

TRANSPORTATION ELEMENT

INTRODUCTION

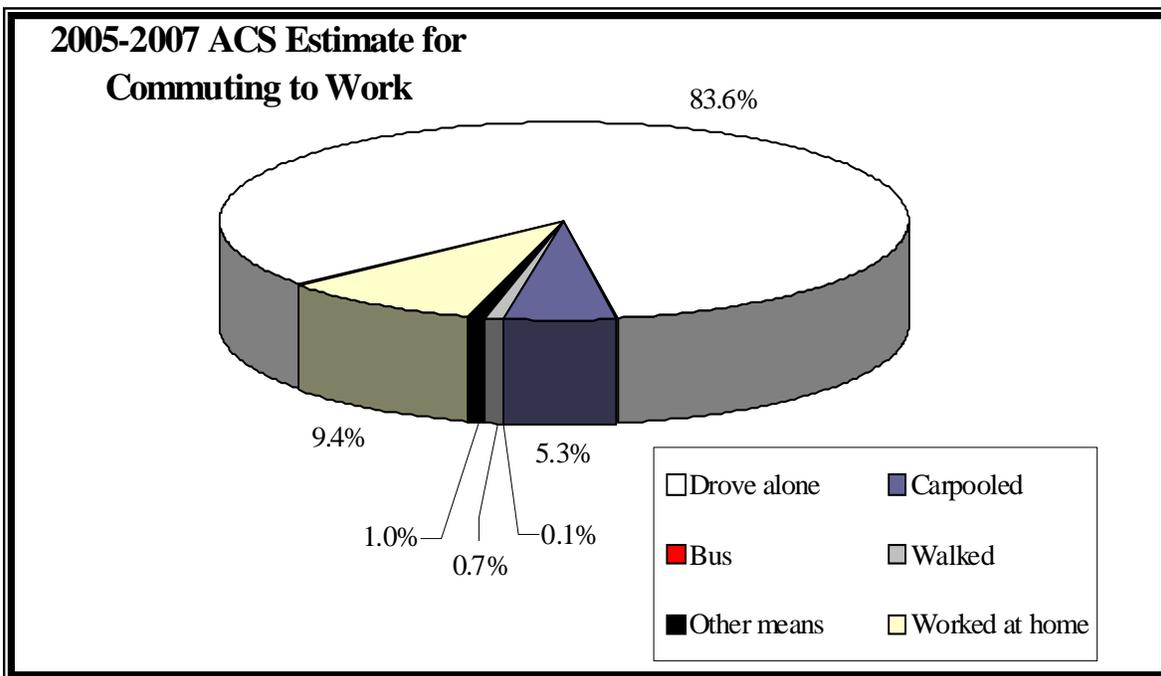
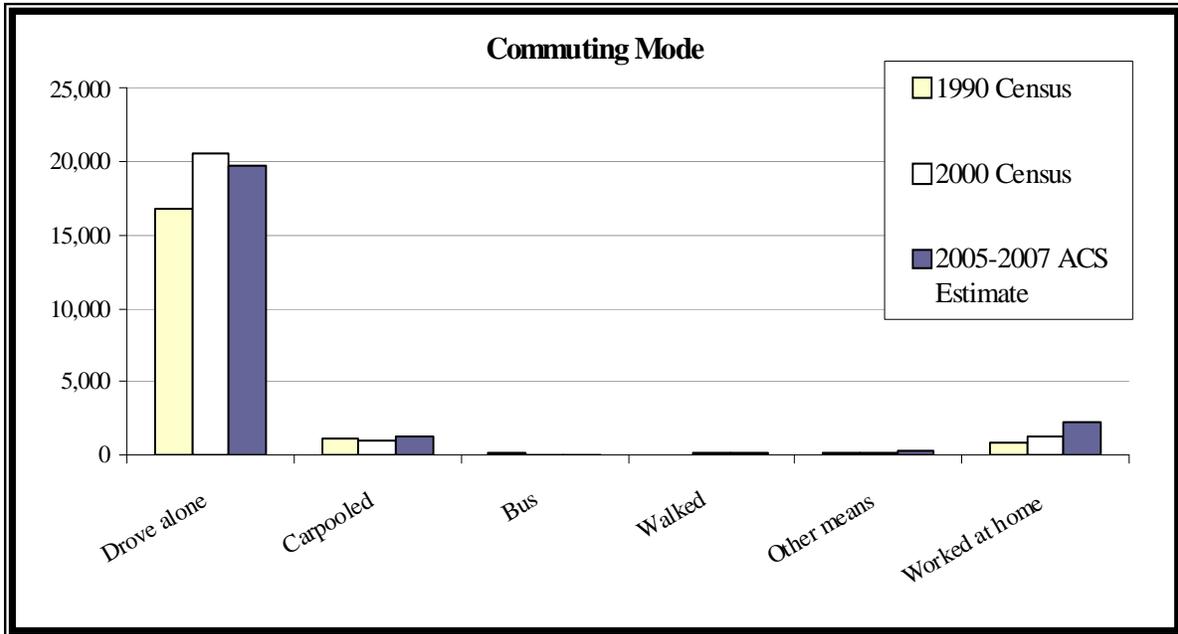
Over the past several decades, the transportation network in the City of Chesterfield has seen dramatic changes. These changes include improvements to the roadway, airway, public transportation, bicycle, trail, rail, water, and pedestrian networks within the City of Chesterfield. It is in the best interest of the City of Chesterfield to ensure that a proper mix of transportation routes is available to residents. The goal is to diversify transportation opportunities so that residents have options to choose from and may decide for themselves which opportunity is best for them and their situation. This also reduces the reliance on one (1) route or mode that may otherwise lead to over congestion.

This element of the Comprehensive Plan identifies transportation and circulation trends and needs in the City of Chesterfield. The information contained within the Transportation Element is provided to support the Plan Policies of the Comprehensive Plan. This element seeks to provide guidance on development, infrastructure, and policy related decisions within the City.

Travel Characteristics

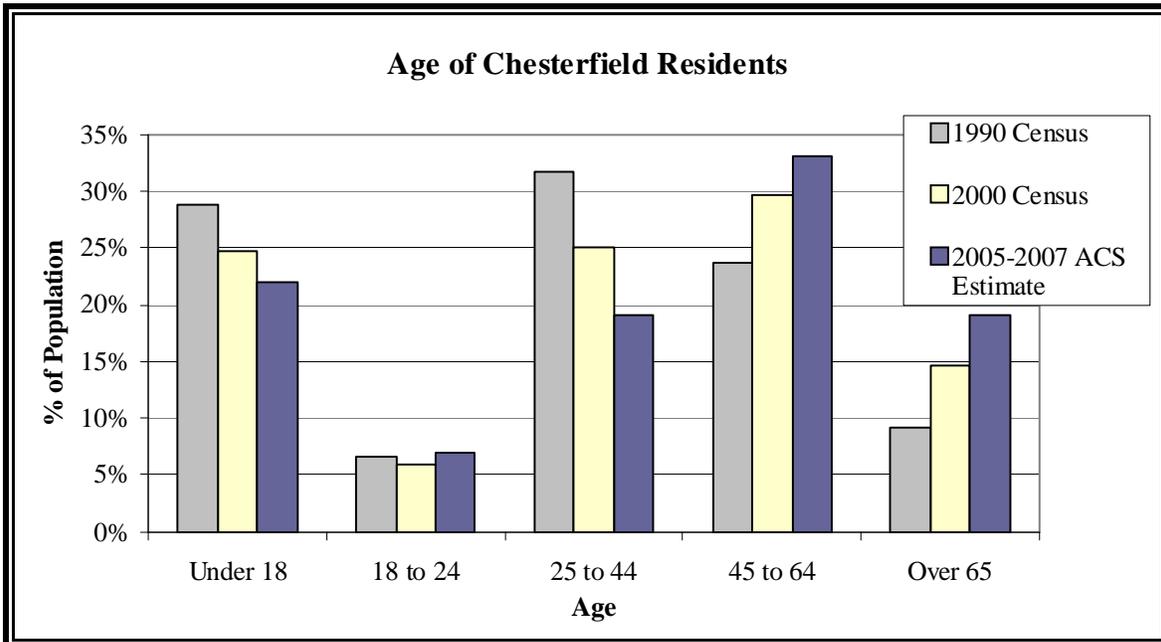
The private automobile has been, and continues to be, the most heavily used mode for commuting within the City of Chesterfield. Nearly 65% of new commuting trips (between the 1990 Census and the 2005-2007 American Community Survey estimate) used an automobile with one passenger for commuting purposes. It should also be emphasized that the total number of people that work from home is estimated to have increased from 822 (in the 1990 Decennial Census) to 2,210 (in the 2005-2007 estimate from the American Community Survey). This increase in the new commute trips accounts for over 30% of the increase. While the number and percentage of residents who work at home is still relatively small, the increasing trend to work at home is important to note when studying commuting patterns and vision for future development in the City.

As can be seen in the following chart, commuting by private automobile (drove alone and carpoled) accounts for nearly 90% of the commuting trips made by residents of Chesterfield; with “drove alone” accounting for 94% of the trips taken by private automobile.

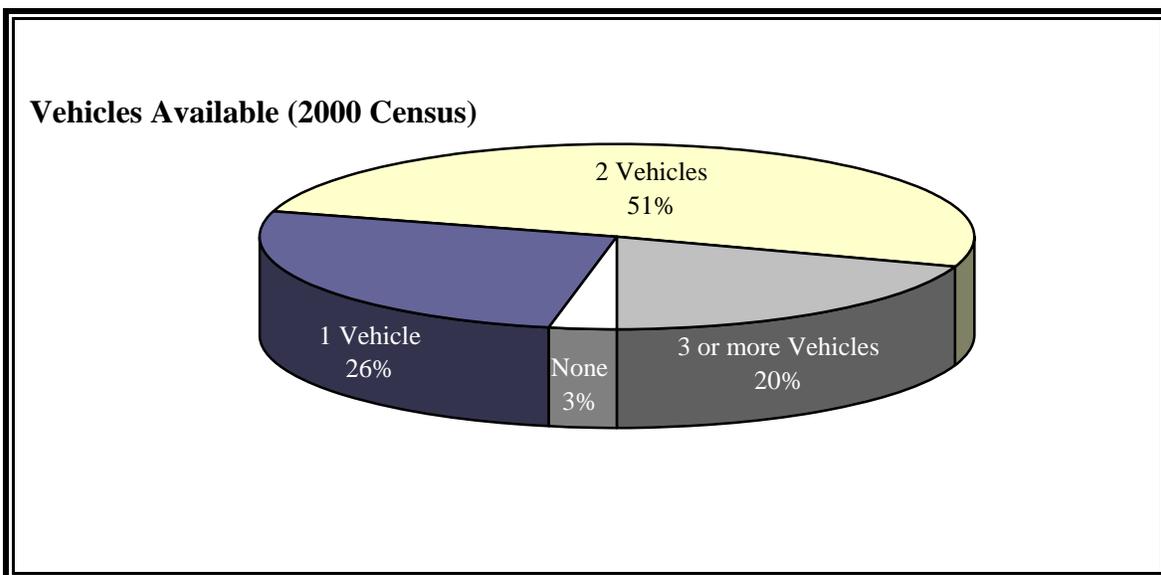


In addition to the travel characteristics above, the age of the population of the residents of the City of Chesterfield is also changing. The 2005-2007 American Community Survey (ACS) estimates that the median age for the City of Chesterfield is 46.0. This compares with a median age of 41.8 in the 2000 Census and a median age under 40 years of age in the 1990 Census. As the population continues to age, it is important that transportation related decisions adapt to the needs of this increasing segment of the population; and that proper access to alternative modes of transportation is made available to ensure the mobility and independence of residents. The following charts

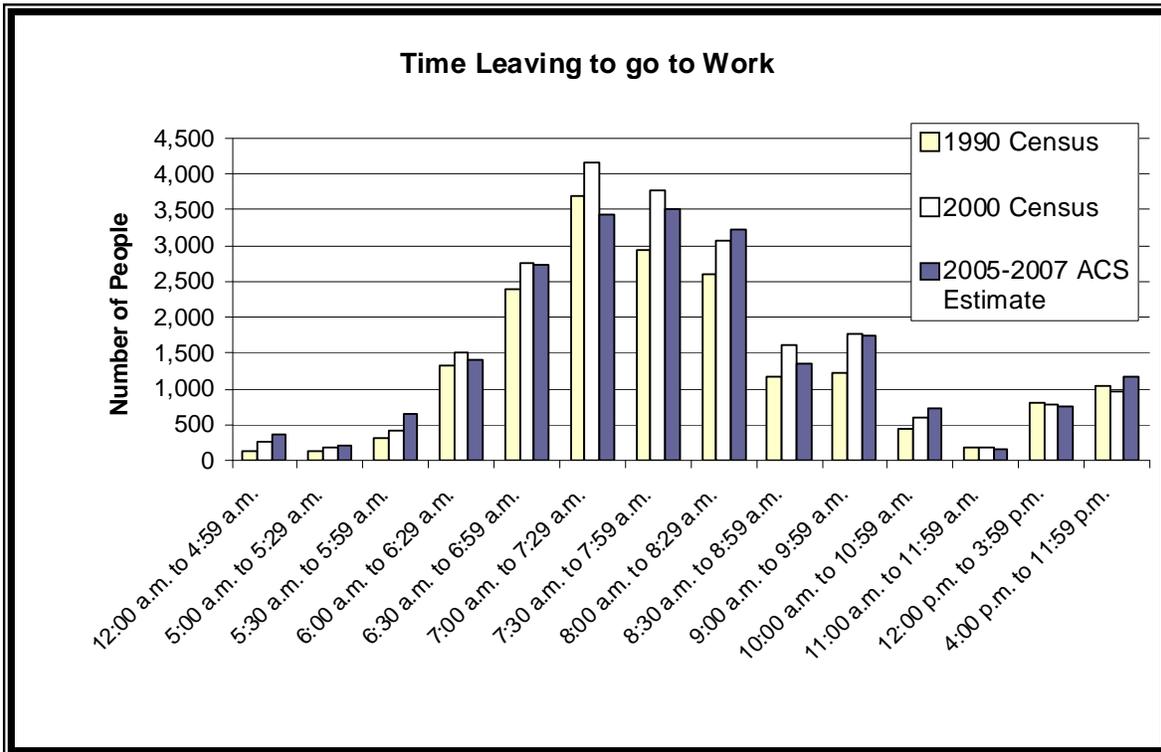
show some key factors that affect travel in the City, and should be used when making decisions regarding the current and future transportation network.

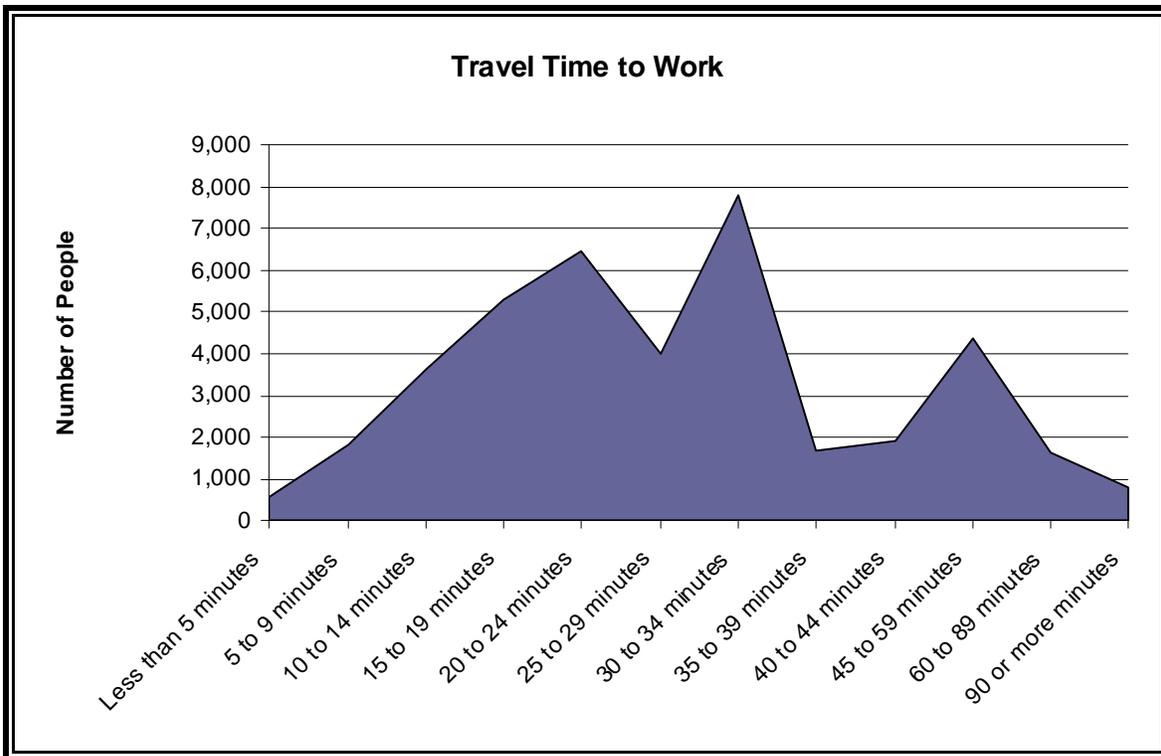


Other information that is important when looking at travel in the City of Chesterfield include factors that may influence the peak period characteristics and mobility of individuals. The next chart looks at the number of vehicles available per household in the City of Chesterfield. As can be seen, 71% of households have two or more vehicles available; while only 3% of households have no vehicle available.



The graph below shows the changes in the time that Chesterfield residents leave for work. This graph shows that the A.M. peak period may be spreading out over a slightly longer period that is evidenced with the increasing trend in the number of people leaving their home for work between 8:00 A.M. and 8:29 A.M. Finally, the graph on page 75 shows the commute time for residents of Chesterfield.





Streets and Roadway System

Transportation networks provide for the movement of goods and people via a variety of modes. While these facilities provide benefits to the public, use of the facilities can cause negative impacts, such as vehicular emissions, traffic congestion, polluted urban stormwater runoff from parking lots, and inconsistent availability and use of public transit. As traffic projections have shown, improving the road system alone will not improve traffic within the City of Chesterfield.

Functional Classification

The East-West Gateway Coordinating Council, in conjunction with the Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA), establishes a Roadway Functional Classification System for the St. Louis Metropolitan Region. The purpose of functional classification is to identify proposed routes for the National Highway System; determine eligibility of roads for the Federal-Aid Highway Program; to assess the extent, conditions, and performance of the highway system; and to determine funding eligibility of transportation projects under the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU). Roadways are defined and grouped into classes according to the service that they provide or are intended to provide within the 20-year span of the region's Long-Range Transportation Plan.

The criteria used in defining the functional classification system include:

- The type of trip (local, highly accessible trips, or long distance, higher speed trips);
- The type of area served (higher-density urban areas, or rural areas);
- The characteristics of the facilities themselves.

The measurable criteria most useful in determining the functional classification of a particular roadway are:

- Service to urban activity centers;
- System continuity;
- Land use considerations;
- Route spacing;
- Trip length;
- Traffic volume;
- Control of access;
- Vehicle miles of travel and mileage.

The importance of this classification system is the ability to identify and establish a balance of functions within the region. A pro-active plan to preserve the intended function of roads in Chesterfield is identified in the Plan Policies. Roads that the City intends to function as local streets should be preserved as such. Roads that the City intends to have function at a higher level in the future should be improved to meet the criteria established for that functional class. The recommendations in this Plan suggest both the preservation and improvement of road functions.

Federal Functional Classification definitions as applied to the City of Chesterfield are as follows:

- *Principal arterials* are interstates, expressways, or freeways with restricted access that provide for the longest trip lengths and highest traffic volumes within an urban area. Also included are other principal arterials that serve the long-distance intra-urban demands in larger urban areas by connecting the regional activity centers not served by the above arterials.
- *Minor arterials* interconnect with and augment the urban principal arterial system. They provide service to trips of moderate length at a somewhat lower level of mobility than principal arterials. Emphasis is on the distribution of vehicles to higher and lower roadway classes and land uses.
- *Collectors* provide access and traffic circulation within residential neighborhoods, commercial and industrial areas by collecting and distributing traffic between local streets and a higher arterial system.
- *Local streets* serve primarily to provide direct access to abutting land and higher order systems, and consist of all streets not classified as arterials or collectors. The

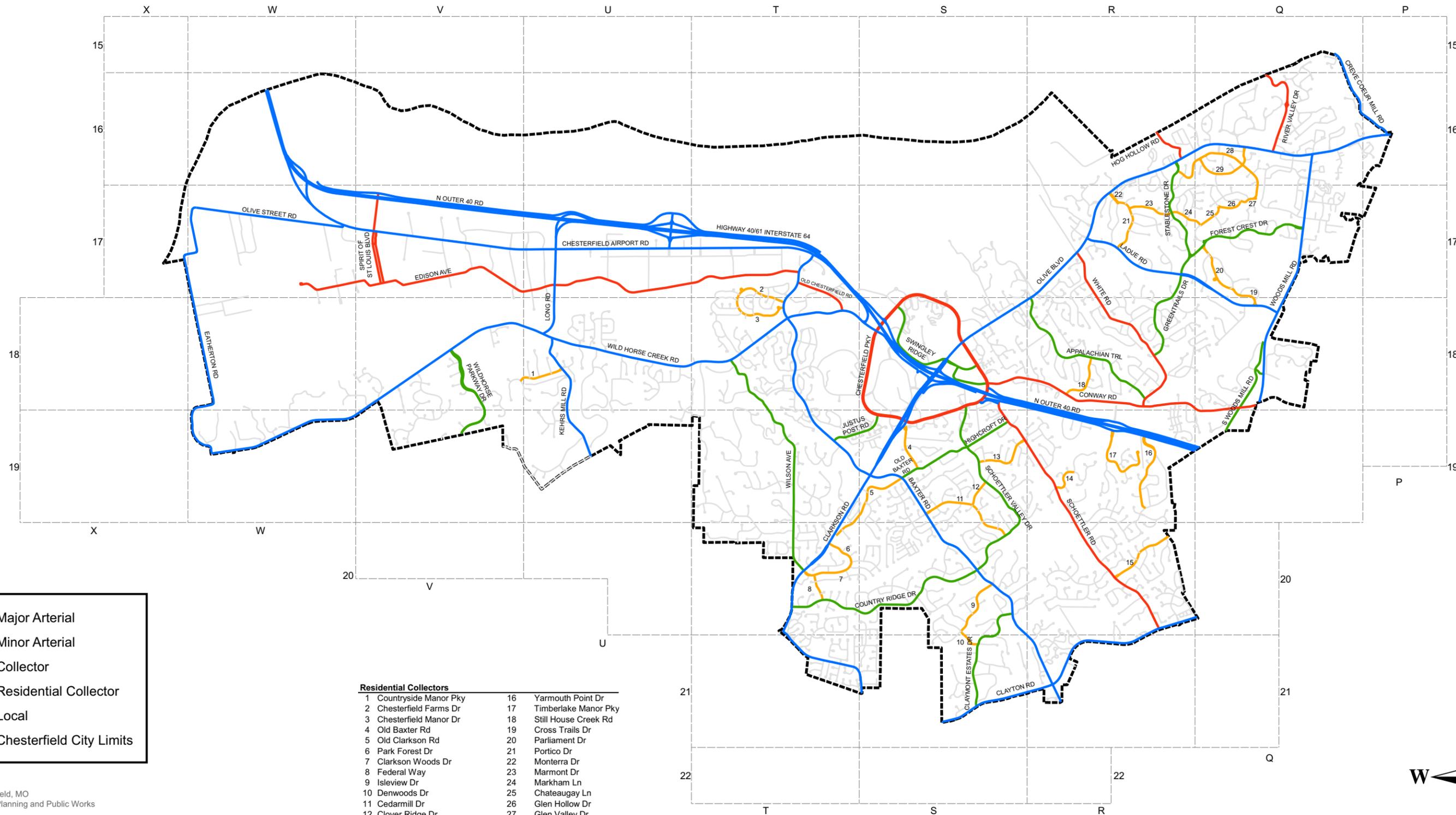
roads within Chesterfield that function as arterials and collectors are shown on the following page. All other roads are classified as local.

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CITY OF CHESTERFIELD

Street Classification Map



- Major Arterial
- Minor Arterial
- Collector
- Residential Collector
- Local
- Chesterfield City Limits

Residential Collectors

1 Countryside Manor Pky	16 Yarmouth Point Dr
2 Chesterfield Farms Dr	17 Timberlake Manor Pky
3 Chesterfield Manor Dr	18 Still House Creek Rd
4 Old Baxter Rd	19 Cross Trails Dr
5 Old Clarkson Rd	20 Parliament Dr
6 Park Forest Dr	21 Portico Dr
7 Clarkson Woods Dr	22 Monterra Dr
8 Federal Way	23 Marmont Dr
9 Isleview Dr	24 Markham Ln
10 Denwoods Dr	25 Chateaugay Ln
11 Cedarmill Dr	26 Glen Hollow Dr
12 Clover Ridge Dr	27 Glen Valley Dr
13 Grantley Dr	28 Glen Cove Dr
14 Greenleaf Valley Dr	29 High Valley Dr
15 Britannia Dr	

Prepared By:
 City of Chesterfield, MO
 Department of Planning and Public Works

This Map has been prepared from the most reliable information obtainable. We cannot, however, due to circumstances beyond our control, guarantee complete accuracy. Any errors or omissions brought to our attention will be appreciated and will be corrected in subsequent updates.

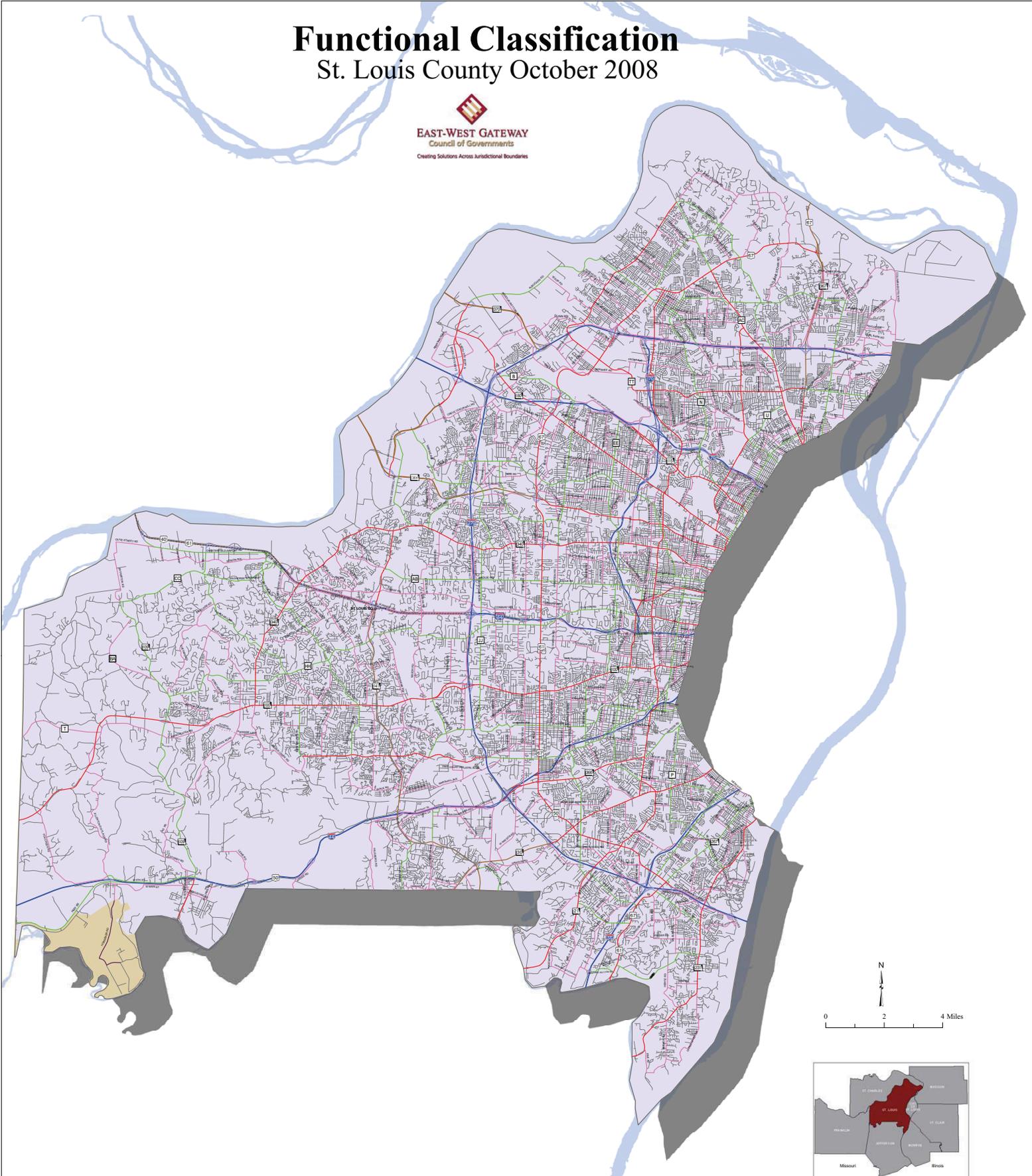
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Functional Classification

St. Louis County October 2008



Legend				
Local Roads	Minor Arterials	Ramps	Planned Minor Arterials	2000 Federal-Aid Urbanized Area
Interstate Highways	Urban Collectors	Planned Interstate	Planned Urban Collectors	Rivers
Freeways/Expressways	Rural Minor Collectors	Planned Freeways/Expressways	Planned Rural Major Collector	
Principal Arterials	Rural Major Collectors	Planned Principal Arterials	Planned Ramps	



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Street Layout

The regional transportation network includes those routes and appropriate modes that people use to travel or transport goods across the greater St. Louis area or to other metropolitan areas. The most used regional transportation mode and route available in Chesterfield is the automobile and highway network. The largest and busiest highway in Chesterfield is Highway 40/61, also known as Interstate 64. Woods Mill Road (Route 141), Clarkson Road/Olive Boulevard (Route 340), and Clayton Road (Route HH) provide means of travel between municipalities within the region.

Most of the local streets within Chesterfield were built prior to construction of houses by the developer of individual subdivisions and later dedicated to the City of Chesterfield for municipal ownership and maintenance. As a result, the local street system does not follow an established city-wide plan, but rather, it is a result of independent site plans that adhere more to traditional subdivision layout. The traditional layout of subdivisions in West St. Louis County incorporates curvilinear streets, cul-de-sacs, and restriction of through-traffic.

Roadway Facilities

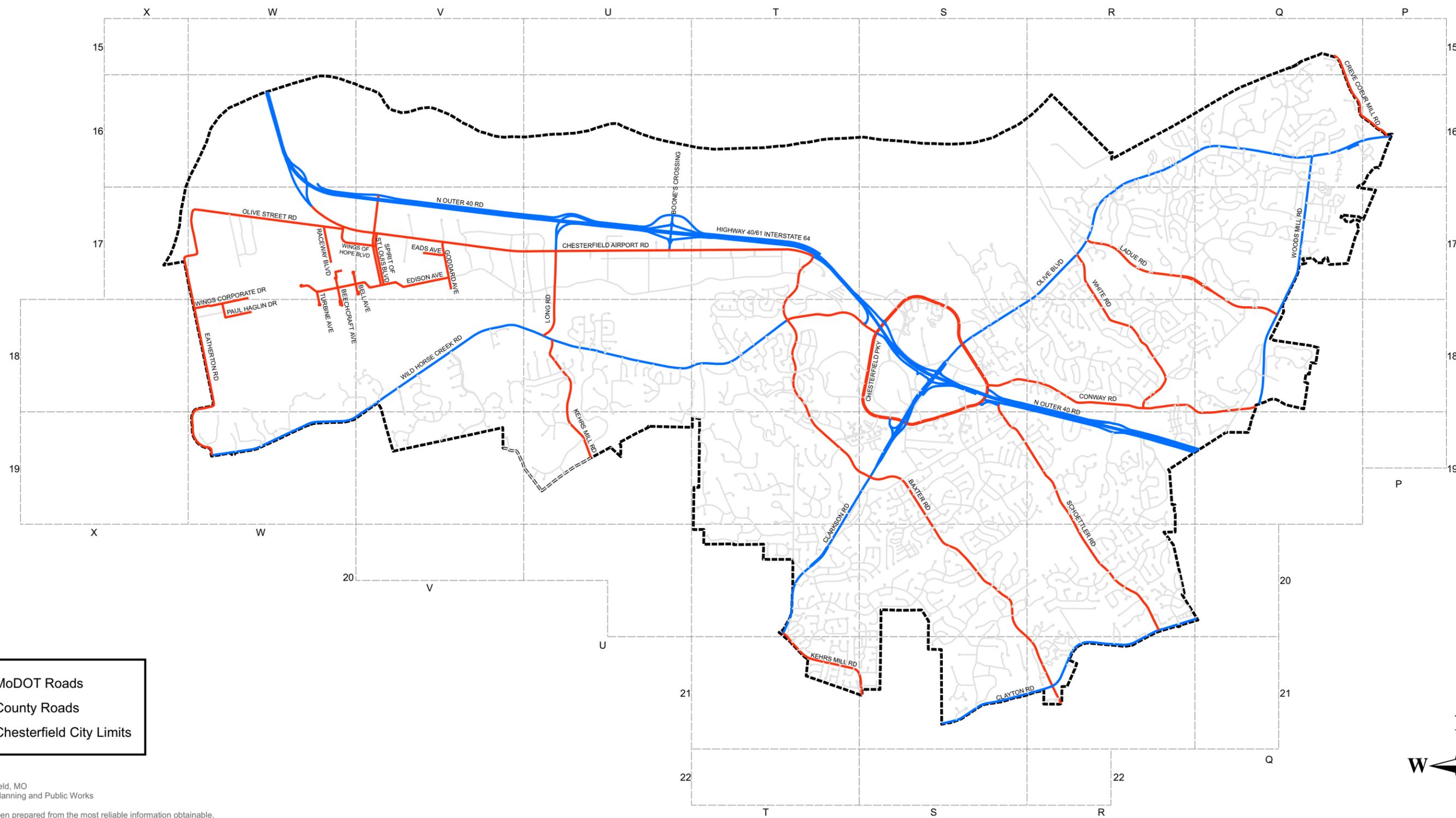
In Chesterfield, many roads are owned and maintained by the Missouri Department of Transportation (MoDOT) and St. Louis County. A map of these roads is shown on page 85.

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CITY OF CHESTERFIELD

State and County Road Map

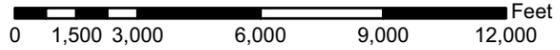


— MoDOT Roads
— County Roads
 Chesterfield City Limits

Prepared By:
 City of Chesterfield, MO
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Last Revised: March 21, 2008



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Major Transportation Investment Analysis (MTIA)

In May of 2000, the East-West Gateway Coordinating Council Board of Directors adopted the recommendation of major transportation improvements in the Daniel Boone study area (generally the area west of I-170 in West St. Louis County). The recommendations emerged from the Major Transportation Investment Analysis (MTIA) process conducted over the preceding two (2) years. The approved highway and transit projects were placed on the region's 20-year Long-Range Transportation Plan (LRT) and are included in the recommended improvements that follow.

Roadway Improvements

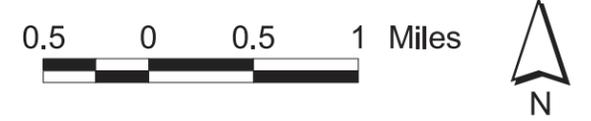
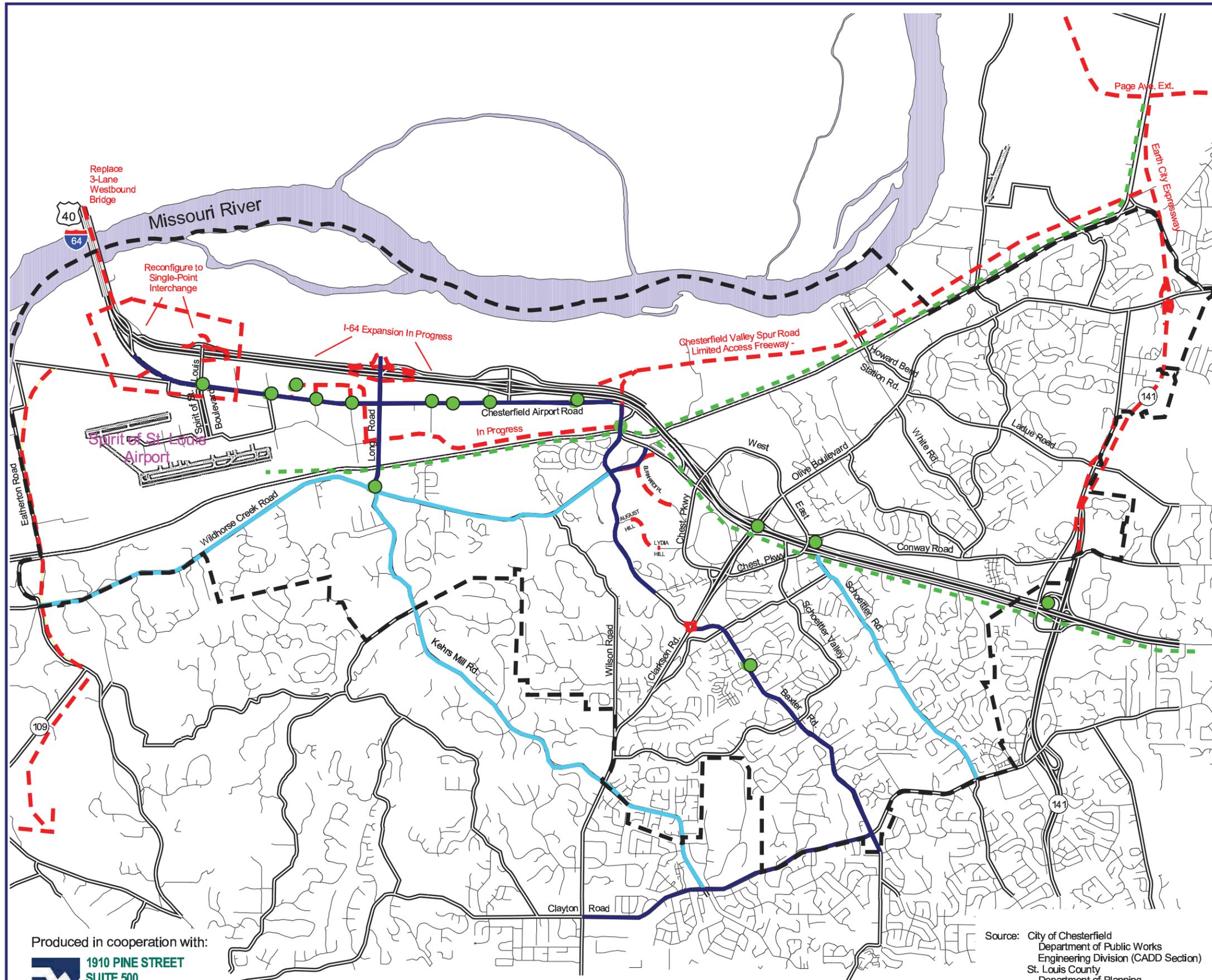
The future development and redevelopment of land in the City of Chesterfield will place additional demands on the transportation system. Recognizing the potential impacts the change in land use may have on the roadway network, the City of Chesterfield has created the *City Wide Traffic Study*, which is incorporated herein by reference. The *City Wide Traffic Study* provides detailed study and analysis of the roadway conditions within the City of Chesterfield. The primary tool used in the *City Wide Traffic Study* is the Chesterfield Travel Demand Model. Both the Chesterfield Travel Demand Model and the *City Wide Traffic Study* are updated periodically to reflect the changes in existing conditions and to provide updated analysis of the improvements that are necessary for an efficient, safe, and effective roadway network. Using the results of the Chesterfield Travel Demand Model, the *City Wide Traffic Study* provides recommendations for new roads and roadway capacity improvements to help meet this growing demand, while also providing a roadway network that is coordinated with MoDOT and St. Louis County.

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TRANSPORTATION IMPROVEMENTS

LEGEND

-  City Boundary
-  New Road Projects
-  New Road
-  Proposed MetroLink Corridors
-  New Traffic Signal and/or Improved Intersection
-  Road Improvements
-  Widen to Three Lanes
-  Widen to Five Lanes



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Source: City of Chesterfield
 Department of Public Works
 Engineering Division (CADD Section)
 St. Louis County
 Department of Planning
 Statistics and Research Division
 Parcel Data Published 12/1999
 Map Printed: October 31, 2002



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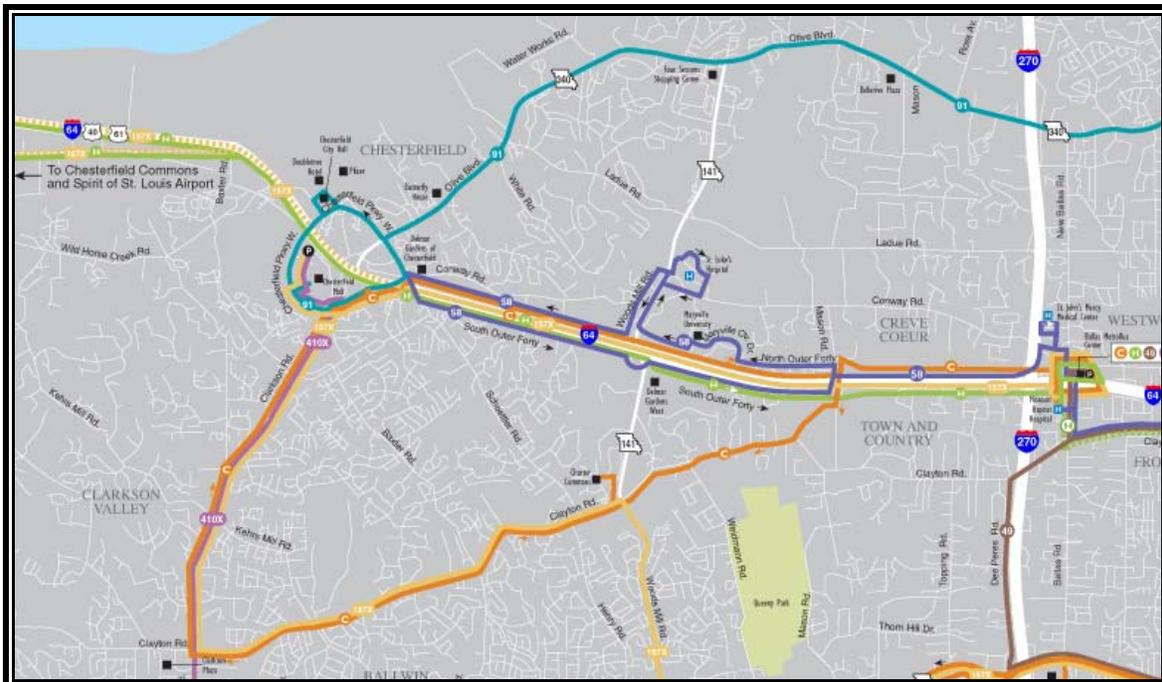
Transit System

Metro operates the St. Louis metropolitan region's public transportation system. This system is a multi-modal system that includes MetroBus, MetroLink light rail, and Metro Call-A-Ride paratransit system. The Agency was created in 1949 through a compact between Missouri and Illinois and ratified by the United States Congress. Metro System operations are subsidized by sales taxes from St. Louis City and County, the St. Clair County Illinois Transit District, federal and state grants and subsidies, and from fares paid by customers.¹

Metro currently provides six (6) bus routes through Chesterfield. These routes include:

- Route 58 – Clayton-Ballas,
- Route C – Clayton Road Connector,
- Route H – Chesterfield Valley Connector,
- Route 157x – Ballas West County,
- Route 410x – Eureka Twin Oaks Express, and
- Route 91 – Olive.

These routes provide connections between many areas of the St. Louis metropolitan area, serve as connectors to other routes (including MetroLink), and provide connections within the City of Chesterfield.



* Excerpt from Metro's Missouri System Map

¹ <http://www.metrostlouis.org>

Transportation also is available for Chesterfield residents who are elderly or disabled as part of the St. Louis metro area Call-A-Ride service. Metro Call-A-Ride Plus provides curb-to-curb van service to eligible customers with disabilities.

MetroLink Extension

MetroLink, the St. Louis region's light rail transit system, currently runs from two lines. The red line offers service from Lambert International Airport east to the Shiloh-Scott station. The blue line offers service from the Shrewsbury Lansdowne I-44 station east to the Fairview Heights station. Transit studies have been initiated for several other corridors throughout the region, all competing for the same regional and federal funding dollars.

Two proposed MetroLink corridors were analyzed as part of the Daniel Boone Study Area MTIA to serve Chesterfield, one from Maryland Heights/Westport on the north and one along I-64 from the east. Both alternatives would serve the employment and commuter needs of the Urban Core and Chesterfield Valley. The "Locally Preferred Alternative" selected by the East-West Gateway Coordinating Council (EWGCC) Board of Directors was LRT Alternative 3: New Light Rail Extension from the Cross-County MetroLink Segment III to Westport Plaza at an estimated cost of \$250 million.

Originally, the LRT Alternative 3 started at I-170 just north of I-64/US 40 following the Rock Island Railroad right-of-way and Page Avenue alignment to Westport (at Page Avenue east of I-270), then continued along Page Avenue or the Fee Fee Road / AmerenUE easement to Chesterfield Airport Road in Chesterfield Valley (estimated cost \$575 million). Compared to the I-64 / US 40 alignment to Chesterfield Valley (LRT Alternative 4, estimated cost \$625 million), LRT Alternative 3 had lower capital and operating costs, produced higher transit trips, provided more households a faster transit trip to downtown St. Louis and other stations along the existing line, and served more low-income households.

It was later concluded that neither alternative would offer St. Louis Urban Core residents good access to jobs in Chesterfield Valley because of extreme transit travel times. Nor would either alternative reduce traffic congestion on major east-west road corridors. Therefore, extending MetroLink west of I-270 was not justified over the 20-year planning horizon. The final alternative was then approved as an abbreviated LRT Alternative 3 from I-170 to Westport.

The City of Chesterfield should continue to support the extension of MetroLink to the Urban Core and Chesterfield Valley as future rounds of analysis are conducted and funding alternatives identified. If the same conclusions are reached regarding unacceptable transit travel times and lack of impact on reducing traffic congestion, the City should pursue other alternative forms of transportation.

Bicycle System

As Chesterfield continues to grow and develop, conflict between vehicular and bicycle travel can be expected to increase. In order to provide for safe and efficient travel of motorists and bicyclists, the City should continue to evaluate opportunities for strategically placed bicycle lanes that connect popular origins and destinations for bicycle travel. Additionally, the City should consider a wide variety of options to increase the safety for travel by means of bicycling including, but not limited to, dedicated bicycle lanes, *Share the Road* signs, bicycle route designations, and educational programs for bicyclists and motorists. Finally, the City of Chesterfield should work with other agencies, including neighboring municipalities and regional bicycle advocacy groups, to ensure that actions taken by the City of Chesterfield connect with other bicycle network plans to provide a connected system for bicycle travel throughout the St. Louis region.

Trail System

Great Rivers Greenway District

The Great Rivers Greenway District works for a clean, green, connected St. Louis region. To deliver its mission, the District is working on the development of *The River Ring*, an interconnected system of greenways, parks and trails that will encircle the St. Louis region, including Chesterfield, enhancing the quality of life for residents and visitors.

Eventually, The River Ring will encompass a 600-mile web of more than 45 greenways that will crisscross the region and provide access to trail and greenway projects developed by the Metro East Park and Recreation District in Madison and St. Clair counties, Illinois.

The Missouri River Greenway is a major component of The River Ring. Ultimately, it will parallel the Missouri River in St. Louis and St. Charles counties. Existing features are the Katy Trail in St. Charles County as well as Riverwoods in the City of Bridgeton and trails in Creve Coeur Park. To develop the Missouri River Greenway, the Greenway District is partnering with the communities of Bridgeton, Chesterfield, Florissant, Hazelwood, Maryland Heights, Wildwood and unincorporated St. Louis County. Additional partners include the Missouri Department of Conservation and North County, Inc.



* Image from the Great Rivers Greenway District

Monarch Chesterfield Levee Trail

The City of Chesterfield and the Monarch Levee District have begun work on the Monarch Chesterfield Levee Trail. The Monarch Chesterfield Levee Trail is a part of the Missouri River Greenway. This segment will eventually become a 17-mile loop, running primarily along the perimeter of Chesterfield Valley in St. Louis County.

Pathway on the Parkway

The City of Chesterfield, in conjunction with St. Louis County and East West Gateway Coordinating Council, has committed to the construction of the Pathway on the Parkway. This pathway includes sidewalks, bicycle paths/pedestrian ways, additional landscaping, streetlights; the installation of bus shelters, bicycle racks, trash cans, park benches, “Share the Road” signs, crosswalks; and improvements to the existing traffic signals regarding the addition of pedestrian signals, all along various sections of Chesterfield Parkway.

Pedestrian System

Current subdivision regulations require sidewalks along all streets with the exception of cul-de-sacs, large-lot residential subdivisions, subdivisions in the Non-Urban District using density development procedures, and industrial developments. As a result, most of the local streets and collector roads have sidewalks adjacent to them. However, given that land use patterns call for distinct separation of uses and the road network in general is not composed of straight routes, distances are generally too great to encourage residents to walk to all destinations within the City.

Private Rail Transportation

Missouri Central Railroad operates a freight rail line through Chesterfield. The line enters the City of Chesterfield from the City of Maryland Heights. Running along the northeast part of the City, the rail line marks the northern boundary between the commercial and residential development to the south, and the largely undeveloped agricultural land to the north. The line then crosses under I-64 / US 40/61 and continues westward between the Spirit of St. Louis Airport and the bluffs, continuing into the City of Wildwood.

Air Transportation

The Spirit of St. Louis Airport acts as both the region's largest general aviation airport and as the prime reliever for Lambert St. Louis International Airport. The airport is owned and operated by St. Louis County and funding for all operations is generated from airport users. "The Mission of the Spirit of St Louis Airport shall be to provide a safe, efficient, dependable and attractive first-class public facility that professionally serves the users and tenants. The airport will strive to maintain its role as a major air transportation facility for the St. Louis region while continuing to be a responsive and responsible neighbor to the surrounding community."

Several fixed-based operators provide a full range of support services including: routine and heavy maintenance, avionics repair and installation, part sales, interior refurbishments and other traditional fixed-based operator's services. Overnight hangar storage and tie down spaces are available for aircraft protection and security. Twenty-four hour AVGAS and Jet Fuel are also available. Other resources include flight training, pilot supplies, pre-owned and new aircraft sales and jet, turbo prop and reciprocating aircraft charter. Spirit of St. Louis Airport is home to over 500 aircraft from single-engine to multi-engine jets. The uses of these aircraft include training, corporate, charter and air medical.

Spirit of St. Louis Airport is home to the largest Regional Automated Flight Service Station in the country. It is located adjacent to the main terminal at Spirit of St. Louis Airport. The 17,000 square-foot facility replaces the original Flight Service Station that was destroyed by flooding in 1993. The new station officially opened April 15, 2000 and services eastern and southeastern Missouri and southern Illinois. Flight planning, weather information, emergency search and rescue services are also provided. The Spirit of St. Louis Airport is also an official "U.S. Port of Entry" as designated by the U.S. Customs Service. This designation provides for 24-hour "on demand" customs services at the airport.²

² Information from <http://www.spiritairport.com/>

Water Transportation

The Missouri River serves as both a regional transportation corridor as well as a natural feature. The use of the Missouri River as an official public transportation route began in 1819 with the voyage upriver of the steamboat *Independence*. Prior to that, the Lewis and Clark expedition used the Missouri River as access to the west in 1804 and Native Americans had been using the river for hundreds of years before that. Currently, the lower reaches of the river are used for barge traffic that carries agricultural products, steel and oil. The River is also used for occasional recreational cruises. There are no public points of access to the Missouri River in Chesterfield.