

2040 CATSO LONG-RANGE TRANSPORTATION PLAN

ROUGH DRAFT 3-2013

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SECTION ONE CATSO Transportation Systems and Planning Issues

CHAPTER ONE: 2040 TRANSPORTATION PLAN

“Columbia and central Missouri, a growing urban community, will have a modern transportation system, which allows its citizens to move about freely within the region using whatever means are desired – automobile, bus, bicycle, walking – and to do so safely, within a reasonable time frame, and without encountering needless congestion.”

--- Vision Statement, Transportation Citizen Topic Group, Imagine Columbia's Future (2007)

1.1 Introduction

Transportation planning in the Columbia area has enjoyed a long history beginning with the adoption of "A City Plan for Columbia, Missouri" in 1935. The first Major Thoroughfare Plan depicting the location of future roadways in Columbia and Boone County was developed by the Columbia Area Transportation Study Organization (CATSO) in 1968. In 1994, CATSO revised and adopted the 2015 Transportation Plan. In 2001, CATSO adopted a revised 2025 Transportation Plan. The Major Roadway Plan element of the 2025 Plan was amended by CATSO in 2005, 2006 and 2007. In 2008, CATSO adopted a revised 2030 Transportation Plan. The MRP element of the 2030 Plan was amended by CATSO in X, x, X, and 2012.

Over the years this series of transportation plans have provided guidance for development of facilities that serve the transportation needs of Boone County and the City of Columbia. The plan goals have been to move people and goods within and through the community in an efficient, cost-effective manner and to minimize disruption to neighborhoods and other sensitive areas. The implementation of a transportation plan has a direct effect on the form and character of a community by influencing development decisions. For this reason, land use and land use planning have traditionally been tied to transportation issues.

The Intermodal Surface Transportation Efficiency Act (ISTEA) passed by Congress in 1991 brought about significant changes in the MPO transportation planning process. The ISTEA planning process required updates to transportation plans for 20-year time horizons, and placed emphasis on reducing the growth in vehicle miles traveled by individuals, implementing Clean Air Act requirements, intermodal means of transportation, and examining the land use implications of transportation decisions. Equally significant was the ISTEA requirement that the transportation plan be financially constrained. Funding for transportation investments (roads, aviation, transit, and bicycle/pedestrian) identified in the plan must be shown to be available over the twenty year period.

It is the intent of this plan is to continue the transportation planning processes, requirements and best practices outlined by ISTEA, and continued under the Transportation Equity Act for the 21st Century (TEA-21), the 2005 Safe, Accountable Flexible Efficient Transportation Act: A Legacy for Users (SAFETEA-LU), and presently MAP-21, to develop a plan that meets the needs of Columbia and Boone County through the first third of the 21st century. Moving Ahead for Progress in the 21st Century Act, or MAP-21, was passed by Congress in July, 2012. This legislation creates a streamlined and performance-based surface transportation program and revises a number of the various programs and policies originally established in 1991 by ISTEA.

1.2 Goals

The goals for the CATSO 2040 Transportation Plan are as follows:

1. Plan and develop a coordinated and comprehensive intermodal transportation system to provide for safe and efficient movement of people and goods within and through the community;
2. Provide coordination with applicable land use and development plans in order to ensure that the transportation system contributes to orderly development of the community;
3. Identify policies to make more efficient use of the existing transportation system by integrating all forms of transportation, where possible, focusing in particular on alternate forms of transportation, both motorized and non-motorized, to the auto in order to reduce congestion and environmental impact, save energy and provide a reasonable alternative to driving;
4. Expand significantly the pedestrian and bicycle facility network and project listing, including the construction of additional sidewalks, multi-use trails, on-street bicycle lanes, and pedestrian connectors between trails and public streets, primarily through the continued implementation of the Get About Columbia Project; and in particular to facilitate work trips by non-motorized means;
5. Analyze the socioeconomic and environmental impacts of all transportation projects.
6. Compliance with National Priorities and Planning Factors.

Moving Ahead for Progress in the 21st Century Act (MAP-21), which was signed into law in July 2012, is the current national transportation legislation providing the guiding principles behind transportation decision-making throughout the United States in metropolitan areas. MAP-21 reaffirms the requirement that the metropolitan areas carryout a transportation planning process that considers the following eight Planning Factors:

- A. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- B. Increase the safety of the transportation system for motorized and non-motorized users.
- C. Increase the security of the transportation system for motorized and non-motorized users.
- D. Increase the accessibility and mobility options available to people and for freight.
- E. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
- F. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- G. Promote efficient system management and operation.
- H. Emphasize the preservation of the existing transportation system.

In addition to these eight Planning Factors, MAP-21 sets a new direction in transportation planning and programming calling for a performance-based approach to transportation decision-making, focused on:

- **Safety** – to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure Condition** – to maintain the highway infrastructure asset system in a state of good repair.
- **Congestion Reduction** – to achieve a significant reduction in congestion on the National Highway System.
- **System Reliability** – to improve the efficiency of the surface transportation system.
- **Freight Movement and Economic Vitality** - to improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

1.3 Study Organization

In November 1964, the Columbia Area Transportation Study (CATSO) was designated by the Governor of Missouri as a Metropolitan Planning Organization (MPO). Along with the MPO designation came access to federal funds for street and bridge improvement projects as well as a responsibility to perform transportation-related planning in accordance with the federal "3-C" process. The "3-C" process of

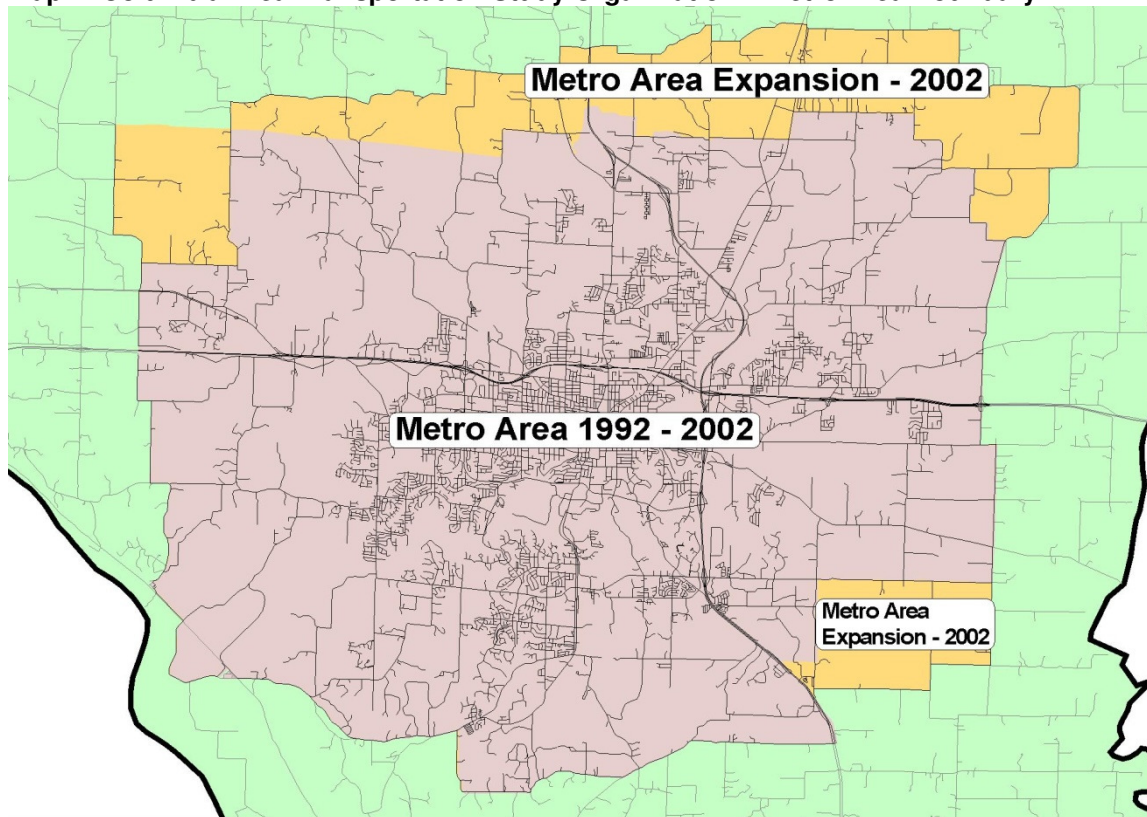
continuing, cooperative and comprehensive planning is funded in large part by the Federal Highway Administration and the Federal Transit Administration in Columbia, and is required in order to continue to receive federal/state capital and operating monies.

The Columbia Area Transportation Study Organization relies on two committees to perform its 3-C planning. The technical committee is comprised of staff level planners, engineers and other transportation professionals from the Missouri Department of Transportation, Boone County, and the City of Columbia, who, as the name implies, undertake technical aspects of plans, studies and reports for the metropolitan area. The coordinating committee is made up of upper level city and county staff members, local elected officials, Missouri Department of Transportation staff, Federal Highway Administration staff and Federal Transit Administration staff. This is a policy making group which directs the activities of the technical committee and approves documents prepared on behalf of the MPO. Staff support for CATSO is provided by the City of Columbia Community Development Department.

1.4 Study Area

Map 1: Columbia Metropolitan Area; shows the City of Columbia and the portion of Boone County addressed by this plan. The Metropolitan Planning (Metro) Area includes the City of Columbia and the surrounding areas in unincorporated Boone County that are projected to urbanize within the next 20 years. The current Metro Area boundary was adopted by the Coordinating Committee in 2002. Transportation Analysis Zones (TAZ's) have been developed for the entire area for eventual traffic analysis. Much of the data found in this report are a mix of Columbia and Boone County statistics which were extracted from 2000 and 2010 Census information or have been developed for the entire area for eventual traffic analysis.

Map 1: Columbia Area Transportation Study Organization – Metro Area Boundary



1.5 Travel demand model

CATSO uses a travel demand model to develop estimates of the future usage of existing and future roadway corridors. Additional discussion of the travel demand model is presented in Chapter 6 – Project Plan. A full update of the model/roadway network will be accomplished at a later date.

CHAPTER TWO: *POPULATION AND EMPLOYMENT: 2040*

This chapter states the underlying assumptions of growth in the metropolitan area for transportation planning purposes. Transportation planning responds to assumed growth in the number of jobs, probable employment locations, projected population growth, and probable housing locations.

2.1 Population Forecast: 2040

There are several methods and sources available for projecting population growth for Boone County and the Metro planning area to the year 2040. Population projection methods rely upon assumptions based upon historic trends, migration, birth and death rates, age cohorts and other factors.

From 2000 to 2010, the Metro Area population grew by 30,479 people and 29.3%. After considering a variety of potential growth rates, the CATSO Coordinating Committee elected to use a more moderate projection rate than was seen in the previous decade; the chosen projection was based on a percentage of population growth that is near the mid-range of the 1980s (1.15%), 1990s (2.05%), and 2000s (2.93%) Metro Area growth rate.¹ The projection assumes an average effective annual growth rate of 1.5%. The choice of projection rate to forecast population growth for the Columbia Metro Area for the year 2040 was also based on local housing and other demographic data, including data from the 2010 Census, and building permit information from Boone County Resource Management and the City of Columbia.

Using 2010 Census data as the base population for the Metro Area (134,592) and Boone County (162,642), a 1.5% annual growth rate results in a projection of 210,347 and 254,222 people in the year 2040 for the Metro Area and County, respectively. This is an increase of 75,775 people in the Metro Area over the 30 year planning horizon.

The Metro Area population has historically been near 80% of the County population (76.9% according to 2000 population estimates, and 82.7% according to 2010 Census data). The Metro Area is expected to retain a similar share of the total county population, with a slight percentage gain possible for Metro Area Boundary expansion over time; other growth trends, such as higher growth rates in the City of Columbia than in Boone County, as was seen over the last decade, may also affect this percentage in either direction (from 2000-2010 the City population grew by 28.3% and the County population grew by 20.1%).

Table 1, shown below, shows population projections for the CATSO Metro Area, the City of Columbia, and Boone from 2010-2040 using 2010 Census data for the base year, and a 1.5% compounding annual growth rate.

Table 1: Population Projections 2010-2040

	2010	2015	2020	2025	2030	2035	2040
CATSO METRO AREA	134,592	144,994	156,200	168,271	181,276	195,286	210,378

¹According to U.S. Census Bureau data, the estimated population for the Metro Area was 104,093 in 2000.

CITY OF COLUMBIA	108,500	116,885	125,919	135,650	146,134	157,428	169,594
BOONE COUNTY	162,642	175,212	188,753	203,340	219,055	235,985	254,222

1.5% Growth Rate

Regular monitoring of local growth trends will allow for the adjustment of these figures over time, and formal adjustment will occur as the transportation plan is updated every 5 years.

2.2 Employment Forecast: 2040

A number of sources were examined to arrive at 2040 employment projections. The U.S. Census, the Missouri Economic Research Information Center, and the Show Me Model developed by the University of Missouri Community Policy Analysis Center show a steady relationship between population and employment throughout the planning period. In 2000, there was a ratio of .56 jobs per person in Boone County. This ratio has increased, to .67 jobs (roughly 2/3) per person in 2010. This is partially attributed to more women entering the work force as well as more person delaying retirement.

These sources indicate decreasing rates of growth in employment. For these reasons, the plan uses a slightly lower rate of growth in employment versus job growth, applying 1.3% positive growth annually to 2010 Boone County employment figures. As applied to the 2010 total County employment figure of 110,698, Boone County is projected to have 163,088 jobs in 2040. It must be emphasized that this number does not represent the total number of employed persons within the county. Rather, it is employment within the county, regardless of place of residence. Numerous persons employed within Boone County have places of residence in surrounding counties. The total employment figure and employment locations provide essential data needed for transportation modeling. Additionally, roughly 90% of job growth in Boone County has occurred within the Metro Area, while in recent years, only about 80% of the County's population growth occurs in the Metro Area

Since the Columbia Metro Area is the principal job generator of the county, it is projected that employment growth in the Metro area will continue to occur at a faster rate than in the rest of Boone County due to in-commuting to employment centers. The jobs total in the Metro Area in 2010, 101,736, was 91.9% of the total County employment of 110,698. Assuming approximately 90% of the County's jobs will continue to be in the Metro Area in 2040, the plan suggests 146,780 as the projected employment figure for 2040. With this assumption, employment in the Metro area would increase by 47,152 persons in 30 years.

Table #: Employment Projections 2010-2040

	2010	2015	2020	2025	2030	2035	2040
BOONE COUNTY	110,698	118,083	125,960	134,364	143,327	152,889	163,088
CATSO METRO AREA	99,628	106,275	113,364	120,927	128,994	137,600	146,780

1.5% Growth Rate

For 2040, it is projected that the above classifications will have minor changes, with some percentage growth in government and services, and minor declines in manufacturing and commercial. The following percentages are estimated for the new jobs to be created through 2040:

Table #: Projected Metro Area Population and Employment Growth through 2040 by Type

Growth category	2010	2040	Net change 2010-2040
Metro Area Population	134,592	210,347	+75,775
Employment - Total	99,628	146,780	+47,152
AGRICULTURE	149	220	+71
MINING	27	40	+13
TRANSPORT & UTILITIES	1,886	2779	+893
CONSTRUCTION	3,367	4960	+1,593
INDUSTRIAL	2,507	3694	+1,187
COMMERCIAL	18,693	27540	+8,847
SERVICES	26,344	38812	+12,468
FINANCE/ INSURANCE/ REAL ESTATE	4,361	6426	+2,064
GOVERNMENT ²	42,293	62309	+20,016

Source: Community Policy Analysis Center, University of Missouri; CATSO Projections

Both the CATSO Technical and Coordinating Committees reviewed potential alternatives for forecasts and gave approval to staff suggestions.

It should be noted that trends in sector growth change over time with technological changes, demographic trends, economic trends and incentives, fuel costs, and other variables which directly and indirectly affect economic and employment environments. Thus, sector type growth figures will be evaluated every five years to readjust the data to fit trends. Overall and historically, the local economy is service based, with most jobs in services, education or government, and retail (commerce).

2.3 Metro 2040 Land Use Forecast

To plan for improvements to the transportation system, it is necessary to anticipate where the 2040 population will live and work. For travel demand modeling purposes, the projected increase and location of future housing and employment is allocated by Transportation Analysis Zone (TAZ). At the time of this plan update, the estimated allocation of future travel demand was affected by the timing of the 2010 U.S. Census Journey-to-Work information from the Census Transportation Planning Package (CTPP). As CPTT data will be included with the growth allocation model (e.g. data is used with a travel demand model to produce trip generation estimates and to assign trips to a model street network), a supplemental update to this plan is anticipated in late 2014. Once this data is available, future population (dwelling units) and employment will be re-allocated to individual TAZ's within Columbia and Boone County. For unincorporated portions of the study area, Boone County Planning Department officials will be consulted. For TAZ's within Columbia, the City of Columbia's *Columbia Imagined* Comprehensive Plan (adopted in 2013) will provide a base for the allocation based upon the Plan's recommended land uses.

Using data collected and analyzed in *Columbia Imagined* via a variety of sources and means, preliminary information regarding the Metro Area Land Use Forecast is presented in the following section, with an expectation this data will be refined following the updated growth allocation model as updated CTPP data becomes available.³

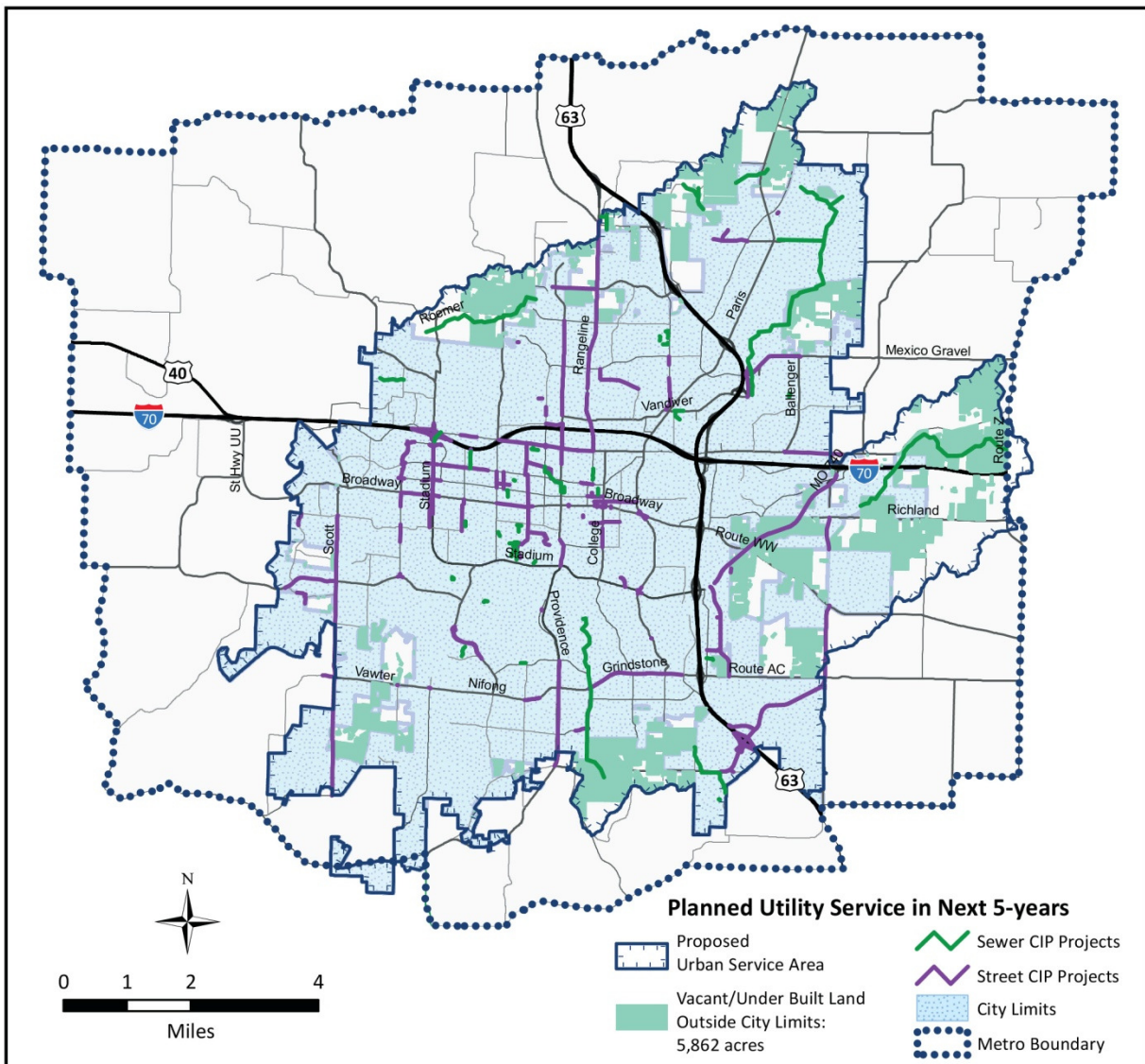
Using the 2040 Metro Area projected population of 210,348 persons, a growth of 75,775 persons over the plan's horizon, it is anticipated 32,946 new housing units will need to be built to accommodate housing needs (projected to be one housing unit for every 2.3 persons using historical trends). These 32,946 housing units will require a total of 12,672 acres (*Columbia Imagined* projects 2.6 housing units per acre across all housing types- single, double and multi-family). Where these housing units are likely to be built is projected by *Columbia Imagined* based upon availability of urban services, utilities, infrastructure, and developable/appropriately zoned land.

²Government sector includes education services and state, local, and federal employment.

³ Note: Columbia Imagined land use, population and employment forecasts are projected to 2030. Using Columbia Imagined's raw data and projection methods, numbers were calculated to 2040 to meet the 2040 planning horizon.

It is anticipated that most new housing units in the Metro Area will continue to be built within the City of Columbia boundary. There are currently 5,324 acres of available vacant land within the City and Metro area with existing or planned utility service (within the next 5 years) which can accommodate 13,928 housing units, or 42% of the anticipated housing units needed by 2040. **Map X** indicates these areas which are likely to develop prior to areas without public utility service due to higher development costs. Only 4% of the presently available 5,324 acres (564 acres) is Metro Area land outside the City limit. To accommodate growth through 2040, it is anticipated that an additional 7,348 acres of land presently outside the City limit will be developed over time; much of it annexed within the City by the time of development based upon prior annexation, utility extension and development trends.

Map X: Planned Utility Service in Next 5-Years in Metro Area



Development to accommodate employment projections through 2040 will require approximately X acres as described in this section. As referenced above in section 2.2 Employment Forecast: 2040, a net gain in 47,152 jobs is anticipated by 2040 for a total of 146,780 jobs. Estimated acreage requirements for

employment vary by the type of classification. For the purposes of estimating the acreage necessary to accommodate new employment, the employment types described in [Table X](#) Projected Metro Area Population and Employment Growth through 2040 by Type are combined and assigned to either office, industrial, or commercial categories.

Industrial (3,757 new jobs) includes manufacturing, construction, transport & utilities, agriculture, and mining. Office (28,314 new jobs) includes government and finance, insurance, and real estate and fifty percent of the estimated employment for services. Commercial (15,081 new jobs) includes retail and non-retail uses such as hotels and one-half of services. Office uses are estimated to have on average 29 employees/acre, industrial uses an estimated 18 employees/acre, and commercial uses have an estimated 20 employees/acre.

To accommodate the projected additional 47,152 employees in the Metro Area by 2040, it is estimated that a total of approximately 1,939 acres will be needed. This includes; 209 acres for industrial, 976 acres for office, and 754 acres for commercial. As technology advances, acreage needed for each category is anticipated to change, necessitating careful recalculation at each five year interval. For example, a rise in telecommuting/working may affect office acreage needs.

2.4 Future Efforts

The 2010 Census was undertaken in the spring of 2010. The provision of new Census data for the Columbia Metro area provides an opportunity to review the Metro area boundary. Minor boundary increases are anticipated following adoption of the 2040 Plan due to 2010 Census-identified increased population densities in outlying areas; however, the anticipated boundary changes will have little effect on the Metro Area population and housing projections.

While income, population, race, age, family size and status, and other demographic data from the 2010 Census was incorporated into the 2040 LRTP update, the late release of the Census Transportation Planning Package (CTPP) necessitates an additional update to the TAZ geography at a later date. June 2015 is the target date for the additional update/supplement to the 2040 LRTP reflective of all available land use and transportation data updates to the 2030 model TAZ geography.

Once the model update work is completed, CATSO staff will revisit the 2040 population and employment projections for possible modifications using the improved data and tools available.

As discussed in this plan, the City of Columbia adopted a new comprehensive plan, *Columbia Imagined*, in [mid-2013](#). *Columbia Imagined* calls for changes in land use and growth management policies within the Metro Area based upon citizen-identified priorities, goals and objectives. Many of these priorities, goals and objectives are incorporated in this plan, and if realized, may greatly affect how and where growth occurs in the future.

CHAPTER THREE: EXISTING TRANSPORTATION FACILITIES AND SERVICES

This chapter describes the existing improvements and associated services that make up the CATSO transportation system. Later chapters analyze the relationships between different modes of transportation and planned improvements to maximize performance of the system in the future.

3.1 Streets, Roads, and Highways

Within the Metro Area, there are approximately 1,123 miles of roadway. Boone County is responsible for 302 miles. Included are 182 miles of local streets. Freeway miles are calculated as “lane miles,” not “centerline miles.” The City of Columbia maintains approximately 575 miles of street. Included are

approximately 364 miles of local streets. There are 148 miles of streets and highways maintained by the State of Missouri (including Interstate 70). The mile numbers were provided by the City of Columbia Public Works Department. Table # provides a breakdown of centerline miles of arterial and collector streets by jurisdiction.

Streets within the metro area are planned and designed according to the hierarchy of functional classification. The MPO uses a somewhat different classification system than does the State of Missouri and the Federal Highway Administration. Roadways are classified in order of function, such as property access, length and purpose of trip, traffic volumes and relationship to the rest of the system. Highways and expressways, for example, typically carry the highest volumes of traffic, carry through trips or cross-town traffic, offer limited access to adjoining property and are the "receivers" or "senders" of large amounts of traffic to and from the rest of the system. Arterial streets are the next in order of importance; collectors carry traffic from and to neighborhoods and activity centers, while local streets carry low volumes of traffic and provide direct access to adjoining property. This concept is meant to achieve efficiency and order in the street system.

The Missouri Department of Transportation (MoDOT), Boone County, and the City of Columbia are the three agencies in the metro planning area responsible for the maintenance and construction of the transportation infrastructure. The following table provides a summary of the arterial and collector street mileage by agency (as of 7/2013):

TABLE # Major Street Mileage by Jurisdiction

AGENCY	Miles of Arterial Streets	Miles of Collector Streets
MoDot	54.29	42.26
Boone County	26.30	76.83
City of Columbia	35.69	91.14
Totals	miles	miles

Highways on the state and federal systems provide much of the roadway network structure and capacity in all the roadway corridors in the metro area. Of the miles of roadway under MoDOT jurisdiction, approximately 40% (80.94 miles) is comprised of high speed, limited access facilities.

There are private streets in the metro system of roadways but most serve to connect a single development, often a small group of dwellings, to the public roadway system. Many are dead-end roads that resemble shared driveways.

The University of Missouri-Columbia also has jurisdiction over several local streets through campus, such as Carrie Franke Drive, Missouri Avenue, Virginia Avenue, Mick Deaver Memorial Drive, Monk Drive, Hospital Drive, and Providence Point. The University has funded signalization where UMC roads meet MoDOT roadways. One notable contrast between city- and university-maintained streets in the campus area is that city streets often include metered parking whereas the university does not maintain parking spaces on its streets.

Appendix A: Functional Classification of Roadways; provides a summary of the total mileage of roadways in the Columbia Urbanized Area, and the mileage by functional classification for streets and highways in the CATSO Major Roadway Plan.

The private automobile is by far the preferred mode of transport on the Columbia street network.

3.11 Public Parking

The availability of compact public parking is a key factor in the creation of walkable destinations, such as the City of Columbia central business district and the University of Missouri-Columbia campus. Bike parking facilities also facilitate transportation options and encourage walkability.

A. City of Columbia

The City of Columbia parking utility owns and operates five multi-level parking structures with 1,882 spaces in the downtown in addition to surface parking lots and on-street parking spaces. A sixth parking garage, at Broadway and Short Street, is currently under construction. The City maintains 1,724 on-street and 302 off-street meters, 3,623 permit spaces in lots or garages and 278 hourly garage spaces. An inventory of downtown parking facilities is attached in Appendix X.

There are 7,710 bike parking spots throughout the City, with most in the downtown core or nearby.

A study completed in January 2007 for the University of Missouri, Stephens College, and the City of Columbia by the Sasaki Group, *Campus-City Downtown Land Use Opportunities Study*, endorsed the concept of “park once” to support downtown redevelopment. Because the central business district is compact and organized in short blocks with wide sidewalks and centralized parking in parking structures, as well as on-street parking, this allows visitors and employees to park once for any number of visits to buildings. The city zoning ordinance allows a waiver of on-site parking in the central business district and in fact requires a conditional use permit for any proposed off-street, on-site surface parking.

Additional city-owned parking is available at city parks and city buildings for the convenience of city customers and city employees. Parking is generally provided according to the anticipated demand of the facilities as required by the city zoning ordinance. The zoning code allows parking requirement reductions for the provision of additional bicycle parking spaces than those required.

The City is currently working towards implementation of the 2001 study’s suggestion to provide additional parking on the north side of Broadway; in addition to the relatively new Fifth and Walnut parking garage, the Short Street and Broadway garage is anticipated to be complete in 2014.

B. University of Missouri-Columbia

The university maintains six parking structures and several surface parking lots on its campus, with additional long-term commuter lots off Stadium, Providence and Ashland Road. The campus parking utility administers approximately 23,000 off-street spaces. Metered on-street parking, maintained by the City of Columbia, is available on city streets within the campus. The university does not install parking meters on university-owned streets, given the prohibition of on-street parking on those streets. The university does have approximately 3,000 metered spaces off-street. The majority of the university-owned parking is by assignment, mostly by permit.

3.2 Transit

A. Columbia Transit

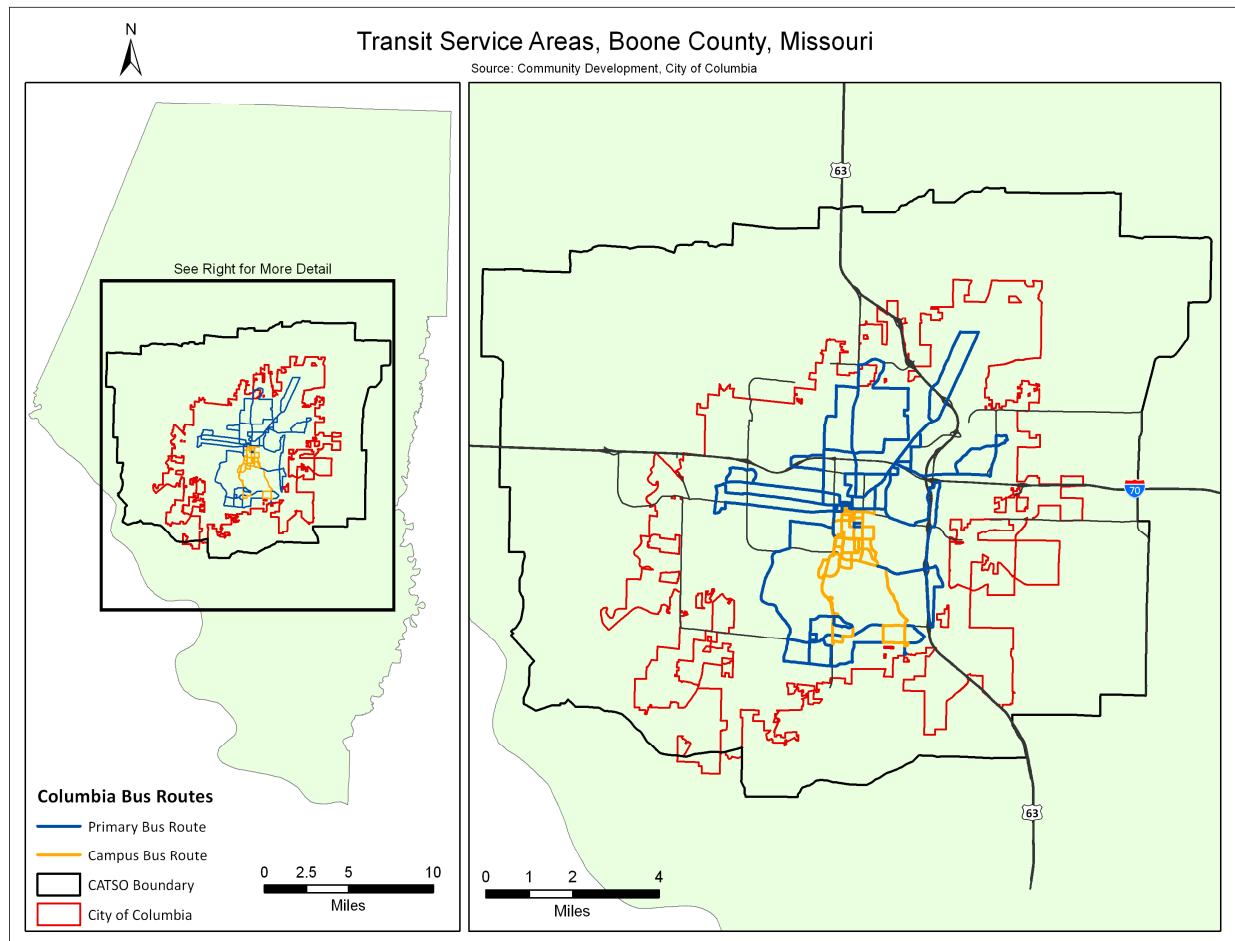
Columbia Transit is the general public provider in the City of Columbia. Service began nearly 50 years ago in 1965. Under the umbrella of Columbia Transit, several services are offered: fixed-route, FastCAT, Paratransit, and MU shuttle services. Columbia Transit provides over two million passenger-trips annually. Columbia Transit is under the administration of the Columbia City Manager and Public Works Department.

Services:

- **Fixed-Route:** Fixed-route bus service within Columbia’s city limits uses seven routes designated by number and color. Bus service starts at 6:25 a.m. and operates on various schedules ending anywhere between 6:30 p.m. and 1:30 a.m., with scaled-back Saturday service. No service is provided on Sunday. Fixed-route service provides over 1.1 million annual passenger-trips. Passengers currently can flag down any fixed-route bus at the end of a block for a ride, where safe to do so.
- **Paratransit:** Columbia Paratransit provides specialized van service for persons with disabilities and elderly who are unable to use the fixed-route bus system. Service is provided curb-to-curb within the City limits of Columbia. Riders must meet eligibility requirements and become certified riders. The

one-way fare is \$2.00. Paratransit service is offered during the same hours as the fixed-route service. The service provides approximately 41,000 annual trips.

- **FastCAT:** FastCAT is Columbia Transit's newest route and is geared towards student riders. There are 24 stops in a loop around campus and downtown which runs every fifteen minutes. Service days, times and amenities are expanded beyond the other service routes offered by Columbia Transit; FastCAT runs seven days a week and, until 2:30 AM Thursday through Sunday morning during the University of Missouri and Stephen's College regular academic calendar. Free transfers and group rate discounts are available.
- **MU Tigerline Service:** The final service Columbia Transit provides is contract shuttle service with the University of Missouri. Service is provided with three day and three evening routes which cover the main campus and commuter parking lots. This service is operated seven days a week during the fall and spring semesters only. Over 880,000 annual trips are provided. Service is provided through student fees.



Map ?: Transit Service Areas for Columbia Metro Area

Financial

Columbia Transit is funded through a combination of FTA 5307 (urbanized) operating funds, FTA 5309 (discretionary) capital funds, a state of Missouri annual grant, a local (City of Columbia) dedicated transportation sales tax, fares, advertising and contract revenue. Total operating costs are approximately \$5.7 million dollars annually.

Facilities

Columbia Transit operates out of two facilities. The first is the *Wabash Station* located at 126 North 10th Street in Columbia. This facility is the main transfer hub for both fixed-route and Paratransit routes. It serves as the bus dispatch center and is the main administrative office of Columbia Transit. Formally the Wabash Train Station, the building celebrated its 100th anniversary in 2010. With the help of an FTA Capital grant, the facility was completely refurbished in 2007 and became the City's first LEED certified building.

The second facility is the *Grissum Building*, located at 1313 Lakeview. This is a shared maintenance and storage facility for the Public Works Department, of which Columbia Transit is a division. This facility is used to store, fuel, maintain, and clean all Columbia Transit vehicles that are maintained through the Fleet Operations Division of the Public Works Department.

Performance Measures

Columbia Transit's baseline performance measures are shown below in [Table ?](#). The performance measures reflect the ridership, vehicle miles and hours, and cost breakdown/allocation provided by Columbia Transit.

Columbia Transit Service Summary						
Route/Service	Annual Passenger Trips	Annual Vehicle Miles	Annual Vehicle Hours	Service Cost	Cost per Trip	Cost per Mile
Fixed Route	1,145,596	550,710	48,809	\$3,505,395	\$3.06	\$6.36
Para-Transit	41,655	207,599	23,228	\$1,302,479	\$31.27	\$6.27
MU Shuttle	882,332	184,463	18,444	\$1,095,843	\$1.24	\$5.94
Total Service	2,069,583	1,009,775	91,049	\$5,903,717		

[Table ?](#). Columbia Transit Service Data and Cost Allocation

Capital (Vehicles)

Columbia Transit has a fleet of 48 passenger vehicles. [Table ?](#), as presented below, provides a listing of those vehicles including make and year.

Columbia Transit Vehicle Inventory		
Type	Year	Number of Units
Chevrolet Pick Up	2005	1
Van (no lift)	1992	1
Toyota Prius	2005	1
Diamond Cutaway	2001	1
Diamond Cutaway	2004	2
Diamond Cutaway	2006	1
Ford E450	2008	2
Ford V10	2011	2
Ford V10	2012	2
Ford Collins	1999	1
Ford Champion	2002	1
New Flyer (40')	1995	2
New Flyer (40')	2000	2
New Flyer (40')	2001	7
New Flyer (30')	2001	6

Gillig (40')	2007	2
Gillig (40')	2010	5
Gillig (40')	2011	3
Gillig (30')	2012	3
Gillig (40')	2012	3
Total Units		48

Table ?: Columbia Transit Vehicle Inventory

The City of Columbia policy on providing transit service is:

- 1) Provide public transportation in the most cost efficient manner possible;
- 2) Develop public confidence in the public transportation system;
- 3) Establish and maintain a direction for growth of the public transportation system and a level of commitment to future service; and
- 4) Encourage the use of public transportation as an alternative to travel by automobile to promote the preservation of the environment through the conservation of fossil fuel resources and improved air quality.

The US Census American FactFinder 2007-2011 describes Travel-to-Work Mode Splits for the City and County. About .5% of Boone County commuters and .7% of Columbia commuters get to work using public transportation (**Figure ?**). This is a very small percentage, but it only takes commuters into account. It does not include people who are too young to work, retired people, and people whose disability makes them unable to have a job, all candidates for transit usage.

The average commute time in Boone County is 18.4 minutes, and 16.6 minutes in Columbia across all modes. Previous household surveys have indicated for transit to begin to attract ridership from other modes, the average travel time will need to be approximately 21 minutes or less. The current bus system uses a pulse system with 40 minute headways.

2010 Boone County Travel-to-Work Mode Split

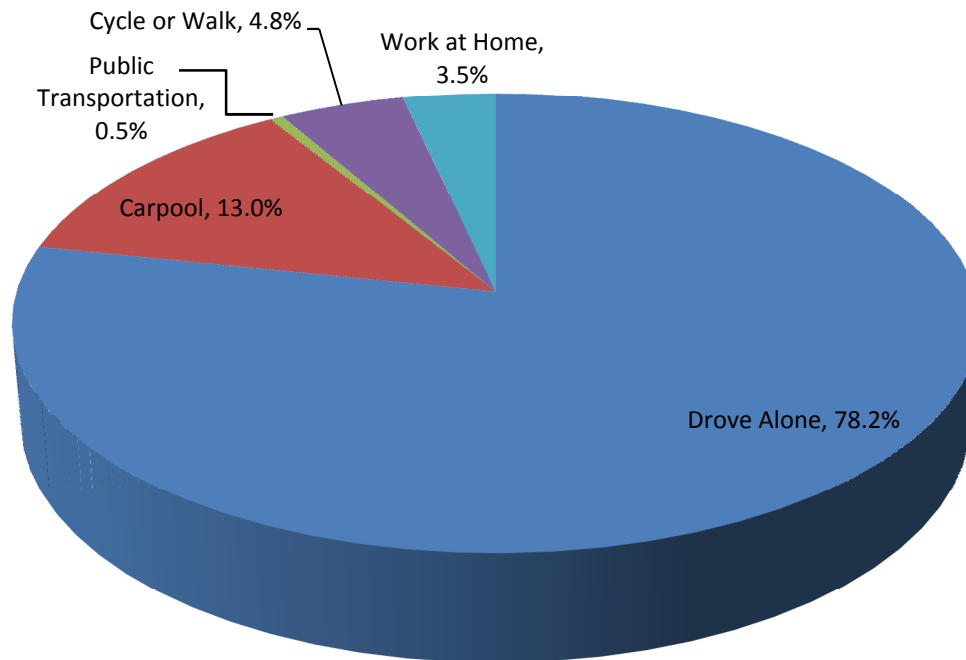


Figure ?: 2010 Boone County Travel-to-Work Mode Split
Source: 2010 U.S. Census

Historical Ridership Trends

The annual ridership in 1980 was 1,100,000+. From that high in 1980, ridership declined from 1981 to 1990. The decline in ridership followed the national trend of reduced transit ridership. Locally, the decline in fixed route ridership was off set by an increase number of riders from the University of Missouri Parking Lot Shuttle Bus. The Parking Lot Shuttle Bus is operated by the City of Columbia under a year to year contract with the UM/C. The combined ridership in 2006 was 1,408,280 (up from 1,100,000 in 1993), and was just over 2 million rides in 2012.

COMO Connect

As a part of a strategic planning effort, in mid-2013 Columbia Transit began work to redesign and rebrand the bus system based upon a shift to a multi-hub connector system using advanced routing, GPS-tracking, and other user-oriented technologies. If fully implemented, the COMO Connect system will utilize a network of routes with shorter travel times, expanded service hours, and 35 transfer nodes throughout the city.

Table ? – Columbia Transit Ridership 1998-2012

Year	Total # of Riders
1998	697,444
1999	645,952
2000	480,575

2001	517,387
2002	536,820
2003	456,961
2004	491,019
2005	1,317,356*
2006	1,408,280
2007	1,583,159
2008	1,796,832
2009	1,957,371
2010	2,006,855
2011	2,214,593
2012	2,027,928

*Note: in 2005, CT began including rider numbers from the Campus shuttle routes to the Fixed Route ridership totals.

Table ?

City of Columbia Paratransit Ridership 1995 – 2012

Year	Total # of Riders
1995	17,411
1996	18,932
1997	20,981
1998	25,498
1999	26,335
2000	28,877
2001	29,940
2002	29,697
2003	24,821
2004	23,647
2005	23,742
2006	23,079
2007	22,444
2008	31,998
2009	33,481
2010	34,860
2011	36,089
2012	41,655

B. School Bus

School buses are a major part of daily transit patterns. The Columbia Public School District is a k-12 school district with an enrollment of approximately 17,000 (2012). It covers an area of 302 square miles including most of the metro area. The Hallsville School District serves part of the north metro area. First Student is the provider of transportation services to Columbia Public Schools. It uses 141 buses daily on more than 500 routes to carry approximately 8,000 students to 30 schools in the district, of which 28 are in the metro area.

The Columbia School District Board of Education approves bus routes each year. By policy, students residing more than one-mile from their assigned school are eligible for free bus transportation. The District also will furnish free transportation to students residing within one mile of a school if the route to school is considered hazardous. Disabled students are eligible for free transportation anywhere in the district.

C. Private Transit Services

Several private organizations provide paratransit and other transportation services. According to the Coordinated Public-Transit Human Services Transportation Plan (2013), 15 transportation and human service agencies actively provide some form of transportation services in Boone County. The majority of these organizations are active in the Columbia Metro area.

OATS is a private, nonprofit specialized transit provider which operates in 87 Missouri counties. Its mission is to provide reliable service for transportation disadvantaged Missourians so they can live independently in their own communities. OATS has been in operation since 1971 and provides door-to-door transportation services to individuals with little or no alternative form of transportation. In urban areas, they provide service to those 60 years and older and the disabled. In rural areas, routine service is also open to the general public.

OATS is funded by a combination of federal, state, and local funds. Government funding through contracts with various agencies covers the cost for the elderly/disabled riders, while general public riders are encouraged to pay the full suggested donation for service.

OATS provides service Monday through Friday 7:00 a.m. to 5:00 p.m. in Columbia and service to other parts of central Boone County is provided on Mondays. OATS' annual ridership is approximately 33,769 one-way trips. The Boone County program costs approximately \$475,000 annually to operate.

3.3 Bicycle Facilities

Facilities for bicycle travel include dedicated trails, multi-use sidewalks ("pedways"), bike lanes, and bike routes. The City of Columbia has approximately 24 miles of trails, consisting of the MKT Nature and Fitness Trail, the Hinkson Creek Trail (2.25 miles of this is maintained by the University of Missouri), the County House Trail, the Hominy Trail, the South Providence Trail, the Scott's Branch Trail, and the Bear Creek Trail. The City also has four connector trails: 1) Garth Avenue, which links Lathrop Road and Clarkson Road to the MKT Trail; 2) Blue Ridge Road, linking Blue Ridge Road to the Bear Creek Trail; and 3) Python Court, which links the Vanderveen Subdivision to the Bear Creek Trail; and 4) Greenbriar, connecting Greenbriar Drive to the Hinkson Creek Trail. Boone County maintains 3.5 additional miles of the MKT trail within its jurisdiction.

The State of Missouri's Katy Trail, part of the 200-mile long Katy Trail State Park from St. Charles to Clinton, crosses the southwest metro area between Route K and Highway O, a distance of approximately 2.25 miles. The City of Columbia has a Trails Plan element in its Park, Recreation, and Open Space Master Plan that lists 16 additional future trails within stream corridors as primary acquisition targets. Included in these are extensions of the existing Bear Creek and Hinkson Creek Trails, miscellaneous trail "connectors," and a trail parallel to the Columbia Terminal Railroad (COLT). Several of the trails have been programmed for design and construction in the City Capital Improvements Program (CIP) which will expand the trail system. Fourteen additional projects are listed as secondary acquisition targets, with twenty-three projects in the tertiary acquisition listing.

Multi-use sidewalks are present along several major roadways. The CATSO Bicycle and Pedestrian Network Plan identifies numerous corridors as "Pedways" and the City of Columbia street standards, Appendix A of the Subdivision Regulations, include an eight-foot "pedway" sidewalk on one side of the street in several of the optional cross sections. Locations of pedways are typically determined on a case-by-case basis.

Together, trails and pedways are sometimes identified as "Class I" bike routes, or routes designed for exclusive use by bicyclists, pedestrians, and wheelchair users.

Bike lanes, varying in width from 4 to 6 feet, are located on nearly 75% of arterial roadways in the City of Columbia, including several roadways under MoDOT jurisdiction. Sixty-three miles of these "Class II"

bicycle routes are within city-maintained right-of-way. Specific locations for future bike lanes are planned as part of the Get About Columbia Project Working Infrastructure Plan (an additional 5.1 miles of bike lanes are expected in FY2014 alone). The City street standards also include provisions for bike lanes in several of the optional cross-sections.

There are 23 miles of “Class III,” or on-street bike routes, in the City of Columbia. On-street routes are designated on streets where dedicated trails, pedways, or bike lanes are not present or are not feasible, and where street conditions and destinations are conducive to bicycle travel. The City currently has one east-west Bike Boulevard through downtown, and is in the public input stage of a north-south connector.

Finally, bicycle parking is required for new development in the City of Columbia and the city has installed bicycle parking in its downtown parking structures. A portion of the non-motorized transportation pilot project federal funds has been spent or is designated towards bicycle parking installations in centers of significant activity, such as the central business district.

The City of Columbia established the Commission on Bicycling in 1977, in response to citizen concerns about bicycling issues. The Commission serves as an advisory board, examining problems relating to bicycling and suggesting solutions. A Bicycle Master Plan developed by the Commission and Staff was adopted by the City Council in November, 1993. The Commission also assists in the development of updates to the Sidewalk Master Plan.

After renaming it the Bicycle & Pedestrian Commission and expanding its membership to 11 in 1998, then 10 in 2013, the Commission now has responsibility for advising the City Council on pedestrian issues, as well as on matters pertaining to bicycling.

In summary, Columbia has three types of existing and proposed bicycle routes (Table 5).

TABLE 5 Miles of existing dedicated bicycle routes in the metro area

Facility type	Class I Bicycle routes used exclusively by bicycles and pedestrians	Class II Bicycle lanes within existing public streets	Class III Signs on existing public streets designating bicycle routes	Totals
Length in miles	23.35 miles of trails*	63 miles	23 miles	109.35 miles

* Figure includes all trails in the Metro area including City, County, University, and State-maintained trails. This figure does not include “pedways,” which in the City of Columbia refers to a wide (typically 8 foot) sidewalk designed for use by cyclists and pedestrians.

The Bicycle/Pedestrian Network Plan element of the 2030 Long Range Transportation Plan updates the 2025 Network Plan element, which was the initial comprehensive Bicycle/Pedestrian Network Plan, and is the principal plan for bicycle transportation. Previously, the 1993 Bicycle Plan filled this role. This network includes both major streets and greenbelt trails. The Bicycle and Pedestrian Network plan includes approximately 375 miles of corridors. The 2030 network added a minimal amount of additional facilities – approximately 15 projects to the 2025 network. See section 6.6 for the 2030 Bicycle & Pedestrian Network Map). **NOTE: 2040 Bicycle/Pedestrian Network Plan still underway**

The latest Network plan addresses the need to eliminate the fragmentation of the existing system of bicycle routes. It proposes a number of Class I bicycle routes (also called shared use paths), some of which would follow the course of the major creeks in the area (“greenbelt trails”). The use of these greenbelts is the most workable way of accommodating Class I routes. Unlike the 1993 Plan, the Network contains the connections necessary to facilitate bicycling as a serious mode of travel. The Class I routes have greater recreational potential than other types of routes, in addition to providing a facility for non-recreational travel.

Additional Class I routes will be constructed along the major roadways included in the Network Plan where implementation is practical. The pedways serve as the Class I routes in major street corridors. Part of the network will be implemented with Class II routes in those locations where Class I routes cannot be built.

As of 2007/2013, the Columbia area has six Class I routes in greenbelt corridors, as described below

- 1) The MKT parkway, which extends to the southwest approximately 9 miles from the Fourth and Cherry Street intersection to the statewide Katy Trail near the town of McBaine.
- 2) Hinkson Creek Trail. This extends for 3.7 miles from Old 63 to the MKT Trail. A 1.8 mile trail extension north from Old 63/Grindstone Nature Area to Stephens Lake Park is under construction. This extension will connect to a pedway on East Broadway, which will then link to the Hominy Branch Trail.
- 3) Hominy Branch Trail (Phase I), which is under construction. This trail provides a connection across US 63 and Broadway/Route WW to Woodridge Park. A second phase of this trail is under design.
- 4) The Bear Creek Trail which currently extends 3.4 miles across northern Columbia from Cosmo Park to Albert-Oakland Park.
- 5) Scott's Branch Trail. Two phases of this project in southwest Columbia are under construction, providing a connector between Rollins Road and Scott Boulevard and then on to Perche Creek.
- 6) County House Branch Trail. This route currently extends along the College Park Drive corridor north across Stadium Boulevard/Route 740.

Numerous Class I routes are planned for the future. Other projects, such as Cow Branch, and future phases of Hominy Branch, Hinkson Creek, County House Branch, and Bear Creek, are in the planning and design stages. The latter would extend the trail from its existing terminus south of Blue Ridge Road to the Boone County Fairgrounds. Other trail projects, including Perche Creek and other creek corridors, are in the planning stages.

Other Class I routes are also present in non-greenbelt locations, with notable examples including Broadway between Old 63 and Brickton Road, and Brown School Road east of Route 763.

A number of locations present problems for bicycle travel. Some of these are so-called "pinch points," frequently bridges, where the narrowing of the road makes bicycling dangerous. Others are major roadways or intersections which present a barrier to bicyclists.

In May 2003, the Bicycle and Pedestrian Commission identified 20 such problem areas on the existing street system in a bicycle ratings map they prepared with staff assistance. The Commission studied other problem areas in 2005 and produced a list of another 14 problem intersections.

Included are a number of narrow bridges, such as the Paris Road bridges over I-70 and the Business Loop. Other problems include the Forum Boulevard-Nifong Boulevard and Stadium Boulevard-Bernadette Drive intersections, both of which pose serious obstacles to cyclists attempting to cross them. Along with identifying pinch points, the map also rated various street routes for their suitability for bicyclists of varying abilities. An updated map was completed in March, 2007. [See Map X](#).

Map 3 – Columbia Bicycle Map (Rating Bicycle Suitability on Specified Major Streets) (attached separately)

In 2005, the City of Columbia was named the recipient of Non-Motorized Pilot Program funds as part of the SAFETEA-LU transportation legislation. The City received \$22,435,421 during the FY 2006-2009 period to be used for the construction of facilities for pedestrian and bicycle travel, with an additional authorization of \$5,929,975 for Phase 2 of the project with the goal to "develop a network of....transportation facilities, including sidewalks, bicycle lanes, and pedestrian and bicycle trails", in order to test the degree to which walking and bicycling can take the place of motorized trips. The City's project is entitled Get About Columbia. A number of bicycle facility construction projects have been funded with

this federal money, and are outlined in the Infrastructure Working Plan. Included are over 100 miles of facilities, including bike lanes, bike routes, multi-use paths (trails), and bike boulevards. These are included in an Infrastructure Working Plan, which also includes pedestrian facility projects. Additional projects now in the planning stages will be funded under Phase 2.

In 2005, the City engaged the services of a consultant who performed a “walking audit” and produced a report on suggested techniques to make roadway intersections easier and safer to cross on foot, by wheelchair or by bicycle. Some of the intersections studied are now included in a consultant contract for pedestrian and bicycle design improvements, funded by the Non-Motorized program. [Appendix X](#) lists the Pedestrian & Bicycle Construction Projects.

3.4 Pedestrian Facilities

In order to accommodate walking as a mode of travel, both residential and other types of subdivisions need to provide facilities for pedestrians. Most important is a sidewalk system along public street right-of-way, allowing pedestrians to be separated from vehicle traffic.

Within the Columbia metro area, a system of sidewalks exists only within the boundaries of the City of Columbia. Outside the city limits, few facilities are present. Current city subdivision regulations require sidewalk construction on both sides of new streets. In the early part of the century, sidewalks were constructed as urbanization took place. There was an extended period after World War II, however, during which sidewalks were not constructed as part of new development. In 1974, new city subdivision regulations took effect which required sidewalk construction on both sides of new streets as new development occurs, except in industrial areas. As a result of the years of development without sidewalks, there are a number of neighborhoods that have no sidewalks, or only a partial sidewalk system. This has left gaps between the older central parts of Columbia and newer neighborhoods. A Master Sidewalk Plan adopted in 1976 attempted to address this problem.

The most recent Master Sidewalk Plan for Columbia was updated in 2012 and adopted in 2013. The amended plan identifies 42 new sidewalk construction projects. [See Appendix X for the 2012 Sidewalk Master Plan Project Listing and Map.](#) These potential projects fall into two categories: 1) Sidewalk projects along major roadways in generally developed areas; and 2) Safe routes to school which may be on any class of street serving as a route to an elementary or middle school. The plan focuses on improving the existing system by constructing important connections, particularly near transit stops, schools, parks and other facilities where pedestrian traffic can be expected. The plan proposes sidewalk construction along a total of 19 miles of improved streets. All of these projects are effectively retrofits of existing older residential and non-residential subdivisions. Also included are 9 existing street reconstruction projects for which sidewalks will be built as part of the project.

Implementation of the 2012 Sidewalk Plan is already underway. \$50,000 in Community Development Block Grant funds have been recommended for pedestrian infrastructure improvements, including two sidewalks on the 2012 project listing (Elleta Blvd. and North Garth Avenue). Surface Transportation Enhancement funds have been awarded for a sidewalk on the east side of Garth and a crossing near Parkade Elementary School, another plan project listing.

A large percentage of the street mileage (City, County and MoDOT maintained) within the Metro Area has no sidewalks. This is true in all categories of streets as classified by the Major Roadway Plan. While most of Columbia's residential areas developed prior to World War II included the construction of sidewalks as standard practice (the City's 1935 comprehensive plan recommended four foot sidewalks be built in new development), this changed during the 1950s and 60s, as the focus of new residential subdivision layouts was to provide roadways designed solely for the private motor vehicle. As a result, most neighborhoods were built with no sidewalks. In 1973, the City passed an ordinance that mandated sidewalk construction along all lot street frontages in new housing developments, and a “complete streets” policy for multi-modal facilities on all street classifications was adopted in 2004. While this has provided sidewalks for internal circulation in subdivisions, the lack of sidewalk construction for over two decades has resulted in a large number of gaps in the sidewalk network.

In addition to those areas developed during the noted time period, there have been large areas of unincorporated land annexed over the past 40 years. The most notable example was a 1969 involuntary annexation which nearly doubled the physical size of the City. This and other annexations added residential subdivisions developed under Boone County standards, which did not include a requirement for sidewalk construction until subdivision regulations were adopted in 1995 to require sidewalks in residential subdivisions with densities higher than one unit per .5 acre.

There are a total of 555 miles of sidewalk within the Metro Area on one or both sides of a street, most on local streets, with roughly half of all arterial and collector street segments in the Metro Area lacking a sidewalk on at least one side. The approximate 94 miles of Interstate-Freeways and Expressways in the Metro Area, as limited-access roadways, do not and are not recommended to have sidewalks for safety reasons. Sidewalk widths in the Metro Area vary from 36" to 120" (known as shared-use paths or pedways). The current minimum standard for new sidewalk construction is 5' wide.

Appendix X: Pedestrian & Bicycle Construction Projects See section 6.6 for the 2030 Network Map.

3.5 Inter-regional Transportation: Moving Goods and Passengers

There are a number of ways in which goods and services are transported in and out of the Columbia metro area. The majority of the freight and passenger movement is accommodated by the area's highway system, principally Interstate 70 and US Highway 63, with other state routes, such as Route B, carrying large volumes of traffic through the region. Other types of interregional transportation that serve the region and are described in the following sections.

3.6 Railways

Freight service to the area is provided by the Columbia Terminal Railroad (COLT), which is owned and operated by the City of Columbia. The city acquired this line from Norfolk Southern in October 1987. The railroad serves the communities of Centralia, Hallsville, Browns Station, and Columbia.

The COLT is a class III railroad, has two locomotives and generally uses a two-man or three-man crew for train operations. The COLT infrastructure consists of its track, right-of-way, bridges, signals, crossings, culverts and all other items related to railroad operation.

The railroad's main track runs between Columbia and Centralia and has 21.34 miles of mainline track. The entire main track is maintained to FRA Class II standards, which allows for speeds up to 25 mph for freight trains. Train speeds are limited to 10 mph in selected areas of Columbia and Centralia.

The COLT handles over 1,500 carloads of freight per year.

The COLT has 39 at-grade public highway/rail crossings and 23 private crossings. The average number of public highway/rail crossings per mile is 1.8, which is the second highest concentration of all railroads operating in Missouri. There are 13 public crossings with active warning devices.

The former at-grade highway/rail crossing on U.S. Highway 63, was the location of several accidents as a result of the requirement for buses and select commercial vehicles to come to a complete stop prior to proceeding through the crossing. This safety hazard has been eliminated with the completion of a new COLT Railroad US 63 overpass bridge in October, 2010.

A rail to truck trans-load facility, or Rail Terminal, has been in operation on the COLT since January 2004. The facility allows the transfer for freight between trucks and rail cars and allows for storage of materials for later delivery. The Rail Terminal is located on a 15 acre parcel of City owned land in north Columbia, which is leased long term to a private rail facility operator. Steel, lumber, auto parts, and other products have been handled through the facility for about 18 different customers in Columbia and mid-Missouri.

Future railroad traffic growth is expected come primarily from further development of rail to truck trans-load freight markets.

3.61 Inter-regional passenger rail service

The nearest inter-regional passenger rail service is located approximately 30 miles south of the metro area in Jefferson City. AMTRAK operates four trains daily on track owned by the Union Pacific railroad between Kansas City and St. Louis and connecting to points beyond. Other AMTRAK service is available at La Plata, approximately 80 miles north of the Metro Area, on tracks owned by the Burlington Northern Sante Fe railroad.

3.7 Pipelines

There are two energy transportation pipelines within the Columbia metro area. One is the Williams Pipeline Company line which runs east-west and crosses US 63 southeast of Columbia, and which carries gasoline and fuel oil. The other line belongs to Panhandle Eastern Company, and is located several miles north of Columbia. It runs east-west and has a spur line which runs south to the Prathersville area. This line carries natural gas.

3.8 Interstate Freight

The Columbia metro area's location along Interstate 70 provides access to a major east-west route for interstate freight movement. Up to thirty percent of the daily traffic on sections of I-70 through Columbia is multiple-axle trucking. US Highway 63 provides north-south access to the area. A number of motor freight companies have terminals located in Columbia. These companies are listed in [Appendix X: Local Freight Haulers](#).

Local freight companies had several concerns related to the condition and design of roadways and intersections in the metro area. The primary issue was geometrics at intersections which do not meet the requirements of truck movement. Inadequate intersection geometrics restrict or prohibit a truck from making a turn. This situation creates traffic delays, breaks down curbs, and can damage vehicles. A list of problem intersections in the urbanized area will be developed for future attention. [NOTE: Section to be updated following stakeholder/public input](#)

3.9 Airports

The Columbia metro area is served by the Columbia Regional Airport, which is located approximately 5 miles southeast of the metro area boundary. The airport is owned and operated by the City of Columbia, and consists of approximately 1,516 acres.

Initial construction at the site was completed in 1968, with the passenger terminal building being constructed in 1969 and the air traffic control tower in 1973. Major east-west highway access to the Columbia airport is provided by Interstate 70. Principal access to the airport is provided by US Highway 63, and State Route H provides direct access to the airport access road on the west side of the facility. This access road is an internal circulation road providing access to the facilities, including the terminal, on the west side of the airport. It forms a one-way loop around the vehicle parking lot west of the terminal, and also accesses the general aviation area, the FAA Automated Flight Service Station, the US Postal Service facility and maintenance hangar. Another road provides access to the air traffic control tower on the east side of the airport. Access to this road is provided by Range Line Road.

Terminal facilities include the terminal building, ramp, hangar storage, auto parking, fuel facilities, and aircraft servicing areas. The terminal area includes almost 21,000 square feet of space for lease purposes. Parking facilities are included for the public, employees, and rental car operations. Public parking is provided for about 270 vehicles, with about 30 spaces for employee and rental car parking. The facility also has an overflow parking lot containing about 50 spaces.

The airport facility includes two runways. At present, one commercial airline, American Airlines, is providing regularly scheduled passenger service. Central Missouri Aviation, Inc. (CMA) provides aircraft charters, rentals, maintenance and repairs, aircraft and aviation fuel sales, and flight instruction. CMA also provides terminal handling for unscheduled air freight shipping and receiving. The airport is served twice daily by Airborne Express, an air freight service. The airport's plans for rehabilitation and expansion are detailed in the Airport Master Plan.

According to a recent study, the airport has a catchment area of over 400,000 persons, and draws users from a nine-county area; however, the airport captures only five percent of passenger air travel within the catchment area. A study found that, due to a lack of surface transportation access from the east and west, the airport does not capture its share of air travelers, who often drive to the international airports in Kansas City or St. Louis. However, the airport has seen a recent increase in passenger traffic, and currently provides commercial flights to and from Dallas-Fort Worth and Chicago O'Hare on American Airlines.

Both Hertz and Enterprise car rental agencies are based in the passenger terminal.

3.91 Regional Bus Lines

Regional bus service through the Columbia metro area is provided by the Greyhound Bus Lines, averaging seven buses a day traveling east and west provide connections to Kansas City and St. Louis. Megabus also provides coach bus service to Kansas City and St. Louis, continuing to its Chicago hub.

MoX, located at 203 Parkade Center, 601 Business Loop 70 West, also provides daily shuttle transportation between Columbia and the St Louis and Kansas City Airports.

Charter services are available from a variety of vendors, including Show-Me Coaches, White Knight Coaches, and First Student Transportation Services.