CITY OF GAITHERSBURG

TRANSPORTATION PLAN

A MASTER PLAN ELEMENT

Gaithersburg

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TRANSPORTATION PLAN
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MASTER PLAN

TRANSPORTATION ELEMENT

BACKGROUND

INTRODUCTION

The development of a complete and effective transportation system to serve the travel needs of the City's citizens, businesses and industries, institutions, and visitors is essential for achieving continued economic development and for maintaining and enhancing the quality of life in Gaithersburg. In the 1974 *Gaithersburg Corridor City Master Plan,* it was noted that for expanding urban areas, 'the healthy, organized growth of a city is directly related to the efficiency of its transportation network.' The 1989 Transportation Ad Hoc Liaison Committee report to the City's Planning Commission indicated that in the preceding 15 years, Gaithersburg had periodically reviewed and updated neighborhood land use elements of the Master Plan but that the transportation element of the plan had not been revised. As a result of the 1989 report and largely based on its findings, the Transportation Element of the Master Plan reviews the historical development of transportation serving the City, looks at the existing conditions, and presents recommendations for short-term and long-term improvements.

OVERVIEW

Until the late 1950's and early 1960's, Gaithersburg was a small rural agricultural business center located as the former town seal indicated 'in the heart of Montgomery County.' Like many similar towns in the United States, Gaithersburg developed at the intersection of a historic colonialera highway, Frederick Avenue (Maryland Route 355), several rural arterial roads and later in the nineteenth century a railroad line. The arrival of the B&O Railroad in 1873 spurred the development of a commercial district centered around the Gaithersburg station at the intersection of Diamond and Summit avenues in Olde Towne. In addition to the commercial activity, some industrial uses were established along the rail line. The town, which was incorporated in 1878, provided commercial services to the surrounding agricultural area but remained small in size and depended heavily on the regional roads and the rail line for its economic viability. Gaithersburg served as a distribution hub for freight coming into and going out of the central and northern areas of Montgomery County and nearby jurisdictions. During this period in its history, the town's transportation system consisted of regional roads connecting Gaithersburg to the rest of the region and local, mostly residential streets in close proximity to the business center. The B&O Railroad continues to connect Gaithersburg and vicinity to the District of Columbia and the rest of the nation via the intercity railroad network. The original street network developed in Gaithersburg to serve a relatively low volume of local traffic and a relatively heavy level of regional traffic traveling to and from the town center.

As a result of the decentralization policy of the federal government in the 1960s, Gaithersburg experienced tremendous growth in employment opportunities, land development and population with the establishment of the former Atomic Energy Commission, now the Department of Energy, just to the north of Great Seneca Creek State Park in Germantown and with the development of a new campus for what is now known as the National Institute of Standards and Technology (NIST) on the west side of town. Under its original name, the Bureau of Standards, NIST relocated from the District of Columbia to its large campus which is now entirely enclosed by the City. These two major federal scientific research centers in turn have attracted many private sector businesses and technological operations to the Gaithersburg area.

1974 CORRIDOR CITY MASTER PLAN

In 1964, the Maryland-National Capital Park and Planning Commission (M-NCPPC) Metropolitan Washington General Plan designated Gaithersburg a 'Corridor City' within the Interstate 270 and Metrorail Red Line growth corridor in Montgomery County. The 1974 *Corridor City Master Plan,* which was formally adopted by the City Council in 1982, was developed with the intention of moving Gaithersburg in a direction to 'fulfill its destiny within the context of this plan' by charting the City's growth into a large satellite city within the Washington metropolitan area.

The transportation element of the 1974 Corridor City Plan consisted of four sections: 1) a conceptual discussion of the future role oftransportation in Gaithersburg, 2) a general discussion of the land use development policy, 3) a specific discussion of the land use sections envisioned for Gaithersburg and anticipated development within the sectors, and 4) a detailed description of the road network envisioned for the City. The plan envisioned a high density urban core to be developed at the intersection of Maryland Route 355 and Montgomery Village Avenue, northwest of the historic OldeTowne businesscenter. The new urban core, on what was mostly vacant property was designated the Central Business District and was to be the new focal point of commercial development and employment activity in the City.

THE CURRENT SITUATION

Despite the goals stated in 1974 for concentrating development in a planned, high density urban core with intra-city public transportation and maximum pedestrian accessibility, commercial development in Gaithersburg was built in the designated urban core area, but at a lower density than originally anticipated and without the provision for coordinated pedestrian and transit accessibility. Much of the core area originally envisioned for office use emerged as retail oriented development. Employers and commercial operations have been established in other locations throughout the city while Gaithersburg's current transportation system is basically a moderately expanded, higher volume version of the same road system in place in the 1960s.

The transportation system in and around the City has remained overwhelmingly dependent on the use of private vehicles except for the completion of the regional Metrorail Red Line to Shady Grove Station in 1984, just outside the corporate limits of the City, and the establishment in 1976 of the Montgomery County Ride-On bus service, functioning primarily as a feeder bus service for commuters using the Shady Grove Metrorail Station. Expansion of the corporate boundaries of the City due to annexations has resulted in growth from 1.25 square miles in 1960 to almost 10 square miles by 1996. Reliance on the existing road network has proven to be a problem during the morning and evening rush hour periods because of limited traffic capacity and the fact that residents, commuters, and visitors now have many destination points within, around, and outside Gaithersburg in addition to the traditional 'hub' of the original town center. Current development plans within the City and in the surrounding area involve the development of two major traffic generating centers of activity. One of these new centers is the evolving Kentlands/Lakelands area in Neighborhood Four on the west side of Gaithersburg and the second one is the expanding commercial and residential development in the Shady Grove West area, just south of the City and adjacent to Neighborhood Three.

Despite no real change in the road system other than expanding the capacity of existing roads and the construction of Great Seneca Highway, Interstate 370, and portions of the Midcounty Highway through the City, the density of development has been dispersed throughout Gaithersburg. This is a significant departure from the earlier vision of a Corridor City with a centralized urban core served by a coordinated multi-model transportation system.

A significant innovation in land-use policy and zoning since the 1974 plan has been the introduction of mixed-use zoning and subsequent planned development in Gaithersburg involving integrated commercial and residential development. This was a departure from automobile dependent single or limited land use category zoning. The urban core proposed in the Corridor City plan was based on conventional zoning with separated land uses requiring people to commute to work, shopping and services.

EXISTING TRANSPORTATION

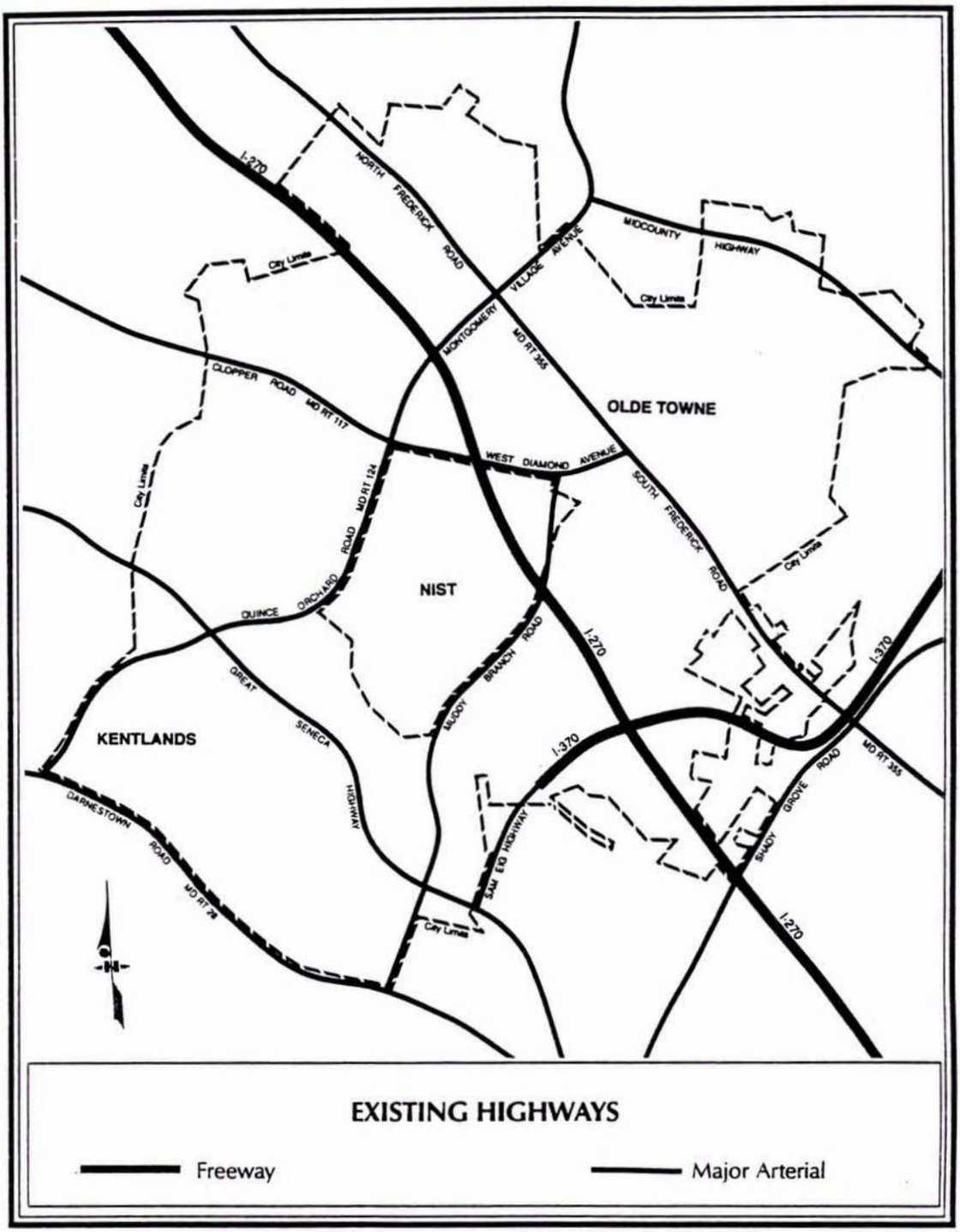
REGIONAL ROADS

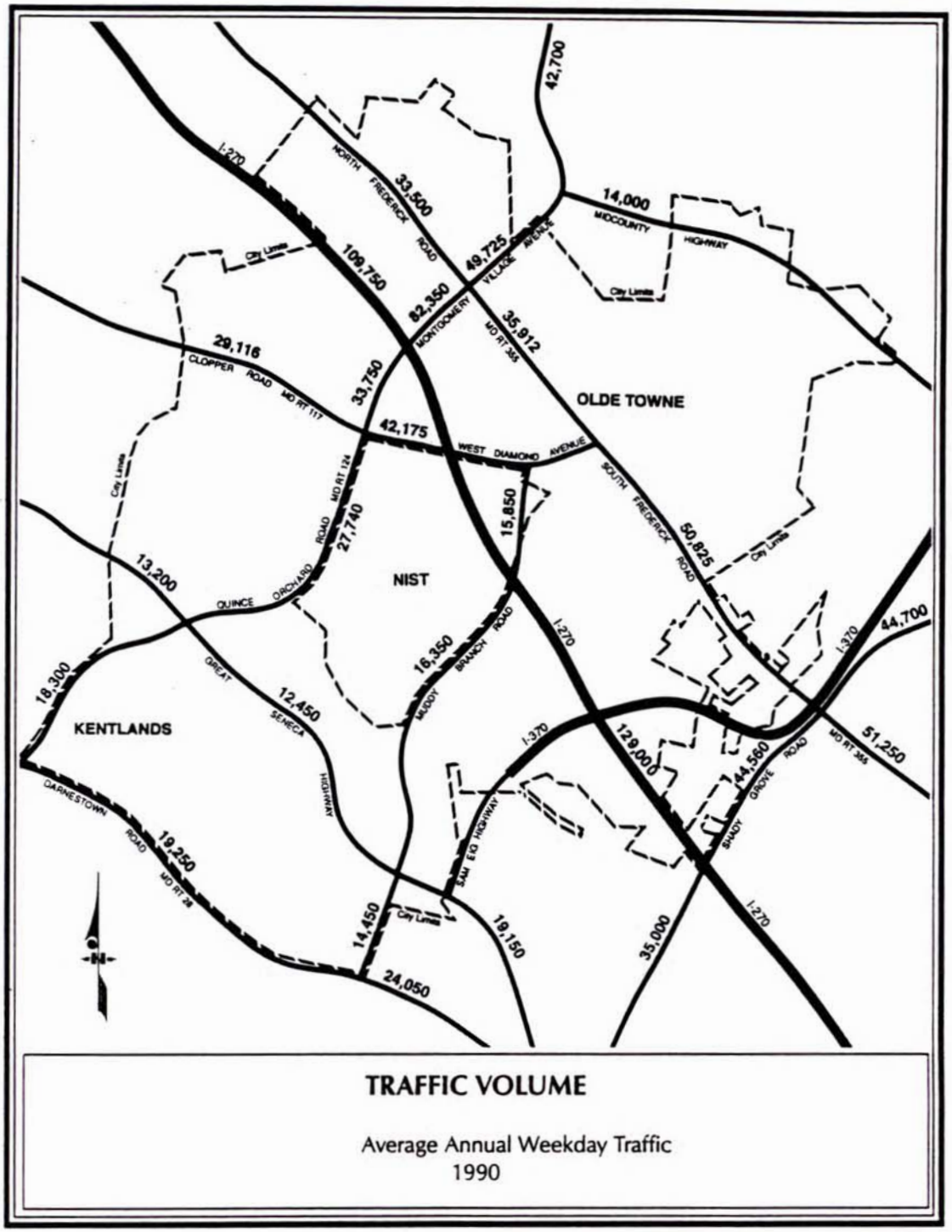
The existing transportation facilities serving Gaithersburg and vicinity include a regional network of interstate and state highways, local county and city roads. Mass transportation includes intercity, regional and local train and bus service.

The City enjoys excellent regional highway accessibility via Interstate 270, a limited access artery which runs through the center of Gaithersburg and connects with Interstate 495, the Capital Beltway, to the south, and with Interstate 70 in Frederick to the north. The Interstate 3 70 spur, which is the only completed section of the proposed Intercounty Connector, a planned east-west highway for Montgomery and Prince George's counties, is a convenient link between State Highway 355, Frederick Avenue, and Interstate 270. other state roads serving the City include Maryland Route 117 (West Diamond Avenue/Clopper Road), Maryland Route 124 (Quince Orchard Road/ Montgomery Village Avenue) and Maryland Route 28 (Darnestown Road). Major streets which feed into the regional highways include Muddy Branch Road and Summit Avenue/ Goshen Road. Other major routes include Great Seneca Highway, a Montgomery County highway which passes through the westerly portion of the City and connects Germantown to the Shady Grove area and Maryland Route 28, and Sam Eig Highway, which is a southerly extension of Interstate 370 to Great Seneca Highway. A partially-completed regional road is the Midcounty Highway (M-83) running east to west along the northerly end of the City. For many years, some residents of Montgomery Village have opposed the completion of the unbuilt section of the highway west of Montgomery Village Avenue. The City has long supported the completion of the regional east-west highway in order to relieve traffic volumes on parallel routes serving Gaithersburg such as Interstate 270 and Maryland Route 355. Montgomery County is considering exchanging responsibility for several major roads with the State Department oftransportation. The County roads serving Gaithersburg that may be transferred to State control are Great Seneca Highway and Sam Eig Highway.

LOCAL STREETS

As Gaithersburg grew in population with the concurrent increase in the volume of local commercial services required by this ever growing population, the City's major arterial roads simply became longer and wider segments of the existing regional roads that intersect within the City. Most of the regional thoroughfares are state and county highways under the control of agencies at those governmental levels. New roads serving neighborhoods within Gaithersburg have, for the most part, been built by private residential and commercial developers and turned over to the City for maintenance as collector roads and local access streets. Some of the collector roads that have been built or expanded include West Deer Park Road, Christopher Street and Quince Orchard Boulevard. With the exception of recent neo-traditional developments such as Kentiands and the proposed Lakelands in Neighborhood Four, the general pattern for new local streets has been for self contained developments that are not an extension of the traditional grid pattern of streets


I-270
NORTH FREDERICK ROAD
MD RT 355
VILLAGE AVENUE
MIDCOUNTY HIGHWAY
City Limits
MONTGOMERY
CLOPPER ROAD MD RT 117
OLDE TOWNE
WEST DIAMOND AVENUE
SOUTH FREDERICK ROAD
MD RT 124
QUINCE ORCHARD ROAD
NIST
KENTLANDS
GREAT SENECA HIGHWAY
MUDDY BRANCH ROAD
I-370
DARNESTOWN ROAD MD RT 28
SAM EIG HIGHWAY
SHADY GROVE ROAD MD RT 355
EXISTING HIGHWAYS
Freeway
Major Arterial



TRAFFIC VOLUME

Average Annual Weekday Traffic
1990

Source: Department of Transportation
Division of Traffic Engineering
Montgomery County, Maryland

similar to the older sections of Gaithersburg. Newer developments are, for the most part, enclaves which have limited access from major arterials. This pattern of development over the past twenty years has resulted in the concentration of heavy traffic on a few overburdened routes such as Quince Orchard Road and Darnestown Road (Maryland Route 28).

The disjointed tendency of the local road system is exacerbated by the presence of Interstate 270 and the CSX/MARC rail line, both of which split the City into two sections, the northeasterly older section and the southwesterly area, which continues to experience most of the new development and population growth. Since the 1974 *Corridor City Master Plan,* Perry Parkway has been constructed as the only new grade-separated crossing of the railroad line. There are a limited number of roads that cross the City such as Maryland Routes 124 and I 1 7. Both of these busy highways carry a disproportionate amount of local and regional traffic. Other major local roads are Muddy Branch Road and Great Seneca Highway which are unique in that they actually operate at below capacity in terms of present traffic volume. While no dramatic increase in traffic is anticipated for Muddy Branch Road, the continuing development and population growth in the Germantown area and elsewhere in the upper county will translate into heavier use of Great Seneca Highway for motorists destined for Gaithersburg and points south.

STREET CLASSIFICATION SYSTEM

Gaithersburg's Street Classification System identifies both street function and the environment the street passes through. Field research completed in the summer of 1994 resulted in an extensive road inventory of existing conditions which was used to classify the City's streets based on traffic volume, physical characteristics, and the types of land use along each route. The multi-volume inventory is available for use at the offices of the City's Department of Planning and Code Administration, City Hall, 31 South Summit Avenue, First Floor.

The City's road system is depicted in the Street Classification Map (page 7) which is included in this plan as a fold-out map. The map depicts the current function and character of existing streets and includes proposed designations for planned transportation facilities and special improvement areas. The Street Classification Map will be amended in the future as new roads and transportation opportunities are planned for the City.

Functional Street Classification Definitions

Freeway

Trip Distance - Provides for the expeditious movement of large volumes of through traffic between areas and/or around or through Gaithersburg.

Access Controls - A freeway is a divided roadway with control of access, and is not intended to provide access to abutting land.

Traffic Separation - A freeway has complete separation of conflicting traffic flows. Opposing traffic lanes are separated by a median.

Number of Lanes - A minimum of two lanes in each direction.

Major Arterial

Trip Distance - Provides for long distance traffic movement within the City and other destinations.

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STREET CL

AND LAND USE

PLANNING AND

Access Controls - Limited service to abutting land. Access controlled through medians and the spacing and location of driveways and intersections.

Traffic Separation - Opposing traffic flows are separated by a median.

Number of Lanes - Two to three in each direction.

Arterial

Trip Distance - Provides for moderately long distance traffic movements within Gaithersburg and areas outside of the City.

Access Controls - Moderate service to abutting land. Access control through frontage roads, medians, and the spacing and location of driveways and intersections.

Traffic Separation - Opposing traffic is separated by a median.

Number of Lanes - Two or three lanes in each direction.

Collector

Trip Distance - Provides for short distance traffic movement; primarily functions to collect and distribute traffic between local streets or high volume traffic generator and arterial streets.

Access Controls - Provides direct access to abutting land with some access control through the spacing and location of driveways and intersections.

Traffic Separation - Generally unseparated traffic lanes. Number of Lanes - One to two lanes in each direction.

Minor Collector

Trip Distance - Provides for short distance traffic movements, collects and distributes traffic between local streets and arterial streets.

Access Controls - Provides direct access to abutting land and has some access control through spacing of driveways and intersections.

Traffic Separation - Generally unseparated traffic lanes. Number of lanes - One through lane in each direction.

Local

Trip Distance - Provides for short distance traffic movement, not intended for through traffic; connects to collector, minor collector, and arterial streets.

Access Controls - Provides direct access to abutting land and functions for traffic movements within neighborhoods.

Traffic Separation - Generally unseparated traffic lanes.

Number of Lanes - One lane in each direction.

PEDESTRIAN AND BICYCLE ACCESSIBILITY

As Gaithersburg developed beyond the original Olde Towne area, neighborhoods were designed as residential enclaves with developers usually providing sidewalks along the local streets within each development as a condition of site plan approval by the City. This often resulted in a lack of pedestrian facilities linking developments to other residential and commercial areas. Recently, however, sidewalks are planned and are being designed for installation along major roads. These new walkways are to be constructed by both private developers and public agencies such as the City, Montgomery County, and the Maryland State Highway Administration (SHA). The SHA had for many years left funding for sidewalks out of its highway design and construction program. Recent legislation requires the State to build sidewalks in State road construction and reconstruction projects.

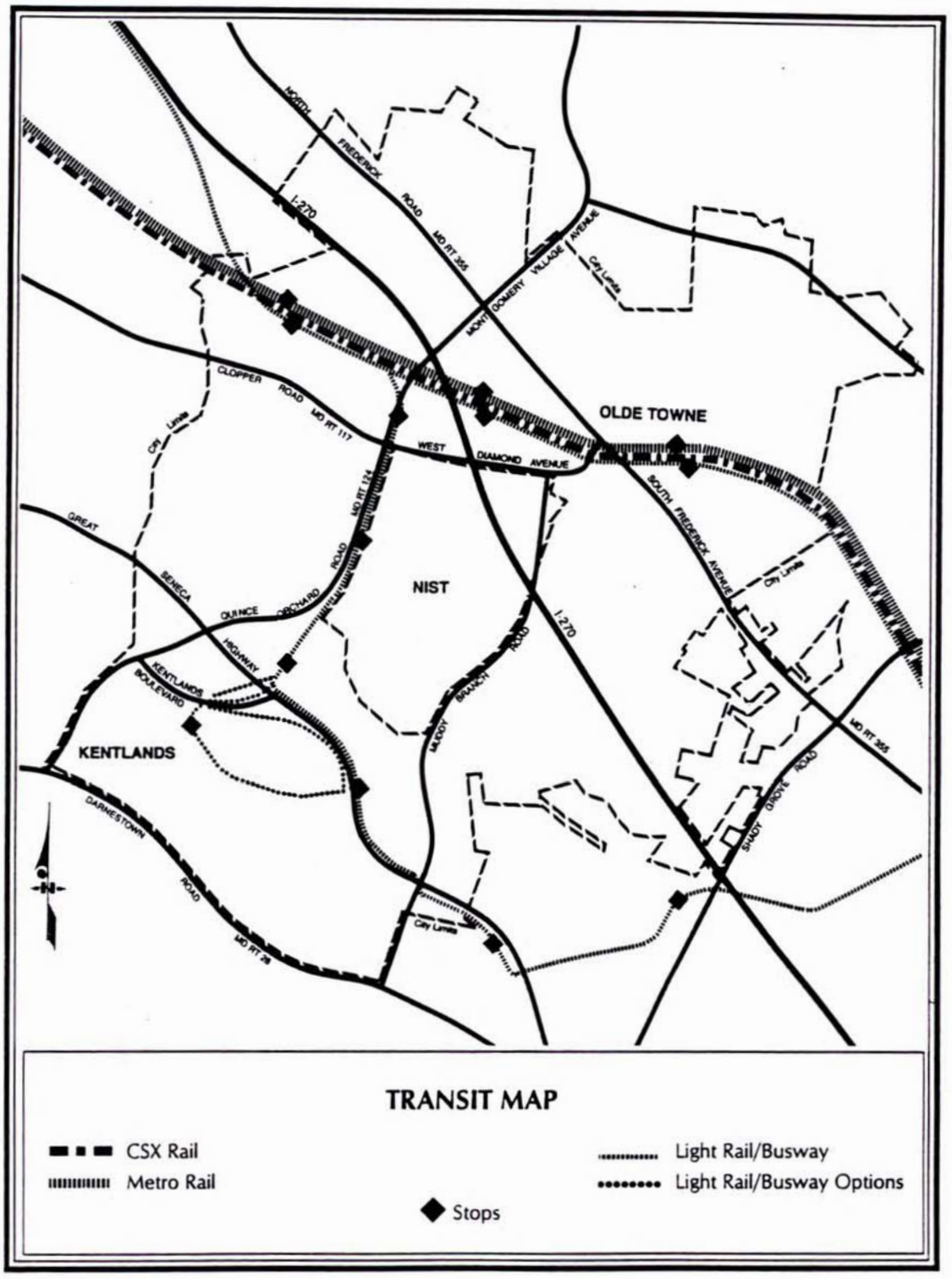
A new and comprehensive inventory of the existing bike trails and pedestrian paths in the City is needed in order to evaluate gaps in the system and to prioritize construction of the pedestrian and bicycle trail connections needed throughout Gaithersburg. The bike trail along the northerly side of Great Seneca Highway and the new sections of bike trail recently approved for construction along Clopper Road by the City are good examples oftrail improvements along major transportation corridors.

Both pedestrians and bicyclists will be well served in the future with the development of a coordinated and comprehensive trail system as part of the Gaithersburg Greenways. (See map, page 23.) The Greenways, a City-wide open space network which is detailed in the Sensitive Areas Element of the Master Plan, will provide the location of many of the connections needed in pedestrian and bicycle paths for the development of Gaithersburg's integrated transportation system. Passive and active recreational open space, institutional and cultural destinations, commercial and professional services and the various neighborhoods throughout the City will be accessible on foot or by bike. A key component of the Gaithersburg Greenways program is to connect the City's open space and trail system with the regional parks and trail network.

It is important to note that even with the addition ofthe Greenways, much of the pedestrian and bikeway system will be within street rights of way and often within thee xisting paved road areas. The Downtown Plan (see Neighborhood One Element of the Master Plan) for the revitalization of Olde Towne calls for the provision of bike lanes and improved pedestrian walks and open spaces. This type of planning for the accommodation of pedestrians and bicyclists should be repeated in other developed areas of the City.

TRANSIT

Until 1976, when Montgomery County instituted the local Ride-On bus service, the public transportation system serving Gaithersburg and vicinity consisted of limited regional and intercity service. Even today, despite the avaiiability of rail and bus service throughout the Washington region and with connections to cities throughout the country, transit remains overshadowed by the ever increasing use of private vehicles and the regional road system. The County's Ride-On bus routes are primarily along the Maryland Route 355 corridor serving Olde Towne and Montgomery Village, with a major "Transit Center' bus stop at Lakeforest Mall within the City limits. In 1984, with the extension of Metrorail Red Line service to the Shady Grove area southeast of the City, there was an increase of local and regional vehicular traffic generated by the users of the new transit facility. The Ride-On bus routes were revised to provide feeder service into the Shady Grove Metrorail Terminal. Citizens have noted that there remains a lack of intra-city bus service in Gaithersburg.


NORTH FREDERICK ROAD MD RT 355
I-270
MONTGOMERY VILLAGE AVENUE
City Limits
CLOPPER ROAD MD RT 117
OLDE TOWNE
WEST DIAMOND AVENUE
SOUTH FREDERICK AVENUE
City Limits
MD RT 124
GREAT SENECA HIGHWAY
QUINCE ORCHARD ROAD
NIST
I-270
MUDDY BRANCH ROAD
KENTLANDS BOULEVARD
KENTLANDS
MD RT 355
SHADY GROVE ROAD
DARNESTOWN ROAD MD RT 28
City Limits
N
TRANSIT MAP
CSX Rail
Metro Rail
Light Rail/Busway
Light Rail/Busway Options
Stops

In addition to regional Metrorail service via the nearby Shady Grove Red Line station, Gaithersburg is served by two MARC (Maryland Rail Commuter Service) stations located within the City limits, Metropolitan Grove in Neighborhood Five and Olde Towne's historic Gaithersburg Station in Neighborhood One. The nearby Washington Grove MARC station is also convenient to many City residents. MARC passengers have direct service into Washington's Union Station where there is connecting service available to Amtrak, other MARC lines, Metrorail, and the Virginia Railroad Express commuter system.

As development has continued in the eastern section of the City, the Planning Commission has secured easements from property owners along the existing CSX/MARC railroad right of way through Gaithersburg in order to accommodate a future extension of the Metrorail Red Line from Shady Grove, a new light rail transit line from Shady Grove to Metropolitan Grove or a third rail to allow expanded MARC service on the busy CSX track system.

In addition to planning for future mass transit improvements to serve the eastern side of Gaithersburg, the City continues to work with state and county planners on the development of the Corridor Cities Transitway, also known as the Shady Grove-Clarksburg Transitway, a transit line that will run from the Shady Grove Metrorail Station through sections of Rockville and the County and up the Great Seneca Highway corridor on the west side of Gaithersburg. The future Transirway will serve communities and employers along the route such as the Kentlands and Lakelands and the National Institute of Standards and Technology. The Transitway will continue north along Quince Orchard Road to a major transfer station at the Metropolitan Grove MARC station and will continue across the Casey tract in Neighborhood Five where it will run along Interstate 270 through Great Seneca Creek State Park and on to Germantown and Clarksburg. The details of the transit right of way and the location and number of transit stops in Gaithersburg are presently under review and are part of a larger planning effort involving the Montgomery County Department oftransportation and Public Works, and the Maryland-National Capital Park and Planning Commission. The Maryland Department of Transportation is carefully analyzing the feasibility, timing, and funding for the Transitway as part of its Interstate 270/U.S. 15 Multi-Model Corridor Study.

AIRPORTS

In addition to the region's three major airports, Baltimore-Washington International Airport in Maryland and Washington Dulles International and Washington National airports in Virginia, Gaithersburg is served by the Montgomery County Airpark, a local aviation facility located just north of the City. The Airpark, which opened in 1960, is Maryland's fourth busiest airport with 108,000 annual takeoffs and landings. The Airpark Manager's Office estimates that a busy day generates up to 400 takeoffs and landings. The privately operated facility is home to over 250 aircraft, ranging from business jets to helicopters and the airpark is open 24 hours a day, seven days a week.

Proponents of the InterCounty Connector, a planned highway linking Interstate 370 in the Gaithersburg area to Interstate 95 in the vicinity of Laurel, have argued that the new east-west highway would provide better access to Baltimore Washington International Airport from the City since it would replace the current routes to the airport along congested Interstate 270 and the Capital Beltway (Interstate 495) and local roads. The City has supported the concept of the InterCounty Connector as a limited access parkway with extensive landscaping in order to provide improved access to the City from the Interstate 95 corridor, Baltimore and points north and east.

MASTER PLAN

TRANSPORTATION ELEMENT

TRANSPORTATION PLAN

VISION STATEMENT

Gaithersburg shall develop
a comprehensive and highly functional transportation system
for the efficient, economical, and effective movement of people and goods,
Particular emphasis shall be given to facilitating pedestrian travel
and other alternatives to the automobile.

GOALS AND RECOMMENDATIONS

1. Goal

Improve and maintain the efficiency and safety of Gaithersburg's street network with projects to upgrade areas impacted by traffic congestion, noise, and road design problems.

Recommendations

- Sufficient resources shall be provided through the operating and capital budget processes to ensure that the City's transportation system continues to move towards a superior level of service.
- Complete the local street network as proposed in this plan.
- Minimize congestion and delay on major nonresidential streets through better coordination of traffic signals and other effective means of traffic control.

2. Goal

Coordinate land use and zoning actions with existing and programmed transportation facilities and consider the land use and transportation plans for adjacent areas outside of Gaithersburg.

Recommendations

- High density mixed-use development shall be encouraged in the vicinity of existing transportation facilities such as the two MARC stations and along established bus lines. Future high density development shall be concentrated along planned mass transportation facilities such as the Corridor Cities Transitway.
- Gaithersburg shall continue to work closely with state agencies, Montgomery County, and the neighboring municipalities of Rockville and Washington Grove on the planning and development of regional transportation improvements. The City should consider a focused outreach effort to increase support within the Montgomery Village community for the completion of the MidCounty Highway (M-83).

3. Goal

Require new development and redevelopment to share in the cost and construction of public facilities such as roads, bikeways and racks, pedestrian walks and amenities, and transit related buildings and parking areas.

Recommendations

- Continue Gaithersburg's successful practice of including the provision of new transportation facilities and site amenities as part of site plan approval. Transit-oriented development shall be given a high priority throughout the City as will extensions and connections to existing and proposed pedestrian and bicycle trails.

- Incentivize the private sector to become a partner in planning, developing, and funding the new Gaithersburg Greenways open space and trail system. (See Sensitive Areas Element of the Master Plan, and map on page 23)

4. Goal

Minimize the impact of through-commuter traffic on the City, particularly in residential and environmentally sensitive areas.

Recommendations

- Work with the state and county to expedite the completion of long-awaited roads designed to move through-traffic around Gaithersburg such as the extension of Midcounty Highway (M-83) and the widening of Darnestown Road (MD 28).

- Implement appropriate traffic controls and develop innovative traffic and speed mitigation plans using good urban design.

- Establish residential permit parking zones in neighborhoods where such parking is needed and develop other appropriate parking controls to ensure parking availability and to improve the appearance and safety of residential neighborhoods.

- Work with citizens and community groups to identify and solve transportation problems.

5. Goal

Encourage the development of nonvehicular circulation systems such as bikeways, pedestrian walks, and trails to provide citizens with alternative means of transportation as well as health and weliness opportunities.

Recommendations

- Where lacking, existing streets shall be improved if possible with sidewalks and bikeways to better accommodate pedestrian and bicycle movement.

- The Gaithersburg Greenways system, detailed in the Sensitive Areas Element of the Master Plan, will provide many of the connections needed for a coordinated intracity pedestrian and bicycle network. The Greenways will be a source of pride for the City and is in keeping with City's strategic direction to pursue policies and projects 'that set Gaithersburg apart' from other communities and improve the City's identity, sense of community, and quality of life.

- New streets and sidewalks shall be designed to fit in with existing neighborhoods and shall facilitate circulation within the city.

- Where feasible, new development shall include sidewalks that provide linkages to existing pedestrian and bicycle path systems in the city and nonvehicular accessibility to commercial centers, transit stops, nearby public buildings, houses of worship, and other institutions and open space.

- Both public and private development shall incorporate accessibility and safety for pedestrians and the disabled and shall, whenever possible, include benches, transit stop shelters, and other pedestrian amenities at strategic locations.

- Consider repeal of restriction on the use of bicycles on sidewalks.

6. Goal

Encourage the use of high occupancy vehicles and transit such as Metrorail, Ride-On buses, MARC commuter rail, car and van pools to support regional and local efforts to reduce traffic congestion, conserve energy, and maintain air quality goals.

Recommendations

- Adopt zoning and design standards that ensure development is accessible, attractive, and convenient to pedestrians and transit users

- Work with the Maryland Mass Transit Administration, Montgomery County, WMATA (Metrorail) and the private sector to develop a transit enhancement plan for the City involving improved intracity transit service and improved bus and rail service to Olde Towne.

- Develop transportation management strategies that augment and optimize existing mass transit systems. Include the encouragement of staggered work hours by employers.

- Work with employers to devise van and car pool programs and provide reduced parking requirements for new projects as an incentive.

- Set up a car pool hot-line as part of a commuter information service.

7. Goal

Provide adequate amounts of convenient parking for shoppers, commuters and residents.

Recommendations

- Implementation of the parking improvements proposed in the 1996 Downtown Plan for the City of Gaithersburg, which calls for a significant expansion of public and private parking capacity for the Olde Towne central business district.

- Provide, when feasible, on-street parking for shoppers in commercial areas throughout the City. This will increase the amount of available parking and help to transform busy commercial streets into more pedestrian-friendly environments by separating pedestrians from traffic with a buffer of parked cars as is found in most urban business districts.

- Parking areas and structures shall be located behind buildings and shall have convenient and well-designed pedestrian accessibility.

8. Goal

Control development in areas where adequate transportation facilities such as additional or expanded roads and transit cannot feasibly be provided or improved.

Recommendation

- Using the Sensitive Areas Element of the Master Plan as a guide, restrict development from environmentally unique or delicate sites. New development shall be concentrated along established transportation corridors such as Frederick Avenue (Maryland Route 355) and Quince Orchard Road (Maryland Route 124) and in the vicinity of both existing MARC and future light rail transit stations.

9. Goal

Improve the function and appearance of existing major roads in Gaithersburg and develop attractive gateways to the City to help welcome and guide visitors. Attractive and inviting street scapes and public spaces in highly visible areas of the City will result in a strong and positive image for Gaithersburg and helps to create a true sense of place.

Recommendations

- Eliminate dangerous two-way continuous left turn lanes and reduce the number of curb cuts on major arterial roads.

- Designate Special Urban Design Corridors and Gateway areas to improve the safety and appearance of high visibility, heavily traveled thoroughfares. Improvements shall include extensive street tree planting, landscaped medians, ornamental street lighting, and attractive directional and informational signage. Maryland Route 355 (Frederick Avenue) should be the first priority for urban design improvements.

10. Goal

Increase roadway capacity by using the existing infrastructure more efficiently.

Recommendations

- Pursue Transportation Management trategie and programs to provide alternatives to capital-intensive transportation improvements.
- Review operational systems such as the timing of traffic signals along major routes, in cooperation with Montgomery County and the State Department of Transportation.

FUTURE TRANSPORTATION IMPROVEMENTS

To realize the Vision of Gaithersburg as a growing city with a comprehensive and highly functional transportation system, the following projects are recommended for implementation. Some of the recommended improvements are in addition to the ones presented in the 1989 report by the Transportation Ad Hoc Committee.

STREET AND HIGHWAY PROJECTS

Freeways

Watkins Mill Road Interchange - An interchange at Watkins Mill Road extended and Interstate 270 will provide relief to the overburdened Montgomery Village Avenue-Quince Orchard Road interchange. The new interchange will also improve the development potential of two major vacant areas in the City, the Casey Tract in Neighborhood Five and the Cousins-I.B.M. site in Neighborhood Six.

New ramp at Exit 10, I-270 - A new ramp from the northbound Interstate 270 lanes to connect directly with Perry Parkway is needed to provide improved access to Olde Towne and to the rest of the Maryland Route 355 corridor.

InterCounty Connector/I-370 - This proposed limited access freeway will provide better access to the City from the Interstate 95 corridor and will be an alternate route for drivers wishing to bypass Interstate 495, the Capital Beltway, and Interstate 270. The highest level of environmental planning and urban design creativity is needed for the development of the new road. The concept should be that of a landscaped parkway, and provision for public transportation should be made a priority.

Major Arterials

M-83, MidCounty Highway - This important regional highway linking Gaithersburg and Montgomery Village to the Shady Grove Road area and the Shady Grove Metrarail Station is to be extended north of its present terminus at Montgomery Village Avenue to Germantown. Completion of M-83 will provide an alternate route for local users of heavily congested Maryland Route 355 and Interstate 270.

Maryland Route 355 - The widening of Frederick Avenue north of Montgomery Village Avenue, Maryland Route 124, to six lanes is underway.

Darnestown Road/Maryland Route 28 - This State road is slated for widening to 4 lanes along the southerly border of the City, from Muddy Branch Road to Quince Orchard Road. Preservation of the existing trees on the northerly side of the road and within the city limits should be considered in the final design for the expansion.

Maryland Route 124/Quince Orchard Road expansion - The widening of this State road to four lanes is underway.

Great Seneca Highway - This County road is presently a four-lane divided highway. It should remain a four-lane highway and the development of the Clarksburg-Shady Grove Transitway along the highway should be strongly supported.

Shady Grove Road - in coordination with Montgomery County, intersection improvements should be made a priority to improve the traffic circulation in this increasingly congested commercial area.

Diamondback Drive/Sam Eig Highway Intersection - This intersection should be upgraded in the future with the construction of the Intercounty Connector. (See Neighborhood Three Plan, Study area 3, Map Designation 9.)

Intersection Improvement/flyover ramp at Sam Eig Highway and Great Seneca Highway - This improvement may be needed in the future if the traffic volume on both highways increases significantly.

Arterials

Watkins Mill Road extended - This is a long-planned connection between Neighborhoods Five and Six, an extension of Watkins Mill Road from Maryland Route 355 to Clopper Road. The new section of the roads will provide access to the vacant Cousins site and the Casey Tract and will allow for a new interchange at Interstate270. Completion of Watkins Mill Road will provide the City with a new and badly needed cross town route, and will help relieve traffic congestion on Maryland Route 124 (Montgomery Village Avenue/Quince Orchard Road).

Collectors

West Diamond Avenue extension to Cedar Avenue - This important link is needed to support new development in Olde Towne and to improve access to the City's redeveloping central business district from Interstate 270 and from the west side of Gaithersburg.(See Downtown Plan in Neighborhood One Element.)

Extension of Teachers Way to North Summit Avenue - The extension of Teachers Way is needed to provide improved access to Olde Towne from the northeasterly section of the City and to improve traffic circulation within the Central Business District. (Downtown Plan.)

Odend'hal Avenue - Odend'hal Avenue shall be extended east from its present terminus at Goshen Road in order to provide access to the Casey Goshen development tract, adjacent to and including the Summit Shopping Center which is in need of redevelopment.

Longdraft Road- This two lane road is being expanded to four lanes just to the south of Clopper Road with channelization at the intersection. The project is nearing completion.

Elimination of narrow bottleneck section of Maryland Route 117/West Diamond Avenue between Perry Parkway and Chestnut Street/Muddy Branch Road - A widening of this section of the road to four lanes would improve traffic flow in the area and the safety of motorists, pedestrians, and bikers. In the design of the improved road, a narrow barrier instead of a planted median should be considered in order to keep overall street width to a minimum. This would support the preservation of the houses on both sides of the street. A upgraded path for pedestrian and bicycle users should be a priority for the project.

East Diamond Avenue - Existing Maryland Route 124, known locally as East Diamond Avenue and Washingtonian Grove Lane, shall be preserved between Olde Towne and MidCounty Highway.

Chestnut Street/West Diamond Avenue intersection - A study is needed to improve the safety of this intersection. The one-way traffic pattern on Chestnut Street shall be preserved.

Completion of Washingtonian Boulevard - The road shall be completed in accordance with the Neighborhood Three Plan, including the interchange at Sam Eig Highway.

McBain Avenue - The extension of McBain Avenue from Chestnut Street to Perry Parkway will provide direct access to Olde Towne from the planned ramp at Exit 10 of Interstate 270. It will serve as an alternate route to Maryland Route 355 (Frederick Avenue) and help to relieve some of the traffic congestion on that busy highway.

New north-south road off of Watkins Mill Road Extended, in Casey Tract, Neighborhood Five - This street will be designed as part of the future site plan for the development of the Casey Tract.

New road from southerly end of Professional Drive to Watkins Mill Road extended - A new stretch of Professional Drive is needed to connect the Professional Drive office complex with the future extension of Watkins Mill Road.

Grade separation at Metropolitan Grove Rd and CSX Railroad - A grade-separated crossing at this location would improve safety and provide access to future development on the Casey Tract.

Minor Collectors

New connector road from Lakelands to Maryland Route 28 - A new road is needed to connect the future Lakelands development with Maryland Route 28 (Darnestown Road). The new road will handle traffic generated by the new development in Lakelands and will help to avoid congestion on existing streets in the Kentlands and elsewhere in Neighborhood Four.

Local

New street from North Summit Avenue to Russell Avenue, located between and roughly parallel to East Diamond and Brookes Avenues - The new street will improve traffic circulation in Olde Towne and provide access to a future public parking structure. (Downtown Plan.)

Game Preserve Road - The road as it now exists shall be preserved as a rustic road. The road should not be widened to increase its traffic capacity and the preservation of trees along the road should be a high priority.

SPECIAL CORRIDORS AND GATEWAYS

The City shall redesign and improve unsafe stretches of existing highways and gateway areas by establishing Special Urban Design corridors and project areas. The prototype project shall be Maryland Route 355, the Frederick Avenue corridor, involving a project area focusing on a section of the busy road between Cedar Avenue and Montgomery Village Avenue. This section of the road shall be designated a Special Urban Design Area and will be the subject of a comprehensive urban design plan. The plan will include removal of unnecessary curb cuts and possible consolidation of driveway and parking lot entrances, the installation of a landscaped traffic separating median, enhanced pedestrian crossings, major tree plantings and decorative lighting to improve the look of Gaithersburg's "main street" as well as to provide better lighting for vehicles and pedestrians. The placement of utility lines underground and the removal of utility poles from the corridor should be a priority for both safety and design considerations.

The improvement of the entire length of Frederick Avenue from Shady Grove Road to Game Preserve Road, with special study and design analysis for the above-mentioned project area as well other sections of the corridor such as the section of Frederick Avenue just to the north and south of the South Summit Avenue intersection, shall be the prototype for targeted Special Urban Design treatment of other major corridors in the City. These other project areas should include East and West Diamond avenues, North and South Summit avenues, Interstate 270 and Interstate 370. Major entrances or gateways into Gaithersburg as well as highly visible edges of the City such as Maryland Route 28 (Darnestown Road) and Shady Grove Road should also be the subject of creative landscaping and urban design efforts.

The Special Design corridors and gateways and other areas of the City that are worthy of design review and improvement will be discussed in detail when the future Urban Design Element of the Master Plan is completed. This Element of the Master Plan will include the development of specific design standards for the six street classifications. This will take into account the character of the adjoining land uses. The Urban Design Element is not required to be submitted to the State Office of Planning by July, 1997 as part of the revised Master Plan.

SIGNAGE

There is an urgent need for a coordinated informational and directional signage system in Gaithersburg to provide information and guidance for visitors and residents to reach destinations within the City. An effective signage system will facilitate traffic movement in the City and will enhance the experience of traveling within Gaithersburg. It will give a positive impression of Gaithersburg to travelers passing through the City to destinations elsewhere in the region. The signs should be coordinated with the existing street signs and park identification signs which utilize the City's logo, the white and green color scheme, and consistent typeface. Entrance signs should be placed at every gateway to the City, and informational and directional signs for destinations within Gaithersburg should be placed along busy roads and at major intersections. The upcoming Urban Design Element of the Master Plan will make specific proposals for the signage system.

PEDESTRIAN AND BICYCLE ENHANCEMENTS

An important aspect of the Transportation Plan calls for filling the existing gaps in Gaithersburg's pedestrian system in order to connect citizens with important destinations within the City and to facilitate interaction and non-vehicular accessibility between neighborhoods. Utilizing the data from the recently completed Street Inventory and with additional field work and analysis, a detailed study is needed to determine the location of existing sidewalks in the City and the missing gaps in the pedestrian transportation network where new walkways would be most beneficial to citizens. The City is currently working on several pedestrian and bicycle path improvements such as the new bicycle path sections along Clopper Road and new sidewalks for areas along Quince Orchard Road and West Diamond Avenue in the vicinity of Interstate 270.

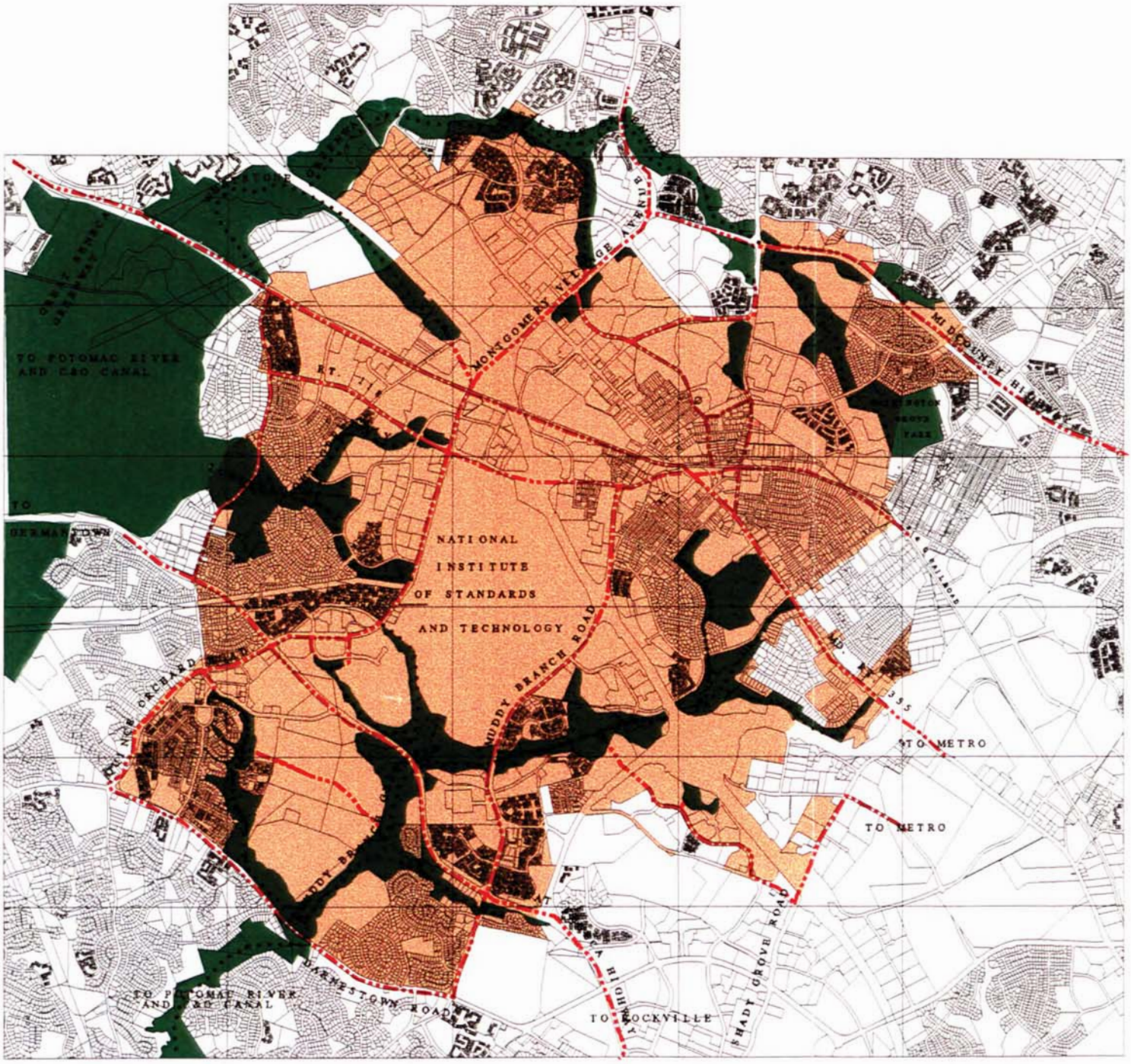
TRANSIT IMPROVEMENTS

Corridor Cities Transitway (Clarksburg-Shady Grove Transitway) - Gaithersburg shall continue to strongly support planning and funding for the future Clarksburg-Shady Grove Transitway, described in the Background section of this Master Plan Element, which will serve the growing west side of the City and will provide needed public transportation to other areas of the City and region. The Transitway should also be viewed as a strategy in reducing the number of private automobiles passing through the City each day clogging major routes and intersections.

Extension ofpublic Transit along CSX line from Shady Grove to Olde Towne, the Fairgrounds and Metropolitan Grove - The City shall continue to support the planning for an extension of transit service along the existing CSX Railroad right of way. This expansion of public transportation could be one or a combination of the following: a new section of the Red Line of the Metrorail system from Shady Grove to Metropolitan Grove and possibly west to Germantown; increased MARC passenger service for the Gaithersburg, Washington Grove, and Metropolitan Grove stations; and the possible establishment of a light rail transit line connecting the Shady Grove Metrorail station with Washington Grove, Olde Towne, the Fairgrounds, and the Metropolitan Grove station. The City's longtime practice of requiring property owners along the southerly side of the CSX right of way to dedicate easements for expanded transit in the future should continue.

Ride-On Bus Service - As stated earlier, the Montgomery County Ride-On Buses function primarily as feeder buses for commuters using the Shady Grove Metrorail Station. Most of the existing routes provide service within the Maryland Route 355 (Frederick Avenue) corridor. The City should work with the County to determine the need for additional bus routes in under served areas in Gaithersburg and to make public transportation to commercial and institutional destinations more convenient.

Bus Shelters - Using the data from the recently completed street inventory and working closely with Montgomery County, a study is needed to determine where new bus shelters are needed. This study should be done as part of the Urban Design Element of the Master Plan so that a distinctive design for the shelters can be developed that will help build the visual image and identity of the City. The Bus Shelter program can be an exciting opportunity to combine the practical need for public facilities with the creation of public art in the form of roadside civic design of high quality throughout Gaithersburg.



GAITHERSBURG GREENWAYS

Gaithersburg

SCALE : GRAPHICAL

DATE = SEPTEMBER, 1996

MAP LEGEND

- BIKEWAY CONNECTIONS
- EXISTING GREENWAY TRAILS
- PROPOSED GREENWAY TRAILS

TRANSPORTATION, TPAFFIC MANAGEMENT AND LAND USE

Gaithersburg shall continue to explore ways to manage traffic such as encouraging major employers to implement staggered work hours and by assisting the State Department of Transportation and Montgomery County to promote the use of the Interstate 270 High Occupancy Vehicle Lanes that are scheduled to open in November of 1996.

To help prevent the increase of commuter traffic, the City's recent planning policy to encourage mixed use development, so that jobs, shopping, entertainment, cultural, educational, and spiritual services are all close to home, shall be continued and expanded. With the development of a comprehensive and coordinated transportation system, Gaithersburg will fully develop into an attractive urban center that, as the City's Vision statement says, "[will retain] the best qualities of a small town," and that "will set the standard for other cities."

MASTER PLAN

TRANSPORTATION ELEMENT

APPENDIX

SHADY GROVE/CLARKSBURG TRANSITWAY STUDY

FINAL REPORT

MARCH 1993

PLANNING COMMISSION
MAR 26 1993
GAITHERSBURG, MD.

PREPARED FOR:
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING AND PROJECT DEVELOPMENT

PREPARED BY:
PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
LOIEDERMAN ASSOCIATES

SHADY GROVE/CLARKSBURG TRANSITWAY STUDY
FINAL REPORT

EXECUTIVE SUMMARY

Background

The Shady Grove/Clarksburg Transitway Study has been undertaken by the Montgomery County Department of Transportation, Office of Planning and Project Development as part of an overall program of proposed transportation improvements in the I-270 Corridor in Montgomery County, Maryland. The provision for a transit facility in the I-270 Corridor appeared in the Master Plan of Highways and the Gaithersburg and Germantown Master Plans since the early 1970s. The original concept identified a right-of-way for the potential extension of Metrorail from Shady Grove north to serve the Corridor Cities of Gaithersburg, Germantown, and Clarksburg. The location of the transitway and it's ultimate uses have become more important as development has proceeded in the corridor over the past 15 years. Both Shady Grove and Germantown Master Plans rely on this transitway to accommodate the levels of development called for in those plans.

The Shady Grove Study Area Master Plan also recommends a southern transitway be developed, extending from the I-270/MD 28 interchange to Great Seneca Highway in the vicinity of the Shady Grove Life Sciences Center. (See Figure 1.2 in main body of report.) This southern transitway is not part of this study.

The first study, The I-270 Corridor Cities Transit Easement Study (CCTES) completed by the Maryland-National Capital Park and Planning Commission (M-NCPPC) in 1990, recommended the best alternative locations and/or uses that would be consistent with emerging land use and travel patterns. It also serves as a guide for this study.

Purpose

The County must be assured that the transitway alignment identified in the CCTES, particularly in three designated segments referred to as A, B, and C, is feasible and that all necessary right-of-way is identified for acquisition or reservation. (See Figure 1.1 in main body of report.) Therefore, the objectives of this study are: (1) to identify the community and environmental features that will guide setting the alignments of Segments A, B, and C; (2) to delineate in precise terms the right-of-way that should be preserved for Segments A, B, and C, to accommodate the transitway guideway, stations, yard and shop, parking, and access.

The results of this study will also serve as valuable input to the Maryland Department of Transportation's I-270 Corridor Project Planning/Alternatives Analysis Study.

Location

The location of the proposed Transitway Segments A, B, and C are described as follows:

- ***SEGMENT A***: Segment A begins at and makes a direct connection with the Shady Grove Metrorail Station. Leaving this station and traveling in a southwesterly direction, the proposed transitway crosses MD 355, traverses through the undeveloped King Farm and alongside the Danac Technological Park, crosses over Shady Grove Road and I-270, traverses the undeveloped Crown Farm and alongside the proposed Decoverly Drive to Great Seneca Highway, follows Great Seneca Highway across Muddy Branch and through the Quadrangle site to Quince Orchard Road, follows along and crosses Quince Orchard Road to the CSX Railroad and the Metropolitan Grove MARC Rail Station, and traverses the Casey Property to Great Seneca Creek near I-270.

- ***SEGMENT B:*** Segment B is the proposed loop around the Shady Grove Life Sciences Center and begins near the intersection of Segment A and Omega Drive, follows Omega and Medical Center Drives to Broschart Road, then connects again with Segment A near the intersection of Diamondback Drive and the proposed Decoverly Drive.

- ***SEGMENT C:*** Segment C begins at MD 118 between Crystal Rock Drive and Aircraft Drive and follows Crystal Rock Drive north to merge with the CCTES Alignment near Century Boulevard and the Fairchild Properties.

Modal Technologies

This study explores several transit modes. In Segments A and B, busway and fixed guideway (primarily light rail transit) were examined (although priority bus lanes are now recommended for Segment B as a result of this study.) In Segment C, a heavy rail (WMATA Metrorail extension) route was studied. The conceptual design criteria for each of these transit modes included provisions to meet the accessibility requirements of the federal Americans with Disabilities Act.

Potential Users

Potential users of the new system include commuters travelling to the employment centers in Shady Grove and Germantown, commuters travelling from Frederick County through the Corridor Cities into lower Montgomery County and Washington D.C., people seeking services at the Shady Grove Life Sciences Center, and residents of the Shady Grove West and Germantown communities wanting a quick connection to Metro.

Potential Station Locations

In addition to station connections at the Shady Grove Metrorail Station and the Metropolitan Grove MARC Rail Station, other potential stations proposed in the study areas are in the vicinity of:

- Pleasant Road
- Piccard Drive
- Fields Road/Omega Drive
- Diamondback Road/Decoverly Drive
- Great Seneca Highway/Decoverly Drive

- Great Seneca Highway/School Drive
- Great Seneca Highway/Sioux Lane
- Quince Orchard Road/National Institute of Standards and Technology
- Quince Orchard Road/Clopper Road
- Germantown Town Center

Environmental/Community Effects

Transit systems relieve suburban congestion with less impact on the environment than new roadway construction. This study identifies and evaluates environmental and community constraints such as wetlands, woodlands, steep slopes, natural habitats, streams, noise sensitive sites, displacement, traffic, safety, and visual effects, which guided the development of the transitway alignments, stations, and candidate maintenance and storage yard locations.

The alignments have been established to avoid and minimize environmental and community impacts. No major unmitigatable adverse impacts are expected from the implementation of any of the transitway segments. Several streams and wetland areas will be crossed or affected but design features, such as clear span structures for crossings of streams or wetlands, and wetlands replacement can mitigate any impacts that can not be avoided. Based on current available information, a maximum total of 0.8 acres of wetlands at twelve locations will be affected along Segment A. Segment C will affect a total of 0.2 acres at two locations. Community impacts are also limited. Buses and rail transit vehicles can generate noise impacts. Much of the proposed alignments run along existing or proposed roadways which generally generate noise levels greater than those produced by transit vehicles. Noise barriers should be able to mitigate any major impacts, and visual screening at selected locations may be required where the transitway passes close to residential or commercial development especially along Great Seneca Highway. Two residences on Quince Orchard Road will have the transitway running through the front of their parcels affecting access and the character of the properties. No historic or known archaeological resources are affected by any of the proposed segments. Detailed environmental impact assessment and investigations of archaeological resources, endangered species and similar issues are beyond the scope of this study. In the description of the segment transitways, environmental mitigation measures are indicated where needed.

About the Study

This study began in July of 1991. It was conducted by the firm of Parsons, Brinckerhoff, Quade, and Douglas, Inc. under the direction of the Office of Planning and Project Development of the Montgomery County Department of Transportation. The study has produced this final report and a set of conceptual plan and profile drawings for the transitway alignments, stations, and candidate maintenance and storage yard facilities sites.

Summary Of Findings and Recommended Next Steps

This study establishes physically and operationally feasible alignments, station locations, and candidate light rail transit maintenance and storage facilities sites for the designated Segments A, B, and C. A separate study product, Conceptual Plan and Profile Drawings, presents the alignments and sites. The

drawings also show the extent of right-of-way necessary for these facilities. In general, the transit right-of-way width has been established as 50 feet in developed areas and 70 feet in undeveloped areas. This right-of-way allows for a continuous pedestrian path along the transitway, except in a few physically constrained locations, such along Great Seneca Highway and the crossing of the CSX tracks. Special right-of-way needs are also shown at stations and parking facilities and where structures or grading may require right-of-way beyond the standard widths.

Three candidate sites were considered for a light rail transit maintenance and storage yard facility:

- Shady Grove -- adjacent to the existing Metrorail maintenance yard
- Metropolitan Grove South -- located south of the MARC Metropolitan Grove Station along the CSX tracks
- Metropolitan Grove North -- located between the MARC Metropolitan Grove Station and I-270

All three sites are operationally well situated, are adequately sized and shaped to accommodate relatively efficient facilities, can handle a reasonably sized vehicle fleet of 25 to 35 cars, and are surrounded by relatively compatible land uses.

As for future planning, the Shady Grove site and at least one of the Metropolitan Grove sites should be reserved as potential locations for a light rail transit maintenance and storage yard facility. Of the two Metropolitan Grove sites, the south one is preferable to the north one, for cost of grading reasons primarily, if it is determined that the land is in fact available for use by a transit project.

With the completion of this study, several next steps should be considered:

- **Continuation of Study To Clarksburg**. Segment A of this study ends just north of Metropolitan Grove while Segment C examines only a short section in the Germantown West area. The segment north to Clarksburg, approximately five miles from Metropolitan Grove, should define the transitway at a similar level as was established in this study for Segments A, B, and C.

- **Advise M-NCPPC and Incorporated Jurisdictions of Alignment Land Reservations**. The study's plan and profile drawings indicate the required right-of-way for the various transitway alignments, stations, and vehicle maintenance and storage facilities. This information can be used by M-NCPPC and the cities of Rockville and Gaithersburg to establish land reservations through existing and proposed developments as well as along and through publicly-controlled property. The proposed transitway alignments should be coordinated with any roadway and related infrastructure projects. The study recommends that both the Shady Grove site and one of the Metropolitan Grove light rail transit maintenance and storage yard candidate sites be reserved. At Metropolitan Grove, the south site is preferable to the north site.

- **Develop a Strategy Plan and Financing Package**. This study has defined alignment and facility locations for various segments of the master plan transitways. At the present time, there has been no decision to implement any specific transitway projects in the I-270 corridor.

  The SHA I-270 Project Planning/Alternatives Analysis Study is studying a range of transit improvement alternatives that include the segments studied here. If that effort leads to a decision to continue to advance the development of a transit improvement project for the I-270 corridor, an implementation staging plan, schedule, and financing plan need to be developed.

An important determinant of the implementation schedule and staging plan will be the financing plan. The financing plan will establish when and how a transit improvement program will be funded and how much funding will be available. The plan will also determine the likely timing of the funding which will establish when and how much of the transit improvement can be implemented and operated.

In addition to identifying the right-of-way requirements and related land reservations for a proposed project, as defined here for Segments A, B, and C, special transit districts should also be established at key areas in the corridor. The special transit districts will be designed to accomplish several purposes:

- Create "transit oriented" development both in terms of concentrating higher-density residential, employment and other trip generators around stations, and provide a designed environment that provides safety, convenience and comfortable access with, and usage, of transit.

- Provide a mechanism whereby the increased value of the development that convenient access to the transit service will create, can be captured to help fund the construction and operation of the transit improvement.

In order to accommodate the development densities that will be allowed by zoning in these transit districts, a high level of transit service and capacity is required.