ROUTE 1 CORRIDOR REVITALIZATION STUDY

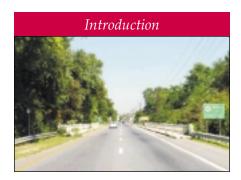
PHASE 2 REPORT

July 12, 2002

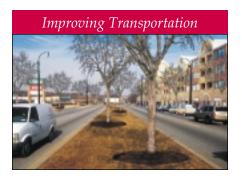
Introduction Envisioning the Future Improving Transportation Addressing Environmental Quality Fostering Community Well-Being Next Steps

PRESENTED BY
Route 1 Corridor Task Force
Howard County Department of Planning and Zoning

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Envisioning the Future
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County Executive: James N. Robey

County Council: C. Vernon Gray, Chairperson

Mary Lorsung, Vice Chairperson

Guy Guzzone Allan Kittleman Christopher Merdon

Route 1 Corridor Task Force: Steve Adler, Co-chair

Kevin Doyle, Co-chair

Northern Area: Central Area:

Patrick J. Dougal William E. (Ned) Eakle

Ed Huber Cindy Huntzberry Rick Kunkle Michael Lewis David Meiners

Dr. Diane Mumford James E. Rogers John Sindler ntral Area: Southern Area:

Jeff Conley Richard W. Anderson

Eleanor Gyr
Carol Martin
Wayne Newsome
Arnold Sagner
Jim Schulte
Ken Williams
Amary Arber
Allen Cornell
Robert J. DiPietro
Artha Groves
Lora Muchmore
Anita Martin

Mike Russo R.C. Shah

Department of Planning

and Zoning:

Joseph W. Rutter, Director

Marsha S. McLaughlin, Deputy Director

Carl S. Balser, Chief, Division of Transportation Planning

George Beisser, Chief, Division of Public Service and Zoning Administration

Jeffrey Bronow, Chief, Division of Research

Charles Dammers, Chief, Development Engineering Division Cynthia S. Hamilton, Chief, Division of Land Development

Elmina J. Hilsenrath, Chief, Division of Environmental and Community Planning

Contributing Staff:

Dace Blaumanis Al Essien Carrie Grosch Lisa Hill Jane Hoffman Chuck Kines Sharon Melis Brian Muldoon Susan Overstreet Benjamin Pickar

Jessica Ritter Gary Sightler Virginia Vargo Michael White

Consultants: A. Nelessen Associates, Inc.

Greenman-Pedersen, Inc.

Streetscapes, Inc. URS Corporation



A New Course for Route 1

he Route 1 corridor is aging and showing signs of neglect. In one of the richest counties in the nation, allowing this decline is unacceptable to citizens and policy makers alike. Revitalizing this significant commercial and industrial corridor is important not only to the corridor itself, but also to the continued economic health of the entire County. Revitalization means expanding opportunities for the economic improvement of corridor businesses and promoting redevelopment for struggling businesses to renew themselves for the current market. Communities, both large and small, new and old, should offer safe and attractive housing in a range of prices that include affordable housing. Needed public services and community amenities should be provided to give the communities pride of place and to ensure their stability. Enhancing the quality of life in corridor communities will also provide support for economic redevelopment. Like all of Howard County, this area should be a great place for people to live, work and spend leisure time.

STUDY PURPOSE AND APPROACH

The Route 1 Corridor Revitalization Study began officially in October 2000 when a citizen's advisory group, called the Route 1 Corridor Task Force, held its first formal meeting. Appointed by the County Executive and County Council members who represent the corridor, the Task Force was charged with the responsibility of representing all who are interested in the future of the Route 1 corridor.

Clearly, revitalization of an area as large and complex as the Route 1 corridor will need time and a sustained effort, including political support, to implement any recommended policies and actions. If this revitalization effort is to be a success, a broad consortium of citizens, community organizations and businesses will need to become involved in advocating and implementing the recommendations of the two reports produced during the twenty-month long study period. The two reports set out the significant areas of agreement already reached in the planning process by the many citizens and government agency representatives who have participated in the revitalization planning process.

Study Phasing

Early in the study process, the Task Force decided to break the study into two parts: Phase 1 and Phase 2. The Task Force chose six priority topics for their focus in Phase 1. The topics were chosen with the consideration that short-term actions on these issues could begin quickly. Concurrent with implementation of Phase 1 recommendations, the Task Force proceeded with Phase 2, to discuss topics that were broader in scope and longer range in timing. Phase 2 of the study began in September 2001 and concentrated on tools and incentives for revitalizing land use patterns and transportation systems, methods for ensuring environmental quality, and approaches for meeting health and human service needs for the corridor's citizens. Although this report begins with a brief recap of the Phase 1 Report, it is primarily an account of the Phase 2 deliberations of the Task Force.

Study Area

- The corridor extends from I-95 east to the Anne Arundel County line and from the County's northern boundary with Baltimore County to its southern boundary at the City of Laurel.
- It contains portions of seven of the County's nine major watersheds and is home to about 37,000 people or almost 15% of the County's population.
- The Route 1 corridor study area is approximately 13,500 acres or about 8% of the land area of the entire County.
- This large area is not monolithic. It is a complex area with a mix of land uses, diverse demographics and an extensive network of regional and local transportation routes.
- A map of the study area appears at the end of this chapter.

Phase 1 Implementation

Promoting the Positive

- Produced a GTV program on the Route 1 Task Force and its work.
- Created and distributed a set of brochures: Clean it Up, Green it Up; Signs Made Simple; Resources for Business Revitalization.
- Posted information on the County's Web site.

Transforming the Negative

- Conducted a clean up campaign for the entire corridor with 100 volunteers that picked up nearly nine tons of trash.
- Implemented a sign code enforcement campaign that resulted in a visible improvement along Route 1.

Setting the Stage for Revitalization

- Hired consultant, A. Nelessen Associates, Inc., to create a North Laurel design concept plan.
- Instituted a \$25 million loan program from local banks, Citizens National Bank and Allfirst Financial, Inc., to help businesses renovate their properties in the corridor.
- Obtained a \$125,000
 Community Legacy grant to help purchase a site for affordable housing in the corridor.
- Received a \$10,000 Smart Codes Grant from the Maryland Department of Planning to develop zoning regulations and design guidelines for the corridor.

Continued in box on next page...

COMMUNITY PARTICIPATION

The Route 1 Corridor Revitalization Study has mobilized a broad group of people. Elected officials, business people and residents of the corridor, County and State staff, and many others are all playing their parts in moving the Route 1 corridor planning process forward. The thirty-member Task Force has a balanced corridor-wide membership of individuals representing the interests of residents, business owners, employers, developers, nonprofit organizations and the faith community.

Citizen Workshops

On March 17, 2001, the Department of Planning and Zoning and the Task Force organized a workshop open to all people interested in the future of the Route 1 corridor. The all-day workshop, sponsored by the Maryland Transit Administration (MTA), attracted more than 130 people.

The MTA consultant, A. Nelessen Associates of Princeton, NJ, conducted a Visual Preference Survey (VPS) to learn which land use and transportation characteristics the participants preferred and could envision for the future of the Route 1 corridor. The Visual Preference Survey consisted of 177 slides illustrating various features of development and streetscapes existing along Route 1 or elsewhere in the country. The participants rated each image on a scale from -10 to +10. The more negative the number, the less the participants liked the image, while the more positive the number, the better they liked the image. The slide show was followed by a written questionnaire on what the participants would like to see in the corridor in the future and what they considered important for the future development of the corridor.

After the VPS and questionnaire, the participants gathered in small groups to map a selected segment of the corridor to show those areas they believed were susceptible to change and those areas they did not expect to change. These "Susceptibility to Change" Maps were used at a second community workshop in June 2001, to help determine where revitalization efforts should be focused. At this workshop the 100 participants prepared "Vision Translation" Maps that showed where proposed land uses and streetscape improvements should be located along the corridor.

The Visual Preference Survey, written questionnaire and community maps give insights into how the community workshop participants view the corridor. By using the information collected at these workshops as a basis for decision-making, County staff and the Task Force could reflect the views of the community in their planning and recommendations. Chapter 2 of this report, *Envisioning the Future*, includes a further discussion of how these community surveys and maps were used in developing land use plans for the corridor.

PHASE 1 REPORT

The findings of Phase 1 of the study, published in June 2001, concentrated on six priority issues and their associated policy and program recommendations. These six topics selected by the Task Force for Phase 1 consideration were examined by the Department of Planning and Zoning (DPZ) staff who produced issue papers on each topic. The papers were presented for deliberation at monthly Task Force meetings. Through those discussions, consensus on Phase 1 policy and program recommendations was achieved. The Phase 1 Report is available from the Department of Planning and Zoning and can be found on the DPZ web site at www.co.ho.md.us.

In the Phase 1 Report, the body of each chapter was a summary of DPZ's research findings and the Task Force discussions on the various topics that relate to the issue. Each chapter closed with a list of policy and program recommendations. Those recommendations were, to a considerable degree, based on the results of the Visual Preference Survey (VPS) and questionnaire completed by more than 100 citizens at the community workshop.

A brief summary of the six priority issues, as presented in the Phase 1 Report, follows. Accomplishments in implementing the recommendations of the Phase 1 study are listed in the boxes on this page and the facing page.

Promoting the Positive

The Task Force feels extremely proud of the communities in which they live, work and spend leisure time and they would like to have that pride shared by the rest of the County. The Route 1 corridor has a rich and lengthy history and its people believe many opportunities exist to increase the positive aspects of the corridor through redevelopment, revitalization and new development.

Transforming the Negative

Although residents and business people in the Route 1 corridor recognize the many positive attributes of the area, aging buildings and aging infrastructure may leave the motorist traveling on Route 1 with the impression that no one cares. Poorly maintained areas and certain land uses often result in misperceptions about safety. The less attractive aspects of the corridor must be improved so that the negative images and perceptions do not impede redevelopment.

Setting the Stage for Revitalization

The need for physical improvement of the Route 1 corridor is obvious. Much of the commercial, industrial and residential development in the corridor occurred prior to current zoning codes, environmental regulations and landscape requirements. The revitalization of the corridor must start with small, easy to implement steps. Both the public and private sectors working concurrently can have an impact on the corridor.

Improving Transportation

Transportation facilities provide a framework for much of what takes place within the Route 1 corridor. As the County revitalizes Route 1, the use of all forms of transportation can be expected to increase. Without proper planning, congestion and conflicts could increase among the various modes of transportation. Revitalization of the corridor should improve the transportation network, making it function safely and efficiently.

Enhancing Route 1 Appearance

The appearance of the Route 1 roadway edge is a hodgepodge of different treatments, with an unpredictable presence or absence of shoulders, curbs, sidewalks and street trees. These conditions can be unsafe both for vehicles and pedestrians. Furthermore, there is a lack of screening or buffering of unattractive land uses adjacent to the right-of-way. Right-of-way planting, which can help make a driving and walking experience pleasant, is almost entirely lacking.

Addressing the Needs of Youth

Young people living in the Route 1 corridor represent its future. Addressing their health, recreational and educational needs is integral to the corridor's revitalization. For the most part, residents of the corridor, especially at-risk young people,

Phase 1 Implementation

Continued from box on previous page...

Improving Transportation

- Established two new peak-hour transit routes in the corridor.
- Had Baltimore Regional Transportation Board take pedestrian counts in North Laurel and in Elkridge to better plan for pedestrian amenities.
- Received tentative approval of a BWI Community Enhancement grant for sidewalk repair in Elkridge.

Enhancing the Route 1 Appearance

- Obtained a \$500,000 Federal grant and a \$250,000 Capital Budget allocation to begin streetscape improvements.
- Developed plans for community gateway signs in four locations in the corridor.
- Designed plans for streetscape improvements, including street trees and sidewalks, in Savage, at the MD 175 intersection and in Upper Elkridge.
- Worked with SHA in designing improvements to the bridge at northbound Route 1 over the Patuxent River.
- Requested SHA to provide interchange plantings for intersections at MD 32 and MD 100

Addressing the Needs of Youth

 Launched a Health and Human Services study, funded with a \$150,000 grant by the Horizon Foundation, with an emphasis on developing strategies to enhance service delivery to the corridor.



Images of urban activity centers such as this one were highly rated by participants in the Visual Preference Survey.



Patuxent Place at the western end of Main Street in Laurel is a local efxample of an activity center.



North Laurel - Before. Traveling north on Route 1, this is the existing view of North Laurel near the entrance to Laurel Park.



North Laurel - After. If redeveloped per the North Laurel Concept Plan, the existing view could be transformed into this view of a pedestrian-oriented activity center.

are underserved by health and human services. Educational quality and equity obviously are important in meeting the needs of youth, but children also must have opportunities for after-school extracurricular activities and places to play and socialize with friends.

NORTH LAUREL CONCEPT PLAN

In the summer of 2001, between the end of the Phase 1 study and the start of Phase 2, the County engaged consultant A. Nelessen Associates, Inc. (ANA) to prepare a concept plan for a prototypical activity center along the corridor. The participants at the community workshops and the Task Force had responded so positively to ANA's images of activity centers elsewhere in the region that the Task Force wanted to have plans developed that would show how such centers might look within the context of the Route 1 study area. The Task Force and County staff believed that site-specific plans and pictures would be important tools for promoting a new vision for corridor revitalization. It was their hope that such a vision would be endorsed by policy-makers, business owners and developers, and existing residents.

Using images that received strong positive ratings in the first workshop's Visual Preference Survey, ANA developed an urban design vocabulary for buildings, roadways, streetscape, parking and public amenity areas. The Vision Translation Maps prepared at the second workshop were the basis for the consultant's North Laurel Concept Plan. Photographs of existing conditions were transformed into photographic simulations of what the revitalized area could look like. Plans and images on this page and the facing page are from the concept plan. During the Phase 2 study period, these images were shown to community groups and at civic meetings. The Task Force and public reception for these plans and images was highly favorable. Thus, the ideas inherent in the North Laurel Concept Plan were incorporated into land use recommendations in the Phase 2 Report.



View looking north from the Patuxent River Bridge. This aerial view of the North Laurel Concept Plan shows how this area might be transformed into a pedestrian-friendly activity area that will be a magnet for local resident and workers. The grid of streets is lined with street trees, wide sidewalks and new buildings with parking (P) behind buildings.

PHASE 2 REPORT ORGANIZATION

This report presents a summary of DPZ's research findings and the Task Force's deliberations during Phase 2, lists policy and program recommendations, and identifies the Next Steps that must be taken to implement recommendations. The Summary chapter provides an overview of the Next Steps and describes a strategy for implementing them. Some of these policies and program recommendations will be translated into proposals for consideration at the time of the County's comprehensive zoning review process. Others will be carried forward for implementation by the County government in partnership with private businesses and citizens.

Phase 2 Report Topics

The following chapters are organized around these topics and issues:

Envisioning the Future. The Task Force and the citizens attending the community workshops expressed their vision that the corridor needs a new development direction, not just a simple continuation of current and past development patterns and uses. Zoning changes and financial incentives are needed to help establish land use changes.

Improving Transportation. Improving the existing road network, adding new roadway connections and providing enhanced transit services are all essential to offer more choices to travelers in the corridor. Balancing the needs of automobiles, trucks, buses, bicycles and pedestrians remains a major goal for the corridor. The transportation system needs to be safe and efficient, but it also should be attractive to those who travel along it and live near it.

Addressing Environmental Quality. Natural resources within the corridor need protection. Because much of the early development in the corridor occurred before environmental regulations were adopted, some natural systems also need restoration. Adequate green space is needed to enhance water quality, serve as a community amenity and offer recreational opportunities. Protecting and restoring natural systems in this built-up corridor will require creative solutions and possibly partnerships between private and public entities.

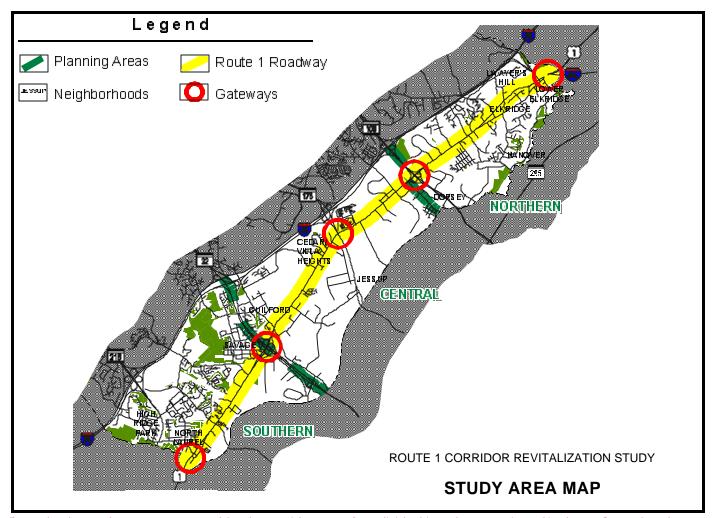
Fostering Community Well-Being. Improving the quality of life for the corridor's residents and workers is an important element in the revitalization of the corridor. Since many health and human services are currently not available in the corridor, strategies for enhancing access to services must be considered.



North Laurel - Before. Traveling south on Route 1, this is the existing view of North Laurel near Madison Avenue.



North Laurel - After. The North Laurel Concept Plan envisions the existing view being transformed into this lively row of restaurants and shops with offices or apartments above.



To make the study more manageable, the corridor was often divided into three sections: Northern, Central and Southern. Five gateways were seen as important entry points to the corridor that should be priority areas for streetscape improvements and potential activity centers.

2

ENVISIONING THE FUTURE

Providing Incentives for Land Use Change

he vision that the Task Force and the citizens who attended community workshops expressed for the Route 1 corridor is the need for a new direction, rather than a simple continuation of current and past development patterns and uses. To realize the new vision for the corridor, this report sets out proposed land use and zoning changes to achieve the desired new development patterns and uses. Clearly, implementing the new vision for the Route 1 corridor will take time. Just as it took time for the corridor to get to its present state of development, it will take time to change it to the new vision.

INTRODUCTION

To formulate a new vision for the corridor, County staff and Task Force members engaged in a multi-step planning process. This process involved analyzing existing development patterns, establishing goals for future development, producing maps that showed where change might occur, studying alternatives, recommending revisions to current regulations and considering incentives that might be needed. The planning process is described in this chapter. The types of changes that should be fostered and the necessary zoning changes that should occur are also described in this chapter.

CURRENT LAND USE PATTERN AND TRENDS

Before establishing goals for land use change, it is important to first understand current land use patterns and trends. The Phase 1 Report, Chapter 1, *Promoting the Positive*, provided a brief history of the corridor and described the general character of its residential communities, employment areas and places for leisure time activities. During Phase 2, a more detailed analysis of existing land use conditions was conducted. This analysis resulted in a diagnosis of which land development patterns are undesirable or might need to be changed, and which patterns are appropriate and need to be retained. Certain land uses need to be retained and fostered because they are essential to the diversity of the corridor and its ongoing economic health.

Current Residential Land Use Patterns and Trends

Residential patterns have been established by historic land use and current zoning. Proposing major changes in residential land use is unrealistic, given the very limited supply of land that is suitable for new residential development and the limitations imposed by the County's Adequate Public Facilities Ordinance (closed school districts and limited housing unit allocations). Thus, no large scale changes to either residential land use or zoning are envisioned. Infill development in accordance with current zoning is expected to occur on much of the undeveloped residential land. To take advantage of senior housing set-aside allocations, some senior housing may be developed in the corridor. The greatest change in residential patterns in the upcoming decade is likely



Existing housing in Elkridge typifies the attractive affordable housing available in the corridor.



Single story uses are prevalent in the corridor's business parks.



Retail uses in the corridor often occur in smaller commercial strips or as free-standing buildings.

Affordable Housing

Obstacles to Providing Affordable Housing

 The high property values and the high proportion of recently built homes in the County cause market-rate housing to be too expensive for low and moderate income households.

County and State Affordable Housing Programs

- The County administers Federal rental housing programs.
- The State's Community Legacy Grant of \$125,000 will be used to purchase land for affordable housing in the Route 1 corridor. Additional Community Legacy funding will be sought through annual grant applications.
- The State's 40 @ 4 Home ownership initiative allowed six households with limited incomes to purchase homes in the Route 1 corridor.

Current Regulations

- Single-family attached dwelling units and apartment units have been added as permitted uses to the Residential-Mobile Home (R-MH) District. At least 15% of the single-family attached units and at least 20% of the apartment units must be reserved for moderate income households.
- Mixed Use Development (MXD) District regulations require that at least 5% of the housing units be reserved for moderate income households in mixed use developments that have between 2.3 and 2.7 dwelling units per gross acre.
- Planned Senior Community (PSC) District and Conditional Use provisions for age restricted adult housing require 10% of the housing units be reserved for moderate income households.

to be development of the Emerson and Stone Lake subdivisions in the Southern Area. These communities will increase diversity in the corridor's housing market by adding higher priced housing.

The corridor has traditionally been the location of significant areas of affordable housing of all types, including single family detached, townhomes, apartments and mobile homes. Over time as revitalization progresses, some loss of affordable housing is expected with the closure of some mobile home parks and residential motels in the corridor. Housing relocation assistance will be needed to aid those who are displaced. The corridor is expected to play an important role in meeting the County's need for more affordable housing for low and moderate income workers. Providing for a range of housing is wise not only for the County's economic health but also for the County's social health. The box on this page discusses some of the obstacles and options for providing affordable housing.

Current Commercial Land Use Patterns and Trends

The existing commercial areas of the corridor are strung along the Route 1 right-of-way rather than concentrated into activity centers, as recommended by the General Plan 2000. The existing business zones, B-1 and B-2, provide some attractive, well-established shopping centers and numerous, viable, local and regional businesses that will continue to be encouraged. Some of these businesses contribute to the liveliness and distinctive character of the corridor that harken back to its earlier days. Portions of the corridor have evolved over the years into auto-oriented strip commercial zones with a proliferation of curb cuts, signs and front yard parking lots. These patterns are often typical of older regional highways. However, the corridor's commercial businesses now primarily serve the residents of neighboring communities and the employees of adjacent employment parks, not regional through traffic. New patterns are needed that will better serve these populations. The current development pattern does not reflect the higher density, pedestrian-oriented image preferred by community workshop participants.

Current Industrial Land Use Patterns and Trends

The existing manufacturing zones, M-1 and M-2, provide for well-established uses, such as traditional manufacturing, warehouse and flex space (one-story buildings that can be adapted to a variety of office or industrial uses), plus a broad range of outdoor storage and motor vehicle sale and repair businesses. These uses are and will continue to be a strong component of this employment corridor. However, much of this traditional development does not need Route 1 frontage. Often the property has a one-story building deeply set back from the road. Some properties have outdoor display or storage yards that may be unsightly, even if partially screened. Many parcels along Route 1 are small and shallow, and are not able to be developed for larger buildings and uses associated with manufacturing and office uses. As a result, many of these parcels are vacant or underutilized. Often they have tended to be developed with auto-related services. Owners frequently seek to develop them with uses that are more retail or service oriented. When this occurs, the M-1 and M-2 zones begin taking on the character of strip commercial zones rather than employment zones.

For industrial land, the major expected changes in the coming decade are likely to involve offices or industrial buildings at the Emerson/Revitz properties in the Southern Area and the Coca-Cola/Patapsco Valley properties in the Northern Area. In addition, operations should soon begin at the proposed Chase Quarry property in the Central Area, but its ultimate development as an employment center may be decades away.

LAND USE POLICIES

A purpose of the Phase 2 study is to identify desirable land use policies to promote new development or redevelopment that will revitalize the corridor. The land use policies comprise three elements: first, a set of goals that will influence decision-making; second, a map that illustrates how those policies might affect land use changes within the corridor; and third, recommended changes to zoning regulations to carry out the goals and policies.

Land Use Policy Goals

In establishing land use policy goals for the corridor, many sources were looked to for guidance. The box on this page lists the four primary sources that shaped these goals. The land use goals for the corridor's revitalization have been defined as the following:

- Keep the residential component of the corridor strong and vital. Provide opportunities to develop a variety of housing, including affordable housing and senior housing, to meet the needs of a diverse population and to meet the General Plan 2000 projections for housing.
- Recognize the importance of this employment corridor to Howard County's current and future economic health. Provide opportunities to accommodate multiple uses, including retail and service businesses, truck-oriented regional distribution centers, flex space, industrial, multi-tenant offices, corporate headquarters and others.
- Institute appropriate zoning and land use controls, and provide incentives for the assembly of parcels, the redevelopment of underutilized land and the revitalization of derelict sites, especially for target industries identified by the Economic Development Authority.
- Create vibrant pedestrian-oriented centers, associated with existing residential areas and/or employment areas, that will offer convenient community retail and service uses within a mix of residential and office uses.
- Control the spread of strip commercial uses and the development of properties for uses that negatively affect public safety and the appearance of the corridor. Provide economic advantages for the creation of desirable employment opportunities.
- Transform the land uses around transit stations to provide convenient access to higher intensity office and residential development, thus potentially increasing transit ridership and reducing automobile traffic.
- Work with interested communities to find solutions to their quality-of-life issues.

MAPPING AREAS OF POTENTIAL LAND USE CHANGE

Because of the size of the corridor area (13,500 acres) and time constraints, this study was not able to address all parcels in the corridor. Instead, the study focused on priority areas that have the highest visibility, are most in need of revitalization, have the greatest potential to effect change, or have owners who are ready and willing to take action.

Examination of potential land use changes in the corridor began by mapping parcels of land that are currently undeveloped. Next, there was a review of those properties identified at the first community workshop as having high or moder-

Land Use Policy Sources

Howard County General Plan 2000

 The policies and recommendations that relate to the corridor. These are summarized in the Phase 1 Report.

Task Force Recommendations

 The opinions endorsed by the Route 1 Corridor Revitalization Task Force during its 18 months of deliberations.

Community Views

 The ideas garnered at two community workshops and documented in a Visual Preference Survey, in Susceptibility to Change Maps and Vision Translation Maps.

Private Sector Input

 The suggestions from property owners and developers who have provided the staff and the Task Force with an understanding of the dynamics of private sector decision-making about land development.

Community Mapping

Susceptibility to Change Maps

Susceptibility to Change Maps, prepared after the first community workshop, show how workshop participants, Task Force members and DPZ staff expect change to occur along Route 1. The maps identify four categories:

- High Susceptibility to Change the property needs major revitalization, is visually unacceptable or has vacant buildings; change is likely within the next two to five years.
- Moderate Susceptibility to Change - the property needs significant improvement, is a likely candidate for immediate redevelopment, but may undergo change within the next decade.
- Low Susceptibility to Change the property needs improvement but is in reasonably good condition; it may remain unchanged for a decade or more.
- Minimum or No Susceptibility to Change - the property is a valued resource (natural, cultural, historic or community), has buildings in good condition; minimal or no revitalization needed.

Vision Translation Maps

At the second community workshop, participants developed Vision Translation Maps that analyzed the development potential of properties based on their susceptibility to change and made recommendations for locations of urban activity centers, land use changes and streetscape improvements. DPZ reviewed the Vision Translation Maps and refined the key proposals shown on those drawings.

ate susceptibility to change. Finally, sites recommended for land use change on the Vision Translation Maps developed at the second community workshop were studied. The box on this page describes how properties were categorized for susceptibility to change and how the Vision Translation Maps were developed. Using this process, the study could differentiate between those areas that are candidates for change and those properties that should be allowed to develop in accordance with current zoning and surrounding land use.

In most residential areas and in many large business and industrial parks, undeveloped parcels are typically surrounded by parcels developed in the same land use and under the same zoning as the undeveloped parcels. Unless evidence suggested otherwise, continuing the same development pattern was judged to be the most appropriate, particularly for small residential parcels of ten acres or less. For the most part, such infill properties do not occur along Route 1, but are located at some distance from the roadway.

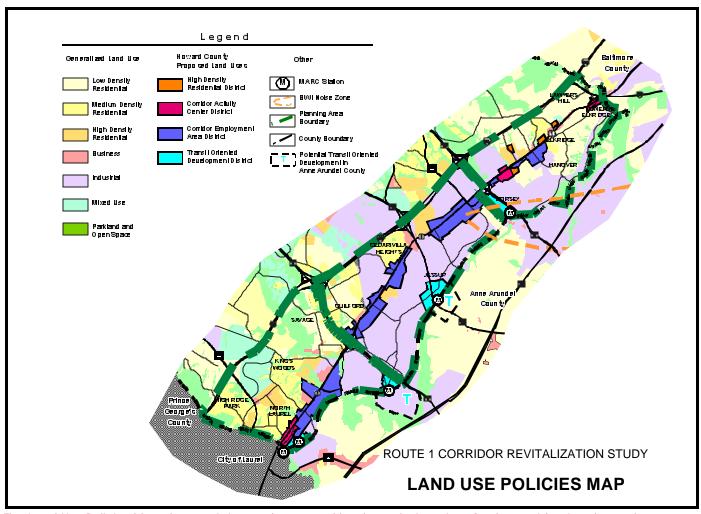
By first eliminating areas that are not susceptible to change or that should be developed in accordance with current zoning, the study could identify areas with the most potential for land use change. The following areas or types of areas were chosen for priority attention:

- Properties with frontage on Route 1, in particular, parcels designated as highly susceptible or moderately susceptible to change. Special attention was given to areas with a high concentration of parcels susceptible to change.
- Areas with a currently diverse mix of residential, commercial and employment uses with potential for expansion. Areas that include or are adjacent to high density development or to a well-established or historic community core were of special interest.
- Areas next to MARC stations, major intersections and highway interchanges.
- Areas where there have been land uses changes in surrounding properties, making the current zoning less suitable and a different zoning district more desirable.
- Areas with a need to introduce certain land uses to meet goals such as economic development, housing diversity, density increases to support public transportation, or provide for absent or needed community uses.
- Areas where rezoning may be appropriate to improve compatibility with surrounding uses.

This review and analysis resulted in the identification of certain areas seen as needing change. A further analysis of redevelopment options for the selected areas resulted in the decision to propose significant new land use changes for these areas. It was decided that new and different land use designations would be needed to meet the land use policy goals. The Land Use Policies Map on the facing page shows the location and type of proposed land use changes. The map shows both existing and proposed land uses for the corridor. On the map, pastel colors are used for existing land uses that are expected to remain and for undeveloped parcels that are expected to evolve using current zoning categories. Proposed land use changes are shown in bright colors.

RETONING TO IMPLEMENT LAND USE POLICY MAP

Because the corridor is one of the oldest developed areas of the County, developments occurred over a long time, reflecting different periods, styles and uses. Consequently, the proposed revitalization for the corridor does not look for monolithic solutions.



The Land Use Policies Map shows existing and proposed land use designations for the corridor. Land use changes include sites proposed for higher density residential use using existing zoning districts and areas proposed for development or redevelopment using three new zoning districts.

To implement the goals for making the Route 1 cor ri dor a more di verse, efficient and attractive employment area, the County needs to institute new land use con cepts. Three distinct land use concepts are proposed. These concepts will need to be crafted into detailed regulations for three new zon ing dis tricts as part of the comprehensive zoning process in 2003. One new zon ing dis trict would concentrate retail sales and service uses within an activity center, such as the North Laurel Concept Plan described in Chap ter 1, Introduction. A second district would encourage redevelopment of target employment uses adjacent to the Route 1 frontage. A third dis trict would take ad vantage of the higher intensity develop-

ment po ten tial of fered by tran sit stations.

To achieve the proposed land use goals for ad dress ing hous ing needs, including affordable housing, additional specified areas are suggested for rezoning to higher residential densities. Residential uses will be included in two of the three proposed new zoning districts. The boxes on the following pages describe in more detail the areas proposed for land use changes.

Residential Zoning Changes

Al though the com mer cial and in dustrial land uses visually dominate the Route 1 front age, the corridor is home to ap proximately 15% of the County's

residents. The corridor has a variety of residential zoning categories offering patterns that range from single-family detached to apartments. In response to the recommendations of Gen eral Plan 2000, which sets a goal of expanding residential capacity in certain ar eas to meet pop u lation projections, recent changes to residential zoning regulations have increased housing opportunities. This was done by creating a new zone that allows for development of active senior communities and by expanding the Residential-Mobile Home (R-MH) zon ing dis trict to al low townhomes and apartments to be de vel oped on par cels of 25 acres or more. No new res i den tial zones are proposed by this study, although residentialopportunities are offered

Land Use Policy Map

The Land Use Policies Map on the prior page depicts the areas in the County where the following land use changes are recommended.

High Density Residential

The following properties may have potential for development as high density residential:

- Troy Hill. The east side of Route 1, across from Troy Hill Business Park, currently zoned industrial and medium density residential.
- Ducketts Lane. The east side of Ducketts Lane, west of Route 1, currently zoned medium density residential. Adjacent land is zoned for mobile homes or high density residential.
- Elkridge. The north side of Montgomery Road, west of Route 1, currently zoned low density residential. Adjacent land is zoned for business uses or mixed use. Property owners in this area have expressed interest in higher density development.

Corridor Activity Area District

The three locations offering the greatest potential for using this district are:

- North Laurel. This area was illustrated in the concept plan and is the basis for other similar districts. It has strong potential as a retail-oriented mixed use district, related to historic Main Street in Laurel and the MARC station.
- Troy Hill. Nearby office/industrial parks and residential communities could be well-served by an activity center in this area. This is one of three possible designations for this property.
- Lower Elkridge. This area has strong potential for community-oriented retail and service uses adjacent to historic Main Street.

Continued in box on next page.....

in two of the new, potential zoning districts described below.

Corridor Activity Center District

This new proposed district is aimed at redeveloping properties for commercial, retail and residential uses in a concentrated way to encourage pedestrian traffic. Participants at the two community workshops showed strong support for this urban concept in the Visual Preference Survey and proposed several such activity centers on their Vision Translation Maps. This district should be used in sections of the corridor where substantial residential development exists, since proximity to residential development is key to generating pedestrian activity in these service areas. The North Laurel Concept Plan would be achieved by this kind of zoning district.

The desired features of this district are:

- Design buildings of two or more stories with minimal setbacks from the street.
- Promote first floor retail uses with office and housing above.
- Provide for a moderate income housing component.
- Require pedestrian-oriented improvements including wide sidewalks, crosswalks, street trees and lighting.

Making full use of this zoning district will be challenging and it may take time to achieve the desired pattern. A major obstacle is that many property owners hold relatively small parcels. Although dense, pedestrian-oriented urban activity centers can be found in many close-in communities in the Washington and Baltimore areas, this type of development would represent a major change from the existing commercial development patterns in the corridor. Developers may need to be convinced that change is possible and economically viable, and that it is time to move away from an approach that saturates the market with gas stations, convenience stores, fast food restaurants, car dealers and other uses that are common for commercial strip developments.

To overcome the obstacles mentioned above, the district may need land assembly incentives to get the desired uses and designs. It may be necessary to provide financial incentives for initial projects. However, as the market accepts the new uses and designs, the need for incentives should decline. To allow more intense, pedestrian-oriented development to evolve, the County may need to designate some intersections or road segments as constrained. This would allow these areas to develop without requiring traffic capacity improvements that would conflict with pedestrian activity.

Given the potential obstacles to developing corridor activity centers, it may be unrealistic to expect the market to absorb many such districts, so the Land Use Policies Map identifies only three proposed locations. Other areas could be added if property owners or communities express interest now or during the comprehensive zoning process.

Corridor Employment Area District

This new district would dominate the Route 1 frontage. The goal of this district is to reduce the spread of strip commercial patterns along the corridor and encourage redevelopment of underutilized sites for business parks to accommodate office, flex or warehouse uses. It will be essential to encourage sufficient land assembly to create attractive new business parks with sites suitable for the target industries that have been identified by the Economic Development Authority (EDA). These target industries include corporate headquarters, information technology, technology-driven manufacturing, life sciences and information

processing. Some currently-permitted uses in the M-1 and M-2 zoning districts are not desirable along the frontage of Route 1 but should be accommodated in other M-1 or M-2 areas within the corridor. The current demand for employment space in the corridor is primarily for single-story flex space and warehouses. Demand for multi-tenant, multi-story office space is limited. However, the scarcity of land and the demand for employment space should, over time, allow for more intensive development similar to Columbia Gateway in Howard County or the National Business Park in Anne Arundel County.

The desired features of this district are:

- Place buildings close to the street, with parking at the side or rear of the building.
- Provide sidewalks and street trees.
- Encourage redevelopment on sites fronting Route 1 for M-1 and M-2 uses that are suitable for office, warehouse and flex space projects.
- Prohibit motor vehicle repair and storage, contractor's yards, self storage buildings and similar uses.
- Promote land assembly by allowing gas stations, convenience stores, fast food restaurants and banks only as accessory uses for redevelopment projects that exceed a certain size.

This district promotes a pattern that is different from the current land use patterns and trends occurring in business and industrial zones along the corridor. Therefore, obstacles to redevelopment using this zone need to be recognized. The redevelopment area may need financial as well as zoning incentives for land assembly for sites over a certain size. The high demand for small commercial sites currently impedes assembly of land for business parks. The level of financial incentive would be based on the desirability of the project. To facilitate land assembly, a government program or private/public partnership program may be needed to help small businesses relocate out of an assembly area to an appropriate long-term location.

Transit Oriented Development District

This new district encourages redevelopment of multi-story office and mixed use projects on sites that are near MARC train stations. This zoning district would:

- Encourage redevelopment on select sites that are near MARC stations for multi-story office and mixed use projects.
- Permit business, government and nonprofit uses in offices.
- · Prohibit intensive truck-oriented uses.
- Promote land assembly on sites that exceed a certain size by allowing higher density housing at 20 dwelling units per acre or by allowing certain special uses. These special uses could include accessory retail and service uses, provided they are not auto-oriented (such as drive-through businesses).

As with the corridor activity center, the market may not absorb this type of development except at limited locations. Four MARC stations are located along the boundary between Howard County and Anne Arundel County. Plans for these areas should take into account compatibility with Anne Arundel County's small area plans, which include provisions for mixed use transit development. The box on this page offers some insight into Anne Arundel County's planning proposals for the areas around the four stations. The extent and timing of development at the four stations will need further study when decisions are made by MTA about expanding or closing stations, and when Anne Arundel County makes its final recommendations about zoning around the MARC stations. Like-

Land Use Policy Map

Continued from box on previous page...

Corridor Employment Area District

The potential locations for this district are:

- Southern Area. The east side of Route 1 north of the split in the roadway to the Little Patuxent River, and the west side of Route 1 in the vicinity of the intersection with Whiskey Bottom Road.
- Central Area. Both sides of Route 1 from MD 32 to MD 100. Does not include: the businesses on the west side of Route 1 north of Guilford Road; the residential areas adjacent to the right-of-way; the intersection with MD 175 and its vicinity; and the west side of Route 1 north of Meadowridge Road.
- Northern Area. The east side of Route 1 opposite Troy Hill and also opposite the Elkridge Library.

Transit Oriented Development

Potential locations for this type of development are at these MARC stations:

- Laurel Park. Anne Arundel County's draft Small Area Plan for Jessup shows the adjacent property for industrial use.
- Savage Station. Anne Arundel County's draft Small Area Plan for Jessup shows the adjacent property for industrial use (staff recommendation) or transit mixed use (committee recommendation).
- Jessup Station. Anne Arundel County's draft Small Area Plan for Jessup shows the adjacent property for transit mixed use (staff recommendation) or low to medium density residential use (committee recommendation).
- Dorsey Station. Anne Arundel County's draft Small Area Plan for BWI/Linthicum shows the adjacent property for industrial use.



This simulation shows how Lower Elkridge might appear if redeveloped as a Corridor Activity Center.



Future development of multi-story office buildings might occur in the proposed Corridor Employment Area District.



The Transit Oriented Development District would allow midrise office buildings as seen in this simulated image of the Dorsey MARC station.

wise, plans by the City of Laurel for the MARC station at the end of Main Street may influence MTA decisions about the Laurel Park station.

Achieving Support for Proposed Changes

To be accepted and eventually implemented, the new land use policies must have backing from residents and businesses. Outreach efforts will be needed to solicit support from communities for the proposed land use and zoning changes. Ways to acquaint people with these new land use policies, through presentations, web sites and other means, must be developed. Some interested civic organizations may have specific concerns about their neighborhoods that may not be addressed in the new land use policies. To address these concerns, certain areas of the corridor may be considered in future, detailed community conservation and enhancement efforts that focus on individual neighborhoods. For example, the Task Force was unable to recommend a prime location for a Corridor Activity Center in the Central Area. Representatives from Cedar-Villa Heights have asked that a special study be conducted to reexamine the opportunities for, or obstacles to, designating a Corridor Activity Center on Route 1 between MD 32 and MD 100.

INCENTIVES FOR REDEVELOPMENT AND RENOVATION

A goal of this study has been to identify potential land use changes that can result in new development or redevelopment that will revitalize the corridor. Another goal was to identify ways to stimulate the private sector to invest in, and thus bring about, the recommended land use policies. On some corridor properties where change is expected, such as vacant properties, change may occur without any rezoning or incentives. Not all desired redevelopment and renovation will happen on its own, or unaided. Other properties that are expected to change, such as those with underutilized land or outdated buildings, may need rezoning or incentives. A financial feasibility study may be needed to help determine what market conditions or incentives will best foster the proposed changes.

Howard County government's greatest influence on land use change in the Route 1 corridor is through its zoning power. However, in some cases, new zoning or regulatory incentives alone may not provide sufficient incentive for investment in new development or redevelopment. Other tools and incentives that stimulate community revitalization and economic development may be needed. The following sections describe possible regulatory and financial incentives.

Regulatory Incentives

The primary regulatory tool that government has at its disposal is its zoning authority. The land use policies and recommendations listed in this report will be implemented mainly through the comprehensive zoning process beginning in 2003. The County Administration will undertake a comprehensive review of the County's zoning to prepare a package of proposed regulations and map amendments. The County Council will decide which proposed zoning changes to approve. Their decisions will form the County's new Zoning Map, which shows all zoning districts. The Route 1 Corridor Land Use Policies Map will be the primary basis for the rezoning proposal for the corridor. The Planning Board and County Council hearings on the proposed zoning changes will offer opportunities for community input. Depending on an individual property owner's interest, other properties could be added to the rezoning petition.

The previous descriptions of the potential new zoning districts mentioned incentives that might be incorporated into those regulations. Some of the zoning and land development incentives that may be offered as an inducement include:

- Reduce front yard setbacks and reduce setbacks to residential areas with an accompanying increase in the landscape buffer.
- Permit specific accessory retail uses.
- Allow housing at a density of 15 to 20 units per acre or higher with a requirement that at least 5% of the units be reserved for moderate income residents.
- Reduce parking requirements for mixed use developments, for proximity to a transit stop, for pedestrian connections to an existing community or for on-street parking.

In addition to the criteria listed above, which would be incorporated into specific regulations for individual zoning districts, other regulatory incentives might be available:

- Examine the potential for DPZ "fast track" approval for site development plans and for subdivisions that comply with design guidelines for redevelopment and concept plans such as the North Laurel Concept Plan.
- Consider a housing set-aside for Adequate Public Facilities Ordinance (APFO) allocations.
- Add flexibility to the APFO traffic test, such as designation of constrained roads, if justified.

Financial Incentives

Because of the complexities of redeveloping a corridor that was developed long ago under different rules, financial incentives in some cases may help to make redevelopment possible. Financial incentives are more likely to be needed initially to establish the market and viability of a new development pattern. The Task Force proposed many ideas for financial incentives. Some incentives could come from the public sector, while others could come from the private sector. They include:

- Assist with infrastructure costs such as water, sewer, roads, stormwater management or streetscape improvements.
- Offer discounted renovation loans from private banks.
- Offer a renovation property tax credit or a cap on the increase in assessment for upgrades to existing businesses.
- Present other possible financial incentives from EDA.
- Curtail agricultural assessments for employment-zoned parcels. This proposal may require State legislation.

Financing revitalization will require many different sources of funds. The box on this page provides examples of financing options that are available and have been used by other jurisdictions, although some may not be appropriate for Howard County.

POLICY AND PROGRAM RECOMMENDATIONS

• Residential Development

Ensure that diverse housing options will remain available throughout the corridor. Identify suitable areas for rezoning to help meet General Plan targets for residential redevelopment in the corridor.

Financing Revitalization

Howard County Capital Budget

 This financial plan establishes needs and spending levels for proposed capital facilities. It is revised annually. Currently, several projects in the corridor are funded through the capital budget.

State, Federal and Private Grant Programs

 These funds are usually awarded in response to an application for a specific project or goal. A box in Chapter 1, *Introduction*, shows the grant funds that have already been received for Route 1 corridor revitalization.

Discounted Private or Public Sector Loan Programs

- Currently, Citizens National Bank and Allfirst Financial, Inc. have instituted a below prime rate loan program to help property owners renovate their properties in the corridor. To date, two loans totaling almost \$850,000 have been approved.
- The County's Department of Housing and Community Development also offers loan programs for home ownership and other housing assistance.

Business Improvement Tax District or Revitalization Tax District

 These types of districts are an independent unit of local government organized to perform certain functions or for a special purpose, such as providing infrastructure in the district. The County does not have such districts.

Next Steps

- On behalf of the County Administration, DPZ will develop draft text for three new zoning districts and zoning maps depicting proposed locations for changes in zoning. These proposed text amendments and map amendments will be presented in early 2003 for review and approval as part of the comprehensive zoning process.
- DPZ will develop design guidelines and graphic illustrations of the proposed new zoning districts to help residents and property owners better understand the proposed changes and to convey the County's expectations for site, streetscape and building design.
- DPZ will encourage property owners, residents, the business community and all interested parties to support the comprehensive zoning process to achieve the desired change for their properties.
- DPZ will initiate a community conservation and enhancement study for the community of Cedar-Villa Heights that will address the infill development potential, the need for sidewalks and storm drains, and the potential for future designation of a Corridor Activity Center in the area. This will serve as a pilot project that may be adapted to other communities in the corridor.

Affordable Housing

Investigate funding and program opportunities to expand affordable housing in the corridor. Consider moderate income housing requirements in the Corridor Activity Center and in the Transit Oriented Development zoning districts. Consider relocation assistance strategies and programs to help residents that may be impacted by future closing of mobile home parks or motels.

Community Conservation and Enhancement Studies

Work with interested civic organizations to develop community-based plans that address concerns such as the future development and redevelopment potential within existing residential neighborhoods, the adequacy of public amenities and facilities, and other issues that affect quality of life.

Corridor Activity Centers

Identify suitable areas for the implementation of a new zoning district that provides for a mixture of pedestrian-oriented retail, office and residential uses. Develop guidelines and incentives to ensure that the vision represented by the North Laurel Concept Plan can be implemented. Consider requesting certain road segments or intersections be designated as APFO constrained, to allow pedestrian-oriented redevelopment of these areas to have priority over capacity improvements for vehicular traffic.

• Corridor Employment Area Districts

Identify suitable areas for implementation of a new zoning district that encourages redevelopment of lands along Route 1 for strategic economic development uses. Within these areas, limit new automobile-oriented, highway-related retail uses and heavy industrial uses.

Transit Oriented Development Districts

Identify suitable areas for the implementation of a new zoning district that provides for a mixture of transit-oriented retail, office and residential uses. Develop guidelines, regulations and incentives to encourage development of high density, mid-rise uses in these districts.

• Feasibility Analysis

Investigate the possibility of working with real estate professionals to review the proposed zoning changes and help determine what conditions or incentives may be needed so that financially feasible projects would result.

• *Incentives for Redevelopment*

Determine and formulate clear criteria for desirable land uses and design features that would be eligible for regulatory and/or financial incentives. To reduce risk for property developers and to help get timely approvals, increase certainty in regulations. Consider funding alternatives to construct infrastructure improvements, such as roads and stormwater management facilities, particularly in target areas such as Corridor Activity Centers and Transit Oriented Development Districts.

Consolidation of Parcels

Address fragmented ownership along Route 1 by offering zoning incentives or, if needed, possibly financial incentives for land assembly.

Community Outreach and Education

Convey the vision of the corridor's future, agreed upon by the Task Force and community workshop participants, through presentations to community and business groups, published materials, County web sites and other means available. Express the intent to preserve the individuality, character and variety of the corridor.

3

IMPROVING TRANSPORTATION

Safely Connecting People and Places

Cars, trucks, buses, pedestrians and bicycles use the corridor's transportation facilities and, in some cases, create congestion and conflict among these various modes of transportation. Transportation planning seeks to improve the transportation network so that it will function safely and efficiently and, at the same time, make travel in the corridor a more appealing experience than it currently is. In particular, pedestrian travel in the corridor needs to be better accommodated. For the revitalization of the corridor to succeed, a major component of the success will be improvements in transportation facilities in the corridor. These improvements will need to take into account the new uses that the vision for the corridor anticipates.

INTRODUCTION

The Phase 1 Report of the Route 1 Corridor Revitalization Study provided a history of Route 1 and background on transportation conditions. As stated in that report, Route 1 began in 1741 as a road connecting Baltimore and Elkridge. Until the early 1900s, it served local and regional traffic. In the first half of the 20th century, the road evolved into a through-route for east coast traffic. Commercial ventures serving travelers began to transform the character of the road. Route 1 became notorious as one of the nation's busiest and most dangerous roads because of the visual clutter of commercial signs and constant hazards created by traffic entering and exiting from roadside businesses. To accommodate the volume of travelers and highway-oriented land use patterns, Route 1 underwent numerous piecemeal upgrades and widenings. Since the 1950s, the Baltimore-Washington Parkway and I-95 have served as major routes for regional commuting and for long distance travel along the east coast. Consequently, Route 1 is now characterized by more localized traffic and trips of shorter distance and duration. Its design must accommodate current traffic patterns and the redevelopment that will result from the land use and zoning changes proposed in Chapter 2, Envisioning the Future.

The visual character of the Route 1 roadway was also covered in the Phase 1 Report. Chapter 5, *Enhancing Route 1 Appearance*, described the roadway edge as a hodgepodge, with an unpredictable presence or absence of shoulders, curbs, sidewalks and street trees. That report called for public sector investment in streetscape improvements as an important step toward encouraging private investment in revitalization. The Chapter 1, *Introduction* to this Phase 2 Report lists the progress that has been made toward funding and designing streetscape improvements along the corridor. Streetscape improvements are an important element in any transportation plan, contributing to the creation of a safe and attractive environment for vehicles, pedestrians and bicyclists.

The Phase 1 Report recommended many preliminary policies and actions to improve transportation in the corridor and to enhance the appearance of the roadway. A goal of the Phase 2 study is to refine and update the Phase 1 Report by identifying viable transportation improvement options which support and com-



Undefined existing roadway edge that lacks amenities.



Desirable median and defined roadway edge with plantings.

Traffic Improvement Strategies

- Provide a well-defined network of intersecting and parallel roadways to balance local and through traffic demands.
- Manage, control and consolidate access through the land development/redevelopment process.
- Redesign/reconfigure intersections to provide added capacity.
- Coordinate signals to improve overall traffic flow.
- Reconfigure the use of lanes within the existing right-of-way, such as converting through lanes to turn lanes and/or service roads.
- If necessary, add lanes for acceleration/deceleration, through traffic and turning movements.
- Add paved shoulders and raised medians to improve safety and provide refuge for pedestrians and bicyclists.
- Implement traffic calming strategies to lower traffic speed and thereby reduce the incidence and severity of traffic accidents and discourage through traffic movements.

plement the revitalization and redevelopment of the US 1 corridor. Toward that end, these strategies must address four goals:

- Promote safe and efficient vehicular travel.
- Endorse public transportation in order to increase mobility and to serve as an alternative to the private automobile.
- Provide for safe and efficient pedestrian and bicycle travel.
- Enhance the streetscape, providing a unifying design for the corridor.

TRAFFIC MOBILITY AND SAFETY

With the exception of a few signalized intersections, the capacity of US 1 is generally adequate to accommodate existing and projected traffic volumes. The three signalized intersections that suffer from significant traffic congestion on a regular basis are Route 1 at Howard Street/Corridor Road, MD 175 and Guilford Road. Where roadway and intersection congestion does occur, it is at least partially attributable to a high proportion of trucks in the overall traffic stream. Trucks, as an essential and permanent feature along Route 1, must be recognized in plans for transportation improvements.

Traffic safety concerns occur throughout the corridor area and are due primarily to the large number of uncontrolled access points, poor sight distance and lack of designated turn lanes. Accident data compiled by the State Highway Administration indicate that approximately one-third of all accidents in Howard County occur in the Route 1 corridor study area, with I-95 and Route 1 each accounting for more than 300 accidents per year.

Road Improvement Policies

A broad array of planning and engineering strategies are available to address these issues of traffic capacity and safety. They are shown in the box on this page. More detailed and site specific suggested traffic improvement strategies are presented on the Road Improvement Policies Map on the following page and in the Road Improvements Table at the end of this chapter. The numbers on the map match the numbers on the table.

Planning for roadway improvements is a multi-step process that begins with the initial identification of a potential project by the County, State or community. The project receives official endorsement or approval when it is incorporated into the Capital Improvement Program (CIP) so that funding can be allocated. For public road improvements, especially large and expensive ones, funding may require several stages from study to design to construction.

Of special importance to the Route 1 corridor is the extension of Dorsey Run Road. This extension will serve traffic between MD 32 and MD 100, particularly for the employment centers located (and planned) in that portion of the corridor. Because this extension will be parallel to Route 1, Dorsey Run Road is expected to provide an alternative to Route 1, particularly for commercial vehicles. The need for this road extension is acknowledged and shown in the Road Improvements Table at the end of this chapter. The southern portion is already under construction. The middle portion has Capital Budget funding allocated for FY 2003, while the northern portion has a study underway.

The Road Improvement Policies Map and companion Road Improvements Table designate the policies by the following categories:

Programmed Improvements. These improvements are in cluded as a line item in an approved Capital Improvement Program (CIP). The CIP shows all projects that have been approved for current funding and/or future funding in the upcoming ten years. Within the CIP, the following

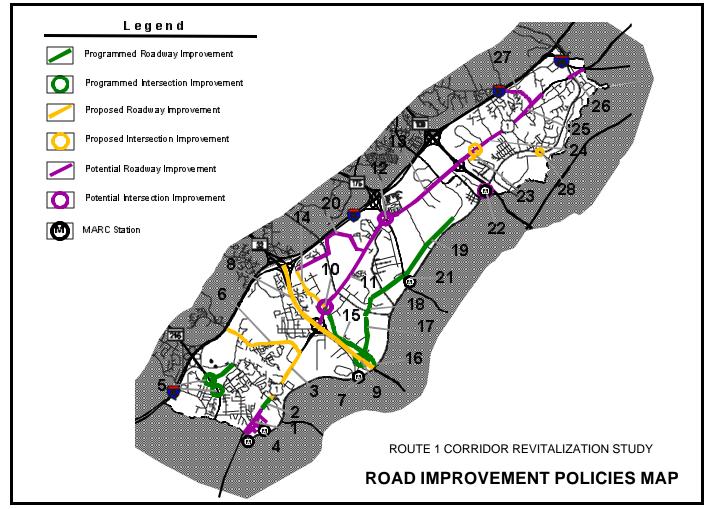
 Study - study has been ini ti ated, is un der way or is com plete. Land acqui si tion may also be un der taken in the study stage.

stages may be shown:

 Design - project planning / study has been ap proved and de sign has been initiated, is in progress or is complete. Construction - construction is initiated, in progress or recently completed.

ProposedImprovements. These future improvements have been proposed by SHA, other State agen cies or by Howard County. The County identifies desired improvements in the General Plan 2000 and in the 1996 County Trans portation Plan. Although these im prove ments have official endorsement, funding has not been authorized. If the project involves State money, it must be included in the Mary land Depart ment of Transportation's (MDOT) Consolidated Trans portation Program (CTP) which is adopted an nu ally.

Potential Improvements. Some of the improvements in this category have not yet received official or wide-spread endorsement. Public review and support will be needed before the project is funded by the State or by the County in the Con solidated Transportation Program or Capital Improvement Program. Further planning studies may be needed to eval u ate the suit ability or cost of these improve ments. In some cases private sector investment is re quired. With out as so ci ated de velopment activity, these projects may be de layed or de ferred. Po ten tial improvements may include these two categories:



The Road Improvement Policies Map shows three generalized categories of recommended improvements. Programmed improvements are projects included in the Capital Improvement Program (for construction, design or study). Proposed improvements have been endorsed by SHA, by the County's General Plan 2000 or by MDOT's Consolidated Transportation Program. Potential projects are identified in this report.

Transit Improvement Strategies

- Provide frequent and highly visible bus transit along the length of US 1. The US 1 services will provide a backbone of north and south transit service for commuters and others to and from Baltimore and along the US 1 corridor.
- Plan for bus transit connectivity for each area of the corridor from local neighborhoods to employment areas and shopping and services along US 1.
- Link these routes to MARC rail stations to provide regional mobility for corridor residents and to provide accessibility to employment in the corridor.
- Offer transit information throughout the corridor.
 Provide transit passenger amenities at strategic and frequently used bus stops.
- Install pathway and sidewalk connections to bus stops.
 Provide incentives for redevelopment of land in walking distance from MARC rail stations.
- Lobby for increased service frequency and reliability on the existing MARC Camden line.
- Encourage and promote long-range, regional, heavy and light rail system plans that provide for connections to the Baltimore and Washington metropolitan areas.
- Enable transit-friendly road design through partnership with the land development/ redevelopment community.

- Concept idea was presented in the Phase 1 Route 1 Corridor Revitalization Study, has been recommended at community workshops or has been supported by the Task Force, County staff or consultants.
- Potential future project idea that may be identified in long-range plans or is dependant on private development activity.

Route 1 Roadway Concepts

A variety of roadway configurations exist along Route 1. The most common is the five-lane cross-section with the center lane serving as a turning lane. Four-lane sections still exist, but are considered less safe by the SHA. Currently, there is no consistent pattern of acceleration/deceleration lanes, shoulders and sidewalks along the road. By choosing a limited number of prototypical design solutions that are appropriate for Route 1, the road will begin to take on a more unified character.

At the community workshop, citizens' Vision Translation Maps showed two street types as most appropriate for Route 1: the boulevard and the urban street. A third type, the five-lane roadway, is based on the current SHA improvements and is included in the list. The next step in the planning process needs to identify where each of these design approaches should be used in the corridor. The goal is to select roadway designs and streetscape elements that are sensitive to their context.

- Boulevard with a median and street trees. In locations with heavy pedestrian use, medians may be needed as safe crossing refuges.
- Urban street with buildings located close to the edge of the right-of-way and wide sidewalks with street furniture for pedestrian use.
- Five-lane roadway with sidewalks and enhanced streetscape. This design may be appropriate where retail businesses, offices and warehouses need good vehicular access from a center turning lane.

PUBLIC TRANSPORTATION

At present, several public transportation services are available to various locations within the corridor. The MARC rail system provides weekday peak period service between downtown Baltimore and Washington along the Camden Line, with four stations located within the Route 1 corridor in Howard County. The Maryland Transit Administration (MTA) Route 320 Commuter Express Bus provides weekday peak period service along Route 1 between Laurel and downtown Baltimore, with numerous stops in Howard County. The County's bus system, Howard Transit, provides peak period, evening and weekend service along the Route 1 corridor. Seven routes operate within some portion of the corridor. Two of these routes were added beginning in April 2002. These so-called "last mile shuttles" provide a peak period bus link between the MARC rail system and residential, employment and institutional uses in the US 1 corridor. The new routes are funded for an eighteen-month trial period through MTA's New Starts program. Other transit options, including the Spirit Shuttle, Connect-a-Ride and the Reverse Commute Program, provide additional public transportation service.

While efforts have been made in the past several years to increase transit service both in the US 1 corridor and County-wide, significant gaps remain. Because existing service is primarily for commuters to get to jobs in the peak periods, a major gap exists for nonpeak daytime service. Very little daytime service is available for residents without cars to get to services and programs at librar-

ies, senior centers, health centers, schools or to go shopping or to church functions. Connect-a-Ride provides some service in the North Laurel area but nothing in the other areas of the corridor. This gap puts low income, disabled and senior citizens as well as youth at a disadvantage in meeting their daily needs. Some residents may qualify for paratransit service but that is an expensive strategy.

Improving pedestrian and bicycle access to rail stations and bus stops could significantly enhance ridership potential. Providing bus stop amenities, such as shelters and bike racks, can also encourage transit ridership. Transit marketing to residents and employers along the corridor can increase awareness of the available services.

Public transportation improvement options for the corridor's revitalization should include the strategies listed in the box on the previous page. A more specific listing of suggested short-term and long- term transit improvements is presented in the Transit Improvements Table at the end of this chapter.

PEDESTRIAN AND BICYCLE MOBILITY AND SAFETY

Throughout the US 1 corridor pedestrian and bicycle activity is a means of travel to and from home, work, school, shopping and recreation. Unfortunately, a general lack of facilities hinders pedestrian and bicycle travel and makes it unsafe. The facilities that do exist are often disconnected and/or in poor condition, thus discouraging additional walking and bicycling. Hazards or impediments to pedestrian and bike travel include inadequate sidewalks, lack of bicycle lanes or narrow shoulders that are in poor condition, poor sight distance, parked vehicles that encroach on shoulders and travel lanes, intersection crossings that do not have pedestrian traffic signals and the long distances between signalized intersections.

Safe walking and cycling conditions need to be provided where pedestrian/bicy-cle traffic currently exists. To document and understand the extent of pedestrian traffic in the corridor, Howard County and the Baltimore Regional Transportation Board conducted pedestrian and bicycle counts and field evaluations. These counts and evaluations were done in two locations: North Laurel in fall 2001 and Elkridge in spring 2002. The North Laurel field study revealed that even without shoulders, sidewalks and pedestrian crossings, there is a fairly high level of pedestrian activity. Over 200 walkers were counted along or in the travel lanes of US 1 or crossing the highway during a six hour period. Pedestrian activity in Elkridge was not as intense as in North Laurel. Approximately 100 walkers were counted in a four hour weekend period. They were walking at locations with no sidewalk or crosswalks and along the Route 1 southbound lane where there are only partial sidewalks.

As of June 2002, there have been eight pedestrian/bicycle accidents, including serious injury and fatal accidents, this year on US 1. Accident data suggests the safety problem is worsening from year to year.

Short-term and long-term strategies for pedestrian and bicycle improvements are listed in the box on this page. A list of recommended improvements is shown the Pedestrian and Bicycle Long Range Improvements Table at the end of this chapter.

Pedestrian-Bicycle Improvement Strategies

- Link existing disconnected sidewalk and pathway segments and add new sidewalks/pathways in order to provide a well-defined network that facilitates access to major residential, employment and activity centers.
- Provide marked, raised and/or illuminated crosswalks.
- Construct raised medians which offer refuge for pedestrians and cyclists.
- Improve street lighting.
- Employ traffic calming techniques.
- Erect signs to alert motorists to the presence of cyclists and pedestrians.
- Install bike racks and lockers at potential high use locations.
- Conduct public information campaigns to educate the public on safe walking and biking practices.



Older sycamores along the roadway edge in Elkridge.



Recently-planted London Plane Trees along the Lincoln Center frontage in Savage.

SAVAGE

Prototypical community identity sign to be installed in four locations along Route 1: North Laurel, Savage, Jessup and Elkridge.



SHA's bridge design for Towson, shown above, is planned to be adapted for the Route 1 northbound lane over the Patuxent River.



The color and historical industrial design character of the Bollman Bridge is the inspiration for street furniture along Route 1.



The appearance of the MD 32 interchange could be transformed with the addition of landscaping.

STREETSCAPE DESIGN CONCEPTS

A successful streetscape has numerous elements that work together to create a safe and attractive environment for vehicles, pedestrians and bicyclists. Choices must be made about which elements to use, how to combine them into roadway design prototypes and what should be the overall character or style of the streetscape. The Task Force, County staff and consultants together selected a theme for streetscape improvements for the corridor. If some neighborhoods want different or distinctive treatments, these areas can be considered in future community enhancement plans.

Sycamores, Stone, Steel

Three landscape materials were selected as representative of the corridor's history and distinct character. Wherever possible, these materials will be used in new streetscape designs to create a special image for the corridor. Decades ago sycamore trees were planted along Route 1. Only a few trees remain as remnants of this past street tree planting. More recently, the London Plane Tree, a relative of the sycamore that is highly adaptable to urban street conditions, was planted in front of Lincoln Center in Savage. This variety of sycamore will be used as the street tree in key locations along the corridor.

The massive stone of Thomas Viaduct is an enduring symbol for the nearby community of Elkridge and for the corridor. This bridge, recognized on the National Register of Historic Places, is the inspiration for the use of stone in corridor streetscape structures. Stone or, if cost dictates, simulated stone will be used for signs, bridges and paving along the corridor. Stone signs identifying corridor communities will be erected at four Route 1 gateway locations in fall 2002. New sidewalks, crosswalks and median islands are proposed to be edged with concrete paving with a stone-like pattern and color.

The corridor's other National Register site, the Bollman Truss Bridge, is the inspiration for the street furniture that might be located along the corridor. Street furniture such as trash containers, benches, bicycle racks and light poles can make a street more hospitable to pedestrians. The preferred street furnishings were selected to echo the historic industrial style of the bridge. Where possible, an attempt will be made to specify metal furniture that is the distinctive dark red color of the Bollman Truss Bridge.

Other Roadway Enhancements

Although the initial focus for streetscape improvements is planting street trees, installing community gateway signs and building sidewalks, other planned and potential improvements will add attractiveness to the roadway. The County has requested that SHA provide added plantings at the MD 32 and MD 100 interchanges. Community assistance in planting small trees, shrubs or flowering bulbs may be part of this beautification program.

As mentioned earlier, this report endorses redevelopment of several five-lane segments of Route 1 as a boulevard with raised medians. Medians can enhance the appearance of a street, calm traffic and improve safety by concentrating turning movements at intersections. Medians often provide a refuge for pedestrians trying to cross streets. If adequate space exists, it is possible to plant medians. Before medians can be installed, by replacing the center turning lanes on five-lane road segments, two things may need to occur. First, existing four-lane road segments need to be upgraded to five lanes so that this basic safety improvement is prevalent throughout the corridor. Second, a detailed right-of-way analysis needs to be conducted to ensure that adequate space is available for

medians and to evaluate where medians can be built without seriously impeding needed mid-block turning movements. Businesses often prefer not to have medians, as they limit the customer's ability to turn into commercial properties from either direction along a roadway.

SUMMARY

The previous chapter describes land use policies that can revitalize the corridor and redefine it as the County's most important future growth corridor. As part of that vision, Route 1 is seen as the location of activity centers that serve residential neighborhoods and business parks. These potential land use changes need to be served by roadways that are safer, more attractive and more inviting for pedestrians. In addition, more roadways need to connect, thus offering travelers more options and more efficient routes. Route 1 roadway geometrics in many places do not measure up to modern highway design standards. As a result, motorists, pedestrians and bicyclists on Route 1 experience periodic delays and potentially unsafe conditions. Just as land use changes may need many years to be implemented, transportation changes will also take time and considerable funds.

POLICY AND PROGRAM RECOMMENDATIONS

Roadway Network

Provide a well-defined network of intersecting and parallel roadways to balance local and through traffic demands. Place special emphasis on completion of Dorsey Run Road as a key addition to the Route 1 corridor network. Study potential street grid layouts that may enhance circulation within higher density Corridor Activity Centers and Transit Oriented Development areas.

Traffic Safety and Capacity Improvements

Study and propose needed improvements including redesigning intersections to provide added capacity, coordinating signals to improve overall traffic flow and, where necessary, reconfiguring, converting or adding lanes within the existing right-of-way.

Access Control

Manage, control and consolidate access points to Route 1 through the land development and redevelopment process. Develop guidelines and recommendations for access control, including analysis of the effect of medians on access to commercial properties.

• Traffic Calming

Where appropriate in residential neighborhoods and pedestrian-oriented development, implement traffic calming strategies to lower traffic speed and thereby reduce the incidence and severity of traffic accidents and discourage through traffic movements.

Pedestrian Networks

Link existing disconnected sidewalk and pathway segments and add new sidewalks/pathways to create a well-defined network that facilitates access to transit stops and to major residential, employment and activity centers.

Pedestrian and Bicycle Safety

Improve pedestrian and bicycle safety by providing marked, raised, signalized and/or illuminated crosswalks; enhancing street lighting; installing signs to alert motorists to the presence of cyclists and pedestrians; and conducting

Next Steps

- DPZ, DPW and SHA will work together on a strategy to implement the proposed roadway and pedestrian improvement projects shown in the tables at the end of this chapter.
- The County will request the SHA to undertake major planning studies and comprehensive traffic safety studies for Route 1 locations experiencing significant congestion and safety problems.
- The County will continue to lobby for increased service frequency and reliability on the existing MARC Camden line.
- DPZ and DPW will seek funding for projects that add sidewalks and streetscape amenities, to encourage pedestrian and transit use within the corridor.

public information campaigns to educate the public on safe walking and biking practices.

• Transit, Pedestrian and Bicycle Amenities

Add transit passenger amenities at strategic bus stops; ensure adequate pathway and sidewalk connections to bus stops; install bike racks and lockers at potential high use locations.

• Transit Networks

Provide frequent and highly visible bus transit along the length of Route 1. Develop bus service to connect local neighborhoods to employment areas, shopping and services along Route 1. Link these routes to MARC rail stations to provide regional mobility for corridor residents and to provide accessibility to employment in the corridor.

• Transit Information and Incentives

Offer transit information throughout the corridor; provide incentives for redevelopment of land in walking distance from MARC rail stations; and enable transit-friendly road design through partnerships with the development community.

Rail Systems

Promote long-range regional rail system plans that provide for connections to the Baltimore and Washington metropolitan areas.

	Road Improvements Table					
No. *	Location	Proposed	Status*	Comments		
	HERN AREA	. 100000	- Ctatao			
1	US1 - Patuxent River to Brewers Court.	North Laurel urban streets, 2 to 3 lanes each direction, wide sidewalks, protected pedestrian crossings, cross streets connect to community and MARC station.	Concept proposed in Route 1 Study	North Laurel Activity Center concept by Nelessen. Implementation and completion will likely require a private sector / County / State initiative.		
2		SHA currently programming changes in vertical alignment.	Design is complete	SHA vertical improvements are funded and do not preclude ultimate boulevard design (see 3, below).		
3	US1 - Whiskey Bottom Road to Gorman Road.	Boulevard design with landscaped median and sidewalks; ensure capacity for commercial traffic (trucks).	Concept proposed in Route 1 Study	Currently 4-lane road with left turns at intersections. Workshop and consultant proposed improvements. Right-of-way needs to be acquired or dedicated.		
4	Laurel Park MARC.	North Laurel / Laurel Park MARC Commuter Rail / Transit Facility; pedestrian and transit enhancements.	Concept proposed in Route 1 Study	Future improvements as part of the Transit Oriented Development (TOD) District.		
5	MD 216 - Stevens Forest Road extended and intersections.	Emerson east access to MD 216, partial grade separation intersection. Additional improvements to MD 216 with development process.	Design by SHA and developer is complete	Project designed and slated for construction 2002 / 2003.		
6	Gorman Road - I-95 to US1.	Capacity improvements (turning lanes, bypass lanes, etc.)	Proposed in General Plan 2000	Provide additional traffic capacity as part of land development / redevelopment.		
7	Savage MARC.	Savage MARC Commuter Rail / Transit Facility.	Design of station by MTA is complete	MTA completed preliminary design in 2000. Additional development possible with future TOD District.		
CENTI	RAL AREA					
8	MD 32 - I-95 to Anne Arundel County.	Expand from 4 to 8 lanes. Evaluate and design for High Occupancy Vehicle (HOV) lanes if appropriate.	Proposed in General Plan 2000			
9	MD 32 / Dorsey Run Road interchange.	Reconstruction including widening and other capacity improvements.	Construction is underway	Project has been initiated. Funded substantially by National Business Park.		
10	US1 - MD 32 interchange to Guilford Road.	Redesign ramps and intersections to improve vehicle capacity / circulation / safety and to accommodate pedestrian traffic.	Potential future project	No study or design yet. Candidate project for inclusion in the State Consolidated Transportation Program (CTP).		
11	US1 - MD 32 to MD 175.	Capacity improvements, access controls, transit and pedestrian facilities; boulevard design with landscaped median where possible.	Concept proposed in Route 1 Study	Currently 4 lanes from MD 32 to Mission Road with left turn lanes at intersections; 5 lanes to MD 175. Redevelopment for employment uses may provide improvements.		
12	US1 / MD 175 intersection.	Study, design and construct capacity improvements including possible grade-separation.	Concept proposed in Route 1 Study	Howard County proposed to SHA. Future inclusion in State CTP for Howard County.		
13	US1 - MD 175 to MD 100.	Boulevard design with landscaped median (to MD 103) and sidewalks.	Concept proposed in Route 1 Study	Currently 5-lane road to MD 103; 4-lane road from MD103 to MD 100 interchange.		
14	Guilford Road - Mission Road to US1.	Safety and capacity improvements including bicycle / pedestrian access.	Proposed in 1996 County Transportation Plan	Project also recommended in Route 1 Study Phase 1 Report.		

Road Improvements Table (continued)

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	Location	Proposed	Status	Comments
CENT	RAL AREA (continued)			
15	Guilford Road - US1 to Dorsey Run Road.	Study, design and reconstruct to 4 lanes.	Capital Budget funding in FY 2003	Estimated construction FY 2004 / 2005.
16	Guilford Road - Dorsey Run Road to Anne Arundel County.	Widening to facilitate traffic at National Business Park.	Construction is underway	New 5-lane cross section design.
17	Dorsey Run Road - Guilford Road to Perkins Hospital.	Relocation toward southeast / widening.	Construction is underway	
18	Dorsey Run Road - Perkins Hospital to MD 175.	Study, design and reconstruct as 4 lane commercial roadway.	Capital Budget funding in FY 2003	Study initiated FY 2003; construction appropriation FY 2004 / 2005
19	Dorsey Run Road - MD 175 to MD 103.	Study, design and construct Dorsey Run Road extension.	Study is underway	
20	Mission Road - Guilford Road to US 1.	Provide pedestrian- / bicycle- friendly design road oriented to non commercial traffic.	Potential future	Could be included in future private sector development of Chase Quarry. Additional connections to Hicks Road / Lincoln Road area also possible.
21	Jessup MARC station - including MD 175 / Dorsey Run Road areas.	Transit-friendly road design (pull- offs, shelters, etc.) and pedestrian access to retail / service / employment uses in the area.	Potential future project	In the proposed TOD District. Need MTA / private sector / Anne Arundel County cooperation.
22	Dorsey MARC station vicinity.	Provide pedestrian circulation; enhance intermodal transit connections.	Concept proposed in Route 1 Study	Additional future private sector redevelopment improvements may occur around this station.
NORT	HERN AREA	•		
23	US1 - MD 100 to Amberton Drive / Troy Hill Corporate Center intersection.	Extend off-ramp and relocate US1 / Amberton Drive intersection opposite US1 / Troy Hill intersection.	Proposed by SHA	Originally proposed by SHA as part of MD 100 project design.
24	US1 - MD 100 to Old Washington Road	Boulevard design with landscaped median, pedestrian crossings, transit shelters, etc. Additional pedestrian enhancements at Troy Hill Corridor Activity Center.	Concept proposed in Route 1 Study	Access control / management and right-of- way acquisition via land development / redevelopment process.
25	US1 - Old Washington Road to Summer Home Terrace	Boulevard design with landscaped median, pedestrian crossings, transit shelters, etc.	Concept proposed in Route 1 Study	Currently 4-lane road with left turns at Montgomery Road. 5-lanes from Montgomery to Summer Home Terrace. Numerous nearby retail establishments make access controls and median difficult.
26	US1 - Old Washington Road to Baltimore County line (Lower Elkridge).	Urban street, 2 to 3 lanes each direction, wide sidewalks, pedestrian crossings.	Concept proposed in Route 1 Study	Lower Elkridge Activity Center concept by Nelessen. Implementation and completion will likely require a private sector / County / State initiative.
27	Montgomery Road - west of US1.	Capacity, safety and pedestrian / bicycle improvements.	Potential future project	Contingent on impact of Marshalee Drive opened as a continuous through road.
28	Hanover Road at CSX railroad.	Closure of Hanover Road at CSX line plus safety improvements.	Proposed by Howard County	County Council Resolution to close Hanover Road.

Projects are listed from south to north.

^{**} See pages 20 and 21 for a description of the status categories. The Road Improvement Policies Map depicts improvements as categories of **Programmed** (Construction, Design, Study, Capital Budget), **Proposed** (in General Plan, Comprehensive Transportation Plan or other official document) and **Potential** (Concept or Future Improvements).

Transit Improvements Table					
Proposed Service	Description				
RECENT AND PLANNED SHORT RANGE IMPROVEMENTS					
US 1 Shuttle South	Begun in April 2002, provides peak-hour shuttle bus service from the Savage MARC station to the Laurel / Savage area with a focus on connections from neighborhoods to industrial parks.				
US 1 Shuttle North	Begun in April 2002, provides peak-hour shuttle bus service from the Dorsey MARC station to industrial and residential areas, Colonial Landing Senior Apartments and the Elkridge Library.				
US 1 Shuttle Central	Planned expansion of the existing Spirit Shuttle bus service to include portion of the US 1 corridor from MD 175 to MD 100, with connections to the Savage MARC station, National Business Park, National Security Agency, MD 175, Maryland Food Center and Dorsey MARC station; will overlap with the US 1 Shuttle South.				
Bus Stops	Planned installation of bus stop signs at designated locations. Planned installation of bus shelters at high use stops such as MARC stations and the Maryland Food Center. Shelters will be lighted and include an electronic message sign with the time the next bus will arrive. Electronic signs will also be located at major destinations such as the Elkridge Library. Future shelter locations will be established as ridership patterns evolve.				
RECOMMENDED SHORT	RANGE IMPROVEMENTS				
MTA 320 Route	The MTA 320 Route runs express commuter service in the morning and afternoons along the US 1 corridor from Laurel to Baltimore. Provide full day service along US 1 every 45 minutes. The service should link to shuttle routes that go into neighborhoods, industrial parks and MARC stations.				
Howard Transit Service	Expand day and evening service between residential areas and schools, libraries, senior and health centers and other public buildings to enhance access to community services.				
Sidewalks and Pathways	To insure that bus shelters are accessible to the general public, including individuals with disabilities, pave sidewalk and pathway approaches and connect to existing sidewalks and pathways in the corridor.				
RECOMMENDED LONG R	ANGE IMPROVEMENTS				
East-West Bus Service	Provide new bus service to connect the US 1 corridor with Columbia and Ellicott City.				
MARC Rail	Provide increased frequency on the MARC Camden line. Long-term investment in separate commuter track is recommended. Evaluate the feasibility of providing a spur from the Camden line into Columbia Gateway and Town Center. (Included in the Baltimore Regional Rail System Plan)				
Regional Rail Connection	Provide a future rail link from Baltimore City to the US 1 corridor and Columbia. Future				
to Howard County	redevelopment along the corridor and surrounding MARC rail stations should consider potential right-of-way reservation for such a system. (Included in the Baltimore Regional Rail System Plan)				
Metrorail	Evaluate the feasibility of extending the Washington Metrorail system from Greenbelt to Laurel.				
Bus Pull-Outs	Provide bus stop pull-out areas where a bus can safely pull out of the flow of traffic and patrons can safely board the bus.				

Pedestrian and Bicycle Long Range Improvements Table Location **Proposed Improvements** Comments US1 - Patuxent River to Wide sidewalks fronting on mixed use Interior block parking lots and scale of shops mandates south of Whiskey that a protected pedestrian environment be provided. buildings; signalized pedestrian Bottom Road (North crossings. Laurel). Laurel Park vicinity. Pedestrian/bike improvements to accommodate rail travelers and as enhanced pedestrian access to the North Laurel Corridor Activity Center District. US1 - Whiskey Bottom Sidewalks and US1 pedestrian crossings | Boulevard cross-sections with median which will Road to MD 32. at selected, signalized locations. accommodate commercial traffic as well as local trips Sidewalk to transit bus shelters and and pedestrians. MARC Station. US1 - MD 32 to south Pedestrian system which includes Proactive measures needed in land development / crossings at selected signalized US1 redevelopment process to secure right-of-way and of MD 175. control / consolidate access. locations, access to transit shelters and interconnections with employment sites. Guilford Road/Mission Residentially-oriented pedestrian / Land development / redevelopment would focus on Road/Hicks bicycle improvements as part of roadway industrial access to US1, keeping residential linkages Road/Lincoln Road. improvements for Guilford / Mission and commercial connections separate. Heights / Pleasant Chase / Cedar-Villa Heights (see Road Improvements Table). MD175/Dorsey Run Road design facilitating transit usage Transit Oriented Development District design should Road area. provide enhanced access and circulation for (pull-offs, shelter pads, etc.) and provision of access for pedestrians and pedestrians and cyclists. bicyclists (see Road Improvements Table). US1/Troy Hill. Signalized US1 pedestrian crossing; Private development and redevelopment in conjunction sidewalks and transit shelters. with State / County to provide right-of-way and improvements. US1 - Troy Hill to Old Sidewalk system linked with transit Redevelopment of current employment areas could Washington Road. shelters and adjacent land uses. provide right-of-way and improvements on east side. State / County to expand sidewalk on west side. US1 - Old Washington Consolidation and acquisition of right-of-way and Expansion of current sidewalk and Road to the top of construction of added pedestrian access management through the land development / Buttermilk Hill. enhancements including raised median redevelopment process. and signalized crossings. US1 (Lower Elkridge) -Pedestrian network which includes a Advocacy of access improvement, consolidation and Old Washington Road signalized ped/bike crossing at Levering control measures needed. to I-895 interchange. Avenue. Montgomery Road -Pedestrian / bicycle facilities on and near Major participation by the County necessary to secure US1 to west of I-95. Montgomery Road with secure crossings needed right-of-way (see Road Improvements Table). provided near schools, shops and parks.



ADDRESSING ENVIRONMENTAL QUALITY

Protecting and Restoring Natural Systems

he corridor contains portions of seven out of the nine major County watersheds. Although the corridor is substantially developed, it has extensive stream valleys that contain many of the County's most important natural resources such as the waterways themselves, wetlands, floodplains, forests, steep slopes and wildlife habitats. Some of these natural resources are protected as parkland or as open space and can be used for recreation. However, because much of the current development in the Route 1 corridor occurred prior to County adoption of environmental protection and stormwater management regulations, many sensitive habitats such as forests, wetlands and streams have been degraded and eliminated. The health of these natural resources reflects the quality of water, land and air in the corridor. Therefore, consideration of the health of these natural resources is an inseparable part of revitalizing the corridor and improving the quality of life not only for corridor residents and businesses, but also for County citizens in general.

INTRODUCTION

The quality of air, water and land are interrelated and are impacted, both positively and negatively, by human activities. Efforts to protect and restore natural resources can be taken not only by the local, State and Federal governments, but also by the individual private citizen. The following sections describe current programs and activities that address natural resource protection and restoration within the corridor.

WATERSHED MANAGEMENT

A watershed can be defined as all of the land area that drains to a given point in a waterbody. The Route 1 corridor contains portions of the Patapsco River, Deep Run, Dorsey Run, Little Patuxent River, Middle Patuxent River, Hammond Branch and Patuxent River watersheds, as shown on the Environmental Features Map on the following page.

Watershed Studies

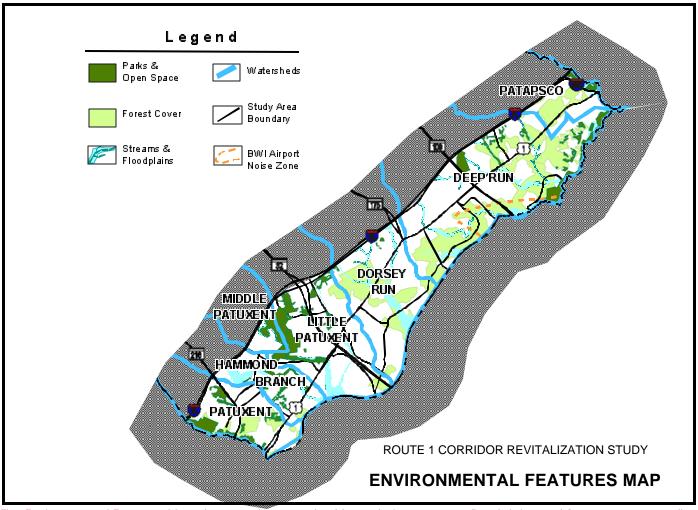
Watershed-based plans provide a framework to comprehensively address the protection and restoration of natural resources. Watershed studies can document current watershed conditions, forecast future conditions, develop water resource and habitat goals, and select appropriate watershed protection and restoration tools. It is important to note that watershed protection and restoration goals may vary by watershed. In a healthy watershed, the goal may be to protect and maintain current conditions. In a degraded watershed, the goal may be to restore and improve conditions to the extent possible, given current development in the watershed.



Watershed management plans can help protect healthy streams.



Watershed studies can target severely eroded streams for stabilization and restoration.



The Environmental Features Map shows major watershed boundaries, streams, floodplains and forest cover, as well as parkland and open space in the Route 1 corridor.

To achieve water shed protection and restoration goals, the following tools are available and should be considered as part of any watershed managementimplementation plan:

- Land Conservation Pro tect sensitive water resources and habitats.
- Riparian Buffers Establish, protect and enhance forested buffers for streams and wetlands.
- Better Site De sign Minimize impervious surfaces and maximize open space through techniques such as cluster development and reduced or shared parking.
- Ero sion and Sed i ment Con trol -Re duce sed i ment loss dur ing construction and ensure sensitive areas are pro tected.

- Stormwater Best Management Practices - Install practices to maintain ground water re charge, reduce pollutant loads, protect stream chan nels and re duce flooding.
- Discharge Controls Manage septic systems, sanitary sewers and in dustrial discharges.
- Stream Channel Stabilization and Restoration - Improve aquatic habitat and reduce sediment loads to streams.
- Wildlife Habitat Management Establish, protect and enhance valuable habitat, and manage wild-life to support healthy and diverse populations of native species.
- Watershed Stewardship Programs - Increase public under

- standing and promote better private land manage ment.
- Subwatershed Studies De velop more detailed res to ration plans for priority subwatersheds.

The County re cently be gan con ducting various types of water shed studies to develop basic information on water quality and habitat conditions in local streams. The following sections provide a brief summary of current watershed studies that include the Route 1 corridor:

Impervious Cover Assessment

Howard County is using impervious area cover age (such as park ing lots, roads and buildings) as an indicator of expected water quality and aquatic

habitat conditions for smaller subwatersheds within the County. Subwatersheds are categorized, based on impervious cover, as follows:

- **Sensitive** less than or equal to 10% im per vious cover, good to excellent expected stream conditions, the health i est streams.
- Impacted greater than 10% and less than or equal to 25% impervious cover, fair to good expected stream conditions, but showing clear signs of degradation.
- Non-supporting greater than 25% im per vi ous cover, poor to fair expected stream conditions, with significant degradation.

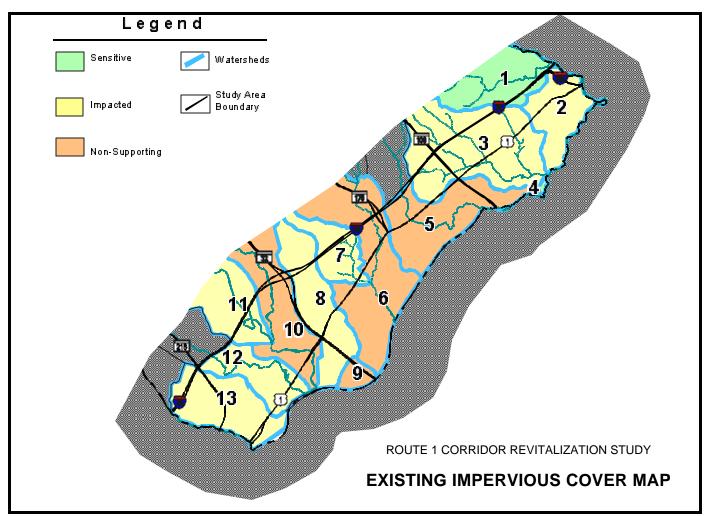
These cate go ries show that as im pervious cover in creases with in creasing development, stream health is expected to decline as forests are cleared, ground water recharge is reduced, and polluted run off in creases in volume and frequency. The more degraded a stream system, the more difficult and costly restoration efforts become.

Thir teen subwatersheds lie within the Route 1 corri dor, as shown on the Existing Impervious Cover Map below and in the table, Impervious Cover Assessment for Route 1 Corridor Subwatersheds, at the end of this chap ter. As with most subwatersheds within the County's Planned Water and Sewer Ser vice Area, the majority of the subwatersheds in the Route 1

corridor are in the impacted and non-supporting categories. Based on expected future development, many of these subwatersheds will face additional significant declines in stream health. How ever, wa ter shed protection tools can help restore stream health and mitigate the expected impacts from future de vel opment.

Stream Biological Assessment

The County's biomonitoring program, initiated in 2001, collects in formation on the number and type of aquatic in sects living in a stream and on the quality of a stream's physical habitat. This information provides a general assessment of stream



The Existing Impervious Cover Map shows the thirteen Route 1 corridor subwatersheds and their existing impervious cover category.



Stream corridor assessment surveys can identify inadequate buffers.



This Little Patuxent River tributary is a priority restoration site.



Older communities developed prior to environmental regulations may be subject to minor flooding.



SWM facilities help reduce flooding and improve storm drainage.



New SWM regulations promote small facilities that increase pollutant removal.

health within a watershed. All major watersheds in the County will be sampled over a five-year period. The Little Patuxent River watershed was sampled in 2001 and the Middle Patuxent River watershed was sampled in 2002. The results for the lower Little Patuxent River watershed indicate that the streams have poor biological health and physical habitat that is unable to support a diverse aquatic community. Results for the Middle Patuxent River will be available in the fall of 2002.

Stream Corridor Assessment Surveys

Surveys document problems along the stream corridor such as eroding streambanks, inadequate buffers and trash. Working with the US Army Corps of Engineers or the Maryland Department of Natural Resources (DNR), the County has conducted surveys in the Deep Run, Little Patuxent River and Middle Patuxent River watersheds. A survey of the Patapsco River watershed will be completed in the summer of 2002 and surveys of the Dorsey Run and Hammond Branch watersheds will be initiated in the fall of 2002. The Patuxent River watershed was surveyed above I-95, but there are no plans at this time to conduct a survey in the Route 1 corridor. In general, these surveys have found that the most prevalent and significant problems along the County's streams are stream channel erosion and a lack of riparian or streamside buffers.

Little Patuxent River Watershed Restoration Action Strategy (WRAS)

The County, working with DNR, completed the WRAS in January 2002. It will serve as a workplan for protecting and restoring water quality and habitat, and for addressing the need for environmental outreach and education within the watershed. The WRAS included a methodology to prioritize problem sites identified in stream corridor assessment surveys for future corrective action. One of the ten high priority sites for future restoration is a stream channel erosion site located in the Southern Area of the Route 1 corridor along Guilford Branch.

Deep Run Watershed Restoration Study

A joint County and US Army Corps of Engineers watershed restoration study was completed for the Deep Run watershed in July 1999. The study identified five possible stream restoration projects within the Route 1 corridor. Final project design work will begin in 2002. The first round of projects includes a wetland creation site just outside the Route 1 corridor in Subwatershed 3 - Deep Run Tributaries (see Existing Impervious Cover Map). The study also identified a stream stabilization project needed to protect a section of Race Road. This project is moving forward under a separate Corps Emergency Streambank Stabilization Project funding program.

Future Directions

The impervious cover, biological and stream corridor assessments indicate degraded stream conditions exist within the corridor. In response, the Little Patuxent and Deep Run watershed studies present workplans to restore and enhance conditions within these watersheds. Watershed studies and restoration workplans also need to be developed for the remaining watersheds within the corridor.

Public support for natural resource protection and restoration is critical because the majority of land in the corridor is privately owned. Watershed stewardship can be encouraged through community-based public outreach and education to increase public understanding about current conditions within the corridor and to promote better private land management. Citizen efforts to improve condi-

tions can include stream clean-ups, painting storm drains with messages to remind residents not to dump trash or other materials, reducing the use of pesticides and herbicides, and planting forested streamside buffers.

STORMWATER MANAGEMENT

Stormwater management (SWM) requirements to restrict development in floodplains and to control the quantity or volume of stormwater runoff became part of the County's subdivision regulations in 1971 and 1974, respectively. Water quality requirements to reduce pollutants in stormwater runoff were not added until 1988.

In general, older residential developments, developed before these regulations, tend to be quite prone to drainage problems. Some homes in older communities in the Route 1 corridor were constructed in floodplain areas. As the land upstream of these communities has developed, greater storm flows have been forced into the waterways through these communities, causing minor flooding to become a more frequent event.

Current Stormwater Management Regulations

New stormwater management regulations were mandated by the State and adopted by the County in 2001. These regulations are intended to better protect stream channels and promote groundwater recharge by minimizing changes to site grading and drainage, protecting natural areas, and retaining and treating stormwater runoff on site. This new approach to stormwater management moves away from having one or two large treatment facilities for a site to constructing more but smaller facilities integrated throughout a site.

A key provision of the new regulations requires redevelopment projects to provide stormwater management by reducing impervious areas by 20% or provide SWM quality control equal to a 20% reduction in impervious area. Where neither of these options can be accommodated, alternative compliance may include off-site facilities, watershed or stream restoration, retrofitting of other facilities or payment of a fee-in-lieu of compliance.

These SWM requirements present new challenges for the development community, particularly when redeveloping older commercial/industrial sites that may have high levels of impervious cover and limited space for new SWM facilities. As an incentive to revitalize older sites, the County will need to work with the development community to develop innovative and creative solutions that meet the requirements of the new regulations.

Improving Stormwater Management in the Corridor

Many of the Route 1 corridor's drainage issues have been documented and have been, or continue to be, addressed through capital improvement projects to reduce flooding and improve storm drainage and stormwater management. However, the County faces unique challenges when addressing these drainage issues. The corridor contains older residential communities and industrial/commercial areas that typically have extensive impervious area, limited riparian buffers and minimal open space. This inhibits the County's ability to implement SWM techniques such as constructing new SWM facilities, retrofitting existing facilities and implementing stream restoration. The box on this page lists some of the County's impediments to improving SWM. These impediments must be overcome if stormwater management is to be improved in the corridor.

Impediments to Improving SWM

Limited Public Open Space for SWM

 It is easiest for the County to develop new SWM facilities on publicly owned open space.
 The limited public open space in older residential developments and in industrial or commercial developments makes them among the most difficult areas for developing new SWM facilities.

High Value of Commercial Land

 Land that is zoned for or already developed with commercial and industrial uses is likely to be prohibitively expensive for construction of new SWM facilities.

Fewer Retrofit Opportunities

 There are fewer SWM facilities in the corridor than in more recently developed areas of the County, which limits retrofit opportunities.

Privately Owned Facilities

 SWM facilities in industrial and commercial areas are almost all privately owned and privately maintained. To retrofit any of these facilities, the County must acquire easements and may need to take on the maintenance responsibility for these facilities.

Limited Buffer Areas for Stream Restoration

Older residential and industrial/commercial areas were not required to have stream buffers and newer industrial/commercial developments have smaller stream buffer requirements than residential developments. This results in limited areas being available for stream channel stabilization and restoration, and for riparian buffer enhancements. For example, regrading a stream bank is not feasible if a parking lot, road or building is only a few feet away from the stream.

Tools for Acquisition and Protection of Green Space

Program Open Space

 The County receives money from the State via Program Open Space for land acquisition and park development. These funds were recently used to acquire lots being assembled for North Laurel Park.

Acquisition using the Fee-in-Lieu of Open Space Fund

- Under certain conditions, the County accepts payment of a fee-in-lieu of open space dedication. The fee is placed in a fund for land acquisition.
- This fund was recently used to acquire additional acreage at Troy Park and at a site near High Ridge Park. Currently, all fee-in-lieu funds for the corridor have been exhausted, however, future residential subdivisions could result in additional revenues.

Dedication through the Subdivision Regulations

- The County subdivision regulations require residential development to dedicate a percentage of open space to the County, based upon the zoning.
- Existing open space dedication areas often include environmentally sensitive lands such as floodplains, forest conservation areas, and wetlands, streams and their buffers. As of January 2002, new open space areas in residential subdivisions with lot sizes less than ten acres must include these sensitive areas.
- New guidelines in the regulations address the connectivity, accessibility and visibility of open space. In addition, the County now has the authority to require open space pathway connections to adjacent schools, parks, open space or commercial areas.

In addition to these constraints, limited County funds are available to implement new SWM techniques. Nevertheless, identifying and implementing SWM improvements in the Route 1 corridor should be a priority as part of the Route 1 revitalization efforts. In particular, in areas where redevelopment will be encouraged, the County may need to provide assistance with infrastructure improvements to address flooding, storm drainage and stormwater management.

OTHER ENVIRONMENTAL ISSUES

Air Quality

Air quality is regulated through the Federal Clean Air Act of 1970 and subsequent amendments. Howard County is within a severe (on a scale of marginal, moderate, serious, severe and extreme) nonattainment area for ground level ozone, a primary component of smog. Ground level ozone is formed when volatile organic compounds and nitrogen oxides from sources such as industrial plants, power plants, and gas and diesel engines react in the presence of sunlight. The County participates in efforts to address air pollution in Maryland, which are coordinated through the Baltimore Metropolitan Council regional transportation planning process. Continued Federal transportation funding to the region is contingent on complying with Federal regulations aimed at systematically improving air quality.

Noise

Noise from automobiles, trucks, trains and the Baltimore-Washington International (BWI) Airport is also a concern in the corridor. The undesirable effects of noise can be mitigated by separating incompatible uses. This separation is partially addressed through the zoning regulations. Residential uses are afforded additional protection by the subdivision regulations, which specify traffic noise limits for the rear yards of proposed dwellings.

The Maryland Aviation Administration monitors noise levels for areas surrounding BWI Airport and has established an official airport noise zone. One of BWI Airport's four major flight paths extends into the corridor to the east of Route 1, roughly along MD 100. The 1998 Certified Airport Noise Zone for BWI extends over the community of Dorsey and is shown on the Environmental Features Map.

The number of flights into BWI Airport has increased dramatically in recent years. BWI is expected to undergo significant airport expansion over the next five to ten years, which will further increase the number of flights. The Department of Planning and Zoning, as a member of the BWI Neighbors and Environmental Committees, continually monitors potential impacts of BWI operations and flight paths on the County, and thus on the corridor.

GREEN SPACE

Green space includes open space, easements, parks and other types of conservation areas. It provides passive and active recreation opportunities for the citizens of the County and protects specific environmental or landscape resources. The Howard County Comprehensive Recreation, Parks and Open Space Plan for 1999, prepared by the Department of Recreation and Parks (DRP), guides green space planning.

Route 1 Corridor County Green Space

Type of Green Space	Acres				
Parkland					
Community - Troy	81				
Community - North Laurel	22				
Community - High Ridge	94				
Community - Savage	95				
Historic - Baldwin Commons	1				
Neighborhood - Guilford	11				
Neighborhood - Cedar Villa Heights	3				
Neighborhood - Harwood	2				
Natural Resource Area - Murray Hill	175				
Natural Resource Area - Patuxent Basin	37				
Total Parkland	521				
Total Open Space	207				
Total Green Space	728				

Source: Department of Recreation and Parks, November 2000

The County owns approximately 521 acres of parkland and 207 acres of open space, for a total of 728 acres of County green space in the Route 1 corridor. The corridor also contains State parkland along the Patapsco River and homeowners association open space. County and homeowners association open space are located in residential subdivisions. County parkland includes community, historic and neighborhood parks and natural resource areas. The Environmental Features Map shows parkland and open space in the corridor, and the table, above, Route 1 Corridor County Green Space, provides information on County parkland and open space in the corridor. The box on the opposite page describes several different funding sources and regulatory methods that the County uses to acquire land for protection, conservation and parkland.

Greenways

Ideally, the location and size of protected green space areas should result in an extensive and continuous network of natural resources that protects critical ecosystem functions. Such a resource protection network should also be the basis for well-planned greenways. Greenways are protected corridors of green space maintained in a largely natural state for a variety of purposes, including safe passage for people and wildlife.

Greenways are often located along stream valleys, where they protect sensitive areas such as streams, wetlands, floodplains, steep slopes, and habitat for threatened and endangered species, and create wildlife and woodland corridors. Greenways are often best protected through public ownership, but can also be protected on private property through environmental protection regulations and easements. The County's land development regulations prohibit or severely limit development of sensitive natural resource areas along streams. Although private ownership of land along greenways prohibits public access to these areas, privately-owned segments still afford protection of sensitive resources and support wildlife habitat needs.

The 1999 Comprehensive Recreation, Parks and Open Space Plan distinguishes between developed and undeveloped greenways. Developed greenways can provide passive and active recreational and educational opportunities through facilities such as boardwalks, nature trails and campgrounds. They can also link destinations such as schools, playgrounds, libraries, regional parks



Neighborhood parks, such as Guilford, provide recreational opportunities for nearby residents.



The Little Patuxent Greenway is one of six designated greenways in the Route 1 corridor.



Developed park facilities offer needed recreational opportunities for youth in the corridor.

and historic sites. The extent to which greenways are developed for public access and use depends on the sensitivity of the resources, location and ownership of the land. Undeveloped greenways often occur in areas where preserving ecological functions and natural resource conservation are the highest priorities, in remote locations that are difficult to access, or when land is in private ownership. Limited and controlled recreational use may be appropriate for portions of undeveloped greenways, particularly where such use can occur on public lands without endangering resources.

Six greenways identified in the Comprehensive Recreation, Parks and Open Space Plan are partially located within the Route 1 corridor. Two regional greenways, the Patapsco and the Patuxent, are located at the northern and southern boundaries of the corridor. Four primary County greenways, the Deep Run, Little Patuxent, Middle Patuxent, and Hammond Branch, are located within the corridor. These six greenways are located predominantly along the stream valley corridors for which they are named. All of the greenways are partially protected. Protected lands along these greenways within the corridor are listed below.

- Patapsco Regional Greenway Patapsco Valley State Park
- Patuxent Regional Greenway High Ridge Park and Patuxent Basin Natural Resource Area
- Deep Run Patapsco Valley State Park
- Little Patuxent Savage Park, Murray Hill Natural Resource Area and County open space
- Middle Patuxent Savage Park, Murray Hill Natural Resource Area and County open space
- Hammond Branch County open space

The Department of Recreation and Parks continues to expand these greenways through dedication and acquisition of land. Priority areas for dedication and acquisition are within the eastern portion of the County, where development pressures are rapidly eliminating land available for protection.

Planning Considerations

The Comprehensive Recreation, Parks and Open Space Plan establishes priorities for development of the County's recreation and park system. The County strives to create a system that balances recreational opportunities with natural resource protection. The box on this page lists current park acquisition and development priorities in the corridor.

The corridor's residents have said that the corridor lacks developed park facilities and that access to park sites is restricted for those without transportation, especially youth and seniors. The Phase 1 Report, Chapter 6, *Addressing the Needs of Youth*, touched on the issue of recreational opportunities in the corridor. That report lists some of the youth services and programs sponsored by DRP and by other social service organizations. Privately-sponsored and commercial recreational opportunities such as Rounding Third and the Volleyball House are also available in the corridor. Residents would like more recreation areas, including commercial recreation facilities, to better serve all corridor residents. The public, private and nonprofit sectors can all play a role in meeting the recreational needs of the corridor's citizens.

The Comprehensive Recreation, Parks and Open Space Plan is scheduled to be updated in 2003, although the Maryland General Assembly may postpone

Park Acquisition and Development Plans

Troy Park

- DRP is pursuing additional land acquisition for Troy Park.
- A master plan will be developed for Troy Park with community input. A design effort for the park is currently scheduled for Fiscal Year (FY) 04.

North Laurel Park

- DRP is seeking additional acreage for North Laurel Park. Two acres were recently purchased and negotiations are continuing with adjacent lot owners.
- Development of a master plan is not scheduled to begin until FY06. The North Laurel Park site is entirely wooded and is in a high density residential area adjacent to Laurel Woods Elementary School. The surrounding community will assist in determining the most appropriate facilities. The North Laurel Civic Association has lobbied for a community/recreation center.

High Ridge Park

 Design of this park is complete and DRP will request funding for construction in FY04. The design includes a tennis court, basketball court, picnic shelter and pathways. Construction and completion of this park will depend upon funding approval.

Potential Future Parks

 DRP recognizes the need for parks near residents and recommends Elkridge, Lennox Park and Jessup as study areas for future community parks. this update until 2004. This update will provide residents with an opportunity to voice their support for continued green space acquisition, including additional parks and recreation facilities in the corridor. It is also important for residents to support ongoing funding requests for park planning and development.

POLICY AND PROGRAM RECOMMENDATIONS

Some specific recommendations discussed by the Task Force are listed below:

Watershed Management

Use watershed studies to document current watershed conditions, forecast future conditions, develop water resource and habitat goals, and select appropriate watershed protection and restoration tools.

Watershed Stewardship Programs

Place particular emphasis on community-based watershed programs to increase public understanding and promote individual actions to improve resource conditions.

• Stormwater Management Solutions

Work with the development community to develop innovative and creative solutions that better integrate stormwater management into overall site design, paying special attention to the unique needs of redevelopment sites.

Stormwater Management Incentives

In target areas, such as Corridor Activity Centers and Transit Oriented Development Districts where incentives to redevelopment are needed, identify opportunities for public sector projects and public-private partnerships for infrastructure improvements to address flooding, drainage and stormwater management.

Green Space

Continue green space acquisition to protect sensitive natural resources. Use the Comprehensive Recreation, Parks and Open Space Plan to identify needs for public parks and recreation facilities. Support funding requests for park planning and development. Encourage the development of commercial recreational opportunities to help meet community needs.

Next Steps

- DPZ, DPW and DRP will work together to identify funding sources and to seek funding for watershed initiatives, especially stream restoration and stormwater management, and for increased green space in the corridor.
- DPZ, DPW and DRP will partner with community-based groups and environmental organizations to conduct public outreach and education initiatives such as stream cleanups, storm drain stenciling and riparian buffer plantings.

Impervious Cover Assessment for Route 1 Corridor Subwatersheds

No. *	Subwatershed Name	Watershed Name	Existing % Imperv.	Existing Category	Future % Imperv.	Future Category	Change % Imperv.
1	Rockburn Branch**	Patapsco River	9.9	Sensitive	11.9	Impacted	2.0
2	Elkridge	Deep Run	19.2	Impacted	23.2	Impacted	4.0
3	Deep Run Tributaries	Deep Run	22.2	Impacted	31.2	Non- supporting	9.0
4	Deep Run on County Line***	Deep Run	2.2	Sensitive	2.2	Sensitive	0.0
5	Lower Deep Run	Deep Run	28.2	Non- supporting	37.0	Non- supporting	8.8
6	Lower Dorsey Run	Dorsey Run	35.3	Non- supporting	41.5	Non- supporting	6.2
7	Gateway Tributary	Dorsey Run	17.6	Impacted	25.0	Impacted	7.4
8	Guilford Branch	Little Patuxent River	24.8	Impacted	29.6	Non- supporting	4.8
9	Junction Industrial Park Tributary	Little Patuxent River	36.6	Non- supporting	36.7	Non- supporting	0.1
10	Little Patuxent below Lake Elkhorn	Little Patuxent River	32.5	Non- supporting	32.8	Non- supporting	0.3
11	Middle Patuxent in Gorman Area**	Middle Patuxent River	13.3	Impacted	23.1	Impacted	9.8
12	Lower Hammond Branch	Hammond Branch	23.7	Impacted	39.3	Non- supporting	15.6
13	North Laurel	Patuxent River	24.2	Impacted	30.8	Non- supporting	6.6

Source: Howard County Department of Public Works, 2001.

^{*} Subwatersheds are numbered from north to south.

^{**} Only a small portion of this subwatershed lies within the Route 1 corridor.

^{***} This subwatershed is only 23 acres, the smallest in the County, and is predominantly State parkland.

FOSTERING COMMUNITY WELL-BEING

Enhancing Health and Human Services

Revitalization of the corridor is not limited to just physical improvements, but also must include social improvements. According to the 2002 Health and Human Services Study, both residents and health and human service providers in the County generally agree that existing services in the corridor are not adequate to meet the residents' needs. A high quality of life is also a major factor in attracting and keeping businesses in an area. Strategies for enhancing the social well-being of the corridor's residents must be addressed if community revitalization is to be achieved.

INTRODUCTION

The General Plan 2000 calls for the development of a County-wide Comprehensive Health and Human Services Plan. The plan's development began in spring 2001 when the County received a \$150,000 grant from the Horizon Foundation for a study to examine how well the County's health and human services delivery system is meeting the needs of Howard County citizens. The County hired a consultant to conduct a health and human services (HHS) study that would identify gaps in existing services and recognize barriers to services used. Two groups provide review and input for the study. An Oversight Group includes representatives from the Departments of Planning and Zoning (DPZ), Health and Citizen Services, the Horizon Foundation and the Board of Education. Also, a 21-person Advisory Committee appointed by the County Executive represents diverse health and human service organizations. When completed, the study will be available from DPZ.



The Phase 1 Report for the Route 1 Corridor Revitalization Study addressed the needs of youth. A Health and Human Services Study, funded by the Horizon Foundation, enabled the Phase 2 Report to consider the full range of social service needs in the corridor.

HHS STUDY PHASING AND METHODOLOGY

Part 1 of the HHS study identified service gaps and access barriers County-wide and for four subareas: Columbia, Ellicott City, the Route 1-Hammond area and Western Howard County. Part 1 work included a review of prior studies, a telephone survey of 1,200 households on actual service usage and their perceptions of barriers to greater service use, and interviews with 43 service providers who represent a broad cross-section of service types, client populations and delivery approaches. More than a third (450) of the households in the telephone survey were in the Route 1 corridor. The service providers included Howard County government agencies, nonprofit organizations, faith-based organizations, for-profit health care organizations and others.

In Part 2 of the study the consultants concentrated on the needs of the Route 1-Hammond area residents. This area was chosen because of its demographic diversity, limited availability of service providers and limited public transportation to services elsewhere. Part 2 evaluated options for addressing service problems, including how barriers to use of existing services elsewhere can be overcome, and diverse means of bringing needed services to the area. Preliminary recommendations have been considered by the Task Force. The Part 2 re-



The Savage multi-purpose center provides community-based access to health and human services.

HHS Study Findings Route 1-Hammond Area

Area Demographics

- The largest percentage of household incomes under \$40,000.
- The highest percentage of households where Spanish is spoken.
- A high percentage of single person households and households with at least one resident aged 18 or younger.

Health Services

- The least likely to access dental and vision care.
- The rate of dental and orthodontic care use is only 67%, 8% lower than the County average and almost 15% below that of Ellicott City.
- A rate of using skilled nursing services that is twice the rate of Ellicott City and Western Howard County.
- A higher utilization rate for emergency room services.

Continued in box on next page...

port, which will detail the final recommended immediate and longer term strategies for enhancing health and human services for the corridor, will be completed by the end of summer 2002.

PART 1 REPORT FINDINGS

General Findings

Overall, Howard County enjoys a well-developed, active network of health and human service providers, but a number of disparities exist in the availability and use of specific health and human services. Use of services varies based on income level, insurance status, geographic area of residence and age. Other factors such as transportation, language skills and consumer awareness also affect people's use of services.

The greatest variations in service use appear to be most closely associated with household income. County residents with an annual household income under \$40,000 reported using health services less frequently. The greatest needs were identified for residents with incomes between \$20,000 and \$39,999. These residents are least likely to have health insurance, since residents with incomes under \$20,000 are usually eligible for Federal or State medical assistance.

Over 97% of Howard County households reported having some form of health insurance, although other surveys have indicated lower rates of insurance coverage. Vision and dental care were the health services most frequently identified as having barriers, and it appears that inadequate insurance coverage plays a part in this.

While cost can be a barrier to obtaining health services, most human services are provided for free or for a nominal charge. This eliminates a cost barrier for consumers but creates a funding challenge for human service providers. Low-income residents use some human services at higher rates than does the rest of the population. These services include financial aid, emergency fuel, food and food stamps, utility services, legal aid, immigration services, youth mentoring and transportation services.

Geographically, service providers are concentrated in Columbia and Ellicott City. Most survey respondents, however, did not view transportation as a barrier to getting services; nearly 97% use their own car to get to health and human services. Nevertheless, lack of transportation is persistently cited as a problem by Howard County health and human service providers. Providers that offer transportation incur large costs, inhibiting their ability to provide their principal services. Due to the concentration of service providers in Columbia and Ellicott City, residents without cars in the Route 1 corridor are likely to experience transportation difficulties when accessing services.

Previous studies and provider interviews indicated that the most significant gaps in human service programs are for substance abuse services, mental health services and affordable, diverse child care. The lack of affordable housing is another frequently cited problem. The high cost of housing impacts the human service system because it is a financial drain for both consumers and for organizations that provide housing programs.

In addition to service gaps, providers identified several problems that constrain their ability to deliver services. Increased public awareness of available services is needed, especially for non-English speaking residents. Making residents aware of available programs is difficult because many nonprofit agencies do not have adequate marketing budgets. Providers also believe that better case management is needed in order to direct clients to other available services and to ensure coordination among service providers. Limited budgets and staff inhibit the abilities of many agencies to offer or expand case management services.

Findings for the Route 1 Area

Because the telephone survey was based on zip codes, the study area extended beyond the limits of the Route 1 corridor. The northeastern area included a portion of Elkridge west of I-95. The southeast study area included the Hammond and Scaggsville communities. Survey responses from the Hammond area were also grouped with the Route 1 corridor because of their similar orientation to services in Laurel. However, the Hammond area's demographic profile is more affluent and less diverse than that of the Route 1 corridor. The characterization of the study area, shown in the boxes on this page and the facing page, is derived from the telephone survey and from interviews with service providers. Comparisons are made between the Route 1-Hammond area and the County as a whole and between the Route 1-Hammond area and the three other study areas (Columbia, Ellicott City and Western Howard County).

PART 2 SUMMARY

The County's consultant is currently completing recommendations that will address needs in the corridor. These recommendations for potential strategies will identify immediate and long-term actions. These recommendations will be presented to the County Executive and the Horizon Foundation for their consideration. The proposed short-term strategies will focus on improving awareness and utilization of existing services, as well as testing pilot programs for bringing services into the corridor using existing facilities. The private sector can be encouraged to help address gaps in service. Commercial brokers or developers can help promote sites within the corridor to private medical and dental practices that are interested in expanding into the area. For those providers already located in the corridor, the expansion of marketing and outreach efforts can strengthen their businesses.

Based on evaluation of data collected from the pilot programs and from implementation of other short-term strategies, the long-term strategies will focus on establishing more permanent service delivery programs within the Route 1 corridor. The potential for two community centers, in Elkridge and the Southeast, are being considered. Improving public transportation to access community based services will also be part of the long-term strategy.

POLICY AND PROGRAM RECOMMENDATIONS

Some specific recommendations discussed by the Task Force are listed in the following paragraphs:

Pilot Programs

Initiate pilot projects, sponsored by the County and other service providers, to address service gaps and barriers. Determine which programs have the greatest demand and which will best address the needs of the residents. Use information gained from the pilot projects to help determine appropriate long-term strategies and to provide justification for future funding requests. Locate pilot projects in leased space or share space in existing public buildings such as libraries or schools.

HHS Study Findings Route 1-Hammond Area

Continued from box on previous page...

Human Services

- The limited availability of childcare is perceived as a weakness.
- A more frequent use of human services such as transportation, financial aid, emergency assistance and legal aid.
- The highest utilization rates for youth and adolescent mentoring services.

Access

- The highest rate of leaving the County for services, particularly for doctor's visits, in-patient care, dental and vision care, immunizations and pediatrician visits.
- The least likely to seek in-County health services.
- The most likely to be without health insurance.
- The highest percentage of children covered by Maryland's Children's Health Insurance Program and the highest percentage of people covered by Medicaid.
- The lowest reported rate of using their own vehicles to get to health and human services.

Next Steps

- DPZ will work with the Department of Citizen Services and the Health Department to identify and assist service providers that are interested in extending services to help evaluate the success of pilot programs and to determine whether community centers to accommodate successful programs are justified.
- Task Force members will help identify real estate brokers who can work with medical and dental providers who want to expand or locate in the corridor.

• Interjurisdictional Solutions

Explore available funding to optimize regional bi-county and tri-county solutions that provide services across County boundaries.

• Alternative and Creative Solutions

Research "best business practices" to identify options for efficient delivery of services. Consider mobile units that offer dental or preventative health care to residents without adequate insurance coverage. Consider soliciting in-kind donations (space, office supplies and machines, furniture) from businesses. Determine if appropriate office space for private medical and dental services is available or would have to be developed in the corridor.

• Child Care Issues

Investigate child care issues to understand the availability and affordability of licensed care, to explore options for expanding and subsidizing care, and to identify incentives for workplace day care.

Transportation

Use pilot projects to determine if it is more efficient to transport people to central locations or to reduce transportation costs by decentralizing services.

Outreach and Education

Identify cost-effective marketing and cross-referral strategies to assist health and human service providers that have a limited budget for outreach and education. Use community liaison staff to reach target populations.

Future Community Centers

If the pilot programs document a need, consider establishing one or more community centers that would offer health and human services and also possibly other nonprofit programs, recreational programs and social activities.



Taking the Next Steps

Lach chapter in the Phase 1 and Phase 2 Reports closed with a list of policy and program recommendations. A box entitled Next Steps accompanied the policy and program recommendations and highlighted the actions that citizens and government must take toward implementing those recommendations. The Next Steps listed in the previous four chapters of this report are seen as the more immediate actions that should be taken at the conclusion of Phase 2 of the study. These Next Steps for Phase 2 are listed below, along with certain tasks that were priority implementation actions for the Phase 1 study. Chapter 1 of this report described many Phase 1 priority implementation actions that have been initiated or completed. The recommendations from the Phase 1 items listed below remain relevant but have not yet been carried out.

IMPLEMENTING NEXT STEPS

As in the Phase 1 summary chapter, this summary organizes the Next Steps into a comprehensive strategy, rather than separating them into the four issues described in the previous chapters. Each of the Next Steps includes suggestions on who will participate in the work and what critical actions must be taken to ensure success. The tasks are organized along three key threads: priority projects, partnerships and funding.

PRIORITY PROJECTS

The Task Force members, citizens, elected officials and County staff who have participated in the Route 1 revitalization effort are eager to see results from their work. But many projects for the corridor demand resources that the County lacks or that will take time to amass. Thus, the implementation strategy begins by establishing priority projects. These projects have been identified as priorities for a number of different reasons: because they are of primary importance and must be tackled if the revitalization is to succeed; because they are relatively easy to accomplish, with funding or support already in place; or because they provide small first steps that will set the stage for later actions that are more comprehensive or expensive.

Many priority projects are associated with physical improvements to the transportation network. The Route 1 right-of-way is under Maryland State Highway Administration's (SHA) jurisdiction. Although the County works with SHA to support and advocate for Route 1 projects and improvements, ultimately SHA makes the decisions. Likewise, the Maryland Transit Administration (MTA) is responsible for most of the public transportation facilities.

Planning for the corridor does not end with this study; it will be a continuing process that will address issues of community conservation and enhancement for neighborhoods throughout the corridor. The comprehensive zoning process expected to begin in 2003 will be a major instrument for advancing the goals of the

Priority Project Goals

- · Establish priority projects.
- Select those projects that are appropriate for short-term and long-range implementation.
- Show tangible evidence of progress in corridor revitalization.
- Propose zoning changes that will further the goals of the study and garner public support for those changes.



Many positive steps toward revitalization have already begun in the corridor, but achieving a new vision for the corridor will depend on implementing priority projects, working in partnership and obtaining public sector funding and private sector investment.

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Boulevards with street trees, sidewalks and medians are among the desired physical improvements to the corridor.



Planning for corridor enhancement will continue with community studies for neighborhoods such as Cedar-Villa Heights.

study. Zoning is the most powerful tool County government has for implementing change in land use. Because a successful zoning process needs input from citizens, all those who are interested in a revitalized corridor are encouraged to participate in this process and support proposals that would aid in reaching this goal.

Next Steps to achieve the priority project goals are classified below as physical improvements or community planning and comprehensive zoning:

Physical Improvements

- DPZ, DPW and SHA will work together on a strategy to implement the proposed roadway and pedestrian improvement projects shown in the tables at the end of Chapter 3 (*Phase 2, Improving Transportation*).
- The County will request the SHA to undertake major planning studies and comprehensive traffic safety studies for Route 1 locations experiencing significant congestion and safety problems (*Phase 1 and Phase 2, Improving Transportation*).
- DPZ will coordinate with SHA's local office to identify minor projects that SHA can undertake, where possible, to improve traffic flow (*Phase 1, Improving Transportation*).
- The County will continue to lobby for increased service frequency and reliability on the existing MARC Camden line (Phase 2, Improving Transportation).

Community Planning and Comprehensive Zoning

- DPZ will initiate a community conservation and enhancement study for the community of Cedar-Villa Heights that will address the infill development potential, the need for sidewalks and storm drains, and the potential for future designation of a Corridor Activity Center in the area. This will serve as a pilot project that may be adapted to other communities in the corridor (*Phase 2, En*visioning the Future).
- On behalf of the County Administration, DPZ will develop draft text for three new zoning districts and zoning maps depicting proposed locations for changes in zoning. These proposed text amendments and map amendments will be presented in early 2003 for review and approval as part of the comprehensive zoning process (*Phase 2, Envisioning the Future*).
- DPZ will develop design guidelines and graphic illustrations of the proposed new zoning districts to help residents and property owners better understand the proposed changes and to convey the County's expectations for site, streetscape and building design (*Phase 2, Envisioning the Future*).

Partnership Goals

- Build a consortium of involved individuals, community organizations, businesses, nonprofit organizations, and civic and faith groups who are willing to support the revitalization effort.
- Mobilize interested individuals and groups.

PARTNERSHIPS

For a project this comprehensive and an area this large, many people must take responsibility for program implementation. It will take a commitment from all branches and all levels of government. Leadership must come from elected officials who can mobilize the various departments within government so all understand the aims of the program and are committed to meeting program goals. This may mean reevaluating policies that are impediments to success and it may mean developing creative new approaches to getting quick results with limited resources. Public-private partnerships are essential. Private businesses and nonprofit organizations must also be willing to dedicate resources to the effort, including funds, time and materials.

The State will be an important partner in this revitalization effort for two reasons. First, SHA owns the Route 1 right-of-way. Improving Route 1 transportation functions and appearance are central to this entire effort; thus, SHA is a key partner with the ability to fund and build the much needed roadway improvements called for throughout this report. Second, by naming the corridor a "Designated Neighborhood," the State granted it special status for funding and technical assistance. Fortunately, this corridor revitalization initiative is an ideal example of what the State is trying to achieve with its Smart Growth and Neighborhood Conservation efforts.

Partnerships can be flexible and loosely organized, getting together to quickly meet a common goal or solve an immediate problem. Sometimes a more formal organization is needed that can serve as an umbrella for multiple actions throughout the corridor. A formal organization would organize around a shared vision and would develop long-term goals.

Clearly, the importance of continued active and vocal citizen support for revitalization projects is critical. Policy-makers who decide the allocation of resources want to be assured that priority projects have broad support. This is especially true for those projects that must be approved by the County's elected officials. State and Federal grant programs require these assurances as well, often in the form of citizen participation and in-kind contributions from local jurisdictions.

Next Steps to achieve the partnership goals are:

- DPZ will encourage property owners, residents, the business community and all interested parties to support the comprehensive zoning process to achieve the desired change for their properties (*Phase 2, Envisioning the Future*).
- DPZ, DPW and DRP will partner with community-based groups and environmental organizations to conduct public outreach and education initiatives such as stream cleanups, storm drain stenciling and riparian buffer plantings (Phase 2, Addressing Environmental Quality).
- DPZ will work with the Department of Citizen Services and the Health Department to identify and assist service providers that are interested in extending services, to help evaluate the success of pilot programs and to determine whether community centers to accommodate successful programs are justified (Phase 2, Fostering Community Well-Being).
- Task Force members will help identify real estate brokers who can work with medical and dental providers who want to expand or locate in the corridor (*Phase 2, Fostering Community Well-Being*).
- The Task Force, working with DPZ, the Economic Development Authority and the Chamber of Commerce, will identify a group or organization that could lead and coordinate a comprehensive marketing campaign for the corridor. That group or organization could then seek funding sources for a comprehensive promotional and marketing campaign (*Phase 1, Promoting the Positive*).
- DPZ and the Task Force will work with the school system to identify potential
 partnerships with the business community to sponsor or fund activities and
 programs that will assist schools in the corridor (*Phase 1, Addressing the Needs of Youth*).

FUNDING

All policy and program recommendations for revitalizing the Route 1 corridor have some costs associated with them. Much of the funding for corridor revital-



The Route 1 Corridor Clean-Up Campaign is an example of citizens, businesses and government partnering to improve the corridor.



Corridor community members and business representatives have been active participants in the planning process. Continued support is essential for successful implementation of report recommendations.

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Funding Goals

- · Identify funding sources.
- Educate individuals, businesses and community organizations that may be eligible to receive funding.
- Solicit needed funds.
- Apply for grants.



Initial Federal funding for Route 1 revitalization was sponsored by Senators Sarbanes and Mikulski, seen here with County Executive Robey, County Councilman Guy Guzzone and members of the Task Force.

ization will come from private sector investment to renovate or redevelop underutilized properties. Two local banks, Citizens National Bank and Allfirst Financial, Inc., have funded a discounted loan program to finance corridor revitalization. This \$25 million program, managed by the County's Economic Development Authority, is an important example of private sector investment in the corridor. Funds and in-kind contributions of labor and materials may also sometimes be donated by individuals, businesses or organizations that believe in the mission of the revitalization initiative.

Funding for infrastructure improvement, public facilities and services will, however, rely primarily on government funding. Howard County Government provides funds through the Capital and Operating Budgets, which are reviewed through a public process on an annual cycle. The schedule for obtaining needed funds for agreed-upon priority projects will depend on the funds available each year in the Capital and/or Operating Budget. Competing priorities for schools and other County facilities will affect the funding that will be available for revitalization priorities. Funds are needed not only for physical improvements, but also for operations and maintenance costs.

Next Steps to achieve the funding goals are:

- DPZ and DPW will seek funding for projects that add sidewalks and streetscape amenities, to encourage pedestrian and transit use within the corridor (*Phase 2, Improving Transportation*).
- DPZ, DPW and DRP will work together to identify funding sources and to seek funding for watershed initiatives, especially stream restoration and stormwater management, and for increased green space in the corridor (*Phase 2, Addressing Environmental Quality*).
- DPZ will develop a roster of grant opportunities, then work with or educate agencies, nonprofit groups, business associations or civic associations about funding opportunities (*Phase 1, Promoting the Positive*).

Never doubt that a small, thoughtful group of concerned citizens can change the world. Indeed it is the only thing that ever has.

Margaret Mead



For information or alternative formats contact:

DEPARTMENT OF PLANNING AND ZONING

3430 Courthouse Drive Ellicott City, Maryland 21043 410-313-2350 www.co.ho.md.us