

INTRODUCTION



Chapter 1

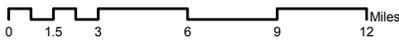
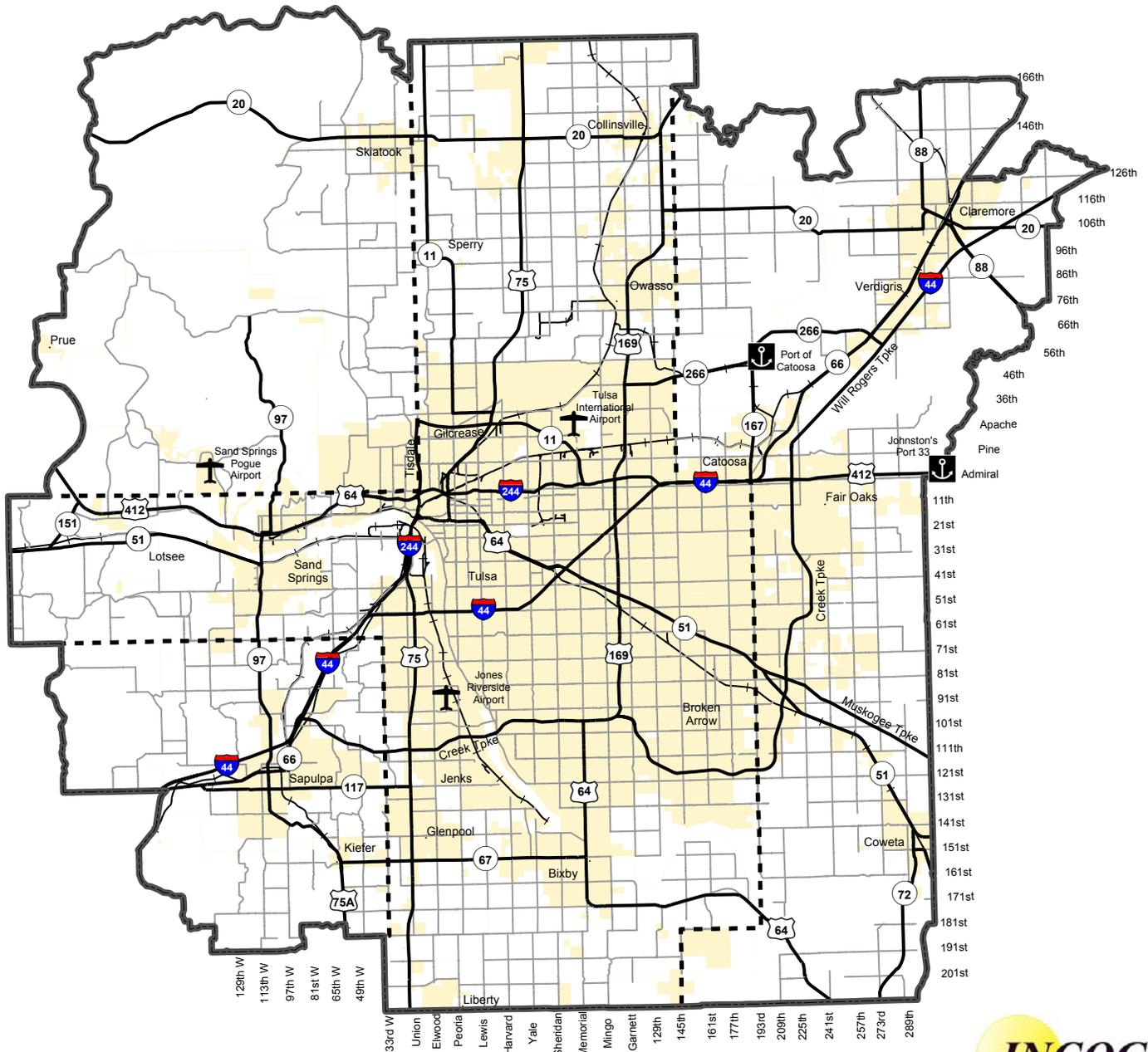


Tulsa Transportation Management Area

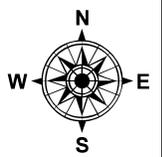


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- Highways
- Arterials
- Rail
- County Boundary
- Corporate Limits
- Transportation Management Area



Map Scale - 1:410,000





BACKGROUND

The 1,200 square-mile Tulsa Transportation Management Area (TMA) is comprised of Tulsa County and portions of 4 adjacent counties: Creek, Osage, Rogers, and Wagoner. The area includes the cities of Bixby, Broken Arrow, Catoosa, Claremore, Collinsville, Coweta, Fair Oaks, Glenpool, Jenks, Kiefer, Owasso, Sand Springs, Sapulpa, Skiatook, Sperry, Verdigris and Tulsa (*Tulsa Transportation Management Area map, Page 1*). According to year 2000 census data, the Tulsa metropolitan area boasts 701,580 residents, all needing reliable, convenient, and safe transportation opportunities.

Transportation History

Even before its incorporation in 1898, the City of Tulsa laid the groundwork for today's freight transportation system. Rail and primitive roadways served early needs to carry cattle, and later oil, to market. As the economy grew, so did the population, which required new means of personal transportation. In 1906, Tulsa's first street cars moved residents across town through a system of unpaved roads. Brick-paved streets led to today's street and highway system. The beginnings of Tulsa's grid-based road system was designated soon after Oklahoma gained statehood, and today the north-south and east-west main arteries, placed at 1 mile intervals, allow motorists to quickly and easily navigate the community relative to similar regions throughout the nation.

By the early 1920s, automobiles replaced horses and wagons as the town's preferred means of travel. Automobiles allowed motorists to take their families on vacations or conduct business in once remote locales at their convenience. Route 66 built on this desire, linking Chicago to Los Angeles through a series of small communities, including Tulsa, that welcomed visitors and their wallets. The route was also popular with truckers and farmers transporting produce and other products. The

"Mother Road," still visible on parts of 11th Street and other streets in the TMA, was slowly replaced in popularity by larger, faster toll roads and federal highways.

The Turner Turnpike, Oklahoma's first toll road, was one such roadway. Opened in 1953, the turnpike provided a direct route between Tulsa and Oklahoma City. The Skelly Bypass, built to relieve Route 66 traffic, provided further conveniences. After the Interstate Highway System was enacted in 1956, the bypass was renamed I-44 and became the first interstate route in the TMA.

Just before Route 66 was first recognized by the state, another means of personal and freight transportation was set into motion. Tulsa's first airfield was built in 1921, a year before Tulsa's first motorized bus appeared in the city. Later, Skelly Oil Company President William G. Skelly funded the municipal airport now known as Tulsa International.

The Port of Catoosa, part of the McClellan-Kerr Navigation Channel, was the next chapter in the TMA's transportation history. Completed in 1971, the McClellan-Kerr system created ports in Arkansas and Oklahoma cities through a series of locks and dams connecting the Mississippi and Arkansas rivers.

Today's effective and diverse transportation system is founded in the ingenuity and foresight of residents throughout the region's rich history. It is the vision of the *Destination 2030* Long Range Transportation Plan (LRTP) to build on these past accomplishments to meet the needs of future TMA travelers.

Purpose

The LRTP looks 25 years into the future to anticipate transportation needs for the TMA. The plan is predicated on demographic and economic assumptions and forecasts for the region. It identifies the various elements of the

desired for the metropolitan community and investigates how these transportation modes interrelate. To ensure financial feasibility, the LRTP summarizes implementation costs and presents practicable funding scenarios. The LRTP also summarizes the resulting impacts of these investments on society and the natural environment.

The LRTP will serve as a guide for the investment of local, state and federal resources and will become a component of the Oklahoma Statewide Intermodal Transportation Plan.

Finally, the LRTP meets the requirements of federal law authorizing the adoption of a long-range transportation plan for the metropolitan planning area. This is an important requirement for the expenditure of federal transportation resources.

Plan Development Process

The Indian Nations Council of Governments (INCOG) is a voluntary organization of local governments and was designated by the governor as the area's Metropolitan Planning Organization (MPO). MPOs maintain lead responsibility for developing transportation plans and programs for urbanized areas of 50,000 or more residents.

Additionally, federal regulations recognize metropolitan areas with a population of 200,000 or more as Transportation Management Areas, which places further requirements on the MPO for congestion management, air quality attainment, increasing safety, and other issues.

All TMA transportation plans and programs are based, in cooperation with local and state governments, on a continuous, coordinated, and comprehensive planning process. Representatives of each member community's principally elected officials are appointed to INCOG's Board of Directors, which serves as a forum for cooperative decision-making on issues of regional significance, including transportation.

The development of the LRTP began in September 2002 with public outreach activities during the Tulsa State Fair. A variety of public-involvement strategies were used to obtain broad-based input from interested citizens and targeted populations at key decision points in the plan development process.

Prior to adoption of the final LRTP by the INCOG Board in August 2005, 2 transportation committees monitored and reviewed the products at each critical planning stage. It is anticipated that the LRTP will be updated every 3 to 5 years.

Committee Oversight

The transportation-planning process is overseen by the Transportation Policy Committee (TPC) and the Technical Advisory Committee (TAC). Committee members, who meet monthly, represent federal, state, tribal, and local governments and agencies; state and local authorities; and modal interests.

The TAC, an advisory group to the TPC, provides technical expertise related to development of urban transportation plans and programs for the TMA.

The TPC is an ongoing forum for policy development and adoption related to urban transportation planning, programming, and operation. Upon TPC approval, transportation

plans and programs are forwarded to the INCOG Board of Directors for endorsement.

Public Participation

Public involvement activities for the LRTP began with an unscientific opinion survey of 2002 Tulsa State Fair patrons. Survey results were tabulated and distributed, along with additional transportation-related information, to area leaders, interest group representatives, and transportation experts during a *Destination 2030* visioning retreat.



Community Planners from the Tulsa TMA discuss the upcoming Long Range Transportation Plan process.



A TMA resident studies information at a Destination 2030 Open House.

Retreat participants were asked questions regarding regional connections, congestion, alternative modes, livability and land use, and area project funding.

Their comments, in conjunction with the survey responses, helped establish the vision and goals for *Destination 2030*. Throughout the planning process, presentations were given to area clubs and organizations to educate the residents about the LRTP and how they could become involved in the process.

In August/September 2003, 13 open house meetings were held throughout the region. The open house format provided participants with the vision and goals passed by committees, along with known demographics and data for the TMA and the region at large. A second survey was distributed, which asked participants for their comments regarding trails/pedestrian systems, roadways, transit, and freight movement. The survey was also available online through INCOG's website (www.incog.org). At key points in the planning process, a newsletter was published and distributed via email and mail. The newsletter was also available in area libraries and online through INCOG's website.

In August/September 2004, 8 transportation road shows were held throughout the region. The road shows were an open format for the public to come and view what had emerged as priorities from earlier public-input sessions with regard to roads, transit, and the bicycle/pedestrian system. Participants were asked to rank the priorities in order of importance to them.

In September/October 2004, INCOG staffed a booth at the Tulsa State Fair, where a third public-opinion survey was conducted

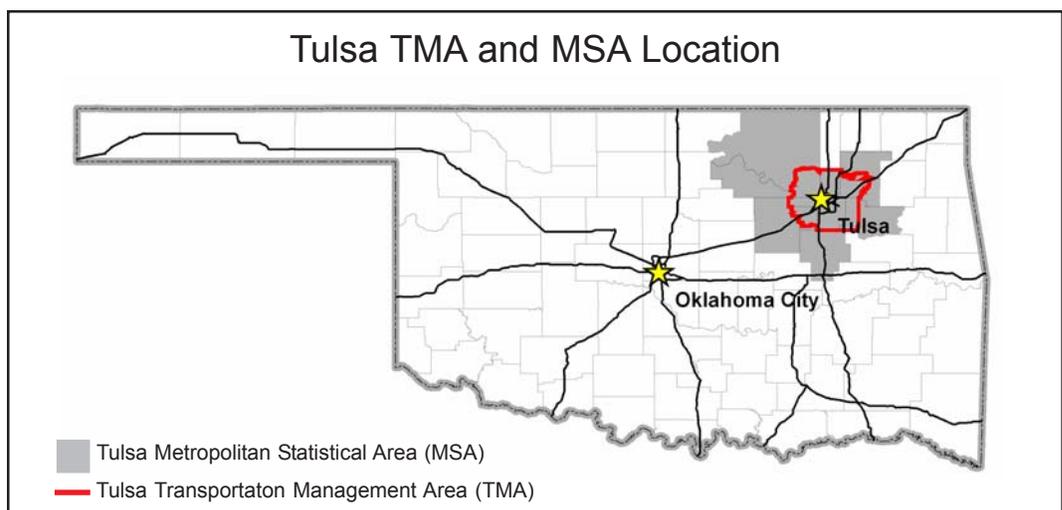
pertaining to current transportation issues in the area as well as the recommendations and priorities developed to that point. The survey also was made available online through INCOG's website.

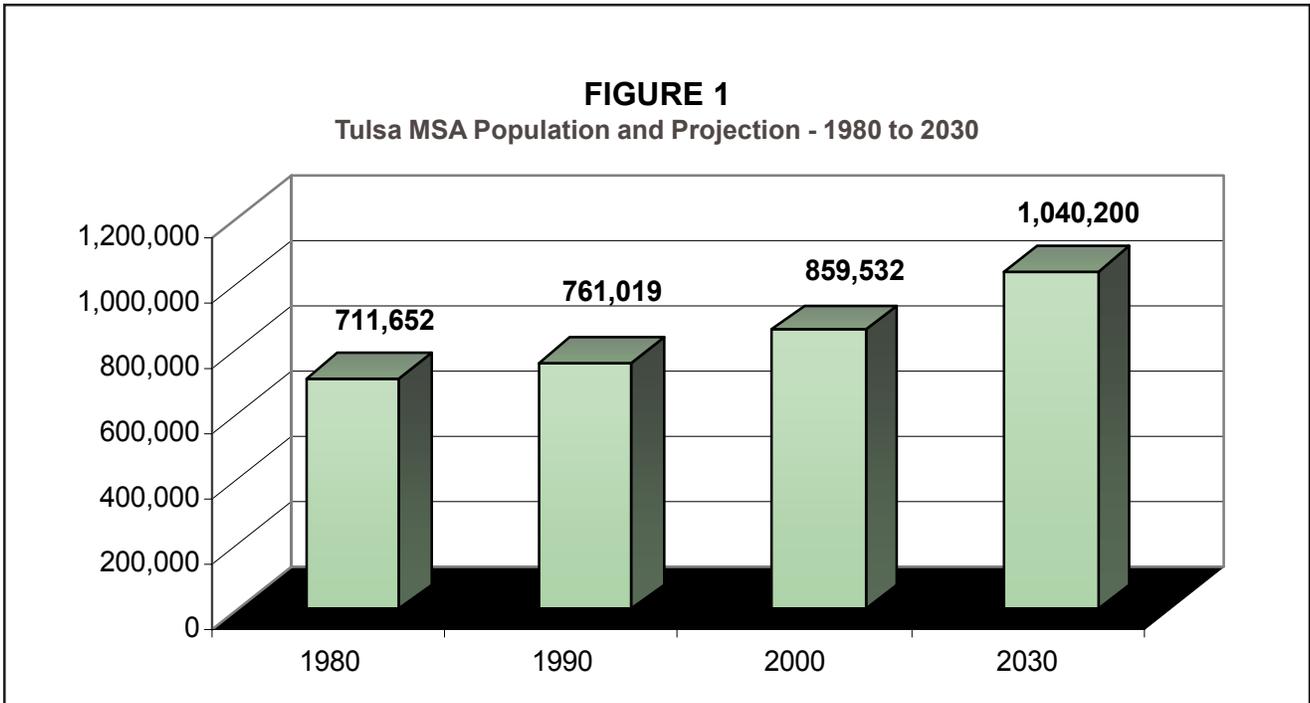
In May 2005, 15 community meetings were held. INCOG staff made presentations during city council meetings, and the final draft plan was distributed for review. Four focus group meetings, one for each modal element of the LRTP (roadways, transit, freight, and bicycle/pedestrian) were held. Attendees were able to review the draft plan and make final comments.

Final review of the LRTP was made available through area branch libraries, Chamber of Commerce offices, INCOG offices, and the INCOG transportation web page. The TPC approved the LRTP in July 2005 and the INCOG Board of Directors endorsed it in August 2005. Comments received during the draft LRTP review process are listed in the *Plan Effectiveness* chapter. A full explanation of the public involvement process is available in the *Supporting Documents*.

REGIONAL OVERVIEW

Economic and population projections provided a framework for predicting the transportation needs for 2030. Data were collected and analyzed for this purpose from the Census Bureau, Bureau of Economic Analysis, Oklahoma Employment Security Commission, and the Nationwide Personal Transportation Survey (Federal Highway Administration). Information is included for the Tulsa TMA and Metropolitan Statistical Area, both outlined in the *Tulsa TMA and MSA Location* map on this page.



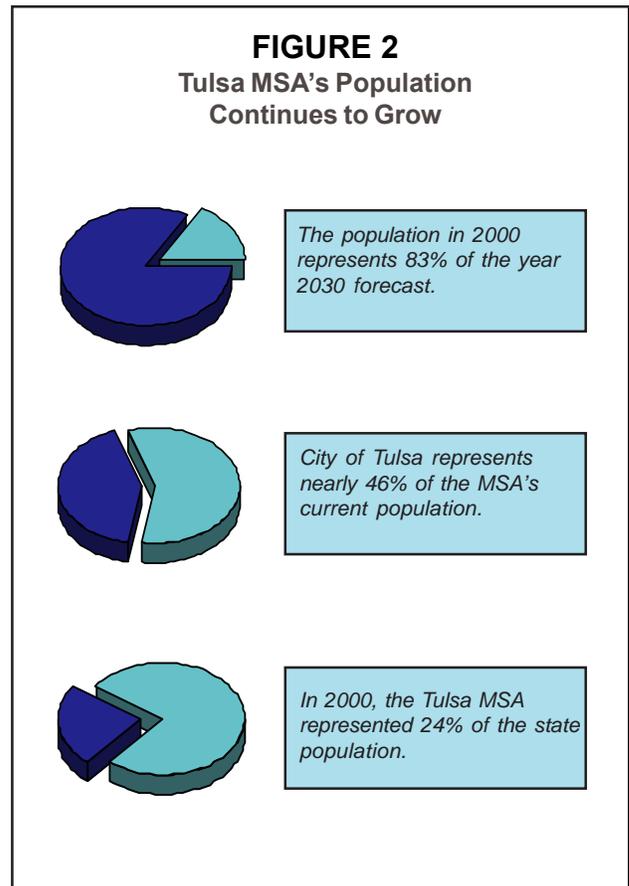


Growth and Travel Patterns

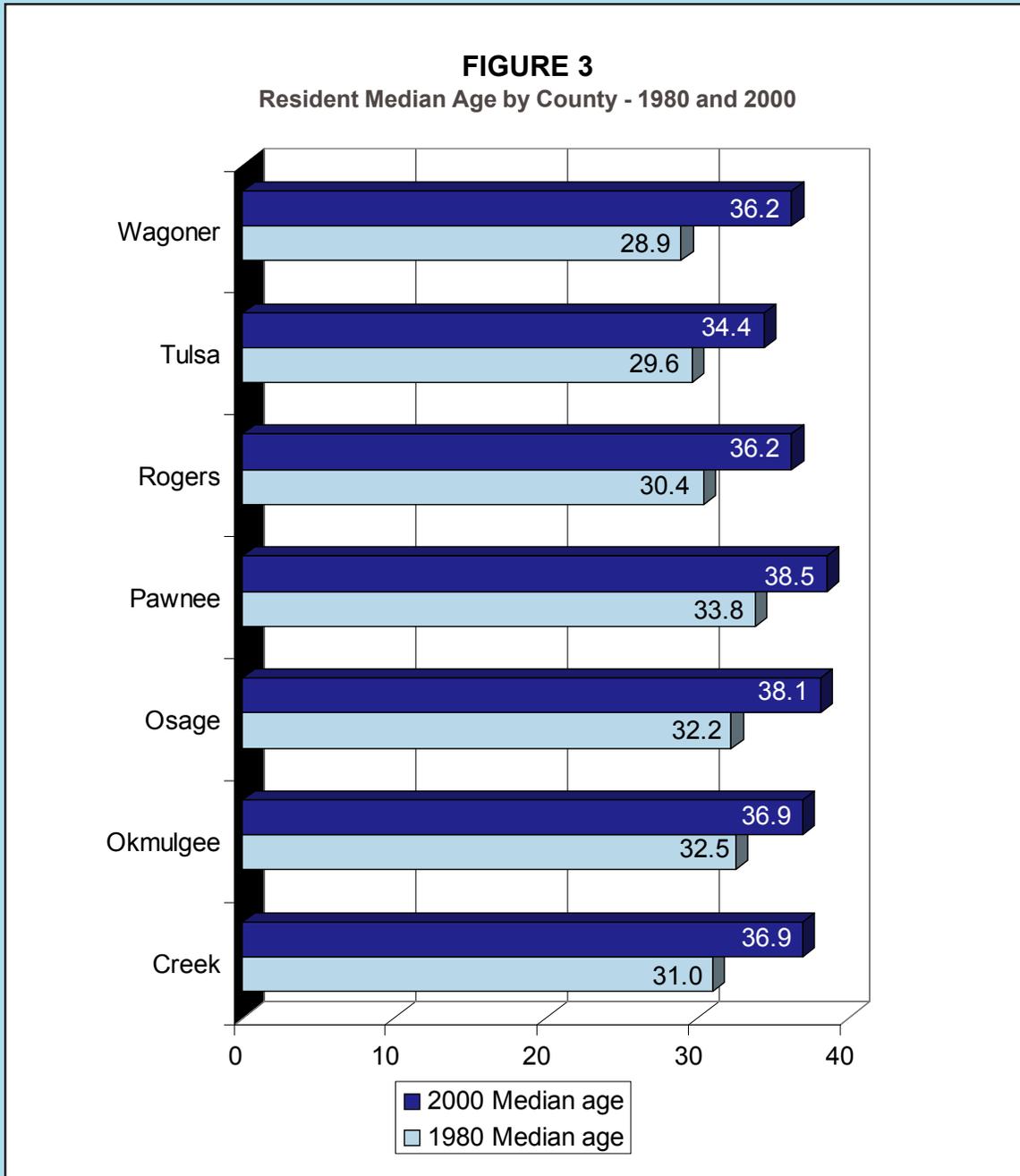
POPULATION

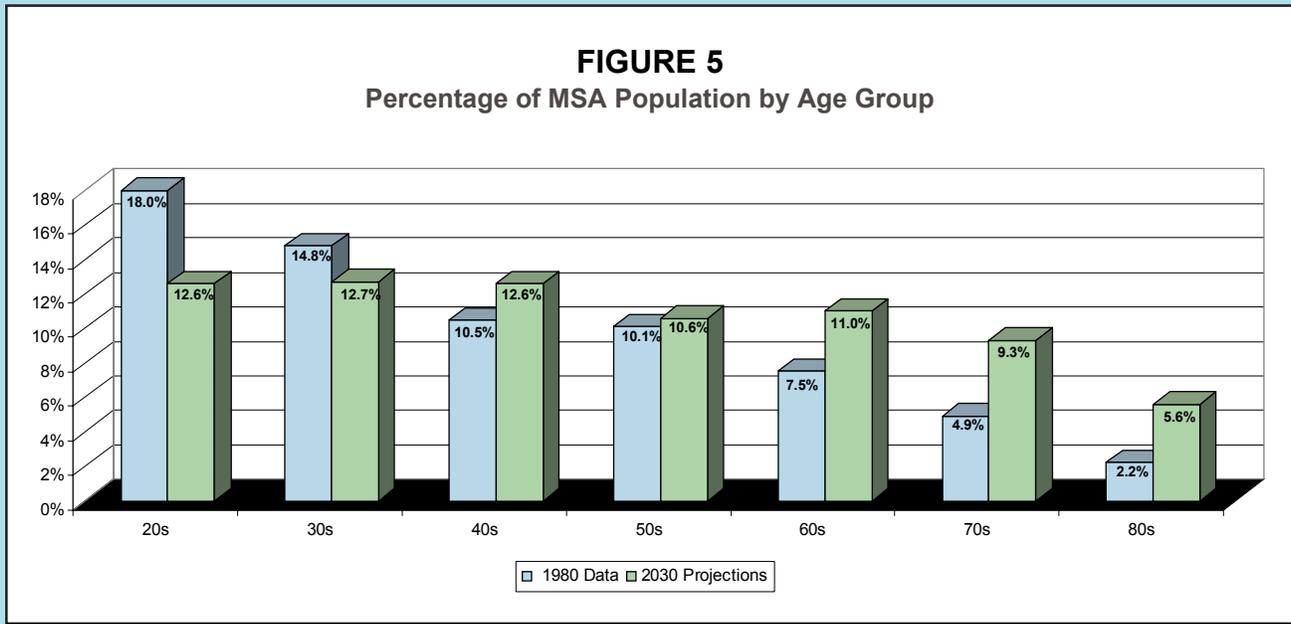
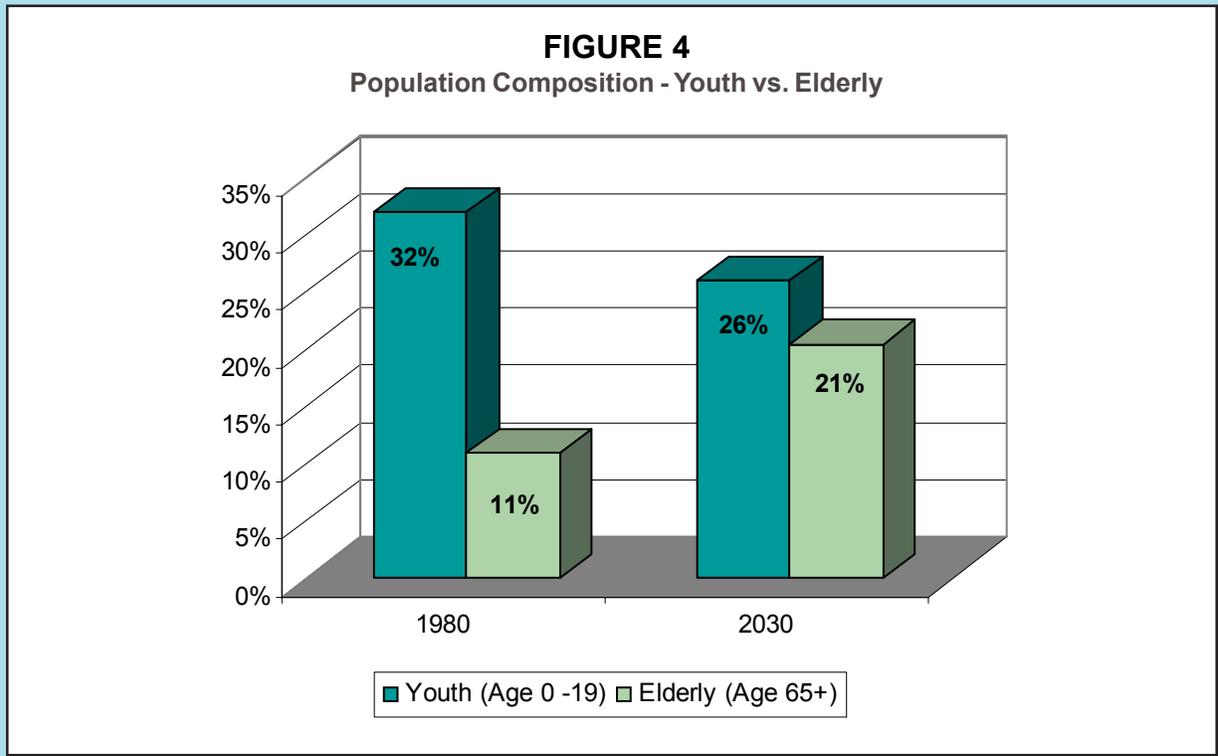
The Tulsa MSA, comprised of Creek, Osage, Okmulgee, Pawnee, Rogers, Tulsa, and Wagoner counties (the Office of Management and Budget formally added Okmulgee and Pawnee Counties in 2002) reached a population of over 859,000 in 2000. This figure is projected to grow to over 1 million residents, a 21% increase, from 2000 to 2030. The TMA is projected to grow by 23% during the same time period, with an average annual growth rate of 0.8%. The 2000 TMA population of 701,580 represents 81% of the 2030 forecasted population (*2030 Population Projection, Page 9*). *Figure 1* depicts the annual population of the MSA, and *Figure 2* shows the MSA increases relative to city and state population totals.

The population's composition is also changing. As can be viewed in *Figure 3*, the median age of residents has risen in the past decade. In addition, as seen in *Figure 4*, the youth population (19 years of age and younger) is decreasing as the older population (65 years of age and older) increases, a shift that is further explored in *Figure 5*, which shows how the percentage of older adults, as compared to other adult age groups, will increase. These changes will have significant effects on transportation needs.



**FOCUS ON:
POPULATION**



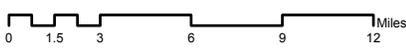
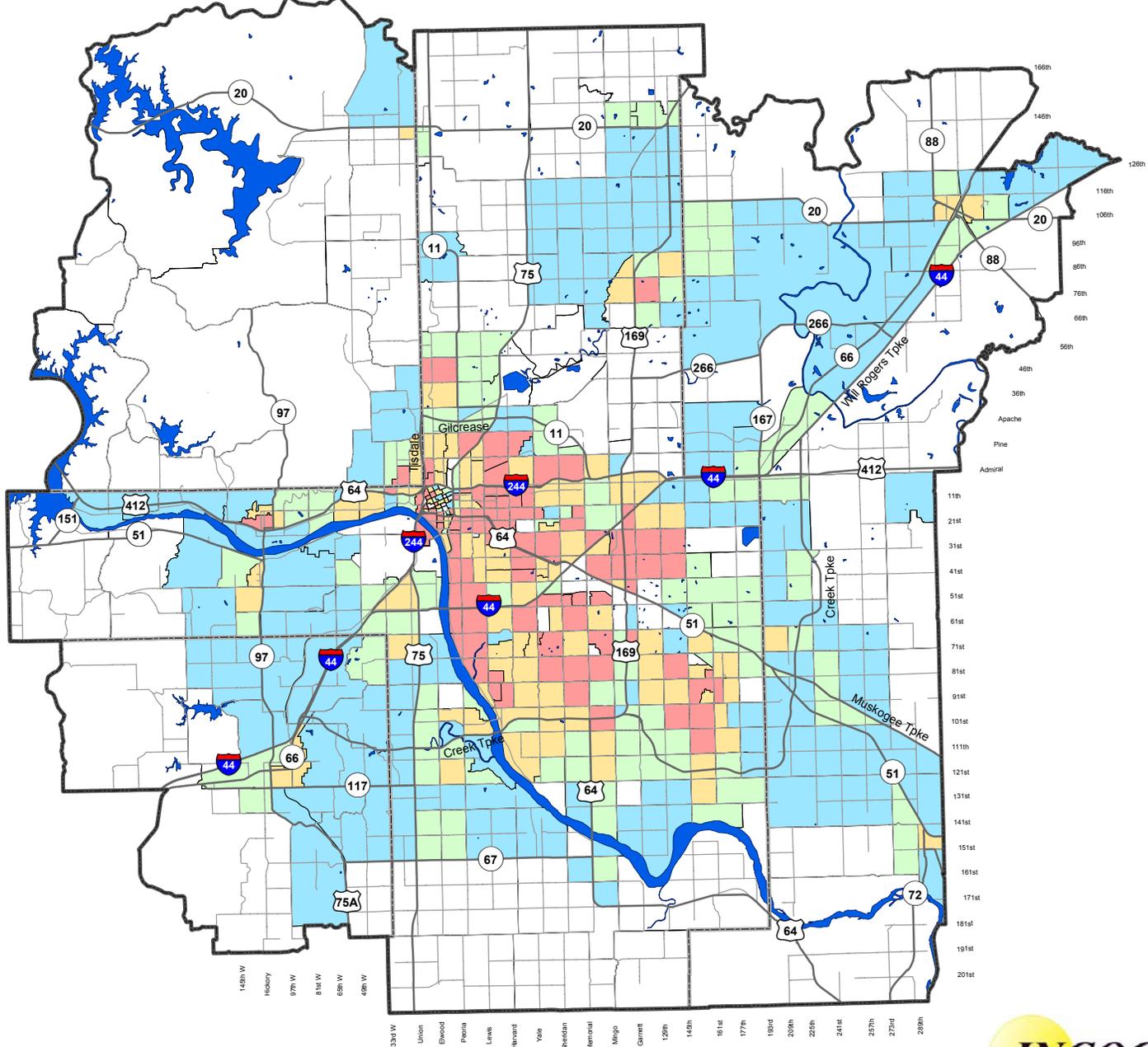


2030 Population per Square Mile



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Transportation Management Area

County Boundary

Arterials

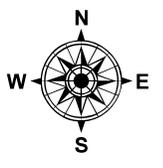
Highways

Lakes and Rivers

Population 2030

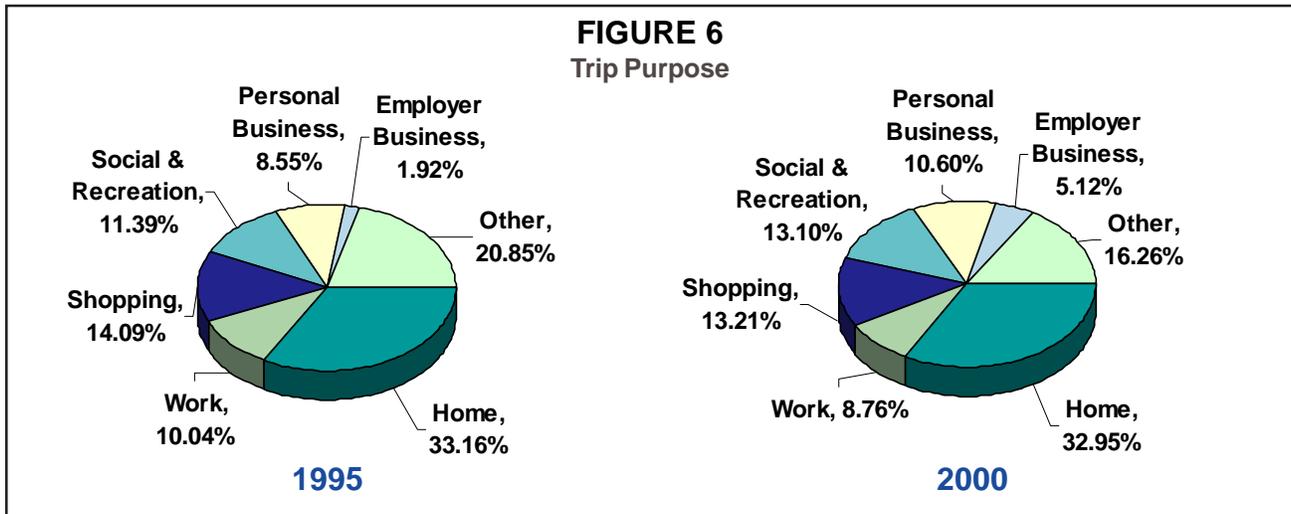
Persons per Square Mile

- 0.0 - 242.2 (lowest 20%)
- 242.3 - 791.8
- 791.9 - 2,192.4
- 2,192.5 - 3,816.1
- Over 3,816.2 (highest 20%)



Map Scale - 1:410,000





EMPLOYMENT

Strong long-term employment growth is expected to continue for the Tulsa region based on Bureau of Economic Analysis forecasts. In 2000, total employment reached over 411,000 – an increase of approximately 50,000 (over 461,000) is projected for 2030 (*2030 Employment Projection* map, Page 13). Downtown employment has steadily grown after a sharp drop in the 1980s (*Figure 7*).

The Service industry sector is projected to hold the largest share of 2030’s total employment at 36%. Two industries face significant projected declines between 2000 and 2030: Farming (projected to decline by 40.4%) and Mining (projected to decline by 15.6%). The Farming (0.53%); Agricultural, Forestry and Fishing (1.39%); and Mining (1.87%) industries have the smallest projected share of 2030 total employment (*Figure 9*).

Approximately 94% of MSA employment falls within the TMA boundary. The base-year employment represents 89% of the 2030 employment forecasts. Employment growth is anticipated throughout the metro area, with significant increases in several major employment centers including the 21st Street and Utica Avenue Corridor, the South Yale Avenue Corridor (from 61st to 71st Street South), the US-64/SH-51 (Broken Arrow Expressway) and US-169 Corridor, the Tulsa International Airport area, the Cherokee Industrial Park, and the Port of Catoosa.

TRAVEL CHARACTERISTICS

Tulsans heavily rely on personal automobiles for transportation. During the 20 year period from 1980 to 2000, households with 0 or 1 vehicle declined dramatically, while households with 2 or 3 vehicles increased from 43% to 58% of all households. During the 1980s and 1990s

the increase in trips per household was a major factor in the growth of the Vehicle Miles of Travel (VMT). In 1995 and 2000, the number of daily trips per household has stabilized at around 9 trips per household, according to the Nationwide Personal Transportation Survey (NPTS). Little has changed in trip purposes with work trips accounting for approximately 9% of all trips (*Figure 6*).

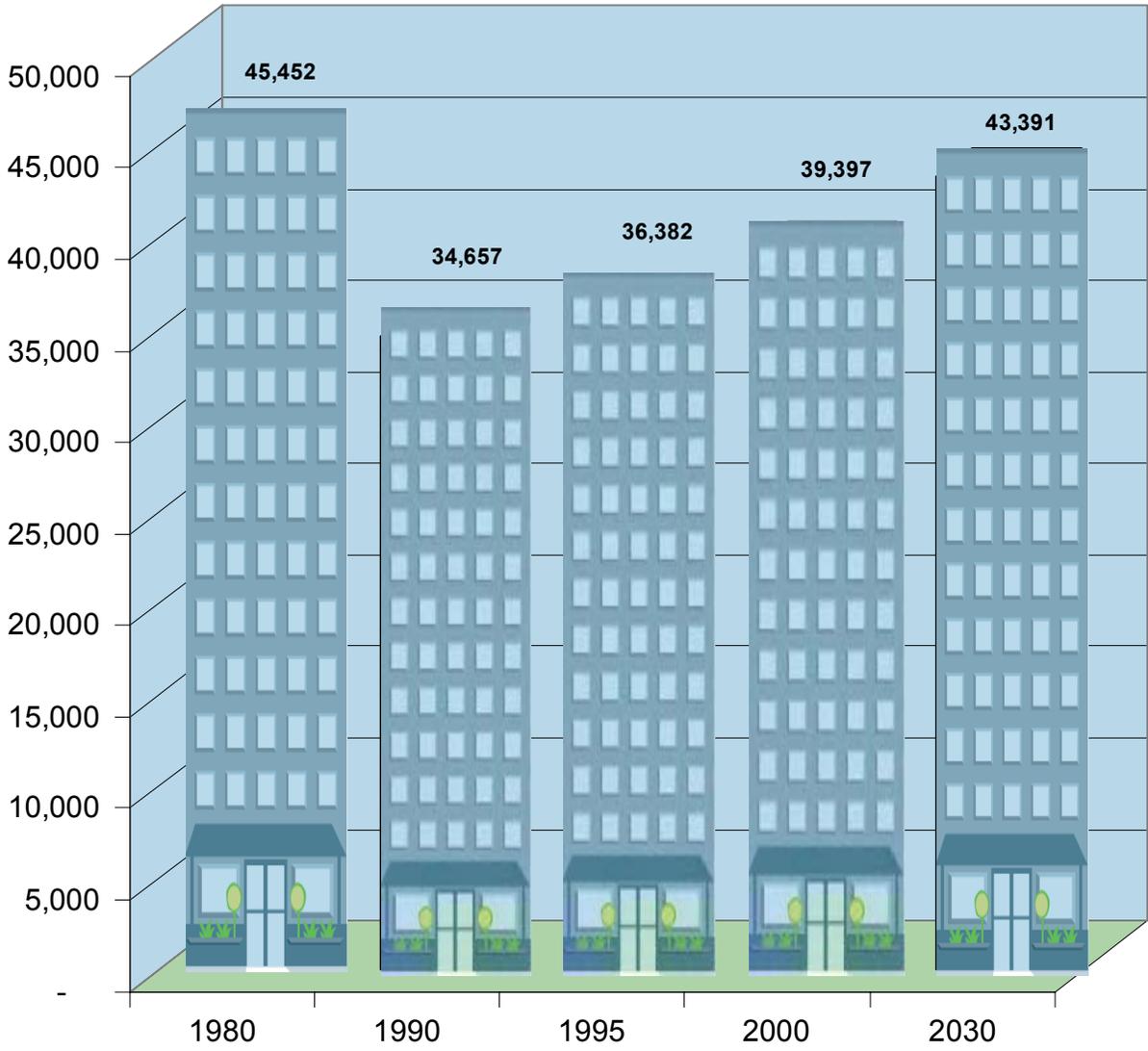
Commuter driving patterns indicate that the vast majority of commuter trips are made alone. In 1980, 72% of drivers in the Tulsa MSA drove alone, which increased to 81% in 2000. Carpooling, transit, and walking have all decreased as a result of this increase. Also during this time, employees working from home increased. Trips are increasingly being spread throughout the day rather than concentrated in the traditional morning and evening rush hours (*Figure 10*). In 2000, the median trip length (in time) in the Tulsa area was 12.3 minutes.

Population, households, workers, and the number of vehicles have all increased significantly while trip lengths in minutes and trip lengths in miles have only changed slightly. Increases have occurred in the number of vehicle trips made and the total miles traveled, increasing from 1990 to 2000. Along with an increase in the number of households, Tulsa drivers are driving slightly further distances per trip, thus increasing the total number of vehicle miles traveled. *Figure 11* reveals the change in key transportation indicators from 1990-2000.

National trends also reflect an increase in the use of alternative modes, which is attributed to the significant increase in total trips. Despite this increase in the number of uses, the percentage of alternative mode uses, in relation to other transportation modes, has actually decreased.

**FOCUS ON:
EMPLOYMENT**

FIGURE 7
Employment In Downtown (within Inner Dispersal Loop) by Year

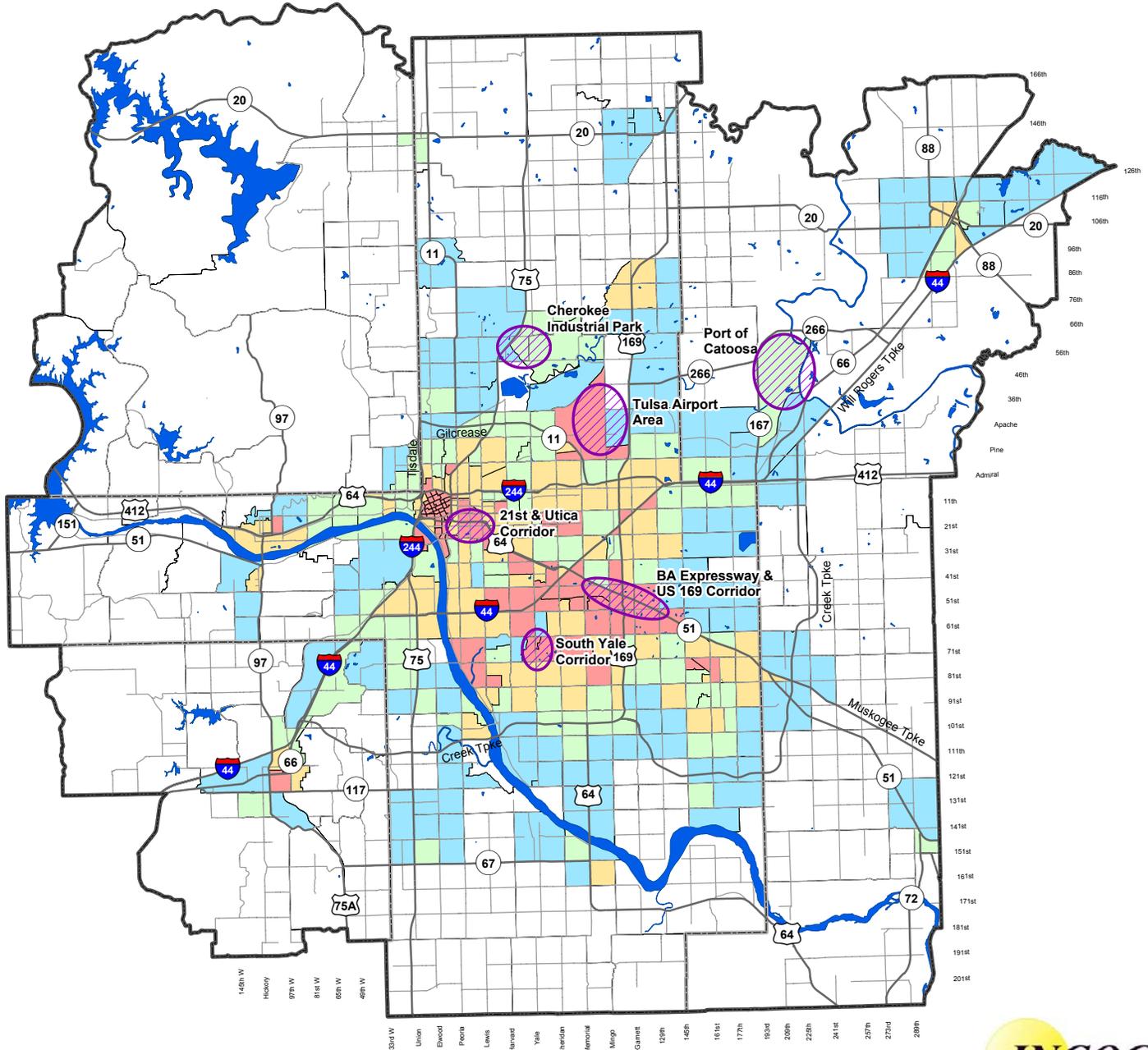


2030 Employment per Square Mile



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Transportation Management Area	2030 Employment
County Boundary	
Arterials	Employees per Square Mile
Highways	
Lakes and Rivers	
Employment Center	
	0.8 - 85.7 (lowest 20%)
	85.8 - 396.5
	396.6 - 1,169.8
	1,169.9 - 2,723.6
	Over 2,723.7 (highest 20%)

Map Scale - 1:410,000



FIGURE 8
Number of Employees by Sector

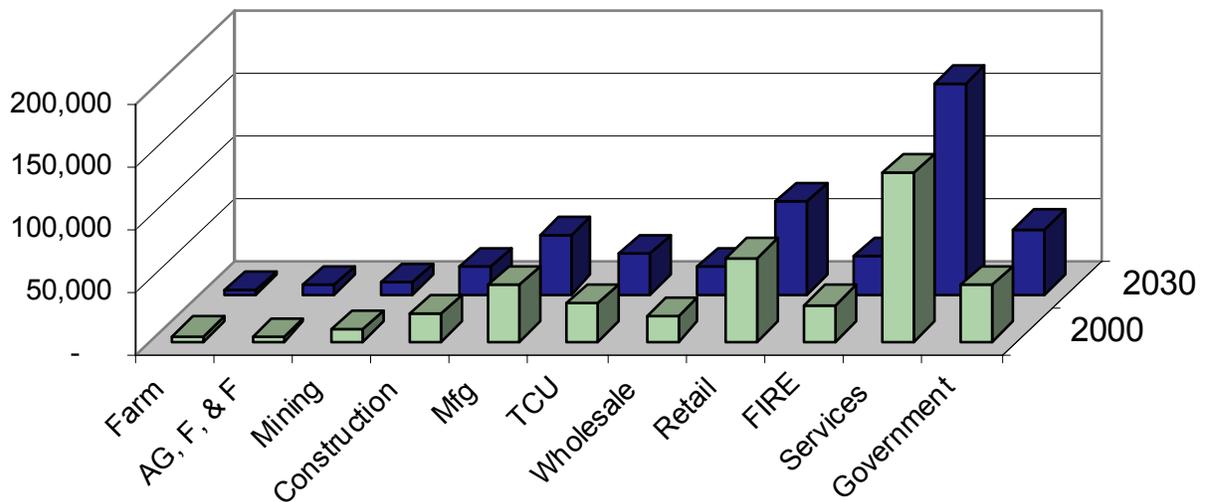
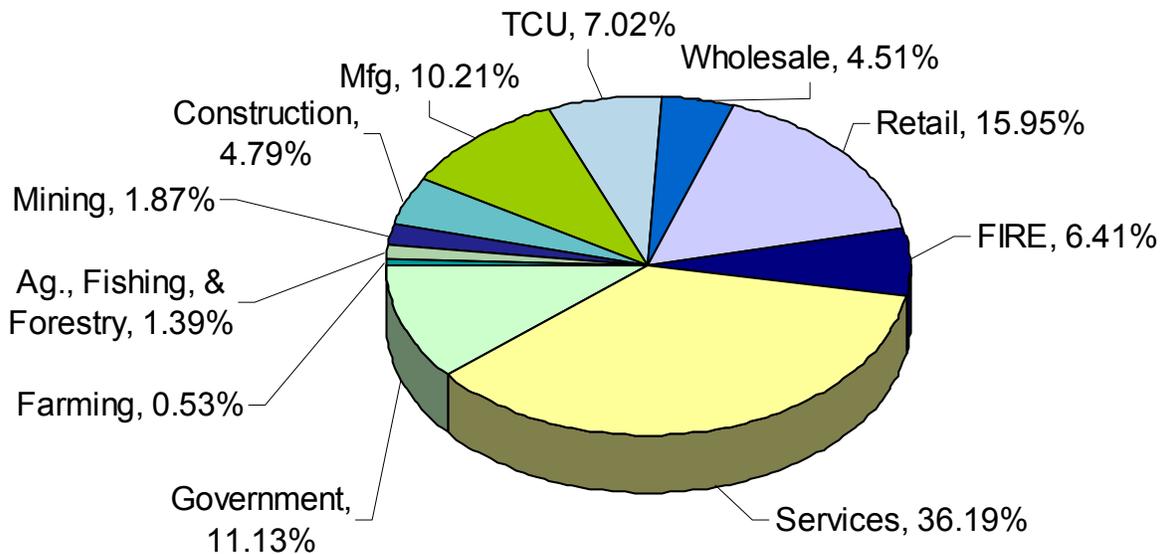
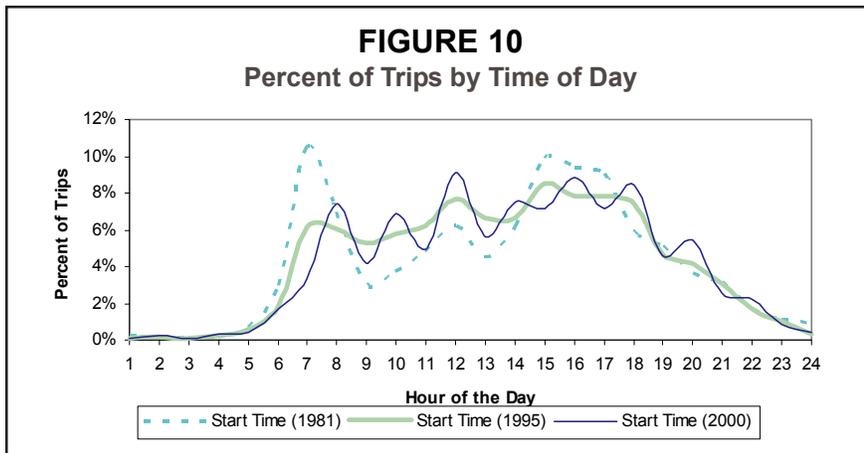


FIGURE 9
Projected Percentage Share of 2030 Employment





LAND USE AND DEVELOPMENT

How available land is used or developed has an obvious impact on transportation facilities and systems, and vice versa. Commercial developments typically have been designed to accommodate automobiles, with limited consideration for public transit, bicycles, and pedestrians. Close coordination of land-use planning and transportation planning is increasingly important.

Other Considerations

ALTERNATIVE MODES

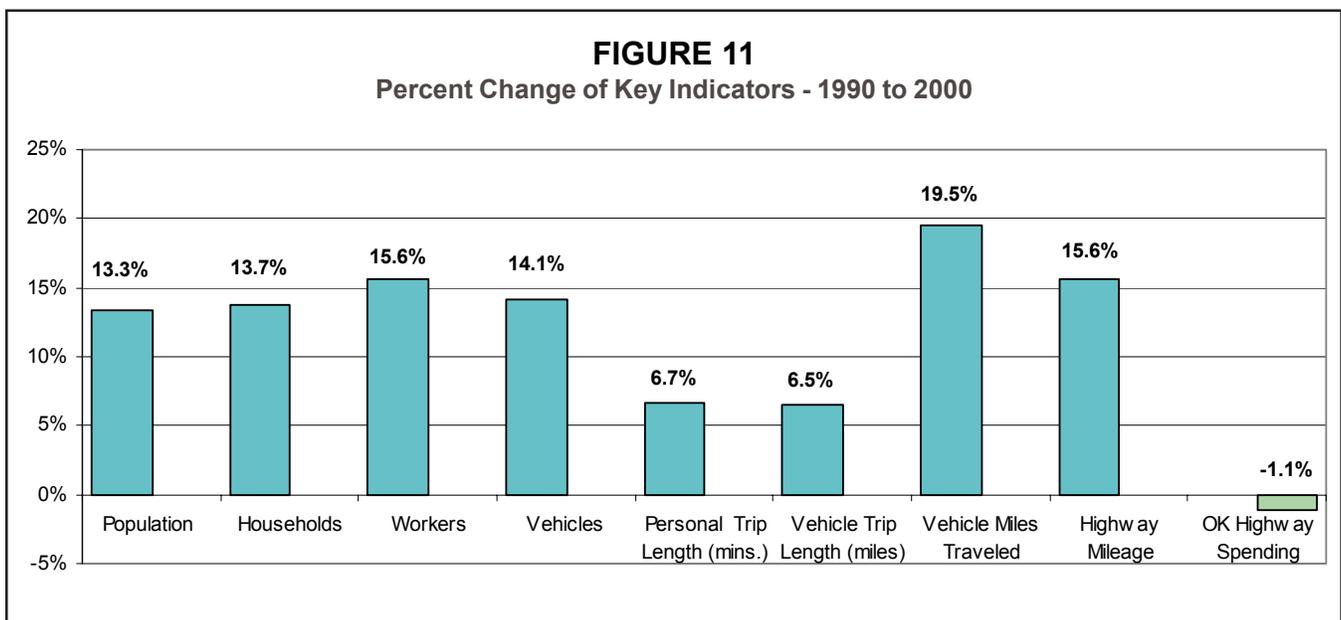
The roles of carpooling, vanpooling, transit, bicycling, walking and telecommuting in the overall transportation system have taken on greater importance. These modes become more attractive when environmental impacts and cost-effectiveness are evaluated. Major obstacles exist, however, in the expansion of these modes. Key challenges to expansion include competing with the automobile's convenience and retrofitting residential and commercial development to provide convenient access to bicycle and pedestrian networks and transit services. The benefits and challenges of these modes are discussed in subsequent chapters.

CONGESTION

Traffic congestion is relative depending on user experience and orientation, and acceptable levels must be defined locally. The region must then decide how best to address congestion from both demand reduction (carpooling, alternative mode usage, flexible work schedules) and supply provision (new and expanded roadways) approaches.

RESOURCE UTILIZATION

Resource management will greatly affect how the transportation vision for 2030 will be realized. Systems must be efficient. Planners, engineers, and policymakers must be innovative and flexible in order to maximize resources and community benefits. Priority uses and preferred facility funding streams must be identified.



PUBLIC INPUT SUMMARY

INCOG sought input from various groups across the region in accordance with procedures detailed in the *Public Input Process for the Tulsa Transportation Management Area*. The input received was used to form the vision and goals for the LRTP. The two early outreach activities below formed the vision and goals that determined the direction of this plan. More information on this process is available in the *Plan Effectiveness* chapter and the *Supporting Documents*.



Tulsa State Fair/Online Survey – 2002

Fair attendees were given information on the plan-development process and were asked to complete a short survey at the INCOG booth. The survey was also available on the INCOG website until the year's end. This was the first outreach activity undertaken in relation to the LRTP.

PRIORITY CONCERNS – *Condition of Neighborhood Streets and Congestion of Arterials and Expressways* ranked as the highest concerns for those surveyed.

ALTERNATIVE TRANSPORTATION – Forty percent of respondents said they would like more trail and transit options available.

CURRENT CONDITIONS – The majority agreed that congestion has worsened, roadway maintenance should be given higher priority, and adequate bike/pedestrian facilities are needed.

FUNDING – Many respondents showed a willingness to fund expenditures for street & highway maintenance as well as bike/pedestrian, transit, and technology enhancements. Although there was a great interest in implementing passenger rail, responses showed little willingness to fund it. Respondents were more willing to increase sales tax for transit than to increase fuel tax for highways.

TRAFFIC FLOWS – Respondents said they are willing to accept higher levels of traffic during rush hour. Area residents still support suburban living and want transportation improvements to be oriented toward suburban locations.

AIR QUALITY – When asked what steps they take to improve regional air quality during *Ozone Alert!* days, almost a third of respondents said they avoid mowing the lawn, and about a quarter each limit their travel or avoid refueling their vehicle. Just over 5% said they ride the bus.

Vision Retreat – February 2003

Retreat invitees included community and business leaders, transportation mode advocates and users, and others interested in environmental justice, the natural environment, and related topics. Attendees were asked to register their responses to a series of survey questions using an electronic receiver. The results were immediately displayed for attendees to view and discuss.

REGIONAL CONNECTIONS – Attendees voted that Dallas/Fort Worth was the most important regional highway connection, and they agreed the current connection was sufficient. The most important air connection was determined to be Washington, DC, and respondents voted that the current connection was inadequate. Other important connections (also ranked as poor) were Los Angeles and New York. Oklahoma City, followed by Dallas/Fort Worth, was selected as the most important passenger rail connection.

CONGESTION – Attendees agreed with state fair responses by saying current congestion levels during peak hours are acceptable.

ALTERNATIVE MODES – When asked what the role of transit should be in 2030, the majority of respondents agreed it should *Serve Major Activity Centers*. Many also responded that it should be a *Viable Option for Anyone*. When asked which transportation alternatives had the most promise, and that respondents would personally consider using, telecommuting received the highest votes; pedestrian modes received the lowest.

LIVABILITY AND LAND USE – Attendees were asked to rank elements of transportation systems (excluding functionality and safety) that they found most important. *Environmental Impacts* and *Ease of Use* were selected.

TRANSPORTATION SYSTEM PRIORITIES (ROADS) – Attendees selected *Condition* to be the aspect of the current transportation system that needed the most improvement for neighborhood and residential streets. For arterial streets and highways, respondents selected *Congestion*. On turnpikes, *Condition* received the most votes, followed closely by *Congestion*.

TRANSPORTATION SYSTEM PRIORITIES (BICYCLE/PEDESTRIAN) – Respondents overwhelmingly chose *Availability* as the element that needed the most improvement in regards to trails, sidewalks, bike facilities and routes, and public transit.

RESOURCES AND THEIR USE (GENERAL) – Attendees were asked what they thought were the priority uses for resources, and they selected *Use Advanced Technologies*.

RESOURCES AND THEIR USE (SPECIFIC MODES) – Respondents selected the stream of funding they felt was most appropriate for specific transportation modes. Respondents selected *Increased State Motor Fuels Taxes and Tolls and Other User Fees* for Transit, *Tolls and Other User Fees* for Light-Rail/Monorail, *Increased State Motor Fuels Taxes* for Highway Maintenance & Construction and for Arterial Improvements.

THE 2030 VISION AND GOALS

During the public outreach efforts mentioned in this chapter, residents have defined the course INCOG should take in terms of strategic goals for the regional transportation system. There are 2 sets of equally important goals. The Core Goals are distinct and easily categorized, while the Cross Cutting Goals fit multiple categories and affect many aspects of the transportation system.

Destination 2030 Vision:

The paramount purpose of the transportation system is to enhance and sustain the quality of life and economic vitality of the region. This will be accomplished by judiciously developing, maintaining, and managing a transportation system that meets the accessibility needs of people and goods in the region through safe, environmentally prudent, and financially sound means.

Core Goals

ACCESSIBILITY – Create a multimodal system that provides reasonable mobility for all persons in the region

ECONOMIC DEVELOPMENT – Advance and support the economic well-being of the region

ENVIRONMENT – Respect the natural environment, support social justice, respect and serve the built environment, and be compatible with land development throughout the region

FINANCE – Ensure by minimizing cost, wisely applying the existing resources while seeking new and innovative sources, and expanding opportunities for greater partnership with the private sector for investing in the system

Cross Cutting Goals

SAFETY – Develop a transportation system that reduces fatalities and injuries and minimizes harm without compromising the benefits of the system

MAINTENANCE – Preserve and improve the condition and function of the transportation system

EFFICIENT AND EFFECTIVE – Promote a transportation system that provides mobility throughout the region easily, quickly, reliably and at the least cost

MANAGEMENT AND OPERATION – Maximize the use of technology options to advance the mobility of users and improve the management and operation of the transportation system

