

- **Linking land use and transportation can reduce infrastructure costs, focus growth, and protect resources.**
- **Healthy neighborhoods have a network of different size streets.**
- **A context-sensitive road varies in design according to the surrounding landscape and preserves resources while maintaining safety and mobility.**
- **An interconnected street network provides route choice for all modes of travel. Such a network supports the pedestrian environment, mixed-use development, and compact, livable neighborhoods.**

Making the Land Use and Transportation Connection

An efficient transportation system supports and connects communities with a balanced and multi-modal network that includes all different ways of getting around - car, transit, walking, and biking. Such a system offers choices for local and regional travel and allows the free movement of people and goods. To reduce congestion and protect the environment, new and existing roadways should provide for more efficient movement of vehicles while better accommodating bicycling, walking, and transit. All new and improved transportation options should respect and support established neighborhoods.



Figure 1. Village-scaled development with a network of streets can focus growth around existing roads, facilities, and utilities as well as preserve rural areas.

Save the date:

May 18th (Evening)

Introduction and Background Presentation

May 20th (9:00a.m.)

Small Group Session on Preferred Alternative

Public meetings will be held at Sutherland Middle School. Please visit

www.albemarle.org for more information.

Linking land use and transportation is critical to reduce capital and operating costs for the transportation system, ensure consistent economic growth, and protect social and environmental resources. The benefits of connecting land use and transportation include:

- Convenient and attractive access between work, services, and residences while reducing dependency on automobiles and the region's major thoroughfares
- Attractive, economically sound places serviced by an efficient and diverse transportation system
- Strategically located urban open space combined with an efficient transportation system that allows residents to walk to a park and open spaces

These connections and many more will be explored in upcoming information sheets.

Places29 Overview:

Places29 is an exciting community planning project that will help shape the future of northern Albemarle County communities. Places29 brings residents, business owners and others together to map out the best possible shared vision for this critical area. The project combines land use planning for four designated urban communities with the US 29 North Transportation Corridor Study.

Places29 Overview

Transportation

Transit & Transportation Operation Solutions

Street Types

Land Use & Urban Design

Place Types

Open Space & Natural Resources

Economics

Implementation

What does a network of different size streets mean?

Healthy neighborhoods and regions have a network of different size streets that balances walking, bicycling, transit, and automobile travel. All streets - from narrow alleys to grand boulevards to rustic parkways - can be placed in categories based on their function. Together, these networks should serve the desired community characteristics. Three categories of streets are:

1. Boulevards and Parkways: Connect town centers to the greater region
2. Transitional Avenues and Main Streets: Connect neighborhoods to commercial centers
3. Alleys, lanes, streets, and trails: Provide access to neighborhoods and makes connections within neighborhoods

To eliminate confusion, the street name (i.e. lane, avenue, boulevard, parkway) should describe both the type and name of the roadway. For example, Smith Lane should be the name of a roadway that provides access to neighborhoods and/or makes connections within neighborhoods.

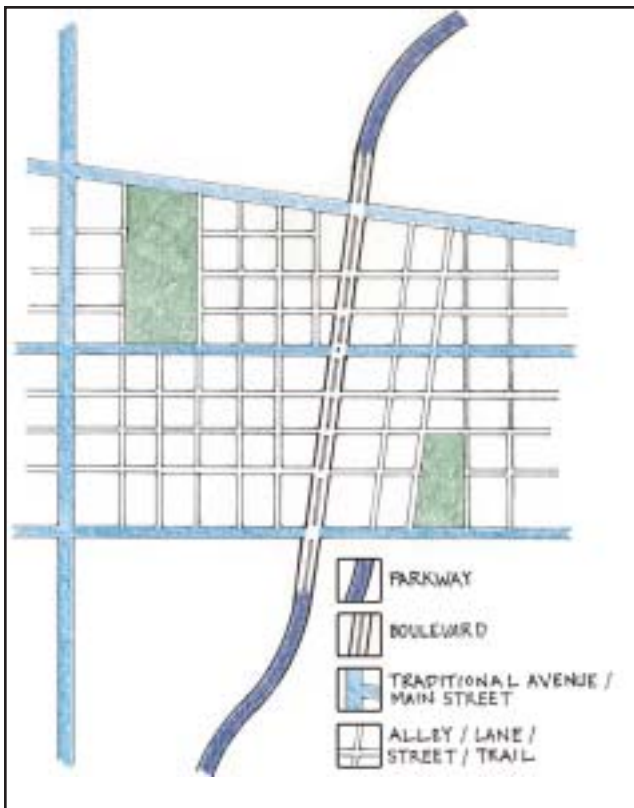


Figure 2. Parkways, boulevards, avenues and streets describe four roadways with specific roles within a network of different size streets.

Such a roadway should not be called Smith Boulevard. Figure 2 illustrates the relationship between four street types. For more information, please review the upcoming information sheet on Street Types.

Is there a difference between a parkway and a bypass?

Yes. A parkway is a rural, landscaped multi-lane thoroughfare typically separated by medians. A parkway is designed for long-distance travel through rural areas and to link neighborhoods to each other. A bypass is a controlled-access highway that avoids urban areas to move regional or statewide through-traffic. Without proper coordination with land use controls along the bypass, new development can make the bypass just as congested as the urban areas it is bypassing.

What are context-sensitive solutions?

Context-sensitive solutions develop appropriate, varying designs for different segments of the same road as it passes through communities, neighborhoods, and rural areas. The goal is to develop (or re-engineer) a street that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while improving safety and mobility.

For US 29 in Albemarle County, context-sensitive design would allow the road to change function from a parkway in the outlying areas of the County to a boulevard as it nears Charlottesville (similar to those shown in Figure 2). This approach could maximize safety, mobility, enhancement of the natural environment, and preservation of community values. For more information on Context-Sensitive Design, visit www.fhwa.dot.gov/csd.

What is an interconnected street network? Will it increase cut-through traffic in my neighborhood?

An interconnected street network, with a variety of street types serving a mixture of residences and commercial establishments, provides multiple routes and distributes traffic more evenly. This network is essential to support walkable, mixed-use developments, and compact, livable neighborhoods. [Figure 3] With a lot of residences, shopping centers, and other facilities located on a few main thoroughfares, congestion is unavoidable. Interconnected streets and parallel roads for local traffic in growth areas can reduce congestion on thoroughfares by allowing local residents to shop, connect to transit, visit other friends, drop the kids at school, visit recreational facilities, and go to work (if it's a shorter trip) without the need to get "out on the big street." Interconnections can also take the form of bikepaths or pedestrian walkways depending on the nature of the neighborhood and the areas and uses that are being connected. Like other transportation options, interconnections should respect and not disrupt established neighborhoods.

Also, an interconnected street system allows for increased efficiency for transit service, emergency response, trash collection, school bus routes, and deliveries. Research has shown that the area able to be served from a single transit stop nearly doubles in an interconnected grid of local streets compared to a system of cul-de-sacs and collector streets.

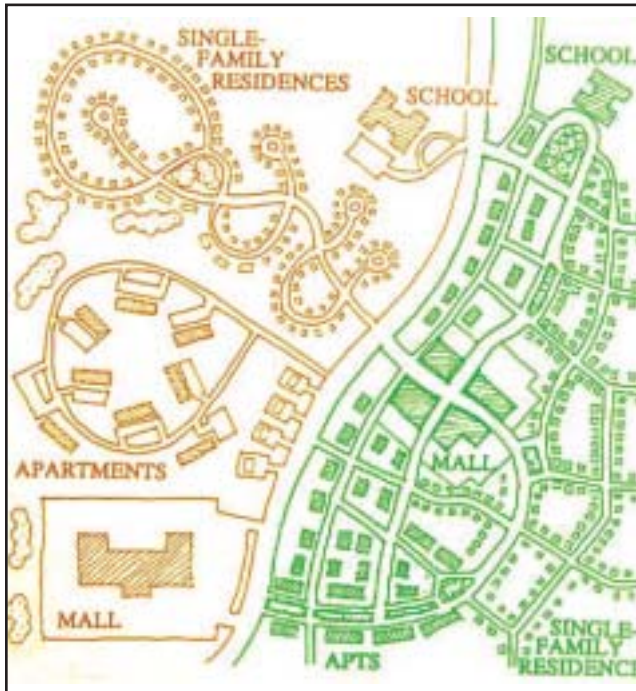


Figure 3. A connected network of streets with sidewalks (right side of drawing) supports the pedestrian environment and provides the framework for mixed use, livable neighborhoods.

But does such a system of interconnected streets increase cut-through traffic between residential neighborhoods or between neighborhoods and stores? Most likely, no. The improved traffic flow on major roads due to interconnected streets limits vehicle trips on all residential streets to a safer level of mostly local traffic. Traffic calming mechanisms such as medians, curb extensions, and roundabouts also discourage cut-through traffic. An interconnected street system encourages walking, bicycling, and transit use.

How do parallel roads help with connections?

Much of the growth in the Places 29 area has been in developments that are directly linked to US 29 and, in many cases, use US 29 as their sole or primary access, which forces local traffic onto our main regional roadway. Why is this an issue? Because about two-thirds of trips along US 29 North are local trips, beginning and ending in to Charlottesville or the adjacent urban areas of Albemarle County. Forcing all of this traffic onto US 29 not only clogs the regional roadway, it makes it more difficult for people to access businesses along US 29.

In areas where roads exist that parallel US 29 (Hillsdale, Commonwealth, and Berkmar Drives) residents and businesses on that side of US 29 have choices of how to access services and shopping, visit neighbors, and take kids to activities without having to travel on US 29. The ability to access shopping without having to contend with traffic on US 29 makes for a more comfortable local trip, even if that trip might seem longer or less direct. For instance, when Berkmar Drive was extended to the north, Kroger found that business increased, and that the majority of customers arrived from Berkmar rather than US 29.



Figure 4. A well-designed network of smaller-scaled streets can provide choices in how to get around, while sparking re-development of under-utilized, aging shopping centers. This visualization from the 29H250 Study shows how a new road parallel to US 29 could connect to Hydraulic, with safer, more direct walking, bike, and transit routes leading to a new mixed use center.

Where is all the traffic on US 29 coming from? Where is it going?

US 29 in northern Albemarle County functions as a route for regional and local traffic. As part of the National Highway System, it connects traffic that travels through the Places29 study area to the rest of the region. This regional role of US 29, while significant, represents only a portion of the road's function. US 29 is also the primary route for residential and commercial traffic that begins and ends in northern Albemarle County. There are three primary trip patterns that describe traffic on US 29:

- *Trips that begin and end outside urbanized Albemarle County (including Charlottesville)* [Figure 5] - Examples include motorists traveling from Washington D.C. to North Carolina on US 29. These trips are regional through traffic and account for about 10% of the travel on US 29 south of the South Fork of the Rivanna River. However, at the Greene County line, this same level of through travel is about 25% of the daily traffic.
- *Trips that either begin or end inside urbanized Albemarle County* [Figure 6] - Examples include Greene County residents who work at the University or in Charlottesville. These trips account for about 25% of all travel on US 29 south of the South Fork of the Rivanna River.
- *Trips that begin and end inside urbanized Albemarle County* [Figure 7] - Examples include persons living in the Places29 study area and working or shopping in the urbanized Albemarle County or by people from the urbanized area that come into the Places29 area to work or shop. Overall the above local trips represent about 65% of the traffic on the southern portion of US 29 North.

The majority of trips on the portions of US 29 in the Places29 study area are trips that have one or both ends inside the urbanized area of Albemarle County. The portion of the corridor south of the Rivanna River and predominantly south of Rio Road is the origin and/or destination of the majority of these "local" trips. This pattern is consistent with the concentration of retail and employment uses in this portion of the US 29 north corridor.

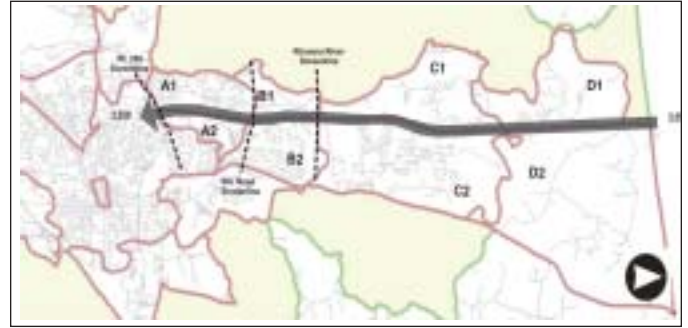


Figure 5. Through trips begin and end outside the study area.

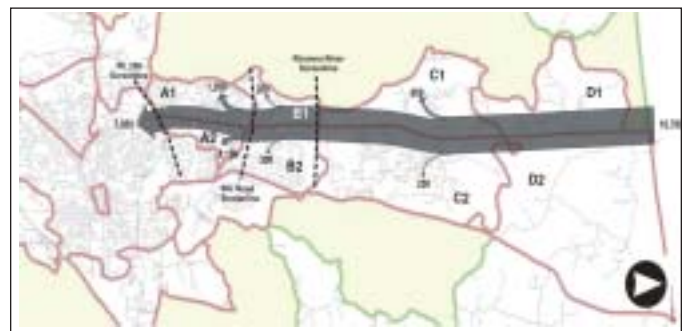


Figure 6. External to internal trips begin outside and end inside the study area. Study area in the diagrams is the urbanized area of Charlottesville/Albemarle, not just the US 29 corridor or the Northern Development Areas.

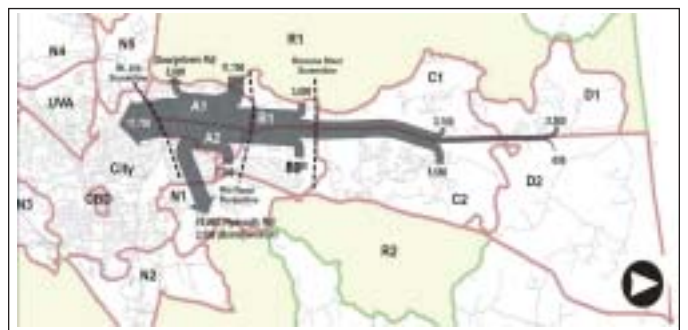


Figure 7. Internal to Internal trips begin and end inside the study area.

For More Information:

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Places29 is a joint project of Albemarle County, the Thomas Jefferson Planning District Commission (TJPD) and the Virginia Department of Transportation (VDOT), with the assistance of an experienced consulting team.