Drive 6 acres	I-1	TOMX-2	Central location; mixed-use, pedestrian-friendly development Cap at 1.5 FAR to balance development with infrastructure
Area 7, Parklawn Bldg 10 acres	I-1, R-90, R-200	TOMX-2	Cap at 1.5 FAR to balance redevelopment with infrastructure
Area 8, south of Parklawn Drive 10 acres	I-1, I-4, R-90	TOMX-2	Cap at 1.5 FAR to balance redevelopment with infrastructure
<b>Light Industrial Area</b>			
Area 9, Washington Avenue	I-4, R-90	I-4 amended	Preserve existing industrial uses
Area 9, Wilkins Avenue	I-4	I-4 amended	Preserve existing industrial uses

## Transferable Development Rights

This Plan recommends three sites for TDRs. On the two sites closest to the Metro station, TDRs provide incentive for residential development. TDRs on the third site, farther from Metro, introduce the potential for nonresidential TDRs. These three sites provide the potential for 105 TDRs, 21 of which could be used for nonresidential uses.

TDRs are valued at three dwelling units each or 3,600 square feet. The square footage value comes from the average size of a dwelling unit near Metro stations, times three units.

In Twinbrook, the TOMX-1 Zone is recommended for Area 5, with development up to 1 FAR with commercial development capped at .5 FAR. The optional method base FAR is .3 and development may be a mix of commercial and residential uses. Development between .3 FAR and .5 FAR can be a mix of commercial and residential development or commercial development, with TDRs. Here non-residential TDRs may be applied up to .2 FAR (the difference between the .3 FAR optional base and the Plan's recommended .5 FAR commercial cap) and would generate 21 TDRS, yielding either 75,408 square feet of commercial development or 63 dwelling units. Above .5 FAR, residential development is preferred and would generate 54 TDRs, yielding up to 162 dwelling units.

Areas 1 and 2 are recommended for TOMX-2 zoning, which allows only a 20 percent residential density bonus and only for residential use. These sites will generate 30 TDRs and yield up to 90 dwelling units.

## PUBLIC IMPROVEMENTS FOR REDEVELOPMENT

In the Twinbrook area, intended for dense, mixed use development with an urban character, the details of development are important in creating the connections, open space, and amenities that complete the community. This Plan recommends parks, streetscaping, trail connections, and road projects tied to private redevelopment projects.

Redevelopment will proceed after County Council approval of the zoning text amendments and the completed sectional map amendments. Before development proceeds, the boundary of the North Bethesda TMD should be amended to include all TOMX zoned properties.

### Analysis Area 1 (Wicomico Avenue)

- Establish the pedestrian route to the Metro station, intended for eventual connection beneath Twinbrook Parkway.

### Analysis Areas 4 and 5 (Fishers Lane)

- Provide streetscape improvements along Fishers Lane.
- Contribute to a new urban park at the end of Fishers Lane.
- Provide Wilkins Avenue Extended connection.
- Provide trail connection to the Rock Creek Stream Valley Park through the Plan area's northeast corner to connect with the existing regional park and trail system.
- On the northern end of Area 5, incorporate forestation, shared use path, and stream buffering.

### Analysis Areas 6 and 7 (Fishers Lane and Parklawn Drive)

- Provide road and streetscape improvements along Fishers Lane.
- Construct a new urban park at the end of Fishers Lane.
- Provide intersection improvements at Twinbrook Parkway and Fishers Lane.
- Provide Wilkins Avenue Extended connection, routed away from adjacent streams.
- Provide road and streetscape improvements along Parklawn Drive.
- Construct the extension of Washington Avenue from Fishers Lane to Parklawn Drive.

### Analysis Area 8 (Parklawn Drive)

- Provide road and streetscape improvements along Parklawn Drive.
- Construct a new urban park.
- Provide intersection improvements at Twinbrook Parkway and Parklawn Drive.
- Participate in the established North Bethesda TMD for all employers with over 25 employees.

In about 15 years, an amendment to the Sector Plan will be warranted. Before any further zoning changes are considered, the following projects should be completed or fully funded for construction through the CIP.

- Provide a pedestrian underpass and bikeway connection to Metro along the east side of the CSX rail line at Frederick Avenue that will improve access to Metro.
- Provide third leg of Wilkins Avenue to Twinbrook Parkway.
- Construct Kraft Drive extension.
- Complete the Frederick-Wicomico pedestrian connection underneath Twinbrook Parkway.
- Implement the recommended pedestrian connection across the CSX tracks to Nebel Street extended.
- Construct bike lanes along Parklawn Drive from the shared use path on Montrose Parkway to Twinbrook Parkway and the Metro station.

## CAPITAL IMPROVEMENTS PROGRAM

The Capital Improvements Program (CIP) allocates public resources among varying needs and populations. Determination of project funding is based on fiscal planning, projects' readiness for programming, and identification of needs.

Along with other County agencies, the M-NCCPC is responsible for identifying some of those needs in its master and sector plans. As noted in the CIP, "One objective is to give high priority to areas of the greatest employment and residential density when allocating public investment."

The following tables identify programmed CIP projects and CIP projects proposed by this Plan. School projects are listed according to the November 2006 Capital Projects Status Report.

### Programmed Capital Improvement Projects, Fiscal Year 07-12

Project #	Description	Agency	Cost	Comments
<b>Public Safety</b>				
450105	Rockville Fire Station # 3 renovation	Fire/Rescue Services	500K through FY06	Pending close out or close out
470703	1 <sup>st</sup> District Police Station Rockville	Police	1,246K through FY06	Site selection, planning and design for new station
<b>Transportation</b>				
509922	North Bethesda Trail			Pending close out or close out
509587	North Bethesda Trail bridges			Pending close out or close out
500153	Twinbrook Station Access			Pending close out or close out
500717	Montrose Parkway East	DPW&T	2,287K through FY06	Fund planning stage of road segment that will travel from Parklawn to Veirs Mill
<b>M-NCPPC</b>				
038707	Montrose Trail		649K	Proposal for western portion of Montrose Parkway, eventual connection to eastern portion



## Proposed School CIP Projects

School	Project	Project Status	Completion	Comments
<b>Walter Johnson Cluster</b>				
Walter Johnson HS	Auditorium	Approved	SY 2006-07	
	Modernization	Recommended	August 2009	
	Site work	Recommended	August 2010	
Ashburton ES	Classroom additions	Recommended	August 2008	To meet projected enrollment
Farmland ES	Classroom additions	Approved	SY 2006-07	
	Gymnasium	Approved	SY 2006-07	
	Modernization	Programmed	August 2011	
Garrett Park ES	Modernization	Programmed	January 2012	
	Gymnasium	Programmed	January 2012	
Luxmanor ES	Classroom additions	Recommended	August 2008	To meet projected enrollment
	Modernization	Proposed	TBD	
<b>Richard Montgomery Cluster</b>				
Richard Montgomery HS	Replacement facility	Approved	August 2007	To meet projected enrollment
	Site work	Approved	August 2008	
College Gardens ES	Modernization	Recommended	January 2008	
	Gymnasium	Approved	January 2008	

This Plan relies on redevelopment and private investment to achieve some improvements in the private and public realms. The Plan also recommends public sector investment to complete the desired improvements. In combination, public and private investment can ensure best use of Metro and coordination of transportation, urban design, and environmental recommendations.

Relevant agencies should pursue federal, state, and local grant and targeted program monies to complete these projects, such as Montgomery County's streetscaping grants.

## Proposed CIP and Private Redevelopment Projects

Project	Description	Responsibility	Estimated Improvements
<b>Land Use/Urban Design</b>			
Fishers Lane Streetscape	Streetscaping	Private	Sidewalks, landscaping, amenities that serve design and environmental goals
Parklawn Drive	Streetscaping	Private	Sidewalks, landscaping, amenities that serve design and environmental goals
Fishers Lane/Parklawn Drive mid-block connection	Park/pedestrian space	Private	Connecting two large blocks to increase pedestrian access
New urban park	Along Parklawn Drive	Private	Designed to complement streetscape and located to complement mid-block connection
Fishers Lane public space	Public and usable open space	Private	Located at eastern end of Fishers, to serve employees and residents and create a link point for sidewalks and trail
Washington Avenue	Streetscape and sidewalk improvements	Public/private	Pedestrian connection to Metro
<b>Environment</b>			
Landscape Twinbrook Parkway outlots	Public and usable open space	Public	These lots should be reclaimed and landscaped for their environmental benefits and potential as public open space
Alternative fuel bus shuttle	Connect increased community of residents and employees to Metro	Public/private	Work with Ride-On and businesses to provide this service to encourage Metro use and minimize air pollution
<b>Transportation</b>			
Twinbrook Parkway street crossings	Pedestrian connections to Metro	Public/private	Safe street crossings are vital to increase walking and transit use
Trail and bicycle link to Veirs Mill Road	From planning area to regional parks	Public/private	Opportunity to make a trail link and preserve forest
Pedestrian connection over CSX	Between Washington Avenue and Bou Avenue via Kraft Drive	Public/private	Connects pedestrians to Montrose Crossing
Pedestrian connection under Twinbrook Parkway	Between Wicomico Avenue and Washington Avenue	Public/private	Pedestrian connection to Metro
Bike routes	Along Twinbrook Parkway, Parklawn Drive, Montrose Parkway, Fishers Lane, Ardennes Avenue	Public/private	As recommended in Bikeways Master Plan
Montrose Parkway	Segments and Parklawn Drive interchange	Public	Include bike and pedestrian routes and landscape buffering
Wilkins Avenue Extended	Completed in two segments – north and south of Fishers Lane	Public/private	Make vehicle and pedestrian connections, preserve stream buffer
Public, centrally located parking garage		Public/private	Constructed when density warrants
<b>Historic Preservation</b>			
Higgins Cemetery	Incorporate cemetery into area urban design and park plans	Public/private	Connect with Twinbrook Parkway outlot landscaping
<b>Public Services</b>			
MCPS			Review capacity as development proceeds
EMS/Fire			Review capacity as development proceeds