3. Existing Conditions and Future Trends

[NOTE: Numbers highlighted in yellow in this chapter will be replaced with new figures after January 31, 2009. The new numbers will be current as of the end of 2008. Pages showing the new figures will be distributed as soon as they are available.]

This chapter provides some of the basic background information used to prepare this Master Plan; it identifies and explains those conditions and trends that form the foundation for the Plan. These conditions and trends have a direct impact on the desired Places29 community structure because they form the starting point for future planning. The existing conditions and future trends are presented in the following order:

1. Population and demographics of the Northern Development Areas
2. Existing Conditions and Community Structure, including land use patterns, planned development, open space and natural resources, and historic and archaeological resources
3. The Existing Transportation Network, future trends, and travel patterns
4. The Economic Framework
5. Market Analyses

Population of the Northern Development Areas

There are approximately 24,000 people residing in the Northern Development Areas, which is about one-quarter of all of the residents in the County. The breakdown by Development Area is:

<table>
<thead>
<tr>
<th>Development Area</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood 1</td>
<td>7,239</td>
</tr>
<tr>
<td>Neighborhood 2</td>
<td>8,397</td>
</tr>
<tr>
<td>Community of Hollymead</td>
<td>6,957</td>
</tr>
<tr>
<td>Community of Piney Mountain</td>
<td>999</td>
</tr>
<tr>
<td><strong>Total: Northern Development Areas</strong></td>
<td><strong>23,592</strong></td>
</tr>
<tr>
<td><strong>Total: All 11 County Development Areas</strong></td>
<td><strong>90,806</strong></td>
</tr>
<tr>
<td><strong>Total Albemarle County (2006)</strong></td>
<td><strong>90,806</strong></td>
</tr>
<tr>
<td><strong>Northern Development Areas as a Percentage of All 11 Development Areas</strong></td>
<td><strong>25.9%</strong></td>
</tr>
</tbody>
</table>

Source: Weldon Cooper Center for Public Service and Albemarle County Office of Geographic Data Services.
The County has an **average annual population growth rate of approximately 1.5% per year** and the Northern Development Areas accommodates a significant portion of that growth. Over three-fourths of the County’s population growth is a result of in-migration.

The Virginia Employment Commission projects that Albemarle County will have 107,760 people in 2020 and 120,456 in 2030. If the proportion of the population living in the Northern Development Areas were to remain constant relative to total County population, the expected total residents in the Northern Development Areas would be 26,509 in 2020 and 29,632 in 2030. The actual population will depend on many factors, including growth elsewhere in the County.

**Existing Conditions and Community Structure**

The Northern Development Areas encompass almost 14.5 square miles (9,233 acres). Neighborhoods 1 and 2 are separated from Hollymead and Piney Mountain by an undeveloped area of land that is dominated by the floodplain of the South Fork of the Rivanna and adjacent land of mostly rural character. Neighborhoods 1 and 2 are characterized by intense development along both sides of US 29 and are among the most urban areas in Albemarle County. By contrast, significant undeveloped portions of land currently remain in Hollymead and Piney Mountain.

Community structure is shaped by the relationships of existing residential areas, retail and commercial uses, employment areas, civic facilities, open spaces, and the network of streets that provide access. An analysis of these existing patterns and their spatial relationships is important because they greatly affect people’s quality of life. For instance, the relationship between where people live and where they work will determine their transportation choices and how much time they have to spend traveling between their homes and places of work, as well as to other destinations.

The existing framework of land use patterns and community structure is the basis for the Future Land Use Plan and Transportation Network in Chapter 4. The existing land use pattern provides the context and opportunities that are the foundation of future land uses. The existing pattern also shows where new uses must respect existing uses and structures.

**Land Use Patterns in the Places29 Area**

Two major elements establish the overall structure of the Places29 area. They are the South Fork of the Rivanna River and US 29 (Seminole Trail). The South Fork of the Rivanna divides the Communities of Hollymead and Piney Mountain, which have a more suburban character, from the more urbanized Development Areas, Neighborhood 1 and Neighborhood 2. “More urbanized” in this context means that the majority of the land is developed and both the residential densities and the intensities of nonresidential uses are higher—similar to urban areas like the City of Charlottesville. Figure 1, in Chapter 1, is a map of the four Northern Development Areas.

US 29 acts as a strong spine connecting all four of the Northern Development Areas. At present, the design of US 29 generally reflects the differences in character that exist between the southern and northern Development Areas. Further, the frontage conditions along US 29 affect the overall character of the adjacent development. However, this “spine” can also act as a major impediment to connectivity for any travel mode other than the auto in the Places29 area. This barrier effect needs to be overcome in the long range planning for the area.

South of the South Fork, US 29 is fronted by substantial and nearly continuous commercial development on both sides. Most commercial development along US 29 relies on access directly from US 29, as no significant system of parallel roads exists.
In contrast, north of the South Fork, most commercial activity now occurs in the Hollymead Town Center, which does not have a direct orientation to US 29, although there is some commercial activity at the Airport Road/Proffit Road/US 29 intersection that is oriented toward US 29.

Other key elements of the overall community structure are the many residential neighborhoods that already exist in the Places29 area, as well as the undulating terrain, pockets of forest and fields, many small streams and drainages, and views of the adjacent Rural Areas. A comparison of the amount of residentially designated property in the Development Areas that is not developed will be provided with the January 31, 2009 figures and updated at the time of Master Plan adoption.

The distribution of employment areas is another important component of community structure. The location of employment areas relative to residential areas has impacts on the transportation (commute) patterns in the area. If the community wants workplaces, residences, and retail and service areas located closer together, the distribution of employment areas is critical. Piney Mountain and the northern half of Hollymead are important centers for employment in the Places29 area. Here, higher concentrations of employment are related to the Charlottesville-Albemarle Airport, the University of Virginia Research Park, the Rivanna Station Military Base, GE-Fanuc, and other industrial/light industrial uses. South of the South Fork of the Rivanna, employment is clearly focused along the US 29 corridor.

**Neighborhood 1**

Neighborhood 1 encompasses 1,183 acres and is bounded by the South Fork of the Rivanna River to the north, US 29 to the east, and Hydraulic Road to the south. The north-south segments of Hydraulic Road, Rio Road West, and Woodburn Road form its western boundary, which separates it from Rural Area 1. A small portion of Neighborhood 1 is located south of Hydraulic Road just north of Neighborhood 7.

Neighborhood 1 is the most urbanized of the Northern Development Areas and includes residential neighborhoods such as Westfield, Berkeley, and Four Seasons, as well as substantial retail and commercial development along US 29. It has the most multifamily housing, the least amount of remaining vacant land, and a diversity of housing types (single family, townhome, and multifamily), a range of retail and service uses, and some fairly significant employment uses, such as Sperry Marine.

About two-thirds of the development in Neighborhood 1 is residential, the remaining third is retail and commercial uses. About one-third of the residential development is single-family homes and two-thirds is multifamily. Almost all of the existing retail is located along and oriented toward US 29. There are a few small pockets of employment and service uses along Rio Road, Hydraulic Road, and Greenbrier Drive. With the exception of a few smaller sites and the site of the future Albemarle Place development (at the intersection of Hydraulic Road and US 29), Neighborhood 1 is largely built out.

Agnor-Hurt Elementary School on Berkmar Drive is the only school located within Neighborhood 1. Greer Elementary School, Jouett Middle School, and Albemarle High School are located immediately to the west of Neighborhood 1 in the Rural Areas. The playfields at the schools are important public open spaces that are accessible to residents in the area. Humphris Park, located in the western portion of the development area, is also a public open space. The Ivy Creek Natural Area is a large-scale natural area for hiking and passive recreation located in the Rural Areas within one-half mile of Neighborhood 1. These public open spaces are...
complemented by the private open space of single-family homes and the semi-public greens around some of the multifamily housing.

The majority of land uses in Neighborhood 1 rely on three major roads for access: US 29, Hydraulic/Rio Road, and Berkmar Drive. The remaining roadway network in Neighborhood 1 consists largely of local loop roads or cul-de-sacs that, with few exceptions, provide few connections between adjacent developments. Without supplemental bicycle and pedestrian connections, this street pattern separates residences and other uses even if they are located in close proximity. The typical trip pattern in this type of environment requires travel out onto the nearest arterial (Hydraulic Road, Rio Road West, or US 29) and back into another part of the neighborhood. This limited connectivity affects the opportunities for travel among residential areas, open spaces, and retail, employment, and civic uses.

**Neighborhood 2**

With 2,981 acres, Neighborhood 2 is the second largest of the Northern Development Areas. The eastern and northern boundaries are the Rivanna River/South Fork of the Rivanna River, US 29 is the western boundary, and the southern boundary is the City limits.

With the exception of a band of retail and commercial uses along US 29, Neighborhood 2 is predominantly residential. The area immediately east of the retail and commercial uses consists of a number of multifamily and senior housing complexes. Residential neighborhoods of predominantly single-family homes are located north of Rio Road, including Dunlora, Raintree, Westmoreland, Woodbrook, and Carrsbrook. Development east of the railroad tracks includes neighborhoods of both neighborhood and urban density levels (Stonehenge and Riverrun). These are interspersed with clusters of estates at lower densities. This area also contains a number of larger un- or underdeveloped tracts of land north of Dunlora and south of the CATEC vocational school. A large area immediately east of the railroad tracks is currently being developed into the Belvedere residential neighborhood.

The only retail area not oriented toward US 29 is located along Rio Road East in the area known as “Gasoline Alley.” This small area includes a series of gas stations with convenience stores and several commercial properties. There is also a street named “Gasoline Alley” in this area.

Except for the recreational facilities located at Woodbrook Elementary School, Neighborhood 2 does not have any public open space. However, a considerable amount of public open space will be built as part of the Meadow Creek Parkway – Phase I. In addition, residents of Neighborhood 2 have access to Pen Park, which is located in the City of Charlottesville just south of Neighborhood 2. Finally, the Belvedere development will include several small neighborhood parks and a soccer complex.

The South Fork of the Rivanna, Meadow Creek, Town Branch, and several unnamed intermittent streams flow through several of these residential neighborhoods. These streams are a major asset for Neighborhood 2. The estate east of Belvedere, known as Dunlora Farm, includes large tracts of private, forested land.

Two major roads, US 29 and Rio Road East, provide all the principal access to development in Neighborhood 2. Beyond these two roads, access to most residential areas is by a combination of loop roads and a branch-like roadway network. This network ultimately focuses neighborhood traffic onto a few intersections that connect with through roads, such as Rio Road and US 29. This system of roads is similar to the one that exists in Neighborhood 1 and results in similar trip patterns. Rio Road East is the area’s principal arterial, providing access to most subdivisions east
and west of the railroad tracks. Local roads provide minimal connections between residential areas and other destinations. The retail and commercial uses along US 29 and residential uses in close proximity to US 29 are accessed either directly off of US 29 or from the perpendicular roads.

Community of Hollymead

The Community of Hollymead is the largest of the Northern Development Areas (4,396 acres) and is located north of the South Fork of the Rivanna on both sides of US 29. Its eastern boundary is formed by a combination of Pritchett Lane, Proffit Road, Powell Creek, and the railroad tracks. Polo Grounds Road and a creek near Templeton Acres form its southern boundary, while the North Fork of the Rivanna is its northern limit. Its western edge, shared with the Rural Areas, is formed by Earlysville Road, the Charlottesville-Albemarle Airport, and Dickerson Road.

The pattern of land uses east of US 29 is dominated by two suburban residential neighborhoods, Forest Lakes North and South. These are separated from US 29 by substantial forested buffers. Both neighborhoods center around the Hollymead Elementary School and Sutherland Middle School and their public playfields and open space. Larger forested areas and agricultural fields east and west of US 29 are still undeveloped, including vacant land between Polo Grounds Road and Forest Lakes South, in the North Pointe area, in the University of Virginia Research Park, and in areas located west and south of Hollymead Town Center.

Hollymead Elementary School and Sutherland Middle School are an important community focal point for Forest Lakes. Additional private recreation centers are owned by the Forest Lakes North and South neighborhood associations.

The Hollymead area includes a number of light industrial and industrial uses. These are concentrated in the Airport Center, the Airport Industrial Park, and the Northside Industrial Park. The University of Virginia Research Park, with 562 acres, is the largest individual employment center in the Places29 area and is still largely undeveloped. This area includes research and development, light industrial, and industrial uses.

As in Neighborhoods 1 and 2, the roadway network in Hollymead east of US 29 is a combination of loop roads and cul-de-sacs. Connectivity between adjacent residential developments is minimal. For instance, aside from US 29, only Timberwood Parkway connects Forest Lakes North and South. West of US 29, the network of roads is limited because there is less existing urban development.

Community of Piney Mountain

The Community of Piney Mountain, with 607 acres, is the smallest of the Northern Development Areas. It is bounded by the North Fork of the Rivanna in the south and Dickerson Road in the west and northwest. Its eastern and northern boundaries follow the alignment of smaller streams.

GE-Fanuc and the National Governmental Intelligence Center (NGIC)/Rivanna Station Military Base, two major County employers, are both located in Piney Mountain.

The western half of Piney Mountain is largely built out with suburban-style residential development and the GE-Fanuc campus. These residential and light industrial land uses are separated from one another and from US 29 by forested buffers. Adjacent developments of Briarwood and Camelot developments currently lack a local road connection to each other.
The area east of US 29 includes a number of light industrial uses located adjacent to the street, as well as the NGIC facility that is accessed via Boulders Road, the only local road in this area. The eastern portion of Piney Mountain is otherwise undeveloped and forested. The area around and including NGIC has been designated the Rivanna Station Military Base. The Defense Intelligence Agency (DIA) will be joining NGIC in this area over the next few years.

**Planned Development**

Already approved developments and proposals now under review are an important component of planning for the Places29 area. This is particularly true because several recently approved proposals, including Albemarle Place, Hollymead Town Center, and North Pointe, are large scale developments and will account for a significant share of growth during the timeframe of this Plan. As of December 2008, approximately xyz dwelling units and xyz square feet of commercial/retail/office had been approved, but not yet developed in the Places29 area.

**Existing and Planned Utilities Infrastructure**

The Places29 area is served by a number of utilities. Both the existing conditions and recommendations are included in Chapter 6, Community Facilities & Services.

**Edge Conditions**

In Albemarle County’s Comprehensive Plan, Principle 12 of the Neighborhood Model calls for “Clear boundaries with the Rural Areas.” The Northern Development Area boundaries include natural barriers, such as the Rivanna River; political boundaries, such as the City of Charlottesville; watershed boundaries, such as Rio Road and Woodburn Road; and existing property lines. Also, some Development Area edges are streets that are also Entrance Corridors. Conditions at the edges vary from fully developed to agricultural lands to undeveloped natural areas.

These edge conditions are discussed in more detail and shown on a map (see Figure 9. Edge Conditions) in the *Assets, Needs, and Opportunities Report*. Future edge treatment is especially important along Entrance corridors and also where other streets constitute the edge of the Development Area. A key goal of the Master Plan is to establish a pattern of consistent edge conditions along the boundary of the Places 29 area. The recommended edge conditions are given in Chapter 7, Design Guidelines.

**Open Space and Natural Resources**

**Open Space**

Planning for future growth in the Places29 area requires a thorough understanding of the existing open space and natural resources. This understanding will help determine what type and quantity of open space will be needed to support new development. It is also important to determine the level of protection that may needed to preserve the area’s natural environment.

Open space planning for an urbanizing area is different from that in the Rural Areas. This distinction is recognized by the Urban Open Spaces chapter of the Comprehensive Plan’s Natural Resources and Cultural Assets section.

“There is a fundamental difference in the value and character of open space in urban and rural situations. In the Rural Area, the County is often seeking to conserve large systems of land of particular value (such as agricultural and forestry lands) or to
preserve areas of significant resources (mountain ridges, stream valleys, wildlife habitat.) Whereas, in urban areas some preservation of natural areas (such as stream valleys) occurs, but more often, open spaces are designed and created. Urban open spaces will become more important as the County’s Development Areas become denser and as additional urban areas are developed. In addition, specifically designed open spaces should be incorporated as amenities into urban developments to offset the higher densities. In evaluating higher density proposals, the County will consider how they relate to existing open space systems, and how they create new open spaces.” (Natural Resources and Cultural Assets Section, p. 181/182)

This section of the Comprehensive Plan also identifies two strategies that are important to this Master Plan.

1. Evaluate all Development Area proposals for their contribution to the urban open space network.
2. Seize opportunities for urban parks.

These two strategies underline the importance of identifying and preserving natural and open space resources that are significant natural habitats, offer opportunities for stormwater management, are areas of natural beauty, or are an asset for recreational uses. A critical aspect of this planning effort is a focus on opportunities to connect these urban open spaces with a system of Greenways.

A discussion of existing public open spaces and parks, including recommendations for additional facilities, is included in Chapter 6, Community Facilities & Services.

Water Resources
The Natural Resources and Cultural Assets section of the Comprehensive Plan addresses the protection, conservation, and management of a variety of water resources in the County, including both surface water and groundwater resources. The Plan also emphasizes the “functional interrelationship of stormwater hydrology, stream buffers, flood plains, wetlands, and human management practices.”

The North and South Forks of the Rivanna River represent the most prominent surface water resources in the Places29 area. Both are drinking water resources for northern Albemarle County. A number of streams and lakes add further diversity to the hydraulic, habitat, scenic, and recreational assets provided by water bodies in the Places29 area. Generally, the County prohibits development in the floodplain areas that are part of these river systems, but where such development would serve a County purpose, it is conditionally allowed and regulated through the County’s special use permit process. The latter is required in order to remain under coverage of the National Flood Insurance Program of the Federal Emergency Management Agency.

The locations of individual wetlands were not specifically mapped for this Master Plan. However, wetlands may be present on a number of sites in the Places29 area, particularly those near one of the many streams in the area. Applicants for development proposals have the responsibility to ensure that wetlands are properly identified and addressed as per applicable Federal and State requirements. The County can support this process through its access to the National Wetland Inventory.
Sites with Importance for Biodiversity

The Natural Resources and Cultural Assets section of the Comprehensive Plan recognizes the importance of protecting biological diversity in both the Rural Areas and the Development Areas for their ecological, aesthetic, and economic benefits to the community.

As a first step toward addressing this objective, the County established the Biodiversity Working Group (BWG). This group published an initial list of Important Biodiversity Sites in Alhambra County Biodiversity – A Report on History, Current Conditions, and Threats, with Strategies for Future Protection. This report is meant to serve as a starting point to which data can be added or amended. Once this database is created, the sites can be identified in the Comprehensive Plan as important sites to be considered in policy development, land-use planning, and development reviews. In the absence of a final and adopted database, this Master Plan uses information contained in the report’s initial list of important sites. At this time, two Important Sites are located in the Places29 area: a small portion of an Important Site reaches into the westernmost section of Piney Mountain. Another small site of importance for biodiversity is located at the southernmost tip of the Hollymead area.

Historic and Archaeological Resources

A review of maps and data maintained by the County and the Department of Historic Resources (DHR) indicates that the Places29 area includes a variety of historic and archaeological resources. This includes a few sites that are listed on the National or State register for historic places. These sites are not identified or shown on a map in order to protect them from possible damage. It is the responsibility of developers to work with the County and the Department of Historic Resources to identify any historically or archaeologically significant sites in a proposed development.

Existing Transportation Network

A multimodal transportation system supports the Northern Development Areas and provides for the movement of people and goods to and through the County. A “mode” refers to a means of travel, such as cars, trucks, bus and rail transit, bicycles, pedestrian paths, air passenger and freight service, and railroads. “Multimodal” means that several modes serve the same area and may share the same road or path.

The transportation system in the Places29 area is made up of several networks: streets, transit, bicycle, pedestrian, railroad, and air. The first four of these networks share the street network. A system of offstreet trails also supports the bicycle and pedestrian network. Rail and air are independent networks that have terminals connected to the street network.

Existing Conditions

US 29 (Seminole Trail) is a multi-lane principal arterial that transitions from urban to rural as it traverses the corridor. US 29 is characterized by the following four basic cross sections:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Basic Cross Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. US 250 Bypass to Hydraulic Road</td>
<td>Six lanes with median and curb and gutter, right and left turn lanes, no parking, no bike lanes, sidewalks on both sides of the roadway.</td>
</tr>
<tr>
<td>2. Hydraulic Road to the South Fork of the Rivanna River</td>
<td>Eight lanes with median and curb and gutter, right and left turn lanes, no parking, no bike lanes, sidewalks on both sides of the roadway.</td>
</tr>
</tbody>
</table>
Average daily traffic (ADT) volumes on US 29 range from about 35,000 vehicles per day (vpd) at the Greene County boundary to about 50,000 vpd near Polo Grounds Road and climb to over 60,000 vpd near the US 250 Bypass. At the 250 Bypass, traffic on US 29 distributes to both directions of the Bypass, which substantially reduces the volume of traffic on US 29 as it becomes Emmet Street in the City of Charlottesville.

Traffic volumes on other streets in the Northern Development Areas vary widely. On US 29, average daily traffic (ADT) ranges from about 35,000 vehicles per day (vpd) at the Greene County line to about 50,000 vpd near Polo Grounds Road and climbs to over 60,000 vpd near the 250 Bypass. Other major roadways such as Rio Road, Hydraulic Road, and a segment of Berkmar Drive carry volumes that range from about 15,000 vpd to over 30,000 vpd. A third group of roads carry ADT volumes in the range of 5,000 to 10,000 vpd and includes Airport Road, Berkmar Drive (north of Woodbrook Drive), Hilton Heights Road, Greenbrier Road, and Earlysville Road. Other roads and streets in the Northern Development Areas carry less than 5,000 vpd and many carry less than 1,000 vpd.

The signalized intersections on US 29 in the Northern Development Areas operate in acceptable conditions during the peak periods, except for the locations from Hydraulic Road to the 250 Bypass. In the northern portion of US 29, where more of the intersections are unsignalized, traffic on the side street approaches at these intersections experiences long delays during peak periods, but otherwise traffic can access US 29. There are congested intersections on Hydraulic Road between US 29 and the US 250 Bypass. Travel time data collected for the corridor indicates that peak period travel on northbound and southbound US 29 north of Polo Grounds Road is at or near the posted speed limit. South of Polo Grounds Road, peak period travel is also at or near the speed limit, except near Rio Road and from Hydraulic Road to the 250 Bypass. There is a high volume of large vehicles in the traffic stream on US 29. Truck volumes on US 29 range from 2% to 13% of total traffic and average about 6% of total traffic. This volume of heavy vehicles, when combined with the rolling terrain present in the US 29 corridor, causes periodic queuing upstream of intersections. This queuing is due to the longer time taken by trucks on an upgrade to start up after stopping for a traffic signal. The travel time observations show that such queuing does occur, but not on a regular basis, except at the congested intersections noted above.

The traffic volume pattern noted above is the product of several factors, the primary of which is that Albemarle County—and the US 29 North Corridor in particular—attract regional travel from neighboring areas. Commuting patterns from the 2000 Census indicate that people from neighboring counties and cities come to work in Albemarle County and the City of Charlottesville. Similarly, among workers who reside in Albemarle County, a vast majority of residents commute to jobs in either Albemarle County or Charlottesville. Few commute to the Richmond or Washington Metro Areas. This means that there is a concentration of traffic along destination corridors where employment, retail, and residential land uses are located. The developed portions of Albemarle County adjacent to US 29 are both a major attractor of regional and local travel, as well as a generator of trips by residents living in these areas.
When these movement patterns are viewed in relation to US 29, they show that about 10 percent of the daily travel is from trips that pass through the corridor to destinations outside the Charlottesville Metro Area. Another 25 percent of the daily travel is people commuting in and out of the corridor to and from neighboring counties. The trips that originate within the corridor and the City of Charlottesville and that travel to jobs, services, and shopping in the corridor represent about 65 percent of the daily travel on US 29.

Traffic volumes will grow on other major road corridors, but not to the same extent that they are projected to grow on US 29. This is due to several factors, primarily the addition of several alternate routes into the future forecasts that would help disperse the future traffic over more routes than are available today. Meadow Creek Parkway and Hillsdale Drive Extended are two of these routes. Hydraulic Road and Rio Road East would see growth of between 5,000 and 10,000 vpd by 2025 under the forecasts prepared for the regional plan.

**Commute Patterns**

The Virginia Employment Commission has developed information on commute patterns, based on residents commuting out of the County and on workers coming into the County.

<table>
<thead>
<tr>
<th>Top 10 Places Residents Are Commuting To from Albemarle County</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlottesville, VA</td>
<td>13,886</td>
</tr>
<tr>
<td>Greene County, VA</td>
<td>545</td>
</tr>
<tr>
<td>Orange County, VA</td>
<td>326</td>
</tr>
<tr>
<td>Fluvanna County, VA</td>
<td>325</td>
</tr>
<tr>
<td>Waynesboro, VA</td>
<td>288</td>
</tr>
<tr>
<td>Louisa County, VA</td>
<td>287</td>
</tr>
<tr>
<td>Augusta County, VA</td>
<td>245</td>
</tr>
<tr>
<td>Nelson County, VA</td>
<td>208</td>
</tr>
<tr>
<td>Henrico County, VA</td>
<td>129</td>
</tr>
<tr>
<td>Madison County, VA</td>
<td>128</td>
</tr>
<tr>
<td>Total County Residents Leaving County</td>
<td>16,367</td>
</tr>
</tbody>
</table>

ZHA; US Census Bureau, 2000

<table>
<thead>
<tr>
<th>Top 10 Places Albemarle County Workers Are Commuting From</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlottesville, VA</td>
<td>7,990</td>
</tr>
<tr>
<td>Fluvanna County, VA</td>
<td>3,413</td>
</tr>
<tr>
<td>Greene County, VA</td>
<td>2,956</td>
</tr>
<tr>
<td>Nelson County, VA</td>
<td>1,543</td>
</tr>
<tr>
<td>Louisa County, VA</td>
<td>1,248</td>
</tr>
</tbody>
</table>
Future Trends

What is significant about the relationships among different users of the road network is that, as growth occurs in the region, this pattern of activity that focuses travel on the corridor will continue to intensify. The travel demand forecasts prepared for the UnJAM 2025 regional plan indicate that traffic growth on US 29 north of the 250 Bypass will add approximately 20,000 vpd to the existing traffic counts. In 2025, the UnJAM Plan projects that volumes on US 29 near the 250 Bypass will be approximately 80,000 vpd. North of Airport Road, volumes of over 50,000 vpd are projected. The projected future traffic in 2025 will more than triple existing travel times in the corridor and is expected to congest peak period intersection operations throughout the corridor. The UnJAM Plan is currently being updated. The 2035 UnJAM Plan will be available at the time this Master Plan is updated.

From a traffic operations standpoint, these travel patterns combine so that US 29 carries very high northbound and southbound volumes of traffic at all intersections. The current design of the roadway is organized to accommodate these traffic volumes reasonably efficiently—at the expense of delaying the turning and crossing multimodal traffic at intersections. As long as the turning and crossing traffic volumes are sufficiently small, the system functions. However, where there are larger movements of turning or crossing traffic (e.g., at the 250 Bypass, Hydraulic Road, and Rio Road), the resulting conflict between them and the high northbound and southbound volumes on US 29 causes substantial peak period queues to develop at these locations. As traffic continues to intensify in the US 29 North Corridor, locations that are currently functioning well will reach a tipping point and begin to experience similar queuing during peak periods.

Simply put, the US 29 North Corridor is a place that people not only want to go through, but want to go to. At this time, US 29 is the only continuous north-south roadway in the Northern Development Areas, which creates a heavy reliance on this one road for many of the trips in the US 29 corridor. This trend of making local trips on US 29 will continue in the future.

Transit Network

Two Charlottesville Transit System (CTS) routes serve portions of the Northern Development Areas. Scheduled transit service is available via Routes 5 and 7, extending from the City of Charlottesville as far north as the Wal-Mart near Hilton Heights Road. The routes run along US 29, Hillsdale Drive, Commonwealth Drive, and Rio Road. They have 30-minute headways and run until 11:45 in the evenings, Monday through Saturday. Sunday service is available on Route 7. Demand-responsive transit service is provided by Albemarle County via the Jaunt system.

Bicycle Network

The bicycle network in the Northern Development Areas includes bicycle lanes and routes on streets and offstreet paths/trails. Onstreet bicycle lanes are delineated by pavement markings.
Bike routes are indicated by signs, but do not provide a marked bike lane. Multi-use trails serve multiple user groups, including in-line skaters, bicyclists, and pedestrians. Bicycle lanes are present on Hydraulic Road, Rio Road, Hillsdale Drive, and a portion of Berkmar Drive. The existing bicycle network is mapped in the UnJAM 2025 regional plan. It is also incorporated into the Parks & Green Systems Map in Chapter 4.

**Pedestrian Network**

The pedestrian network in the Northern Development Areas consists primarily of sidewalks adjacent to streets. Multi-use trails, described in the section on bicycle networks above, also serve pedestrians. Sidewalks are present along both sides of portions of US 29, extending from the vicinity of the 250 Bypass north to approximately the South Fork of the Rivanna River. Sidewalks are also present along several of the cross streets in the corridor (Hydraulic Road, Seminole Court, Greenbrier Drive, Rio Road, and Airport Road).

Provisions for pedestrians to cross US 29 are largely absent. There is one crosswalk and one pedestrian signal head on US 29 between Barracks Road and the South Fork of the Rivanna River, but they are not at the same location. The lack of delineated pedestrian crossings on US 29 is an impediment to pedestrian travel within the corridor. In addition to the lack of marked crosswalks, signal timing generally does not provide for a separate pedestrian signal phase.

**Rail Service**

Norfolk Southern, which is the second largest railroad system in Virginia and one of the four largest railroads in the United States, operates a north/south running line for freight service that traverses Albemarle County east of the Northern Development Areas. The Norfolk Southern tracks are inside the Northern Development Areas only south of the South Fork of the Rivanna River. There are currently no railroad spurs in the Northern Development Areas. The nearest one is in the Proffit Road area (serves Better Living Building Supply).

AMTRAK service for passengers is provided in and out of the City of Charlottesville’s Union Station on West Main Street; both City and County users access the train from this station. There are no AMTRAK stops in Albemarle County. Charlottesville is served by two lines, the Crescent, which runs from New Orleans to New York, and the Cardinal, which runs from Washington, DC to Chicago.

The Virginia State Rail Plan refers to a proposal for passenger service from Bristol to Richmond and Washington, D.C. that would use the Norfolk Southern line. This proposal is called The TransDominion Express (TDX) and would run from Bristol to Richmond and Washington, DC. It would link Southwestern Virginia to Richmond via Lynchburg and Southwestern Virginia to Washington, DC via Lynchburg and Charlottesville. The proposal would also include improvements to Norfolk Southern track to accommodate a high level of service with European style cars and amenities.

The TDX organizers have been working toward qualifying the Bristol to Richmond demonstration route for eligibility for funding from the Rail Enhancement Fund. In addition, recent efforts have looked at the potential for increasing AMTRAK frequency of service between Lynchburg and Charlottesville directly to DC.

**Air Travel**

The Charlottesville-Albemarle Airport (CHO), located in the Northern Development Areas, is a non-hub, commercial service airport offering 60 daily nonstop flights to and from Charlotte, NC;
Philadelphia, PA; New York/LaGuardia, NY; Washington/Dulles; Cincinnati, OH; Detroit, MI; and Atlanta, GA. CHO is served by Delta Connection, United Express (Atlantic Coast Airlines), Northwest Airlines, and US Airways Express (Piedmont Airlines). The Airport also serves General Aviation uses. The Charlottesville-Albemarle Airport has grown from 65,600 passengers departing on commercial flights in 1980 to 132,400 in 1990, and served 163,400 passengers in 2003.

The Charlottesville-Albemarle Airport Master Plan, adopted in 2004, notes that the vast majority of customers reach the airport by car, which emphasizes the importance of the street system that serves the airport. Traffic delays on the access roads (US 29 in particular) affect the convenient nature of the airport and its economic vitality. Maintaining a predictable, reasonable travel time from the population and employment centers in Charlottesville and Albemarle County is vital to the continued success of the airport.

Additional information about the transportation network may be found in the US 29 North Corridor Transportation Study Final Report and also in Technical Memos 3, 6, and 11.

Economic Framework

In order to plan for the future of the Northern Development Areas, it is important to understand the role that the Northern Development Areas currently play in the regional economy. Based on current trends, the likely role of the Northern Development Areas can be projected into the future. This Economic Framework summarizes economic trends for the Charlottesville Metropolitan Area and Albemarle County. It is based on demographics, such as rates of population growth, existing and future household characteristics, and employment trends.

Please note that the full Economic Framework and Market Analysis are available in the Places29: Assets, Needs & Opportunities Report. The information included below is a summary of the full report. The market for future residential, retail, and office development in the Northern Development Areas is quantified in the market analysis. A market analysis projects the amount of a land use that market demand will support.

The following terms are used in the Economic Framework and Market Analysis:

Charlottesville Metropolitan Area, Charlottesville CBSA: The Charlottesville Metropolitan Area (Metro Area) is another name for the Charlottesville Core Based Statistical Area or Charlottesville CBSA, which is a Census designation. The Charlottesville Metro Area includes Albemarle County, the City of Charlottesville, and Fluvanna, Greene, and Nelson counties.

Household: A household includes all the people who occupy a housing unit as their usual place of residence.

Head of Household: The person, or one of the people, in whose name the home is owned, being purchased, or rented.

Regional Demographic and Economic Trends

The demographic, employment, and economic trends summarized below will help users of this Master Plan understand how Albemarle County is changing. This information was accurate as of January 1, 2007; it predates the 2008 economic downturn and reflects a long-range approach to economic trends and projections.
Household Characteristics and Projections

- Albemarle County-Charlottesville has a greater proportion of households headed by 15 to 24 year-olds and a lower share of households headed by persons 35 to 44 years of age than either the state or the nation. The presence of the University of Virginia likely accounts for the high share of households headed by persons aged 15 to 24.

- The share of households headed by 45 to 64 year-olds has increased, along with households headed by someone over 70 years of age. Albemarle County-Charlottesville’s increasing share of households aged 45 and over is both a national phenomenon (the baby boomers getting older) and a likely function of in-migration. The result of these changes has been an increase in the County’s median head of household age.

- Based on nationwide trends, there will likely be more Albemarle County-Charlottesville households in the 55- to 70-year-old range. This group typically contains many “empty nester” households. Empty nesters are parents whose children have left home. This life change can impact how these households spend their time and money, and where they live.

Income and Employment Characteristics

- The per capita income in Albemarle County-Charlottesville is higher than the state and national averages. There is significant buying power in Albemarle County.

- Albemarle County has experienced explosive job growth. From 1995 to 2003, the number of jobs in the County increased by over one-third. In 1995, there were more jobs in the City than in the County.

- There are about as many jobs in the County as there are households.

- With over 70,000 jobs available in Charlottesville and Albemarle County, the two areas supplied 82 percent of the Metro Area’s jobs in 2003. The City and County are the commercial and marketing center of the region.

- As of September 2005, the Charlottesville Metro Area’s unemployment rate was among the lowest in the country. Only 3 percent of the Metro Area’s labor force was out of work.

- An issue in the region is underemployment. Underemployed workers are those who have the education and skills to occupy higher paying jobs, but occupy lower paying ones. Many talented individuals are taking lower-paying jobs just to stay in the Charlottesville area.

- Over the last five years (2000-2005), Charlottesville Metro Area housing prices have escalated by 71.78 percent. Over the same period, the median household income in the Charlottesville Metro Area increased by only 13.9 percent.

Area Employers

- The area’s economic base is composed primarily of government service providers and the following industries: manufacturing, education, technology, retail trade, travel trade, construction, and services.

- The region’s economy is anchored by the University of Virginia (UVA). With over 12,500 employees at the University and an additional 5,500 at the University Medical Center, UVA accounts for over 15 percent of the employment in the City and County. Over 20,000 UVA students also help to fuel the economy.

- The travel industry is a major component of the local economy. Travel spending in the area exceeds $307 million annually and generates more than 2,600 jobs in the City and 2,400 jobs in the County.
The wholesale and retail industries account for the greatest share of County employment after State government.

The area’s economy is changing as it grows. Between 1995 and 2003, the County gained employment across all industry sectors except manufacturing. Many manufacturing jobs have been replaced by jobs in the service and hospitality sectors—many of which do not pay as well as the manufacturing positions they replaced.

The cost of living index indicates that the Charlottesville Metro Area is an expensive place to live, since the cost of living here is 7 percent higher than the national average.

**Economic Framework Conclusions and Projections**

- Because of the high cost of living in the area, diversifying industry to compensate for manufacturing job losses should provide employment opportunities offering at least equivalent pay
- Adequate housing for a wide range of household types and income levels will be needed to accommodate the expected increase in population
- Albemarle County jobs in the technical and administration industry sector may increase substantially as the University of Virginia Research Park continues to attract tenants and the Rivanna Station Military Base continues to grow.

**Market Analysis**

Three market analyses—residential, retail, and office—evaluate trends and make projections to determine what the market will demand in the future. Market analyses are useful because they provide information about the magnitude and type of development the Albemarle County-Charlottesville market will support over the next ten years. Because markets are complex and variable, projections are only made for the first ten years of the Master Plan’s 20-year implementation timeframe. These projections will be reviewed and updated, if necessary, when the Master Plan is reviewed every five years. These three market analyses were prepared in 2005-6. The three analyses presented below are summaries of the more detailed analyses included in the Assets, Needs, and Opportunities Report.

The market analysis does not address whether a given land use or the magnitude of development is desirable; that is the role of the planning process. The market analysis is a tool used during the planning process to understand the magnitude and character of future development pressure. With this understanding, the planning process results in strategies to manage this growth in a manner that is consistent with community desires.

**Residential Market Analysis**

The residential market analysis identifies the demand for new housing in Albemarle County over the next ten years. It also identifies the type of housing demanded (single family or multifamily). Finally, the market analysis projects the market demand for single-family and multifamily housing units in the Northern Development Areas, given County land use policies and the Northern Development Area’s competitive advantages and disadvantages for different types of housing.

**Residential Market Findings**

- Almost three-quarters of Charlottesville Metro Area households reside in single-family detached or attached houses.
As of 2005, almost 60 percent of Albemarle County-Charlottesville households owned their home.

Between 1990 and 2005, Albemarle County captured 51 percent of all new for-sale housing in the Metro Area. Over this same period, the County captured 79 percent of all new rental units built in the Charlottesville Metro Area. Prior to the economic downturn in 2008, market projections indicated that the County could potentially support between 2,760 and 3,140 new rental units and between 2,120 and 2,590 new for-sale housing units over the next five years.

Growth in the number of households is projected to continue to be strong through 2010. The Charlottesville Metropolitan Area is projected to grow by 5,700 households during the next five years. With 4,010 units of for-sale housing and 1,690 units for rent, much of this demand will be met. Due to the downturn, housing growth will be lower than initially projected. The County will continue to monitor the growth.

The Northern Development Areas captured 28 percent of the County’s new for-sale housing and 49 percent of the County’s new rental housing between 1990 and 2005.

Using these capture rates as a proxy for the future, the Northern Development Areas have the potential to capture between 1,770 and 2,640 new residential units over the next five years.

Household projections by income and household type are not available for 2010 to 2015. The best approach to projecting demand for the 2010 – 2015 timeframe is to perform the same type of market analysis as part of the five-year review and update in 2014. It can be assumed that the same magnitude of demand for housing in the Northern Development Areas will likely exist from 2010 to 2015 – approximately 1,770 to 2,640 units. What may change is the split between multifamily and single family homes. As land becomes scarcer in the Northern Development Areas and land values increase, and as market dynamics change (e.g., gas prices increase, households age, the median age of heads of households increase, etc.), it is likely that more multifamily units will be constructed.

For planning purposes, it is assumed that the split between multifamily and single family demand will change to 45 percent multifamily and 55 percent single family between 2010 and 2015. The single-family home will continue to be the housing type a majority of the market will demand. However, multifamily will become a more attractive housing type due to its affordability and ability to satisfy the one- and two-person household market.

Residential Market Conclusions

If current trends continue, there will be significant residential development in the Northern Development Areas over the next 10 years (2005–2015). The market for residential development will be largely driven by singles and couples without children at home. New residential products will need to be designed to serve these changing demographics. There are already between 1,500 and 1,769 housing units approved for development in the Northern Development Areas. If these units are built between 2005 and 2015, the market can support an additional 2,000 to 3,500 units in the Northern Development Areas.

Condominium products, such as villas, townhomes, and flats, have potential in the Northern Development Areas. However, to capture the market, these unit types must be developed in walkable, neighborhood settings comfortable for older households and singles. In addition, mixed-use settings with goods, services, jobs, and transit within walking distance have proven to be attractive to the empty-nester market.
Retail Market Analysis

The retail industry provides goods and services to consumers. The demand for retail space increases when the buying power in a market expands. Buying power is a function of the number of consumers and their income.

Retail considered in this analysis typically includes the types of stores found in shopping centers, rather than smaller, independently located retail businesses. These types of stores are called “shopping center-inclined retail” and can be bundled into four broad categories: 1) General Merchandise, Apparel, Furniture and Home Furnishings and Other (GAFO); 2) Eating and Drinking Establishments; 3) Convenience Goods; and 4) Other. These store types do not include motor vehicles and parts establishments, gasoline stations, and nonstore retailers.

Each of the four classifications has very different market and location characteristics. GAFO tends to either be in a “big box” configuration like Wal-Mart or Target, or it is clustered in either a shopping center or downtown location. GAFO stores thrive in environments where there is depth and breadth of merchandise to allow for comparison shopping. For this reason, GAFO stores tend to capitalize on the economic principle of agglomeration.

Eating and drinking establishments also vary in their market and location characteristics. Limited service restaurants, such as fast food, are attracted to locations with high market volume—whether it is people or cars. Fast food depends on its convenience to the market. Full-service restaurants tend to be like GAFO since they thrive where there is a depth and breadth of restaurant outlets. Full-service restaurants are attracted to locations with a lunch and dinner market.

Convenience retail is attracted to locations with excellent access to strong markets. In a market environment like the Northern Development Areas, convenience retail typically serves a market within a three- to seven-minute drive. Convenience retail requires a density far in excess of a few hundred households or employees.

The market characteristics of home improvement-type stores depend on the store-type. There are generally two store-types: the big box and the small hardware store. The small hardware store tends to locate like convenience retail—close to a strong market. Big box stores tend to locate on major arterials that serve a strong and growing market.

Retail Market Findings

- The Charlottesville Metro Area is ranked 214th among 300 U.S. Metro Areas in terms of population. However, with over $3.1 billion in total retail sales it ranked 194th in retail sales.

- The distribution of retail sales is not particularly balanced among Charlottesville Metro Area municipalities. In 2005, retail located in Charlottesville and Albemarle County accounted for 90 percent of the Metro Area’s retail sales. Fluvanna, Greene, and Nelson counties contained 30 percent of the Metro Area’s population, but only 10 percent of its retail sales. The data suggest (and interviews confirm) that residents of Fluvanna, Greene, and Nelson counties come to Albemarle County and Charlottesville to shop and dine.

- County growth in both population and real income will generate demand for additional retail space. Albemarle County population and income growth between 2005 and 2015 translates into $294 million of additional shopping center-inclined retail expenditure potential.

- Applying average sales of between $250 and $300 to support a square foot of new shopping center retail, these new projected expenditures translate into between 991,000 and 1.177
million square feet of shopping center retail potential between 2005 and 2015. This potential is based on County growth alone.

- Growth among surrounding Metro Area municipalities will also generate demand for new retail. Given the critical mass of retail in both Charlottesville and Albemarle County, most of this expenditure potential will likely be captured in Charlottesville and Albemarle County. However, it should also be recognized that new commercial, retail growth in these surrounding markets may reduce some of the capture in Charlottesville-Albemarle County over the long term.

- Population and real income growth between 2005 and 2015 in the Metro Area outside of Albemarle County (Charlottesville, and Greene, Fluvanna, and Nelson counties) will result in $141.9 million of shopping center-inclined retail potential. Applying average sales of between $250 and $300 to support a square foot of new shopping center retail, these new projected expenditures translate into between 473,100 and 567,700 square feet of shopping center retail potential between now and 2015 (in addition to the potential growth from Albemarle County described above).

- The City of Charlottesville and Albemarle County are expected to capture the vast majority of the nonconvenience store, shopping center-inclined retail expenditure potential derived from the Greene, Fluvanna, and Nelson County growth over the next ten years. Capture rates have been reduced to account for new retail development in Fluvanna, Greene, and Nelson counties. Between 2005 and 2015, Charlottesville and Albemarle County have the potential to capture $384 million of additional retail expenditure from the Metro Area.

- Albemarle County growth and land availability suggest that most of the projected new retail will be built in Albemarle County, not the City of Charlottesville. It is assumed that the City will capture 25 to 35 percent of the eating and drinking expenditure potential because of the Downtown’s critical mass of restaurants and its role as an employment center.

**Retail Market Conclusions**

- There is significant retail development potential in the County over the next ten years. It is projected that between 1.0 and 1.4 million square feet of retail is supportable in the County between 2005 and 2015. Where this development occurs depends on market factors and public policy. Given Albemarle County’s current land use plan, most of this retail development will occur in the Northern Development Areas. From a market perspective, it is an attractive retail investment location because of high traffic volumes and market growth around it.

- As of December 2008, projects under construction and approved rezonings in the Northern Development Areas include approximately 1.838 million square feet of retail. If built over the next ten years, these approved projects will provide more retail space than the 1.0 to 1.4 million square feet that is supportable between 2005 and 2015. Approved projects include Hollymead Town Center (Areas A1, A2, B, and C), Albemarle Place, University of Virginia Research Park, North Town Center, and North Pointe.

**Office Market Analysis**

Employment growth drives the office market. Private investors develop office space to satisfy increasing demand and/or to address an undersupply of particular office types in the existing market. This office market analysis analyzes employment projections among “office-inclined” industries to project office demand. “Office-inclined” industries are:

- Information (such as publishing and telecommunications)
- Financial Activities (such as banking, insurance and real estate)
- Professional and Business Services (such as accountants, lawyers, engineers and management of companies)
- Doctor’s offices (not in hospitals)
- Research & Development

Public sector employment is not included because private investors rarely develop office space to house government employees. Government employees are typically housed in buildings that are financed and owned by the government.

**Office Market Findings**

- In 2004 there were 20,790 jobs in office-inclined industries in the Charlottesville Metro Area. These jobs represented 23 percent of the Metro Area’s jobs in 2004.
- The industry standard of 250 square feet of office space per employee applied to 2004 office-inclined employment results in a demand for 5.2 million square feet of office space in the Metro Area. This space may be owner-occupied or in rental office space.
- There were 2.94 million square feet of multi-tenant, rental office space in the Charlottesville Metro Area in 2004. Approximately 82 percent of this space was occupied (2.72 million square feet). There was a 7.4% vacancy rate.
- In the Charlottesville Metro Area, rental office space accounts for just over half of the office space potential. This ratio reveals that the rental office market is relatively small compared to the total office market. This office market includes a significant amount of owner-occupied office space.
- The Charlottesville Metro Area office market area can be broken down into submarkets. The “North” submarket includes the Northern Development Areas. “UVA/Downtown” includes the Downtown and the Fontaine Research Park. The other submarkets are to the east and west of Downtown Charlottesville.
- Employment in office-inclined industries drives office space demand. Charlottesville Metro Area employment among office-inclined industries is projected to increase by 3,350 employees from 2004 to 2010. This represents a growth rate of 1.6 percent per year.
- Between 2010 and 2015, Charlottesville Metro Area employment in office-inclined industries is projected to increase by 2,820 or 2.2 percent per annum. Using the industry standard of 250 square feet per employee, office-inclined employment growth will support 837,500 square feet of additional office space in the Metro Area by 2010 and 1.54 million square feet by 2015.
- Albemarle County captured 88 percent of the employment in the Metro Area between 1995 and 2003. Applying the same capture rate, the County’s office potential totals 736,000 square feet between 2003 and 2010. This translates into an average absorption rate of approximately 123,000 square feet per year. So, projected growth among office-inclined industries will support an additional 620,400 square feet between 2010 and 2015.
- Because of their excellent access, their central location, the commercial character of US 29, and the UVA Research Park, the Northern Development Areas are well-positioned to capture office demand from the professional and business service industry.
- With significant residential and employment growth planned, Hollymead will also be an attractive location for medical, finance, insurance, and real estate office space.
Given the land available in the UVA Research Park, the planned expansion at NGIC, and the existing mix of land uses in the Northern Development Areas, it is reasonable to assume that the Northern Development Areas may capture between 55 percent and 65 percent of the County office development potential. Between 2004 and 2015, this amounts to between 746,000 and 881,660 square feet of office space.

In addition to the office space demand generated by office-inclined industries, there may be office space demanded by government and other industries.

**Office Market Conclusions**

Office-inclined industries will likely demand between 746,000 and 881,660 square feet of office space in the Northern Development Areas by 2015. In addition, other industries like NGIC may require additional office space. It can be assumed that the market will demand approximately 1 million square feet of office space in the Northern Development Areas by 2015.

Much of this demand can be accommodated within existing approved Northern Development Areas projects.

**Industrial Uses**

The Economic Framework and Market Analysis does not cover industrial uses, yet these uses play an important role in the area’s economy. The County’s Economic Development policy recognizes the importance of Albemarle’s industries and the changes in industrial uses over the past few years. The Northern Development Areas have been home to several major industrial users, including Comdial, GE-Fanuc, Badger-Powhatan, and Sperry Marine. These firms are examples of more traditional research, development, and manufacturing businesses, and the current status of these companies reflects the national trends away from traditional manufacturing. Comdial is no longer in business in the County, Badger-Powhatan has moved its operations outside the U.S., and GE-Fanuc is operating at a reduced size.

Instead of these traditional industrial users, the County is seeing more research & development (R&D), scientific testing, and, in general, smaller development and production businesses trying to locate here in the County. One of the challenges for the Northern Development Areas is how to reuse existing facilities for new industrial and employment uses that are different from more traditional industrial uses. The challenge exists because industrial buildings have been used primarily for research, development, service, production, storage, and/or distribution of goods. They may or may not include office space. These facilities are less suitable for the newer types of light industrial/office/research & development firms.

The challenge for small industrial users to find affordable properties is acute in the County’s Development Areas. While industrial uses need affordable land and buildings, they also require access and public services.

The County recognizes that, in order to sustain its long-term economic growth, it must be able to accommodate industrial activity. Relevant goals of the County’s Economic Development policy include promoting:

- Employment at higher wage levels than retail positions.
- Diversification of the local economic base, which currently rests primarily on professional/business services, retailing, government, and a wide range of service industries.
• Bringing new wealth into the local economy; industrial businesses typically derive their incomes from sources external to the local economy. Retailing, in contrast, typically attracts local spending rather than exporting products or services.

• Provision of supplies and services to existing businesses. Local sources for such supplies and services contribute to the existing business environment. In addition, businesses involved in professional services, such as research and development, scientific testing, and health care often generate patents. These patents offer the potential for production of the new device or service, which may be accommodated on industrial properties.

**Industrial Uses—Findings**

- From a long-term perspective, the market for light industrial space offers significant development potential. This potential is derived from local employment patterns.

- The County economy is growing. Employment growth in professional services, retail trade, health care/social assistance, accommodation/food services, and government sectors has more than offset a persistent and marked decline in manufacturing employment. These sectors are expected to continue growing.

- While the County’s growth sectors are oriented primarily toward office rather than industrial space, many businesses seek relatively inexpensive buildings with wide, flat floor expanses, rather than more highly finished office buildings. Such businesses include call centers and back office service providers, engineering companies, design-related companies, laboratories for research, development, testing, and so on. Of perhaps greater importance, professional services relating to engineering, research, testing, and other such activities may generate new patents and new products, which will require production facilities in new industrial properties.

- Sole proprietors, partnerships, and corporations that do not employ workers provide another important indicator of industrial development potential. These nonemployers typically conduct business in home locations or in old, small, inexpensive spaces. As they grow, many such businesses hire employees and seek to upgrade their business space—often to small office, industrial, or “flex” spaces.

- In Albemarle County, from 2000 to 2003 (the most recent data available), growth among nonemployer businesses has proceeded at an annualized rate of 8.1 percent, far exceeding growth rates in overall covered employment. More important, such businesses’ gross receipts have grown even more rapidly, at 11.6 percent. This strong performance may indicate a possible demand for additional growth—with eventual conversions to “employer” businesses seeking new space.

**Industrial Uses—Conclusion**

- The Northern Development Areas are poised to respond to global changes in industrial uses. However, properties and buildings for small industrial firms, as well as service uses that support industrial development, are not plentiful. This issue is currently being addressed on a countywide basis through economic development analysis and policy development. The Future Land Use Map in Chapter 4 responds to the land use needs currently identified, recognizing that modifications may be needed after completion of the analysis now underway.