

Chapter 8: Implementation of the Master Plan

Introduction

This chapter describes the public and private actions—the implementation projects—that will be needed to implement the Master Plan over the next 20 years. This chapter provides guidance on the timing of transportation and other infrastructure improvements. In addition, this chapter recommends Priority Areas where the County needs to focus its funds on provision of infrastructure to support existing and proposed development. The chapter ends with the Implementation Table. This table lists the implementation projects in the approximate order in which they are expected to begin, along with estimated costs, proposed funding sources, responsible parties, issues to be addressed, and milestones against which progress will be measured. The Implementation Table represents, in a nutshell, what will be needed to create the sustainable, multimodal, mixed use urban environment—the desired urban form—for the Northern Development Areas.

The implementation projects are grouped into four categories: Transportation, Land Use and Development, Community Facilities and Services, and Parks and Green Systems. The Transportation category contains the largest number of projects and requires the greatest amount of funding. The recommended improvements will support the future growth anticipated in the Master Plan. While funding for these improvements might require longer time periods than anticipated in the Master Plan, the Plan establishes how these improvements should be provided concurrent with new development under the proposed land uses.

The implementation projects are scheduled to begin throughout the 20-year implementation timeframe. There are several reasons for this spacing: first, the projects located in the recommended Priority Areas should begin first. Many of these projects are needed now to serve existing development and to address the backlog of infrastructure needs. Other projects are not expected to be necessary until further development takes place, and some projects are dependent on completion of an earlier one. Many of the projects are also dependent on funding that has not been identified or may not be available for several years. Further, other areas in the County have infrastructure needs that must be met and may be more immediate than some of the needs in the Places29 area. Even without funding for all of the implementation projects, this Master Plan is valuable because it sets forth the community's vision for the area and demonstrates how development can be designed to support the principles of the Neighborhood Model.

The implementation projects and the priorities assigned to them will be reexamined every five years when the Master Plan is reviewed and updated.

Transportation Projects

The recommended transportation projects form a multimodal transportation network that is designed to address both existing and future transportation demands. These demands begin with a number of existing needs that have not yet been addressed. The transportation improvements recommended to begin in the first ten years are intended to address these existing needs. Then, as the Places29 area and the surrounding region continue to grow and transportation needs increase,

all of these improvements are ultimately expected to be necessary. In other words, the recommended transportation projects form a unified set of improvements, not a list of choices.

It is essential to recognize that many of these transportation improvements are needed regardless of whether the County adopts this Master Plan. One reason for this need is that many properties both inside and outside the Places29 area are already zoned and ready to develop, so the potential for additional growth exists even without the Master Plan. However, the Future Land Use Plan is designed to complement the transportation network; they promote a form of development that can reduce future transportation demands. Without this form of development, future transportation demands are expected to be even higher than projected.

This Plan recognizes that the transportation network in the Places29 area serves the needs of both regional and local traffic. US 29 functions as a National Highway of Significance; it serves traffic that originates outside the Places29 area and whose destinations are also outside the area. Some of the transportation improvements are necessary to serve this regional need as well as local growth. About two-thirds of the trips on US 29 are local trips that begin and end in the Places29 area. Some of the transportation improvements will give these local drivers alternate routes and/or open up planned areas for development and redevelopment.

The proposed design for US 29 allows for the US 29 improvements to be implemented as a series of independent roadway projects over the 20-year implementation timeframe. The improvements are multimodal; they include transit as an integral part of the transportation system and transit-friendly design to complement proposed transit routes. Further, pedestrian and bicycle improvements are planned throughout the Places29 area. Many projects can be implemented as redevelopment takes place. The design will also provide alternatives for existing intersection movements during the construction of connecting roads for new, grade-separated intersections.

Prior to construction of any improvements to US 29, each improvement will require preliminary and final engineering design, programming of funding and potential right-of-way acquisition. The timelines for these activities will vary depending upon the complexity of the roadway elements. A timeline provided by VDOT shows that one of the grade-separated intersections could take 8 to 12 years to complete. Projects may overlap; one improvement may be under construction as planning begins for another.

While VDOT is the lead agency for improvements to primary and secondary system roadways, the County plays a vital land use role by coordinating how private development occurs in relation to the roadway improvements. The County also works with VDOT in the design of the improvements and by participating in regional project priority programming through the Metropolitan Planning Organization (MPO).

As parallel routes are implemented, the County and VDOT will work with businesses and property owners along US 29 to implement the access management program. This program is described in more detail in US 29 North Corridor Transportation Study Technical Memo 7.

A Note about the “Western Bypass.” The Western Bypass is not recommended in this Master Plan because the US 29 North Corridor Transportation Study has demonstrated that the recommended set of transportation improvements noted herein would be a more effective and efficient means to address existing and future transportation demands during the 20-year

implementation timeframe. While the Western Bypass would have served most regional traffic (the 12% of drivers moving through the Places29 area without stopping), the Bypass would not have helped local traffic (64%) or served many of the subregional vehicle trips (24%). An alternative route that would have functioned as a bypass to the west of US 29 was considered during the early phases of the Places29 transportation modeling, but such an alternative route would have been significantly more expensive and, most importantly, would not have served more than about 12 – 20% of the traffic on US 29. Thus, most of the improvements in the transportation plan would be needed regardless of whether a bypass was built.

Nothing in this Master Plan would preclude a Western Bypass if it became an appropriate improvement at some time after the 20-year implementation timeframe.

Land Use & Development Projects

The recommended land use and development projects are designed to create the form of compact, pedestrian-friendly urban development envisioned in the County's Neighborhood Model. These projects include establishment of a Community Advisory Council to assist in implementation of the Plan.

The Future Land Use Map in Chapter 4 governs land use and development decisionmaking in the Northern Development Areas. As each zoning map amendment, special use permit, and site plan is reviewed for approval, the recommendations in this Master Plan will be applied. As such, there are fewer individual projects listed in the Land Use & Development Projects sections of the Implementation Table, than there are, for example, under Transportation. Instead, as developers bring forward new proposals, the proposed developments will be evaluated according to the Future Land Use Map and Tables, Parks & Green Systems Map, the Neighborhood Model Principles, and other parts of the Comprehensive Plan.

Community Facilities & Services Projects

Existing and proposed community facilities and services are presented in detail in Chapter 6. The planning for and operation of each facility and service is the responsibility of a County department or regional agency. The projects needed to support the existing and future development in this area are identified in this Plan. Recommendations included in master plans prepared by other County departments and agencies have been included as projects in this Plan.

Parks & Green Systems Projects

The Northern Development Area's existing and proposed parks, trails, greenways, and open spaces are shown on the Parks & Green Systems Map in Chapter 4. In some cases, the proposed open space needs will be addressed as new developments are planned and constructed. In others, the County will provide open spaces as the need for them arises and funds are available.

Implementation Priorities

This Master Plan recommends an extensive and interrelated series of implementation projects. Each of these projects is listed in the Implementation Table at the end of this chapter. To facilitate provision of these projects, priorities have been set in order to focus public efforts and limited

resources where they are most needed during the 20-year implementation timeframe. The priorities are set based on several factors, including:

- Existing facility, service, and infrastructure needs that are driven by existing development. There is a backlog of transportation, infrastructure, and community facilities and services that is already needed to serve the community as it exists today.
- Regional transportation needs are more acute in this part of the County than in any other area.
- Priority should be given to investments in the transportation network, community facilities and services, and parks and green systems that support the areas where developments have been approved, but not yet built. Most of the population and employment growth the County expects during the next ten years can be accommodated in developments that have already been approved.
- Improvements needed to support further development outside of the mapped Priority Areas and corridors. Relative to the three bullets above, this is the lowest priority for investment.

Many of the approved developments include transportation improvements or other facilities that will be constructed by the developer. The precise timing and phasing of development will be determined by developers and property owners based on market conditions, so; it is difficult for the County to know when some of the promised infrastructure will be completed.

The two Priorities recommended in this Plan are:

Priority 1: Transportation Improvements in the US 29 Corridor

The transportation network in the Northern Development Areas is intended to serve all users, from those making very local trips (e.g., from home to the grocery store a few blocks away) to those traveling long distances who simply pass through the Places29 area. The transportation network, in particular US 29, is already congested in some areas at certain times. Several road improvements have been proposed for years to address this congestion. The transportation network has been designated the first Priority to support the backlog of road improvements that are necessary to keep traffic moving (See Priority Area 1 Figure).

In most cases, construction of the network of roads parallel to US 29 depends largely on the timing of private development projects along the corridor. However, some segments of the parallel roadways are needed to provide alternate routes during construction of US 29 improvements. In these areas, portions of the parallel road network may need to be designed and constructed before private development takes place adjacent to US 29. Similarly, some portions of the parallel road network will extend the useful life of the existing US 29, so that large-scale roadway improvements can be deferred as far as possible into the future. The most critical transportation improvements for the US 29 corridor Priority Area are the following, which are not listed in any particular order (all are important):

1. **The improvements recommended in the 29H250 study and Hillsdale Drive Extended.** Construction of the segment of Hillsdale north of Hydraulic Road is needed to reduce the volume of turning traffic at the intersection of US 29 and Hydraulic Road.

[INSERT map of Priority Area 1]

This reduction will be of critical importance while the recommended grade-separated intersection is constructed at Hydraulic and US 29. While these improvements are in the City, they are essential to the function of the US 29 corridor and include:

- Improve the US29/250 Bypass interchange by adding a lane to the southbound to westbound onramp
 - Add an auxiliary lane on the 250 Bypass westerly to the Barracks Road interchange
 - The eight through lane plus turn lanes configuration of US 29 north of Hydraulic Road would be extended south to the 250 Bypass interchange
 - Increase parallel local roadway capacity by extending Hillsdale Drive from Greenbrier Road to Hydraulic Road and, ultimately, to Holiday Drive
 - Redesign the westbound 250 Bypass ramp to US 29 to connect to a realigned Holiday/Angus intersection
 - Change access at the Hydraulic Road and 250 Bypass intersection to provide right-in/right-out access on Rugby Road and Hydraulic Road
 - Reconstruct Hydraulic Road as a two-lane cross section with a landscaped median from the 250 Bypass to US 29 with roundabouts at intersections in place of traffic signals and stop signs.
2. **Berkmar Drive Extended**—the segment north of Hilton Heights Road to Towncenter Drive, including construction of the bridge over the South Fork of the Rivanna River, is needed to support the widening of US 29 north of Polo Grounds Road.
 3. **The grade-separated intersection at Rio Road and US 29**, including the ring roads that will connect US 29 with Rio Road and also serve development adjacent to them. These roads will be at grade level (not ramps or flyovers) and will double as neighborhood streets.
 4. **Widening US 29 to six lanes**—the segment of US 29 north of Polo Grounds Road up to Towncenter Drive will need to be widened before the segment of US 29 north of Airport Road. The timing of this widening will depend on the pace of development in Hollymead and Piney Mountain and when Berkmar Drive Extended is constructed.
 5. **Transit**—providing transit service will enable some drivers to use transit for some of their trips, thereby reducing the number of vehicle trips on network roads. It will also provide opportunities for transit-dependent people to reach additional destinations. Transit service should be expanded south of the South Fork of the Rivanna River as soon as possible after adoption of the Plan and established as soon as sufficient density is developed in areas north of the South Fork.

Priority 2: Areas for Redevelopment & Approved New Development

Priority 2 reflects the areas where new development has been approved and where redevelopment is encouraged. There are two distinct geographic areas. First, Priority Area 2 includes the portions of Neighborhood 1 and Neighborhood 2 shown in the Priority Area 2 South Figure. This area was selected because a Small Area Plan will be developed for the area around the intersection of Rio Road and US 29. Much of the existing commercial development in this area may be ready for redevelopment, so the focus of public investment here will be on revitalizing, expanding, and improving the existing infrastructure to support redevelopment during the first ten years of Plan implementation.

Priority 2 also includes the portion of the Hollymead Community shown in the Priority Area 2 North Figure. This part of the Hollymead Community has been approved for development and construction is underway, so this area was selected to focus public infrastructure investment to support this approved development. A large part of this area will also be included in the Airport Road Corridor Small Area Plan.

Private Development & Public Investments in Non-Priority Areas

While decisions on private development proposals (rezonings and special use permits) and public investments should not be based solely on these Priorities, decisions on development proposals should be made with an understanding of where public investments are focused. Focusing public investments creates efficiencies and ensures that infrastructure is in place when it is needed. County land use decisions should be consistent with the Priorities established in this Plan. If the infrastructure needed to support a proposed development outside the Priority Areas is not in place, the proposed development should not be approved. For those implementation projects that are already needed to serve existing and/or approved development, the “Milestones” column in the Implementation Table includes a notation to that effect.

When a development proposal is evaluated, any public infrastructure that would be adversely affected by the proposal or is already in a substandard condition will be identified. The existing condition of and any adverse affects on the public infrastructure from a development proposal should be important factors in considering the suitability of the property for the proposed use. The transportation and other infrastructure requirements of the community, including the timing of improvements should also be considered during evaluation of development proposals. The County will consider the following:

- a. Existing facilities
- b. Facilities included in the capital improvements program
- c. The ability of the County to finance facilities under its fiscal policies
- d. Service level standards established by approved facility master plans or service plans, and the effect of existing and approved development, and the proposed development, on those standards
- e. Service levels on the existing transportation system; the effect of existing and approved development and the proposed development of those service levels and the effect of proposed roads which are funded for construction

[INSERT map of Priority Area 2 South]

[INSERT map of Priority Area 2 North]

- f. Commitments to phase the proposed development to the availability of adequate services and facilities
- g. Other mechanisms or analyses as the County may employ that measure the adequacy of such services and facilities for various areas or that measure the County's ability to establish adequate services and facilities.

The County wants to encourage infill development and redevelopment in appropriate locations, as well as affordable housing, neighborhood-serving retail, light industry, and other land uses. As one of the first implementation projects under this Master Plan, County staff will develop more detailed guidance in the form of a future Comprehensive Plan Amendment about the County's expectations for proposed developments outside of the Priority Areas.

Funding the Implementation Projects

The Places29 Master Plan is a vision plan—it is based on what the community has identified as desirable in the area where its members live and work. To work towards that vision and address the needs of existing and future development during the next 20 years, the Plan recommends an ambitious program of Transportation, Land Use & Development, Community Facilities & Services, and Parks & Green Systems implementation projects. Finding the means to pay for these projects will be challenging. Monies to fund the improvements are expected from various sources including federal, state, and local dollars. Public as well as private investment will be used in construction of local projects.

Types of Costs and Source of Estimates

The assumptions and methodologies used to estimate the costs of specific projects are described here, along with who is responsible for the estimates. The cost estimates are listed in the Implementation Table, along with the party or parties responsible for funding the projects. The costs are divided into three components: capital, program and planning, and operating costs.

Capital Costs

Generally, capital costs for transportation, community facilities, and other infrastructure elements are those costs required to build a project or improve an existing facility. They include planning, design, engineering, land/right-of-way acquisition, utility relocation, site preparation, and construction.

For Places29, costs for design and construction of the transportation improvements were prepared based on the roadway network shown in Chapter 4, using preliminary or planning estimate cost data provided by the Virginia Department of Transportation (VDOT) and escalated to 2008 dollars using a growth factor provided by VDOT. These costs are listed in the Implementation Table. It is important to note that these costs for Places29 projects do **not** include land/right-of-way acquisition and utility costs. A table showing a summary of construction costs and a total with right-of-way and utilities for the entire US 29 North Corridor is provided in the US 29 North Corridor Transportation Study Technical Memo 11.

In addition to the construction costs, there will also be regional capital and operating costs to expand the transit system to achieve the levels of transit use envisioned for the Places29 area. Some of these costs have been estimated by the consultants and included in the Implementation

Table. Estimates for others transit-related costs will be prepared as the system is designed and equipment chosen.

Capital costs for the community facilities described in Chapter 6 were prepared by County staff.

For both transportation improvements and other infrastructure and community facility costs, the County expects that new development will pay at least a portion of the capital cost.

Program and Planning Costs

Program and planning costs are those that will be necessary for ongoing planning efforts, such as the Small Area Plans recommended for the Rio Road/US 29 area and the Airport Road Corridor. These costs include staff time and, possibly, consultants for all or part of the planning process. The costs also include an estimate for the County's public participation program. They should be considered the minimum cost since the scope of work for each Small Area Plan has not been prepared. Staff has also not yet coordinated efforts with VDOT, which will likely be handled through a memorandum of understanding or similar instrument.

There is also an ongoing cost for County staff to implement and monitor this Master Plan.

Planning and design costs for transportation improvements are included in the capital costs described above, except for the transit system. These costs for transit are not yet known since they are dependent on the routes chosen and the types of vehicles used.

Operating Costs

The ongoing costs of utilities, maintenance, and other operational costs for each transportation improvement, other infrastructure improvement, and community facility need to be calculated and incorporated in the overall cost of the project. These costs will be determined when an improvement or facility is designed, so they are not included in the cost estimates listed in the Implementation Table.

For some infrastructure improvements, such as libraries and fire stations, the County will also face the cost of staffing the facilities once they have been constructed. Staffing costs will also need to be considered as part of the operating costs of the facility.

Further, it is possible that some private entities, such as homeowners associations or property owners, will be responsible for the operating costs of some of the facilities.

Funding Strategies

In order to implement the recommendations in this Plan, the County will need to coordinate funding for ongoing planning, capital investment, operations and maintenance, and monitoring costs from a broad range of public and private sources. This section describes some of the funding strategies that can be used to fund the recommended projects.

In addition to the information provided below, more detail regarding transportation funding options can be found in the Thomas Jefferson Planning District's report, *Transportation Funding Options*, dated October 10, 2005. The full report is available on the TJPDC's website.

Prioritize Public Funding to Priority Areas

In keeping with County policy, this Master Plan identifies two Priorities (transportation improvements in the US 29 corridor and areas identified for redevelopment and new development) where public funding for infrastructure development should be directed during implementation of this Plan. By focusing the limited public funds on these Priorities, the County can address the existing infrastructure backlog, provide infrastructure for approved (but not yet built) developments, and encourage redevelopment in areas where existing infrastructure may not meet the needs of additional density/intensity.

Development Approval Process

Private developers will continue to play the key role in building attractive and functional neighborhoods and mixed use centers through their own capital investment, while business, neighborhood, and homeowners' organizations will continue to play a role in operating and maintaining these elements. As part of a rezoning, it is expected that developers will provide proffers for offsite transportation or other infrastructure improvements to address impacts arising from the development. These improvements and the proffers related to them need to be in keeping with this plan.

Federal, State, and Local Dollars

The County's main funding source for implementation is the funds that are generated through the County's taxing authority. Priorities for expenditure of these funds for infrastructure and capital improvements are given in the County's Capital Improvements Program (CIP). Based on a five-year financial cycle, the CIP details the County's funding priorities, including funding level, timing, and sources associated with specific improvements. The programming of projects for the Northern Development Areas in the CIP should be based on the priority needs outlined in this Plan and the availability of funds.

The majority of transportation funds flow from the state through VDOT's Secondary (county), Urban (city), and Primary road funding programs. There is a recognition in the region, and throughout the country, that there is not enough funding available from the standard federal, state, and local sources to fund all of the region's multimodal transportation priorities. Since many of the region's high priority transportation corridors extend through the Places29 area, the County expects that significant amounts of federal and state funding will be necessary for the expansion and maintenance of US 29 and related regional elements of the transportation network. Still, the competitive nature of transportation funding at the state level will make it difficult to rely solely on standard funding sources to pay for the recommended transportation improvements. As part of the local funding, some combination of developer contributions of land and funding for construction will be needed.

The overall strategy for accommodating future traffic volumes on US 29 is a combination of improvements to US 29 *and* to the parallel and perpendicular road network. This combination of improvements provides for more uniform operating conditions on US 29. It provides a road network that allows the pattern of development to evolve in ways that are more supportive of US 29 as a part of the regional network, while providing for local trips on the parallel network. Under this strategy, improvements to some portions of the secondary road system would be equivalent to an improvement in the primary system. Accordingly, VDOT and the County need to maximize the ability to use state and federal primary system funds for improvements to network roads that

improve the function of US 29. This can best be achieved by demonstrating that the construction of off-US 29 network improvements has a direct relationship to access management improvements on US 29 and/or is part of the grade-separated intersections.

At the same time, the County needs to be prepared to apply for funding whenever new sources of federal or state funding become available.

The County will also continue to work with stakeholder agencies, organizations, and individuals to implement the Plan by pursuing grant funding from government agencies, foundations, and corporations, as well as through direct investments of labor and funding from individuals, such as trail construction and maintenance, and concepts like adopt-a-road or adopt-a-park programs that can reduce operations and maintenance costs.

Special Taxing Districts

There are several types of special taxing districts that may be established in Virginia. Several of these may be useful as a means to manage and fund infrastructure in the Places29 area. Use of one or more of these districts should be evaluated during the first five years of Plan implementation.

Community Development Authorities (Virginia Code § 15.2-5152 *et seq.*). A community development authority (“CDA”) may finance, fund, acquire, construct, equip, operate and maintain infrastructure improvements such as roads, bridges, parking facilities, curbs, gutters, sidewalks and traffic signals within or serving the district. A CDA is managed by a CDA board. A CDA has the power to issue revenue bonds, the power of eminent domain, and the power to fix, charge and collect rates, fees and charges for services. A CDA may also request annually that the locality levy and collect a special tax on taxable real property within the district. The maximum rate of this tax is \$0.25 per \$100 of assessed value unless all of the landowners within the district request a greater tax. A CDA would be created by an ordinance adopted by the Board of Supervisors. A CDA’s creation must be initiated by a petition from the owners of at least 51% of either the land area or the assessed value of land within the boundaries of the proposed district. The petition fixes the boundaries of the CDA, and describes the facilities and services proposed, the plan for providing the facilities and services, and the benefits that can be expected from providing the facilities and services.

Service Districts (Virginia Code § 15.2-2400 *et seq.*). Localities may create service districts to provide additional, more complete, or more timely governmental services than are desired in the locality or localities as a whole. These services include transportation and transportation services such as road construction and maintenance. A service district would be managed either by the Board of Supervisors or by a development board. Transportation improvements in a service district may be funded either from payments to the district by the County, by taxes levied by the County on property within the district, or from any other available source such as any person, authority, transportation district or state or federal agency. Unlike Community Development Authorities and Title 33.1 Transportation Districts, there is no maximum tax rate for a service district tax. A service district is created by an ordinance adopted by the Board that fixes the boundaries of the district, and describes the district’s purpose and the facilities and services proposed, the plan for providing the facilities and services, and the benefits that can be expected from providing the facilities and services.

Transportation Districts (Virginia Code § 15.2-4500 *et seq.*). The Transportation District Act of 1964 enables localities to jointly plan and development transportation systems to promote orderly growth and development through transportation districts, which are managed by a district commission. The district is enabled to construct and operate transportation facilities, which include both public highways and mass transit services. Transportation improvements in a transportation district may be funded by payments received from the County via contract, appropriations by the County to the district, loans and grants awarded to the district commission, the issuance of bonds or other interest bearing obligations by the district, and by taxes imposed by the district (e.g., motor vehicle fuel sales tax) if it is granted the taxing power by the General Assembly. Districts are established by one or more localities by an ordinance adopted by the governing body of each locality, which fixes the boundaries of the district.

Transportation Districts within the City of Charlottesville and the County of Albemarle (Virginia Code § 33.1-447 *et seq.*). In 2004, the City and the County were enabled to create a transportation district under Title 33.1 of the Virginia Code to construct, operate and acquire transportation improvements, including highways and related interchanges. These districts are managed by a district commission. Transportation improvements in a transportation district may be funded by advanced or matching funds from the City or the County that are not otherwise obligated, funds from any other source, or from property taxes levied and collected by the City and the County at the request of the district commission. The tax is a special improvements tax imposed on taxable real estate zoned for commercial or industrial uses or used for such purposes, as well as taxable leasehold interests. The maximum rate of this tax is \$0.25 per \$100 of assessed value. A transportation district is created by resolutions adopted by the City's and the County's governing bodies, but only upon receipt of a petition to each locality of the owners of at least 51% of either the land area or the assessed value of land, in each locality which is within the boundaries of the proposed district and is zoned or used for commercial or industrial uses. The petition fixes the boundaries of the district, describes the proposed transportation improvements, and proposes a plan for providing the improvements.

Partner with the City of Charlottesville and the University of Virginia

There are several opportunities for the County and the City of Charlottesville to partner in the funding of transportation and other improvements, particularly in the southern portion of the Places29 area where the two localities abut each other. Such a partnership could involve either shared funds from the two localities or a collaboration in the use of funds from another source. Prime examples of such a partnership include: the Meadow Creek Parkway, the interchange at US 29 and the 250 Bypass, the Hydraulic Road and US 29 intersection, portions of Rio Road, and Hillsdale Drive Extended. Other opportunities exist in the areas of public open spaces, trails, and stormwater and water quality preservation needs.

Developing robust transit service is one area where a partnership between the County and City is essential, especially considering the high level of capital improvements and operating costs that will be required to meet the recommendations in this Master Plan. This Plan recognizes that a regional transit authority (RTA) or similar management organization is needed.

“Nonstandard” Federal and State Funding Sources

There is a variety of federal and state funding sources that are currently available, and additional ones may become available during implementation of the Master Plan. The County will continue

to work with other stakeholders and federal and state agencies to make use of these funding sources, which include:

- **Base Realignment and Closure (BRAC) Assistance Funds:** Given the pending expansion of the National Ground Intelligence Center (NGIC) into a larger facility called the Rivanna Station Military Base, the County may apply for planning and capital grants to support needed transportation, school, housing, and other improvements necessary to serve the increase in population from the military base. Funds may also be available to support business and workforce development in connection with the base.
- **Brownfield Planning and Capital Grants and Loans:** Brownfields are lands whose redevelopment or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. The County and private land owners can compete for grant funding or loans from the federal Environmental Protection Agency (EPA) to support the planning for and actual reuse of brownfield properties. The Virginia Department of Environmental Quality (DEQ) also has a loan program to support the remediation of brownfield sites.
- **Virginia Clean Water Revolving Loan Fund (VCWRLF):** The Virginia DEQ has a revolving loan fund that supports the acquisition of title or other rights to property when this will protect or improve water quality and prevent pollution of state waters. These funds could be applied for in connection with the recommended open space system within the Places29 area.

Private Funding for Maintenance of the Public Realm

Currently, a variety of business organizations (e.g., business park owners and the UVA Research Park) and homeowners associations maintain privately owned open spaces, trails, recreational facilities, streetscapes, roads, and other elements of the public realm within their developments. The County may wish to work with future developments to continue this practice as a means to maintain these elements in future neighborhoods and mixed use centers.

Partners in Implementation

Many public agencies and private entities will be partners in the successful implementation of the Master Plan's recommendations for the Places29 area. Many of the implementation projects included in the Implementation Table will involve coordinated and joint efforts by the entities listed below:

- Albemarle County, both the local government and school divisions
- The Virginia Department of Transportation (VDOT)
- The Thomas Jefferson Planning District Commission (TJPDC) and the Metropolitan Planning Organization (MPO)
- The City of Charlottesville
- The Virginia Department of Rail & Public Transportation (VDRPT)

- The Virginia Economic Development Partnership (VEDP)
- The Virginia Housing Development Authority (VHDA) and the Virginia Department of Housing and Community Development (DHCD)
- The University of Virginia and the University of Virginia Foundation
- The Charlottesville-Albemarle Airport Authority
- Charlottesville Transit Service (CTS), JAUNT, and a potential Regional Transit Authority (RTA)
- Jefferson-Madison Regional Library
- Rivanna Water & Sewer Authority, Albemarle County Service Authority, and other utilities
- A wide range of nongovernmental, civic, and environmental, business, and community organizations
- Neighborhood and homeowner associations
- Developers, builders, real estate agencies, financial institutions, and others involved in the development process
- Residents and property owners
- New agencies, such as business improvement districts or community development agencies, that may be set up to assist with implementation in certain parts of the Places29 area.

Places29 Community Advisory Council

As with other master-planned Development Areas, the County's Board of Supervisors will establish the Places29 Community Advisory Council (P29CAC) to work with staff to monitor the implementation of the Places29 Master Plan. The form and composition of the P29CAC will be determined after adoption of the Plan.

Implementation Monitoring

Good planning practice includes the periodic review and update of plans after they are adopted. An important part of this review is an ongoing monitoring program that keeps tabs on how well implementation is proceeding and what additional issues or information have arisen since the plan was prepared. At strategic times, a plan should be reviewed and updated or revised, based on the results of the monitoring program and input from the public and local officials.

Monitoring Projects

With this Master Plan, successful implementation requires monitoring and refinement of both the Plan and individual implementation projects. Monitoring by the County, other agencies, and stakeholders will ensure that the Plan's goals are met. The monitoring process recommended as part of this plan incorporates a range of perspectives: fiscal, economic, social, and environmental, as well as consideration of the general quality of life. A monitoring program is described below, along with possible milestones for review and refinement of the Plan. Milestones for individual implementation projects are included in the Implementation Table at the end of the chapter.

Master Plan Review

It is recommended that this Plan be reviewed and updated every five years. These five-year reviews are incorporated into the Plan as an implementation project and are envisioned as the time to adjust the plan, based on any changes in conditions or new information. As part of the five-year review, a broad range of performance criteria will be measured and reported to County officials and the public. These criteria will include those referred to under individual projects in the Implementation Table and the following more general criteria, among others:

- Changes in population, income, social, economic, and/or employment patterns, as measured by the US Census and the state demographer.
- Changes in the County's physical environment.
- New developments approved and/or constructed during the previous five-year period.
- Any changes in the Comprehensive Plan and/or ordinances made by the Board of Supervisors that affect implementation of the Master Plan.
- The results of the UnJAM 2035 planning process and the possible completion of VDOT's "Blueprint" plan.
- Any changes in driving patterns or other transportation data, such as road incident information.
- Updates to the County's Comprehensive Plan, including additional master plans adopted after Places29.
- Progress made on the implementation projects slated for completion during that five-year period.
- The availability of new funding sources or programs for transportation and/or other infrastructure improvements.

The five-year review process will begin with collection of background information and statistics by County staff, as well as staff's evaluation of performance criteria. Staff, in consultation with the Places29 Community Advisory Council, will work with the County Planning Commission to develop a process for the plan update.

The Implementation Table

Each of the projects listed in the Implementation Table represents one action needed to implement this Master Plan. The projects are grouped first by timeframe; beginning with ongoing projects that will be implemented throughout the 20-year implementation timeframe. Then, the remaining projects are divided into two groups, those projects that are expected to begin during the first ten years and those that will begin during the second ten years. Within each of these timeframes, the projects are broken down by type into Transportation, Land Use & Development, Community Facilities & Services, and Parks & Green Systems sections. It is important to note that a significant number of the projects, especially some of the major transportation improvements, will go through several stages of planning, design, and construction from start to completion. At the appropriate time, the projects will be included in the County's Capital Improvement Program (CIP) and/or the 6-Year Transportation Plan.

The Implementation Table gives the following information for each strategy:

- **Implementation Project:** the project name and the page on which it is discussed and recommended earlier in the Master Plan are listed here. In many cases, individual transportation improvements are described in more detail in Appendix C.
- **Estimated Cost:** an estimate of the capital and/or operating cost for the project is listed in this column. This cost estimate is for design and construction of the complete project; where projects may be implemented in stages, cost estimates for some of those interim stages are listed in the Milestones column. For example, many of the transportation projects will begin with a preliminary design and engineering phase, during which a more accurate cost estimate for the entire project will be determined. The cost estimates for the preliminary design and engineering, if available, is listed under Milestones. This initial design phase may begin early in the 20-year implementation timeframe in order to provide further direction and more detailed cost estimate information for the full project. All cost estimates have been adjusted to 2008 dollars, using an inflation factor recommended by VDOT. It is important to note that these estimated costs for Places29 projects do **not** include land/right-of-way acquisition and utility costs. A table showing a summary of the estimated construction costs and a total with right-of-way and utilities for the entire US 29 North Corridor is provided in the US 29 North Corridor Transportation Study Technical Memo 11.
- **Responsible Parties:** those public and private entities that are responsible for planning, funding, and building or providing the project are listed in this column. In many cases, these parties have been determined based on previous experience. For example, where the state has designed, constructed, and funded certain types of road improvements in the past, similar improvements recommended in this Plan are also considered state responsibilities.
- **Issues to Be Addressed / Actions Required / Additional Notes:** the type of public involvement needed for the project, and any major issues that will need to be addressed during project planning are included in this column.
- **Milestones:** triggers or thresholds that will indicate when it is time to begin a project, the points at which success can be measured as implementation of the project proceeds, and the criteria to be used to measure implementation are listed in this column. In cases where one project is dependent on completion of another, this is noted in the Milestones column.