

## Appendix 2. Implementation Project Descriptions

This appendix provides a more detailed description of each of the Places29 Implementation Projects than is given in the List of Implementation Projects at the end of Chapter 8. The projects in this appendix follow the same order and have the same organization as they do in the List; they are grouped by timeframe and then by project type (i.e., Transportation, Land Use & Development, Community Facilities & Services, Parks & Green Systems). The project reference number in the upper left hand corner of each project corresponds to the project reference number in the List of Implementation Projects. These numbers are provided for convenience; they do not indicate a priority.

The **project descriptions** of the transportation projects are taken from the US 29 North Corridor Transportation Study. The descriptions of the other projects are from other planning documents or the County's Capital Improvements Program (CIP).

**Timing** indicates when a project is expected to *begin*.

The **estimated costs** listed for each project have come from one of two sources:

1. The Places29 transportation consultants, Meyer Mohaddes Associates, developed the transportation project estimates, based on cost factors supplied by VDOT. These cost estimates include design, planning, and construction. Also, staff has used the same VDOT factors to prepare an estimate for right-of-way acquisition and utility relocation. (See the Appendix of Technical Memo 11 from the US 29 North Corridor Transportation Study for a list of these cost factors.) These cost estimates have been escalated to Fiscal Year (FY) 2101-2011.
2. Estimates for non-transportation projects, where they are available, are taken from the County's Capital Improvements Program (CIP) for the current year (FY 2009-2010).

It is important to remember that these cost estimates have been prepared to assist users of this Master Plan to understand the relative magnitude of the costs for different projects. Except where noted otherwise, preliminary engineering for the projects has not yet been done, so these estimates are more subject to change than project estimates based on engineered plans. The original estimates were prepared by the US 29 North Corridor Transportation Study consultants and were updated by the consultants to 2007. Staff has escalated the costs further to the fiscal year 2010-2011, the year of adoption of this Master Plan. Since it is not certain when many of the projects will begin, these costs have not been escalated to the time when design or construction is expected to begin. For additional information about these cost estimates, including the methodology used to develop them, see the text of Chapter 8, Implementation.

The **issues to be addressed** are those which must be dealt with before a project can be completed.

The **milestones** will affect the timing of the project, especially in relation to other projects and funding. There is also an indication whether the project is currently included in one of the County's or Planning District Commission's planning/budget documents.

The **illustrations** of each project are from one of three sources and the source is indicated in the caption:

1. The Places29 Future Land Use Map. The complete Future Land Use Map is included at the end of Chapter 4. Illustrations from the Future Land Use Map show the land use designations and recommended roadway projects.

**The legend that applies to excerpts from the Future Land Use Map is:**



2. The US 29 North Corridor Transportation Study Concept Maps. This is a series of four diagrams that were prepared by the Places29 transportation consultants to show transportation improvement projects in greater detail than is possible on the Future Land Use Map. The diagrams are approximately to scale, but are **not** engineering drawings; they do **not** show precise final locations of road improvements. They should be viewed as possible road layouts subject to further refinement during preliminary engineering of each road improvement project. It is important to recognize that once the project has been designed and engineered, the actual project could be significantly different than what is shown in these illustrations.

**The legend that applies to excerpts from the Transportation Study Concept diagrams is:**

US 29 New Modifications
US 29 Removal
US 29 New Undercrossing
New Road Overcrossing
New Bridge
Parallel Road Modifications
Other Network Modifications

3. The transit projects are illustrated with schematic diagrams from Chapter 4.

<b>Project Reference No.</b>  <b>1</b>	<b>Project Title:</b> Access Management Improvements along US 29 from the 250 Bypass to the Green County line	
<b>Project Description:</b> Access management is intended to maximize the effectiveness and safety of the roadway system, particularly in relation to land adjacent to the roadway. Access management recognizes the need for roadways to accommodate varying degrees of through traffic movement at the expense of access to abutting property. Under this basic principle of access management, higher order roads favor through traffic movement over direct access to adjacent property. This means that property access needs to be from lower order roads that intersect with the higher order roads. In this context, traffic function (i.e., the degree to which through traffic movement is given priority) controls the design of the roadway.  Access management improvements along US 29 will facilitate the movement of through traffic along US 29 by encouraging access to adjacent property from other roads wherever possible.		
<b>Timing:</b> Ongoing	<b>Estimated Cost:</b> Variable; to be determined	<b>Responsible Parties:</b> VDOT, City and/or County, adjacent property owners & businesses
<b>Issues to Be Addressed:</b> <ul style="list-style-type: none"> <li>▪ These improvements will be based on the Access Management Plan, as detailed in Technical Memo 7 of the US 29 North Corridor Transportation Study</li> <li>▪ Incremental improvements will be designed as new developments are approved, during redevelopment, and as other US 29 transportation improvements are designed</li> <li>▪ Determine funding arrangements on a project-by-project basis</li> <li>▪ Some of these projects will be funded by private developers as part of development projects</li> </ul>		
<b>Milestones:</b> <ul style="list-style-type: none"> <li>▪ Each development project and transportation improvement should be reviewed by County and VDOT staff for compliance with the Access Management Plan</li> <li>▪ Continues throughout 20-year plan timeframe</li> </ul>		
<b>Comments/Notes:</b>		
Included in Planning/Budget Document: No.		

1. For a complete set of maps and diagrams depicting the recommended access management projects, please consult the *US 29 North Corridor Transportation Study Access Management Plan*, dated May 25, 2007, prepared by Meyer, Mohaddes Associates. This document is in Appendix 5 and is available under separate cover.

<b>Project Reference No.</b>  <p style="text-align: center;"><b>2</b></p>	<b>Project Title:</b>  <p style="text-align: center;">Intelligent Transportation Systems Strategies (ITS)</p>	
<b>Project Description:</b> Intelligent Transportation Systems (ITS) collectively refers to technology-based approaches to managing traffic operations. Traffic signal systems, automated vehicle identification systems, and traveler information systems are among the approaches included in ITS.		
<b>Timing:</b> Ongoing	<b>Estimated Cost:</b> Variable, subject to a separate study by VDOT	<b>Responsible Parties:</b> VDOT, City, County
<b>Issues to Be Addressed:</b> <ul style="list-style-type: none"> <li>▪ Design an ITS for the US 29 corridor, including improved monitoring of traffic conditions, communications infrastructure, traffic signal improvements, and, possibly, a management center to oversee traffic</li> </ul>		
<b>Milestones:</b> <ul style="list-style-type: none"> <li>▪ Continues throughout the implementation timeframe</li> </ul>		
<b>Comments/Notes:</b>		
<b>Included in Planning/Budget Document:</b> UnJAM 2035 Constrained Long Range Plan, I-37.		

<b>Project Reference No.</b>  <p style="text-align: center;"><b>3</b></p>	<b>Project Title:</b>  <p style="text-align: center;">Places29 Community Advisory Council (P29CAC)</p>	
<b>Project Description:</b> <p>The Council will be established and staffed once the Master Plan is adopted. As with the CACs for other master-planned areas, the P29CAC will work with staff to monitor the implementation of the Places29 Master Plan. The CAC’s role is to advise staff and the Commission on matters related to land use and development in the Places29 area.</p>		
<b>Timing:</b> Ongoing	<b>Estimated Cost:</b> NA— included in Community Development Dept. budget, for staff time and other resource needs.	<b>Responsible Parties:</b> County Staff
<b>Issues to Be Addressed:</b> <ul style="list-style-type: none"> <li>▪ The P29CAC’s work during the first five years of Master Plan implementation is expected to be low due to the lack of funding for projects and to staff the CAC</li> <li>▪ P29CAC may meet in two parts, if necessary to address issues more relevant to Neighborhoods 1 and 2 or to the communities of Hollymead and Piney Mountain</li> <li>▪ As more development takes place in the Hollymead/Piney Mountain area, additional members may be added to the P29CAC to represent those new developments</li> </ul>		
<b>Milestones:</b>		
<b>Comments/Notes:</b> The P29CAC will be similar in purpose and composition to the CACs for Crozet and Pantops.		
<b>Included in Planning/Budget Document:</b> NA		

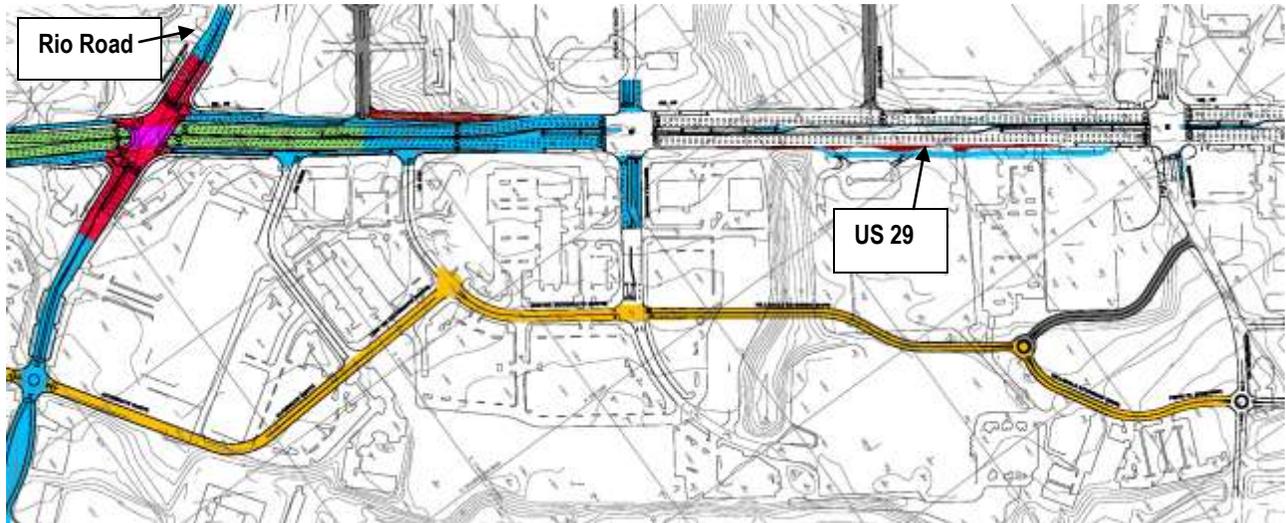
<b>Project Reference No.</b>  <b>4</b>	<b>Project Title:</b>  Places29 Master Plan Administration and Management	
<b>Project Description:</b>		
<ul style="list-style-type: none"> <li>▪ County staff monitors plan implementation</li> <li>▪ Staff facilitates plan implementation initiatives (ZTAs, studies, capital project planning, etc.), as necessary</li> <li>▪ Staff pursues new federal, state, and other funding sources for transportation projects and other projects, as needed</li> <li>▪ Staff conducts five-year plan review and update, in conjunction with the Planning Commission and the P29CAC (see also Project #10)</li> <li>▪ Staff monitors development review projects (ZMAs and SPs) for conformity with the Plan</li> <li>▪ Staff organizes and facilitates preparation of Small Area Plans (see Projects 15 and 49).</li> </ul>		
<b>Timing:</b> Ongoing	<b>Estimated Cost:</b> Included in CDD budget for staff time	<b>Responsible Parties:</b> County staff
<b>Issues to Be Addressed:</b>		
<ul style="list-style-type: none"> <li>▪ Staff time available for Master Plan administration and management is expected to be limited during the first five years of Plan implementation due to limited resources</li> </ul>		
<b>Milestones:</b>		
<ul style="list-style-type: none"> <li>▪ Administration/management begins when Master Plan is adopted</li> <li>▪ Periodic written reports on progress will be prepared for the Planning Commission</li> <li>▪ Planning for five-year review will begin in year 4 of each five-year cycle</li> </ul>		
<b>Comments/Notes:</b>		
<b>Included in Planning/Budget Document:</b> Included in County operating budget.		

<b>Project Reference No.</b>  <b>5</b>	<b>Project Title:</b>  <b>29H250 Study Recommended Improvements A HIGH PRIORITY IMPLEMENTATION PROJECT</b>	
<b>Project Description:</b> Project includes the following improvements, most located in the City: a. <b>A HIGH PRIORITY IMPLEMENTATION PROJECT:</b> Expand the southbound-to-westbound onramp at US 29/250 Bypass (near Best Buy) with an auxiliary lane to the Barracks Road offramp; and construct a fourth southbound lane on US 29 between Hydraulic Road and the US 250 interchange; two lanes would drop at the offramp to westbound US 250. b. <b>A HIGH PRIORITY IMPLEMENTATION PROJECT:</b> construct westbound merge lane on 250 Bypass at Barracks Road interchange See Project #41 for the full scope of 29H250 recommended improvements.		\$2,432,000 (a & b)
<b>Timing:</b> Begin a & b during the first five years	<b>Estimated Cost:</b> \$2,432,000	<b>Responsible Parties:</b> City of Charlottesville, VDOT
<b>Issues to Be Addressed:</b> <ul style="list-style-type: none"> <li>▪ Most of these projects are in the City, but they are included in the Master Plan because they are essential to the overall transportation plan for the US 29 North Corridor</li> <li>▪ A partial design for these improvements has been completed</li> </ul>		
<b>Milestones:</b> <ul style="list-style-type: none"> <li>▪ Funding has been identified for the first two items (a &amp; b)</li> </ul>		
<b>Comments/Notes:</b>		
<b>Included in Planning/Budget Document:</b> Projects a and b are in the TIP		



5. This schematic diagram from the US 29 North Corridor Transportation Study shows the various road improvements recommended by the 29H250 study and incorporated in the Places29 Master Plan. North is to the right.

<b>Project Reference No.</b>  <b>6</b>	<b>Project Title:</b>  <b>Construct Hillsdale Drive Extended north of Hydraulic Road A HIGH PRIORITY IMPLEMENTATION PROJECT</b>	
<p><b>Project Description:</b>                  Hillsdale Drive will be a three-lane cross section with parking. It will increase the parallel local roadway capacity from Hydraulic Road to Greenbrier Drive. This connection needs to be made before the US 29/Hydraulic Road intersection is constructed in order to provide for construction traffic diversion. The complete extension of Hillsdale will run from Holiday Drive in the City to Greenbrier Drive in the County. The segment north of Hydraulic Road is primarily in the City, with a short segment at the north end in the County. This parallel road system is consistent with the 29H250 Study recommendations. If all of the needed ROW is donated by property owners, the cost for this improvement could be as low as \$8,260,000.</p>		
<p><b>Timing:</b> Begin during the first five years and continue until completed</p>	<p><b>Estimated Cost:</b>                  \$30,108,000                  (Includes ROW est.)</p>	<p><b>Responsible Parties:</b>                  VDOT, City, Property owners/ developers</p>
<p><b>Issues to Be Addressed:</b></p> <ul style="list-style-type: none"> <li>▪ Constructing the Hillsdale Drive portion of the recommended parallel road system is consistent with the 29H250 Study recommendations</li> <li>▪ Needed to address existing deficiencies</li> <li>▪ If all of the needed ROW is donated by property owners and developers, the cost for this improvement could be as low as \$8,260,000</li> <li>▪ Hillsdale Drive Extended south of Hydraulic will be constructed as each property redevelops</li> </ul>		
<p><b>Milestones:</b></p> <ul style="list-style-type: none"> <li>▪ Design work is underway now; construction of first segment adjacent to the K-mart property is underway</li> <li>▪ Need to begin accruing funds for further construction</li> <li>▪ Construction of the remainder of the road to begin as soon as funding is available</li> <li>▪ The southern portion of Hillsdale Drive Extended (south of Hydraulic Road) will be constructed as each property redevelops</li> <li>▪ Hillsdale Drive Extended needs to be completed before the grade separation at Hydraulic and US 29 is constructed in order to provide an alternate route during construction of the grade separation</li> <li>▪ Due to cost and impacts, completion is expected within 10 years, but is dependent on private development</li> </ul>		
<p><b>Comments/Notes:</b> Note in TIP indicates that the Developer is expected to donate ROW worth approximately \$12,000,000.</p>		
<p><b>Included in Planning/Budget Document:</b> Project N-2. Not funded at this time.</p>		



6. North is to the right in this schematic diagram from the US 29 North Transportation Study. US 29 runs from left to right just above the center of the diagram, the 250 Bypass is on the left. Hillsdale Drive Extended north of Hydraulic Road is shown in yellow. The segment of Hillsdale Drive south of Hydraulic is shown in the illustration for Project #5.

<b>Project Reference No.</b>  <b>7</b>	<b>Project Title:</b> <b>Widen US 29 to six lanes from Polo Grounds Road to Towncenter Drive</b> <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b>
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**Project Description:**

Widen US 29 from four lanes to six lanes between Polo Grounds Road and Towncenter Drive, resulting in a six-lane rural cross section with full shoulders and a center median. There will be a multi-purpose path on at least one side of the road. The County also plans landscaped/ forested buffers on both sides to preserve the wooded, rural character of this stretch of US 29, thereby maintaining a visual break between the more urbanized areas north and south of this section of US 29. Future volumes projected for this stretch of US 29 require that the roadway be widened. The process to plan and design this improvement should begin as soon as the Master Plan is adopted in order to determine actual cost, permit right-of-way acquisition, relocate utilities, and begin construction as soon as funding is available. Other improvements, such as the grade separation at Ashwood Blvd. and the “jug handle” connecting roads, may be affected by the design of this widening and are expected to be considered during preparation of the design.

<b>Timing:</b> Begin during the first five years	<b>Estimated Cost:</b> \$18,528,000 ROW (est.): \$11,117,000	<b>Responsible Parties:</b> VDOT
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**Issues to Be Addressed:**

- Planning & preliminary design cost estimate: \$800,000
- Project is necessary to address existing deficiencies in the road network by providing a consistent number of lanes throughout the US 29 North Corridor. This project will also address vertical curvature deficiencies along this stretch of US 29.
- Design and ROW acquisition for the jug handle connecting roads at Ashwood to be considered as part of this project, if funding permits

**Milestones:**

- Provide funding for design and begin design in years 1 – 5. This project is the highest priority improvement in the County
- Accrue construction funding
- Construction to begin as soon as design is complete and funding is identified

**Comments/Notes:**

**Included in Planning/Budget Document:** UnJAM 2035 Constrained Long Range Plan, I-5.



7. This portion of the Future Land Use Map shows Polo Grounds Road on the left and the dashed lines along US 29 (through the center) show the area to be widened (north is to the right).

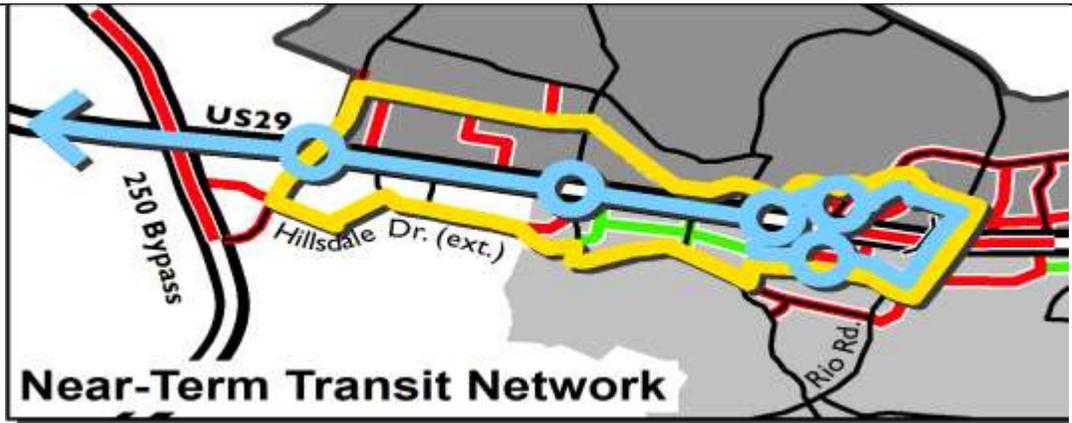
<b>Project Reference No.</b>  <b>8</b>	<b>Project Title:</b>  <b>Berkmar Drive Extended</b>  <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b>	
<b>Project Description:</b> This road will be a four-lane divided cross section from a new bridge crossing of the South Fork of the Rivanna River to its connection to Hollymead Drive/Meeting Street in the Hollymead Town Center. This road is intended to serve as a neighborhood street with a top speed of 35 miles per hour. Berkmar Drive Extended will extend parallel connectivity on the west side of US 29, offering drivers an alternate route to US 29, especially for local trips. Berkmar Drive Extended, if constructed before US 29 is widened between Polo Grounds Road and Towncenter Drive, will provide an alternate route for traffic diversion during construction on US 29. This project is expected to be completed in three phases: <ol style="list-style-type: none"> <li>1. Initiate an alignment study for the Berkmar Drive Extended bridge over the South Fork of the Rivanna River to help determine the full cost of the bridge based on the chosen crossing location and profile. Study will include environmental reviews.</li> <li>2. Extend existing roadway from northern terminus of Hilton Heights Road to Meeting Street in Hollymead Town Center, including the bridge over the South Fork of the Rivanna River.</li> <li>3. Widen Berkmar Drive from Rio Road to Hilton Heights Road to a 4-lane, undivided section.</li> </ol>		
<b>Timing:</b> Begin design during first five years and continue until construction is completed.  The highest priority during the first five years is the bridge alignment study and environmental reviews.	<b>Estimated Cost:</b> Bridge alignment study: \$155,000 Bridge & Road: \$25,273,000 ROW (est.): 12,637,000	<b>Responsible Parties:</b> VDOT, TJPDC, County, Property Owners / Developers
<b>Issues to Be Addressed:</b> <ul style="list-style-type: none"> <li>▪ Funding for the alignment study needs to be identified.</li> <li>▪ The study should begin as soon as the Master Plan is adopted in order to determine what the best bridge profile is and the resulting cost of the bridge (expected in the first three years). The full cost of the bridge will be known once the preliminary design of the bridge is complete.</li> <li>▪ The alignment of Berkmar Drive Extended north of the bridge should also be determined at this time, with the right-of-way (ROW) platted to protect the alignment.</li> <li>▪ Property Owners/ Developers may be asked to dedicate ROW and/or construct a portion of Berkmar Drive Extended as part of development of parcels the road crosses. If the parcels do not develop in time, other funding sources for all/part of the costs will be necessary.</li> <li>▪ Widening the section of Berkmar Drive between US 29 and Rio Road may be shifted to the second ten years of Plan implementation, after Berkmar Drive Extended is completed. The widening will be needed after the bridge over the South Fork of the Rivanna is constructed and Berkmar Drive is extended to Hollymead Town Center.</li> </ul>		
<b>Milestones:</b> <ul style="list-style-type: none"> <li>▪ Completion of the bridge alignment study and design is the first priority during the first five years.</li> <li>▪ The location and design of the road north of the bridge is based on available resources.</li> <li>▪ If Berkmar Drive Extended, including the bridge, is in place before US 29 is widened to six lanes between Polo Grounds Road and Towncenter Drive, Berkmar Drive Extended could serve as an alternate route, especially for local traffic.</li> <li>▪ Bridge design should begin as soon as the Master Plan is adopted so the alignment and cost of both the extension and the bridge can be determined.</li> </ul>		
<b>Comments/Notes:</b>		

**Included in Planning/Budget Document:** Project N-1 in TIP. Remarks/Comments reads: “Assume Developers to build, donate ROW, and/or donate cash for approximately half of the project (2018 estimate \$44,100,000 use \$21,835,000 for plan.”



8. This portion of the Future Land Use Map shows the recommended extension of Berkmar Drive over the South Fork of the Rivanna River and north to Hollymead. The extension would run from the current southern end of Berkmar Drive at Hilton Heights Road (visible at the left edge of the diagram) to a planned connection with Meeting Street in the Hollymead Town Center, shown on the right side of the map. North is to the right.

<b>Project Reference No.</b>  <b>9</b>	<b>Project Title:</b>  <b>Transit System Expansion &amp; Improvements A HIGH PRIORITY IMPLEMENTATION PROJECT</b>	
<b>Project Description:</b> Implement Priority Transit service in the Charlottesville-Albemarle area from Charlottesville to the Rio Road/US 29 area (see also <i>Charlottesville-Albemarle Regional Transit Authority Draft Final Report, August 2008</i> )		
<b>Timing:</b> Begin during the first five years; project will continue throughout the 20-year Plan timeframe	<b>Estimated Cost:</b> \$17,000,000	<b>Responsible Parties:</b> City, County, CTS, RTA, and other agencies
<b>Issues to Be Addressed:</b> <ul style="list-style-type: none"> <li>▪ An RTA or similar organization needs to be established as soon as possible in order to oversee implementation of a City-County operated transit system essential to Places29.</li> <li>▪ Extend local bus service as Centers develop.</li> <li>▪ Coordinate initial Priority Transit service with road improvements and development of Centers throughout the US 29 Corridor.</li> <li>▪ Provide express or Rapid Bus service along US 29, linking the City and eastern Development Area corridor from Charlottesville to US 29 / Rio Road intersection.</li> </ul>		
<b>Milestones:</b> <ul style="list-style-type: none"> <li>▪ Establish an RTA or a similar organization to develop and manage system.</li> <li>▪ The short-term focus should be on expanding service in the Development Area and improving quality of service (shorter headways, night service, better access to stops—sidewalks, bench/shelter/bike rack installation)</li> <li>▪ Service should begin as soon as sufficient residential density and employment intensity are present in the area to be served.</li> </ul>		
<b>Comments/Notes:</b> The cost for this transit system will depend on the level of local service provided.		
<b>Included in Planning/Budget Document:</b> UnJAM 2035 Constrained Long Range Plan, I-35.		



9. This schematic diagram is an example of an initial Bus Rapid Transit (BRT) and circulator system that would serve the southern part of the Places29 area.

<b>Project Reference No.</b>  <b>10</b>	<b>Project Title:</b>  <b>Five-Year Master Plan Review &amp; Update</b>	
<p><b>Project Description:</b></p> <p>This Master Plan has been prepared with a 20-year Plan implementation timeframe, with a review and update every five years to ensure that implementation of the Plan is proceeding according to the guidelines in the Plan. These reviews are envisioned as the time to adjust the Plan, based on any changes in conditions or new information. As part of the review, a broad range of performance criteria will be measured and reported to County officials and the public. These criteria will include those listed under individual implementation projects in this Appendix and a set of more general criteria listed at the end of Chapter 8.</p> <p>The five year review process will begin with collection of background information and statistics by County staff, as well as staff's evaluation of the performance criteria. Staff in consultation with the Places29 Community Advisory Council, will work with the Planning Commission to develop a detailed process for the Plan update.</p>		
<b>Timing:</b> Begin in fourth of first five years	<b>Estimated Cost:</b> \$	<b>Responsible Parties:</b> County
<p><b>Issues to Be Addressed:</b></p> <ul style="list-style-type: none"> <li>▪ The number of implementation projects that have begun and how much has been completed.</li> <li>▪ New issues that have arisen since adoption of the Master Plan</li> <li>▪ Revisit the transportation network, in particular to review the need for grade separations at major intersections and other major transportation improvements</li> </ul>		
<p><b>Milestones:</b></p> <ul style="list-style-type: none"> <li>▪ Begin review and update process in Year 4 with data gathering and analysis</li> <li>▪ Process to be coordinated with the Planning Commission and P29CAC</li> </ul>		
<p><b>Comments/Notes:</b> additional information about the review is provided in Chapter 8.</p>		
<p><b>Included in Planning/Budget Document:</b></p>		

<b>Project Reference No.</b>  <b>11</b>	<b>Project Title:</b>  <b>Utilities</b>	
<b>Project Description:</b> The following are a series of both RWSA and ACSA water and sewer system improvements needed in the Places29 area:		
Sewer Service:		
<ul style="list-style-type: none"> <li>• In 2009, the ACSA initiated final design of the North Fork Regional Pump Station Project. This project includes the installation of the Camelot Pump Station and the North Fork Regional Pump Station and their associated force mains. Wastewater generated in the northern area served by the Camelot Wastewater Treatment Facility will be pumped south and flow by gravity to the Moore’s Creek Wastewater Treatment Facility. The pump stations and force mains will be owned and operated by the ACSA. It is anticipated that these facilities will be in operation by June 2011 and the Camelot Wastewater Treatment Facility and North Fork Research Park Pump Station will be abandoned.</li> <li>• Additional sewer improvements may be identified upon completion of the ongoing Sewershed Analysis.</li> </ul>		
Water Service:		
<ul style="list-style-type: none"> <li>• The RWSA and ACSA are evaluating the implementation of an Airport Pressure Band that would result in the abandonment of the Piney Mountain Storage Tank. This would require replacement and upgrade of the existing water transmission mains in the US 29 corridor north of the Hollymead Town Center to Dickerson Lane.</li> <li>• Replace and upgrade water transmission line providing service to the Northern Development Areas. The line and easement should be provided along the alignment of Berkmar Drive Extended.</li> <li>• Construct a water tank along the new water transmission line. The desirable location would be at the higher elevations in the Hollymead Community. A potential site includes the ridge line located between the Hollymead Town Center and Airport Road. This is one of the highest elevations in the area. The facility should be a ground level water tank as opposed to a tower facility.</li> </ul>		
<b>Timing:</b> Throughout the 20-year implementation timeframe	<b>Estimated Cost:</b> NA	<b>Responsible Parties:</b> Rivanna Water & Sewer Authority, Albemarle County Service Authority
<b>Issues to Be Addressed:</b> ▪		
<b>Milestones:</b> ▪		
<b>Comments/Notes:</b>		
<b>Included in Planning/Budget Document:</b>		

<b>Project Reference No.</b>  <b>12</b>	<b>Project Title:</b>  <b>Northtown Trail</b>	
<b>Project Description:</b> Create a trail system that extends from the Hollymead Development Area to Downtown Charlottesville, approximately six miles of trail and a bridge over the Rivanna. This trail, and possible associated spurs, will provide commuter and recreational opportunities. The linear park and trail system connected with the Meadow Creek Parkway project provides a key segment of this trail.  Thomas Jefferson Planning District Commission has developed the Northtown Trail Plan, which calls for a conceptual trail, beginning in the City and continuing into the County. The proposed route is described and illustrated in the “Conceptual Trail” publication prepared by the TJPDC. Ultimately, the proposed route would extend from the UVA Research Park off US 29 in the Hollymead area to Downtown Charlottesville, and to UVA. This commuter “trail” is intended to promote multimodal transportation options along the often congested US 29 corridor. The Plan identifies existing facilities, what will be constructed in the near future, and what is planned for the long term. The Downtown Trail Steering Committee, which is made up of representatives from the City of Charlottesville, Albemarle County and VDOT, guided work on this project, whose overall goal is to create a non-vehicular transportation link between the residential and employment centers of the City and County.		
<b>Timing:</b> Begin during the first five years	<b>Estimated Cost:</b> \$4,972,000	<b>Responsible Parties:</b> City, County, TJPDC, VDOT, other agencies, property owners, developers
<b>Issues to Be Addressed:</b> <ul style="list-style-type: none"> <li>▪ Identify specific route for trail</li> <li>▪ Design and consider possible locations in the County with development proposals</li> <li>▪ Property owners/Developers may be asked to donate ROW and/or construct segments of the trail</li> </ul>		
<b>Milestones:</b> <ul style="list-style-type: none"> <li>▪ Design/alignment needs to be complete as soon as possible after adoption of the Master Plan in order to obtain dedications of ROW and construction of portions of the trail during development review of projects in the relevant portions of the Places29 area</li> </ul>		
<b>Comments/Notes:</b>		
<b>Included in Planning/Budget Document:</b> TIP: N-10.		

12. See the TJPDC publication “Conceptual Trail” for a diagram of the proposed route.

<b>Project Reference No.</b>  <b>13</b>	<b>Project Title:</b> Greenway along the Rivanna River/North Fork of the Rivanna River <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b>	
<b>Project Description:</b> As shown on the Parks & Green Systems Map.		
<b>Timing:</b> Begin during the first five years	<b>Estimated Cost:</b> \$175,000	<b>Responsible Parties:</b> County, Property owners/Developers
<b>Issues to Be Addressed:</b> <ul style="list-style-type: none"> <li>▪ Complete development of the Rivanna River Greenway from Ivy Creek Natural Area to Darden Towe Park (\$100,000)</li> <li>▪ Complete development of North Fork Rivanna River Greenway from Chris Greene Lake to eastern Development Area boundary (\$75,000)</li> <li>▪ Includes field space</li> </ul>		
<b>Milestones:</b>		
<b>Comments/Notes:</b> Development will be forwarded by volunteer construction services and the donation of land or easements, which reduce the total estimated cost of construction.		
<b>Included in Planning/Budget Document:</b>		

<b>Project Reference No.</b>  <b>14</b>	<b>Project Title:</b>  Provide active field space for practice and competitive sports fields/multi-purpose fields	
<b>Project Description:</b> To provide new community park facilities for practice and competitive sports as needed to serve anticipated growth in the Places29 area. [see the Parks & Green Systems Map]		
<b>Timing:</b> Throughout plan implementation timeframe	<b>Estimated Cost:</b> \$7,000,000	<b>Responsible Parties:</b> County, Property owners/developers
<b>Issues to Be Addressed:</b> <ul style="list-style-type: none"> <li>▪ Obtain through proffer or acquisition to begin in the first five years</li> <li>▪ Construction within the first 10 years in Hollymead/Piney Mountain area (\$3,500,000)</li> <li>▪ Construction in the second 10 years in Neighborhoods 1 and 2 (\$3,500,000)</li> </ul>		
<b>Milestones:</b> <ul style="list-style-type: none"> <li>▪ Identify types and amount of space needed</li> <li>▪ Identify possible locations (consider land proffered for a future school in North Pointe as a site that could be used to address this need)</li> <li>▪ Request proffers with new developments</li> </ul>		
<b>Comments/Notes:</b> Cost estimate is based on the development of two little league baseball fields, two full-size soccer field/multipurpose fields, two basketball courts, two playgrounds, shelters, and restrooms. Additional field space may be necessary.		
<b>Included in Planning/Budget Document:</b>		