

## Places29 Implementation Table [Date of Master Plan Adoption]

### Important Points to Keep in Mind When Using This Table

- This table includes all of the projects that Albemarle County considers necessary over the next 20 years to address an existing backlog of needed infrastructure improvements, support growth and development that will have an impact on this infrastructure, and, ultimately, achieve the Vision stated in Chapter 2 of the Master Plan. A number of these projects, particularly the transportation projects, would have also been necessary to support growth and development under the 1996 Land Use Plan for the area now proposed to be covered by this Master Plan. Most of the transportation projects associated with the US 29 Corridor are also a response to regional needs and US 29’s classification as a Highway of National Significance. In consideration of these factors, the projects listed in this table are not only to enable the desired land use Form proposed under this Master Plan, but also in response to existing conditions and larger growth and development trends expected to have an impact on this area.
- Albemarle County staff considers this table to be a guide to how to allocate limited resources and how to set priorities for the next 20 years. While the table establishes timing for the listed projects and strategies for funding, it is understood that the actual development of projects will be a function of growth and development trends and the availability of resources. The actual implementation will be monitored and reevaluated during each 5-year Master Plan update.
- An explanation of the column headings in the chart is given at the end of this table and is also discussed in the text of Chapter 8. Items shown in **boldface** type are expected to be public projects. Those projects labeled “A HIGH PRIORITY IMPLEMENTATION PROJECT” are the most essential projects, as discussed earlier in this chapter.

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
<b>ONGOING</b>				
<b>TRANSPORTATION</b>				

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
<b>US 29</b>				
Access Management Improvements along US 29 from US 250 Bypass to Green County Line [Page ]	Variable; to be determined	VDOT, City and/or County, adjacent property owners and businesses	<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>▪ Design incremental improvements as developments are approved &amp; 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>	<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>
Intelligent Transportation System Strategies (ITS) [Page ]	Variable; to be determined	VDOT, City, and/or County	<ul style="list-style-type: none"> <li>▪ Design an ITS for the US 29 corridor, including a management center to oversee traffic, improved monitoring of traffic conditions, communications infrastructure, and traffic signal improvements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continues throughout 20-year plan timeframe</li> </ul>
Pursue new federal, state, and other funding sources for transportation projects		County and VDOT staff	<ul style="list-style-type: none"> <li>▪ Throughout plan implementation, County and VDOT staff will monitor state and federal funding programs to identify any additional funding for transportation improvements in the Places29 area</li> </ul>	Special attention will be paid during each federal and state legislative session
<b>LAND USE &amp; DEVELOPMENT</b>				
Places29 Community Advisory Council [Page ]		County Staff: Community Development and Community Relations	<ul style="list-style-type: none"> <li>▪ Establish and staff Council</li> </ul>	<ul style="list-style-type: none"> <li>▪ Council will be set up as Master Plan is adopted</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Plan Administration and Management [Page ]		Places29 Neighborhood Planner, County staff	<ul style="list-style-type: none"> <li>▪ Neighborhood Planner monitors plan implementation</li> <li>▪ Staff recommends ZTAs, as necessary</li> <li>▪ Staff conducts five-year plan review and update, in conjunction with the Planning Commission and the P29CAC</li> <li>▪ Staff monitors development review projects (ZMAs and SPs) for conformity with the Plan</li> </ul>	<ul style="list-style-type: none"> <li>▪ Administration/management begins when Master Plan is adopted</li> <li>▪ Periodic written reports on progress to Planning Commission</li> <li>▪ Planning for five-year review will begin in year 4 of each five-year cycle.</li> </ul>
<b>FIRST TEN YEARS</b>				
<b>TRANSPORTATION</b>				
<b>US 29</b>				
[In City] on US 29: <ul style="list-style-type: none"> <li>▪ Expand southbound-to-westbound ramp at US 29/250 Bypass (near Best Buy) with auxiliary lane to Barracks Road offramp</li> <li>▪ Construct westbound merge lane on 250 Bypass at Barracks Road interchange [Page ]</li> </ul>	\$2,100,000	City of Charlottesville, VDOT	<ul style="list-style-type: none"> <li>▪ A project in the City, included here because it is essential to the overall transportation plan</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b></li> <li>▪ Funding has been identified</li> </ul>
Add southbound left turn lane and westbound right turn lane at Greenbrier Drive and US 29 [Page ]	\$270,000	VDOT	<ul style="list-style-type: none"> <li>▪ Address intersection LOS and traffic management</li> </ul>	<ul style="list-style-type: none"> <li>▪ When traffic warrants or a redevelopment opportunity arises</li> </ul>
Extend northbound left turn and right turn storage at Woodbrook Drive [Page ]	\$940,000	VDOT	<ul style="list-style-type: none"> <li>▪ Address intersection LOS and traffic management</li> <li>▪ Cost listed includes additional improvements at Woodbrook Drive (see channelization below)</li> </ul>	<ul style="list-style-type: none"> <li>▪ At peak periods, traffic now warrants these improvements</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Plan / design / construct widening of US 29 to six lanes from Polo Grounds Road to Towncenter Drive [Page ]	\$16,000,000	VDOT	<ul style="list-style-type: none"> <li>▪ Planning &amp; preliminary design cost: \$800,000</li> <li>▪ Project is necessary to address existing deficiencies in the road network by providing a constant number of lanes</li> <li>▪ Design and ROW acquisition for jug handles at Ashwood to be considered as part of this project, if funding permits</li> </ul>	<ul style="list-style-type: none"> <li>▪ A HIGH PRIORITY IMPLEMENTATION PROJECT</li> <li>▪ Provide funding for design and begin design in years 1 – 5</li> <li>▪ Accrue construction funding</li> <li>▪ Construction to begin as soon as design is complete and funding identified—anticipated by year 10.</li> </ul>
<p>[In City] On US 29 from the 250 Bypass to Hydraulic Road: [Page ]</p> <ul style="list-style-type: none"> <li>▪ Construct eastbound to northbound/southbound offramp at US 29/250 Bypass</li> <li>▪ Close eastbound to northbound/southbound offloop at US 29/250 Bypass and reconstruct northbound to eastbound onramp</li> <li>▪ Construct new offramp at Holiday Drive</li> <li>▪ Reconstruct southbound to eastbound onloop at US 29/250 Bypass</li> <li>▪ Expand US 29 from Morton Drive to Seminole Square</li> </ul>	\$20,000,000	City, VDOT	<ul style="list-style-type: none"> <li>▪ Improvements in City that are essential to the smooth functioning of US 29 corridor in both the City and the County</li> </ul>	<ul style="list-style-type: none"> <li>▪ Begin planning &amp; design within first 10 years</li> <li>▪ Determine which improvements need to be done within first 10 years</li> </ul>
[In City] Reconstruct 250 Bypass/Hydraulic Road intersection [Page ]	\$8,250,000	City, VDOT	<ul style="list-style-type: none"> <li>▪ Improvement in City that is essential to the smooth functioning of the US 29 corridor in both the City and the County</li> </ul>	<ul style="list-style-type: none"> <li>▪ Begin planning &amp; design within first 10 years</li> <li>▪ Determine which improvements need to be done within first 10 years</li> </ul>
Construct access lane on east side of US 29 to consolidate access from USPS to Greenbrier Drive [Page ]	\$700,000	City, VDOT, Property Owners	<ul style="list-style-type: none"> <li>▪ Intended to be an uninterrupted right turn lane for the length of this block</li> </ul>	<ul style="list-style-type: none"> <li>▪ Now complete, except for one “bumpout” near the Post Office exit</li> </ul>
Construct northbound auxiliary lanes for Rio Road intersection [Page ]	\$475,000	VDOT	<ul style="list-style-type: none"> <li>▪ A parallel roadway adjacent to the part of US 29 that will be most disrupted by construction of the grade separation at Rio Road</li> </ul>	<ul style="list-style-type: none"> <li>▪ Must be completed prior to the grade separation at Rio Road.</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
US 29 at Shoppers World Court and Mall Drive [Page ]	\$550,000	VDOT, Property Owners	<ul style="list-style-type: none"> <li>▪ Widen Shopper’s World approach by adding a third lane and reconstruct Mall Drive approach to eliminate the channelized right turn in lane</li> <li>▪ Retains direct access to existing retail areas on both sides of US 29</li> </ul>	<ul style="list-style-type: none"> <li>▪ Complete as property redevelops or as improvements necessary to functioning of US 29</li> </ul>
<b>Construct southbound auxiliary lane at Berkmar Drive [Page ]</b>	<b>\$52,000</b>	VDOT	<ul style="list-style-type: none"> <li>▪ <b>Add southbound right turn lane (auxiliary lane to new access to US 29 opposite Fashion Square Drive)</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Construct in conjunction with interchange redesign at US 29 and Rio Road</b></li> </ul>
Albemarle Square Drive at US 29 [Page ]	\$2,700,000	VDOT, Developer	<ul style="list-style-type: none"> <li>▪ Widen Albemarle Square Drive to provide two inbound lanes and three outbound lanes at intersection with Rio Road</li> <li>▪ Will support full access to Albemarle Square, the Ring Road, and grade separation of Rio Road and US 29</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construct in conjunction with redevelopment of Albemarle Square or grade separation at US 29 and Rio Road</li> </ul>
<b>US 29 at Woodbrook Drive. Channelize Woodbrook Drive/US 29 intersection [Page ]</b>	<b>(Cost included in Improvements to Woodbrook Drive above)</b>	VDOT	<ul style="list-style-type: none"> <li>▪ <b>Westbound approach will be right-out only; Eastbound approach will be right-out/left-out only</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>When traffic warrants, after high priority projects are completed.</b></li> </ul>
Signalize US 29 at Airport Acres North [Page ]	\$280,000	Property Owner/ Developer	<ul style="list-style-type: none"> <li>▪ Part of North Pointe proffered improvements</li> </ul>	<ul style="list-style-type: none"> <li>▪ To be installed with development of North Pointe</li> </ul>
Signalize US 29 at Northside Drive [Page ]	\$280,000	Property Owner/ Developer	<ul style="list-style-type: none"> <li>▪ Part of North Pointe proffered improvements</li> </ul>	<ul style="list-style-type: none"> <li>▪ To be installed with development of North Pointe</li> </ul>
<b>Add left turn lanes on US 29 at Burnley Station Road/Frays Mill Road [Page ]</b>	<b>\$2,300,000</b>	VDOT	<ul style="list-style-type: none"> <li>▪ <b>Northbound and southbound second left turn lanes, widen eastbound and westbound approaches, signalize intersection</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Future volumes will require added lanes. To be installed when traffic warrants (expected within first ten years)</b></li> </ul>
Signalize US 29 at Burnley Station Road/Frays Mill Road [Page ]	\$280,000	VDOT	<ul style="list-style-type: none"> <li>▪ <b>Will be needed to regulate traffic flow after turn lanes are installed</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>To be installed when future traffic warrants (expected in first 10 years)</b></li> </ul>
<b>Parallel and Perpendicular Roads</b>				
Construct Hillsdale Drive north of Hydraulic Road [Page ]	\$26,000,000	VDOT, City, Property Owners/ Developers	<ul style="list-style-type: none"> <li>▪ Construct parallel road system consistent with the 29H250 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> </ul>	<ul style="list-style-type: none"> <li>▪ <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b></li> <li>▪ Design work underway now</li> <li>▪ Accrue funds for construction</li> <li>▪ Construction to begin as soon as funding is available</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Initiate an alignment study for the Berkmar Drive Extended Bridge to determine the best crossing location and bridge profile [Page ]	\$155,000	VDOT, TJPDC, County	<ul style="list-style-type: none"> <li>▪ Funding for this study needs to be identified</li> <li>▪ Study will help determine full cost of bridge based on chosen location and profile.</li> <li>▪ Study will include environmental reviews.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b></li> <li>▪ Study should begin as soon as Master Plan is adopted in order to determine as soon as possible what the best bridge profile is and the resulting cost estimate for the bridge (expected in first three years)</li> </ul>
Design the Berkmar Drive Extended bridge over the South Fork of the Rivanna River [Page ] (Construction of bridge and road are separate items below)		VDOT, Albemarle County	<ul style="list-style-type: none"> <li>▪ Full cost of bridge will be known once design is complete</li> <li>▪ Bridge is essential link in Berkmar Drive Extended parallel road.</li> <li>▪ Bridge and road need to be in place in time to serve as alternate route when US 29 is widened to six lanes between Polo Grounds Road and Towncenter Drive</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b></li> <li>▪ Design should begin as soon as alignment study is completed</li> <li>▪ Construction should be coordinated with construction of Berkmar Drive Extended and should begin as soon as design is completed and funding is identified (expected by year 10)</li> </ul>
Albemarle Place: Construct street system [Page ]		Property Owner/ Developer	<ul style="list-style-type: none"> <li>▪ Will provide an essential part of the local street network, including the southernmost segment of Cedar Hill Drive Extended in the County (Hydraulic Road to 4<sup>th</sup> Street)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Timing set in proffers; construction is dependent on private development decisions</li> </ul>
North Pointe: begin construction of street system [Page ]		Property Owner/ Developer	<ul style="list-style-type: none"> <li>▪ Main road through proposed development will serve as parallel route to US 29 between Proffit Road and Lewis &amp; Clark Drive</li> <li>▪ Development roads need to be in place when additional development north of Hollymead Town Center brings additional traffic</li> </ul>	<ul style="list-style-type: none"> <li>▪ Timing set in proffers; construction is dependent on private development decisions</li> </ul>
<b>[In City]Reconstruct Hydraulic Road from US 29 to 250 Bypass [Page ]</b>	<b>\$8,250,000</b>	<b>City of Charlottesville</b>	<ul style="list-style-type: none"> <li>▪ <b>Cross section will be reduced, landscaped median added, with onstreet parking, roundabouts will replace signals</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Begin planning and design in the first 10 years, based on City priorities</b></li> </ul>
Construct Hillsdale Drive Extended south of Hydraulic Road as property redevelops [Page ]		Property Owners/ Developers	<ul style="list-style-type: none"> <li>▪ Hillsdale Drive Extended will be constructed as each property redevelops.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Needs to be completed before the grade separation at Hydraulic and US 29 is constructed to provide alternate route during construction of grade separation</li> <li>▪ Due to cost and impacts, completion is expected within 10 years, but is dependent on private development</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Construct Cedar Hill Drive Extended from Fourth St. to Greenbrier Drive [Page ]	\$1,475,000	Property Owner/ Albemarle County	<ul style="list-style-type: none"> <li>▪ North of Albemarle Place, Cedar Hill Drive to be constructed in five segments: this is the first (southernmost) segment.</li> <li>▪ Portion(s) of this segment may have to be constructed by the County if property does not redevelop</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction is development-dependent</li> </ul>
Construct Northwest Rio Ring Road [Page ]	\$1,500,000	VDOT, Albemarle County, Developer	<ul style="list-style-type: none"> <li>▪ Design/alignment will be determined during preparation of Small Area Plan</li> <li>▪ Will have an impact on adjacent property and will provide access to adjacent property</li> <li>▪ Will serve as connection between US 29 and grade separation at Rio Road</li> </ul>	<ul style="list-style-type: none"> <li>▪ Timing of construction will be identified during preparation of Small Area Plan</li> <li>▪ This Ring Road must be complete prior to construction of the grade separation at Rio Road and US 29 because this road and the southeast Ring Road are needed to provide for construction of the grade separation</li> </ul>
Construct Southeast Rio Ring Road [Page ]	\$1,000,000	VDOT, Albemarle County, Developer	<ul style="list-style-type: none"> <li>▪ Design/alignment will be determined during preparation of Small Area Plan</li> <li>▪ Will involve Fashion Square Mall property</li> <li>▪ Will serve as connection between US 29 and grade separation at Rio Road</li> </ul>	<ul style="list-style-type: none"> <li>▪ Timing of construction will be identified during preparation of Small Area Plan</li> <li>▪ This Ring Road must be complete prior to construction of the grade separation at Rio Road and US 29 because this road and the northwest Ring Road are needed to provide for construction of the grade separation</li> </ul>
<b>Construct Berkmar Drive Extended [Page ]</b>	<b>\$10,500,000</b>	<b>VDOT, Albemarle County, Developer</b>	<ul style="list-style-type: none"> <li>▪ <b>Berkmar Drive Extended will provide alternate route for local traffic</b></li> <li>▪ <b>Will provide access to parcels not served by US 29</b></li> <li>▪ <b>Will, with the bridge, provide a second crossing over the South Fork of the Rivanna River</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b></li> <li>▪ <b>Design should begin as soon as Master Plan is adopted so alignment and cost of extension can be determined.</b></li> <li>▪ <b>Project should be coordinated with design and construction of bridge</b></li> <li>▪ <b>It is highly desirable to have Berkmar Drive Extended constructed prior to widening of US 29 north of Polo Grounds Road, so that Berkmar can serve as an alternate route for local drivers</b></li> <li>▪ <b>Segments of Berkmar Drive Extended may be constructed by developers when adjacent parcels are developed</b></li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Widen Berkmar Drive from Rio Road to Hilton Heights Road [Page ]	\$13,000,000	VDOT, Albemarle County, Developer	<ul style="list-style-type: none"> <li>▪ Project may be shifted to the second ten year timeframe, after Berkmar Drive Extended is completed.</li> <li>▪ Property Owner/ Developer may be asked to dedicate ROW and/or construct a portion of the road</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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>
Construct jug handle road and consolidate access on the east side of US 29 between Timberwood Blvd. and Airport Road [Page ]	\$2,500,000	VDOT, Property Owners	<ul style="list-style-type: none"> <li>▪ Design should be part of US 29 north of Hollymead Town Center</li> <li>▪ Property owners will be asked to dedicate ROW</li> <li>▪ If property redevelops, owners / developers may be asked to construct part of road</li> <li>▪ Provision of jug handle will provide an alternate route for some traffic; will take some of the pressure off of the intersections themselves and delay need for construction of grade separations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Design and ROW acquisition should begin during first ten years</li> <li>▪ Construction may not take place until the second ten years due to funding constraints</li> </ul>
Construct jug handle, parallel road, and consolidate access on the west side of US 29 between Timberwood Blvd. and Airport Road [Page ]	\$2,700,000	VDOT, Property Owners	<ul style="list-style-type: none"> <li>▪ Design should be part of US 29 north of Hollymead Town Center</li> <li>▪ Property owners will be asked to dedicate ROW</li> <li>▪ If property redevelops, owners / developers may be asked to construct part of road</li> <li>▪ Provision of jug handle will provide an alternate route for some traffic; will take some of the pressure off of the intersections themselves and delay need for construction of grade separations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Design and ROW acquisition should begin during first ten years</li> <li>▪ Construction may be delayed to second ten years due to funding constraints</li> </ul>
<b>Transit/Pedestrian/Bicycle Network</b>				
Transit: System Expansion & Improvements [Page ]		City, County, UVa, CTS, RTA, other agencies	<ul style="list-style-type: none"> <li>▪ Establish an RTA or a similar organization to manage system</li> <li>▪ Extend local bus service as Centers develop</li> <li>▪ Coordinate initial Priority Transit service with road improvements and development of Centers throughout US 29N Corridor</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b></li> <li>▪ RTA or similar organization needs to be established as soon as possible in order to oversee implementation of the transit system essential to Places29</li> </ul>



Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Transit: Implement Priority Transit service in the Charlottesville-Albemarle area [Page , see also <i>Charlottesville-Albemarle Regional Transit Authority Draft Final Report, August 2008</i> , pages 12-13] from Charlottesville to Midtown	\$17,000,000	RTA	<ul style="list-style-type: none"> <li>▪ Requires establishment of an RTA or a similar management organization to accomplish</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 (Midtown area)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Service should begin as soon as sufficient residential density and employment intensity are present in the area to be served</li> </ul>
Bicycle & Pedestrian Network [Page ]		County, VDOT, other agencies, developers, & property owners	<ul style="list-style-type: none"> <li>▪ Add/upgrade bike lanes and sidewalks as components of all new and expanded public road projects.</li> <li>▪ Correct existing gaps in bicycle and pedestrian facilities and improve existing crosswalks</li> <li>▪ Require construction of bike and pedestrian connections with development projects</li> </ul>	<ul style="list-style-type: none"> <li>▪ Facilities that are part of private development projects will be completed as those projects are constructed</li> </ul>
Hollymead to Downtown Trail		City, County, VDOT, other agencies, Property Owners, Developers	<ul style="list-style-type: none"> <li>▪ Identify specific route for trail</li> <li>▪ Design and consider with development proposals</li> <li>▪ Property owners/ Developers may be asked to donate ROW and/or construct segments of the trail</li> </ul>	<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</li> </ul>
US 29 Pedestrian Crossovers / Crossings		County/ VDOT, Property Owners/ Developers	<ul style="list-style-type: none"> <li>▪ Identify locations for crossings and determine if they are to be at-grade or elevated</li> <li>▪ Determine order for construction</li> <li>▪ Design, determine cost of each</li> </ul> <p>Each grade separation will include transit / bicycle / pedestrian crossings</p>	<ul style="list-style-type: none"> <li>▪ Location identification should begin as soon as Master Plan is adopted</li> <li>▪ Potential crossing locations should be considered as part of each Small Area Plan</li> </ul>
<b>LAND USE &amp; DEVELOPMENT</b>				
Prepare a Small Area Plan for the area around Rio Road and US 29 [Page ]	\$100,000 (minimum estimated cost for County planning process)	County, VDOT, Property Owners, & Business Owners	<ul style="list-style-type: none"> <li>▪ Coordinate with VDOT's design &amp; engineering study for grade-separation at Rio &amp; US 29; develop Memorandum of Agreement between VDOT and County to conduct joint public planning process</li> <li>▪ Impact of Eastern Connector Study results</li> <li>▪ Complete planning process at least through identification of ring road routes</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b></li> <li>▪ Begin as soon as funded</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Prepare a Small Area Plan for the Airport Road Corridor area [Page ]	\$100,000 (minimum estimated cost for County planning process)	County, VDOT, Property Owners, & Business Owners	<ul style="list-style-type: none"> <li>▪ Will include design/location of jug handle roads at Timberwood Blvd. and Airport Road. Construction of jug handles may delay the need for the grade separations at Timberwood and Airport</li> <li>▪ Should include adequate signage for airport</li> </ul>	<ul style="list-style-type: none"> <li>▪ Should begin in time to provide design/location of jug handle roads at Timberwood Blvd. and Airport Road</li> <li>▪ May be delayed until second ten years due to funding constraints</li> </ul>
<b>COMMUNITY FACILITIES &amp; SERVICES [to be updated consistent with CIP submittal changes]</b>				
Sutherland Middle School Addition Will redo Comm facs & servs section when David completes Chapter 6		Albemarle County Schools Division	<ul style="list-style-type: none"> <li>▪ Programmed in current CIP: 2012 - 2014</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
Hollymead Elementary School Addition		Albemarle County Schools Division	<ul style="list-style-type: none"> <li>▪ Programmed in current CIP: 2012 – 2014</li> <li>▪ Provide necessary field space to meet existing demands and long-term growth needs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Site selection and acquisition</li> <li>▪ Construct in latter part of 10-year period</li> </ul>
Recreational Field Space in Hollymead/ Piney Mountain Area			<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
Monitor long-term need for future Fire/Rescue service improvements		Albemarle County Dept. of Fire Rescue	<ul style="list-style-type: none"> <li>▪ What criteria will be used?</li> </ul>	
Police Office for beat officers in Neighborhoods 1, 2, Hollymead, Piney Mtn.		Albemarle County Police Dept.	<ul style="list-style-type: none"> <li>▪ Ensure police have facilities in the Northern Development Areas per Community Facilities Plan standards. Current space exists.</li> <li>▪ Space is usually provided at County Fire-Rescue Stations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monitor for need to upgrade.</li> </ul>
County Administrative Offices		?	<ul style="list-style-type: none"> <li>▪ No separate satellite County administrative offices are proposed for the Northern Development Areas</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
Public Meeting Places		?	<ul style="list-style-type: none"> <li>▪ Encourage the establishment of these meeting places within new or expanded County community facilities (e.g., libraries, fire stations)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Incorporate into future public buildings (e.g., libraries)</li> <li>▪ Monitor need to improve/expand space</li> </ul>
Jefferson/Madison Regional Library Facility Needs Study		Jefferson-Madison Regional Library	<ul style="list-style-type: none"> <li>▪ Update study to establish short-, mid-, and long-term space needs for the City and County</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
Upgrade/Expand the Northside Library		Jefferson-Madison Regional Library	<ul style="list-style-type: none"> <li>▪ Facility size should be based on the update of the JMRL Facility Needs Study</li> <li>▪ Determine whether Northside library will continue in current location or new location, with preference for a location in Neighborhoods 1 or 2, based on JMRL Facility Needs Study</li> </ul>	<ul style="list-style-type: none"> <li>▪ Develop plan to upgrade/expand (first 5 years)</li> <li>▪ Construction in 6 – 10 year timeframe</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Library Service in Northern Development Areas		Jefferson-Madison Regional Library	<ul style="list-style-type: none"> <li>▪ Consider the need for additional library service beyond that currently offered by the Northside facility</li> <li>▪ May involve expanding the Northside facility or locating a new library in the Hollymead Community</li> <li>▪ Second facility may be a satellite facility</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
Recycling Centers		Rivanna Water & Sewer Authority, County General Services, Facilities Development	<ul style="list-style-type: none"> <li>▪ Provide locations for one or two recycling centers to serve the Northern Development Areas</li> <li>▪ Central to the Hollymead/Piney Mtn area (first 10 years)</li> <li>▪ Central to Neighborhoods 1 and 2, as needed based on demand (11 – 20 year timeframe)</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
New Middle/High School		Albemarle County Schools Division	<ul style="list-style-type: none"> <li>▪ Monitor the annual <i>Albemarle County Schools Long Range Planning Process</i> to assess the need for additional schools facilities</li> <li>▪ Site selection to begin during 6 – 10 year timeframe</li> <li>▪ Construction may need to begin during 11 – 20 year timeframe</li> <li>▪ Places29 area may be the location</li> </ul>	
Upgrade Seminole Trail Fire/Rescue Station and rescue building facilities		Albemarle County Dept. of Fire Rescue	<ul style="list-style-type: none"> <li>▪</li> </ul>	
<b>PARKS &amp; GREEN SYSTEMS</b>				
Provide active field space for practice and competitive sports fields/multi-purpose fields [see Parks & Green Systems Map]		County, Property Owners/ Developers	<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</li> <li>▪ Construction in the second 20 years in Neighborhoods 1 and 2</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identify types and amount of space needed</li> <li>▪ Identify possible locations</li> <li>▪ Request proffers with new developments</li> </ul>
Greenway along Rivanna River [see Parks & Green Systems Map]		County, Property Owners/ Developers	<ul style="list-style-type: none"> <li>▪ Complete development of Greenway from Ivy Creek Natural Area to Darden Towe Park</li> <li>▪ Complete development of Greenway from Chris Greene Lake to eastern Development Area boundary</li> <li>▪ <b>Includes field space</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b></li> <li>▪ Construction is development-dependent</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Trail connections from adjacent and nearby neighborhoods to Greenway network		County, Homeowners Associations, Property Owners	<ul style="list-style-type: none"> <li>▪ Provide for these connections with private development/proffer, neighborhood association effort, or Parks &amp; Rec Dept.</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
<b>Hollymead to Downtown Trail</b>			<ul style="list-style-type: none"> <li>▪ See Transit/Pedestrian/Bicycle Network section above.</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
<b>SECOND TEN YEARS</b>				
<b>TRANSPORTATION</b>				
<b>US 29</b>				
Design and construct US 29 / Hydraulic intersection with a single point urban interchange (SPUI) [Page ]	\$34,000,000	VDOT, City of Charlottesville	<ul style="list-style-type: none"> <li>▪ Will protect pedestrians and bicyclists from exposure to heavy traffic on US 29 and provides a safe connection between areas east and west of US 29</li> <li>▪ A SPUI works most efficiently with the existing topography in the area</li> <li>▪ A partial design has been completed</li> <li>▪ Facilitates redirection of more local trips to Hillsdale Drive Extended and connector roads to the west of US 29</li> </ul>	<ul style="list-style-type: none"> <li>▪ A HIGH PRIORITY IMPLEMENTATION PROJECT</li> <li>▪ Complete design and construct as soon as funding is identified</li> <li>▪ Construction assumes that ***** is complete [information coming from Jack K]</li> </ul>
US 29 at Seminole Square. Construct turn lane at Seminole Square [Page ]	\$290,000	VDOT	<ul style="list-style-type: none"> <li>▪ Add a second northbound left-turn lane to US 29; extend southbound US 29 left-turn storage; Reconfigure Sperry driveway and Seminole Square to add dual left-turn lanes</li> <li>▪ Need for reconfiguration at Sperry and northbound US 29 should be tracked to determine if volumes increase over time to warrant proposed improvements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Traffic volumes should be tracked to determine if the reconfiguration and northbound US 29 turn lanes will be needed.</li> </ul>
US 29 at Branchlands Blvd. [Page ]	\$280,000	VDOT	<ul style="list-style-type: none"> <li>▪ Extend turn lane at Branchlands to Premier Circle</li> <li>▪ Realign Premier Circle to support parallel road network</li> </ul>	<ul style="list-style-type: none"> <li>▪ Turn lane to be extended when traffic warrants</li> <li>▪ Premier Circle to be realigned when motels at southern end redevelop</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
US 29 at Rio Road: replace at-grade intersection with grade separation [Page ]	\$36,000,000	VDOT	<ul style="list-style-type: none"> <li>▪ Design of the grade separation and location of ring roads will be determined during Small Area Plan process</li> <li>▪ Use of ring roads will allow the intersection of US 29 at Albemarle Square to remain full access</li> <li>▪ The ring road concept will also support redevelopment in the Midtown area</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>A HIGH PRIORITY IMPLEMENTATION PROJECT</b></li> <li>▪ It is anticipated that the Small Area Planning process will begin as soon as this Master Plan is adopted.</li> <li>▪ Construction should begin as soon as funding has been identified</li> <li>▪ Construction should be coordinated with construction of the SPUI at Hydraulic Road so that both grade separations are not under construction at the same time</li> </ul>
At US 29: Expand turn lanes at Schewel Furniture driveway [Page ]	\$1,200,000	VDOT, Developer	<ul style="list-style-type: none"> <li>▪ Includes the Northtown Center improvements (add northbound right turn lane; add southbound dual left turn lanes; add westbound approach); add southbound right-turn lane (close second Schewel Furniture driveway)</li> <li>▪ Some of these improvements will be paid for by the developer, others by VDOT</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
Construct grade separation at Ashwood Blvd. [Page ]	\$10,300,000	VDOT	<ul style="list-style-type: none"> <li>▪ Eliminating the at-grade median break and signal will improve the operations and safety on US 29</li> <li>▪ Design should be part of design of US 29 widening from Polo Grounds Road to Towncenter Drive</li> <li>▪ Most appropriate location for jug handle connecting roads will be determined during design, based on development status of relevant parcels</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction will begin after Small Area Plan is completed and funding is identified</li> <li>▪ Construction of Ashwood grade separation expected to precede construction of grade separations as Airport Road and Timberwood Blvd</li> </ul>
Construct grade separation at Airport Road [Page ]	\$15,500,000	VDOT	<ul style="list-style-type: none"> <li>▪ Will be done simultaneously with grade separation at Timberwood Blvd.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Design, layout of jug handle roads, and timing of construction will be determined during preparation of Small Area Plan for the Airport Road Corridor</li> <li>▪ Construction will begin after funding is identified and after grade separation at Ashwood Blvd. is completed</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Construct grade separation at Timberwood Blvd. [Page ]	\$15,500,000	VDOT	<ul style="list-style-type: none"> <li>▪ Will be done simultaneously with grade separation at Airport Road</li> </ul>	<ul style="list-style-type: none"> <li>▪ Design, layout of jug handle roads, and timing of construction will be determined during preparation of Small Area Plan for the Airport Road Corridor</li> <li>▪ Construction will begin after funding is identified and after grade separation at Ashwood Blvd. is completed</li> </ul>
US 29 at Hilton Heights Road. Construct grade separation at Hilton Heights Road [Page ]	\$15,500,000	VDOT	<ul style="list-style-type: none"> <li>▪ May not be necessary during the 20-year plan timeframe</li> <li>▪ Design will be difficult due to topography</li> <li>▪ Would provide another connection between areas to the east of US 29 and Berkmar Drive Extended</li> </ul>	<ul style="list-style-type: none"> <li>▪ Evaluate need for grade separation during each 5-year review and update</li> <li>▪ Identify funding and schedule construction if traffic warrants a grade separation at this intersection</li> </ul>
Widen US 29 to six lanes from Airport Road to bridge over the North Fork of the Rivanna River [Page ]	\$11,000,000	Property Owner/ Developer	<ul style="list-style-type: none"> <li>▪ The northbound lane is part of the North Pointe proffers</li> <li>▪ The southbound lane is part of the University of Virginia Research Park proffers</li> </ul>	<ul style="list-style-type: none"> <li>▪ The northbound lane will be constructed as part of the North Pointe Development</li> <li>▪ The southbound lane will be constructed when square footage of buildings constructed in the Research Park reaches the threshold specified in the proffers</li> </ul>
Signalize US 29 at Austin Drive [Page ]	\$280,000	VDOT	<ul style="list-style-type: none"> <li>▪ Required to serve development in the area</li> </ul>	<ul style="list-style-type: none"> <li>▪ Install signal when traffic warrants</li> </ul>
Signalize US 29 at Dickerson Road [Page ]	\$280,000	VDOT	<ul style="list-style-type: none"> <li>▪ Required to serve development</li> </ul>	<ul style="list-style-type: none"> <li>▪ Install signal when traffic warrants</li> </ul>
<b>Parallel and Perpendicular Roads</b>				
Construct Cedar Hill Extended to Shopper's World [Page ]	\$2,650,000	County, VDOT, Property Owner/ Developer	<ul style="list-style-type: none"> <li>▪ From Greenbrier Drive to Dominion Drive: in three segments: 1) from Greenbrier to Westfield, 2) from Westfield to Branchlands, and 3) from Branchlands to Dominion Drive</li> <li>▪ Extends parallel connectivity on the west side of US 29 along a commercial street instead of along Commonwealth Drive, which is residential</li> <li>▪ Provides interparcel access that allows for driveway consolidation along US 29</li> <li>▪ Will include realignment of Premier Circle; neighbors need to be involved in choice of road alignment</li> </ul>	<ul style="list-style-type: none"> <li>▪ These segments of Cedar Hill Drive will be part of the redevelopment of motel property at the southern end of Premier Circle</li> </ul>

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Construct southwest Rio Ring Road [Page ]	\$4,100,000	VDOT, Property Owner/ Developer	<ul style="list-style-type: none"> <li>▪ Three-lane cross section from Berkmar Drive to Rio Road</li> <li>▪ Provides opportunities for redevelopment of adjacent parcels in Midtown area</li> <li>▪ County may have to construction if property does not redevelop prior to construction of grade separation at Rio Road and US 29</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction not essential prior to grade separation at Rio Road and US 29</li> </ul>
Construct northeast Rio Ring Road [Page ]	\$2,650,000	VDOT, Property Owner/ Developer	<ul style="list-style-type: none"> <li>▪ Use existing Albemarle Square Drive and Garden Drive</li> <li>▪ Need to address existing connections internal to the existing shopping center</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction not essential prior to grade separation at Rio Road and US 29</li> </ul>
Construct roundabout at Fashion Square Mall Drive [Page ]	\$465,000	Property Owner, County	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
<b>Construct pedestrian overcrossing (of US 29) at Berkmar Drive [Page ]</b>	<b>\$1,900,000</b>	<b>County, VDOT, Property Owner / Developer</b>	<ul style="list-style-type: none"> <li>▪ <b>Recommended to serve pedestrian and bicycle traffic in the Rio Road / US 29 area</b></li> <li>▪ <b>Will connect Fashion Square Mall to corner of Berkmar Drive and US 29</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Construct as soon as funding has been identified</b></li> <li>▪ <b>May require developer participation; coordinate with development of surrounding area</b></li> </ul>
Construct Cedar Hill Drive from Dominion Drive to Berkmar Drive [Page ]	\$900,000	Property Owner, VDOT,	<ul style="list-style-type: none"> <li>▪ The fifth segment—provides additional connectivity parallel to US 29</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction is development-dependent</li> </ul>
Extend roadway on west side of US 29 opposite Albemarle Square to Berkmar Drive [Page ]	\$1,700,000	Property owner, VDOT, County	<ul style="list-style-type: none"> <li>▪ Provides an opportunity for local traffic to reach Berkmar Drive Extended</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction is development-dependent</li> </ul>
Connect Schewel Furniture Drive to Berkmar Drive (development-dependent) [Page ]	\$1,700,000	Property Owner, VDOT, County	<ul style="list-style-type: none"> <li>▪ Requires participation of property owners</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction is development-dependent</li> </ul>
Extend Ashwood Blvd. to Berkmar Drive Extended [Page ]		Property Owner/ Developer, VDOT	<ul style="list-style-type: none"> <li>▪ The segment of Ashwood Blvd. from the western end of the grade separation to Berkmar Drive Extended</li> <li>▪ Will allow Forest Lakes residents (and others) to reach Berkmar Drive without having to use US 29</li> </ul>	<ul style="list-style-type: none"> <li>▪ Should be constructed as part of Ashwood grade separation, provided Berkmar Drive has already been constructed</li> </ul>
<b>Construct roundabout at Worth Crossing and Timberwood Blvd. [Page ]</b>		<b>VDOT</b>	<ul style="list-style-type: none"> <li>▪ <b>Supports grade separations and jug handle roadway operations</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>May be completed after grade separations at Airport Road and Timberwood Blvd.</b></li> </ul>
<b>Transit/Pedestrian/Bicycle Network</b>				

Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
Transit:		City, County, UVa, CTS, RTA, other agencies	<ul style="list-style-type: none"> <li>▪ Extend local bus service as Centers develop</li> <li>▪ Coordinate initial Bus Rapid Transit (BRT) with road improvements and development of Centers throughout US 29N Corridor</li> <li>▪ Estimated cost to extend BRT on US 29 from Midtown to Uptown: \$16,500,000</li> </ul>	<ul style="list-style-type: none"> <li>▪ A HIGH PRIORITY IMPLEMENTATION PROJECT</li> <li>▪ Extend BRT to Midtown as density/intensity increases to support transit use, if not done during first ten years</li> <li>▪ Extend BRT to Uptown and Airport once density/intensity increases to support transit in Airport Road Corridor Area, possibly further north to Rivanna Station Military Base/ GE-Fanuc area</li> <li>▪ Extend BRT to Greene County when potential ridership warrants</li> </ul>
Bicycle & Pedestrian Network [Page ]		County, VDOT, other agencies, developers, & property owners	<ul style="list-style-type: none"> <li>▪</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
<b>LAND USE &amp; DEVELOPMENT</b>				
[No projects identified at this time]			<ul style="list-style-type: none"> <li>▪ Projects will be identified during 5-year Plan updates based on transportation projects, community facilities &amp; services, and Parks &amp; Green Systems projects during the next five years</li> </ul>	<ul style="list-style-type: none"> <li>▪</li> </ul>
<b>COMMUNITY FACILITIES &amp; SERVICES</b>				
New Elementary School [section to be revised when David completes Chapter 6]		Albemarle County Schools Division	To be located in one of three locations in the County, based on need/demand: Crozet, southern urban area (Biscuit Run proffered site), the Northern Development Areas (North Pointe proffered site)	<ul style="list-style-type: none"> <li>▪ Identify need</li> <li>▪ Design and construct new school</li> </ul>
New Middle/High School		Albemarle County Schools Division	<ul style="list-style-type: none"> <li>▪ Monitor the annual <i>Albemarle County Schools Long Range Planning Process</i> to assess the need for additional schools facilities</li> <li>▪ Site selection to begin during 6 – 10 year timeframe</li> <li>▪ Construction may need to begin during 11 – 20 year timeframe, possibly after</li> <li>▪ Places29 area may be location</li> </ul>	



Implementation Project	Estimated Cost	Responsible Parties	Issues to Be Addressed Actions Required / Additional Notes	Milestones
<b>PARKS &amp; GREEN SYSTEMS</b>				
Provide active field space for practice and competitive sports fields/multi-purpose fields	Variable, TBD	County, Property owner/ Developer	<ul style="list-style-type: none"> <li>▪ Provide through proffer or acquisition to begin in the first five years</li> <li>▪ Construction in the second 20 years in Neighborhoods 1 and 2</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identify needs</li> <li>▪ Identify locations</li> </ul> Request proffers with new developments

### Notes on Column Headings

**The Implementation Table gives the following information for each project:**

- **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.