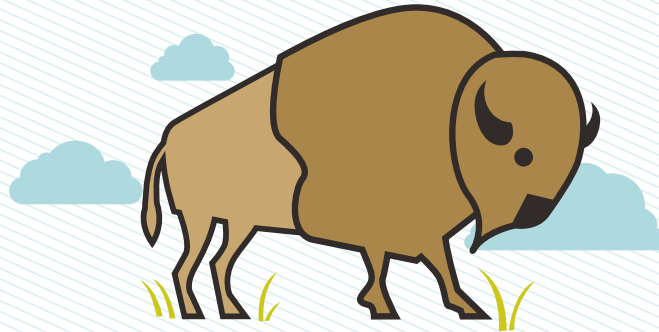


INTRODUCTION



Transportation plays a vital role in today's economy, providing access to jobs, education, shopping, and recreation. It is an integral part of our mobile society influencing urban development, economic vitality, quality of life, and national defense. Our transportation system consists of many parts that work together to move people and goods within metropolitan areas, statewide, and throughout the country. Therefore, it makes sense for many transportation decisions to be made collaboratively at the regional level.

Local governments in Central Oklahoma have been continuously engaged in regional transportation planning since 1965. Not only is it a federal requirement, but planning ahead ensures that steps can be taken to maintain current transportation investments, enhance safety and security, improve mobility, and prevent gridlock as the region's population continues to grow and travel increases.

Approved in October 2016, Encompass 2040 is the comprehensive, long-range transportation plan for Central Oklahoma. It guides how the region will manage, operate and invest more than \$10 billion in its multimodal transportation system over the next 25 years. The Plan uses a base year of 2010 and a forecast year of 2040 to analyze land use,

population, employment, and other socioeconomic factors that will influence the region's development and travel in the coming years.

Encompass 2040 was developed in compliance with current federal transportation legislation – Fixing America's Surface Transportation Act (FAST Act), which was signed into law on December 4, 2015, and the prior Moving Ahead for Progress in the 21st Century (MAP-21) Act, signed on July 6, 2012. Although it provides a snapshot of current conditions and future transportation needs, transportation planning is a dynamic process. Therefore, as additional studies are completed and local priorities change, amendments to the Plan may be necessary.

REGIONAL TRANSPORTATION PLANNING

Transportation planning for Central Oklahoma is coordinated by the Association of Central Oklahoma Governments (ACOG), a voluntary association of city, town, and county governments. ACOG also serves as the Metropolitan Planning Organization (MPO) for the region. One of the primary roles as the MPO is to conduct a comprehensive, coordinated, and continuing long-range transportation planning process. Toward that end, ACOG works with area local governments, transit providers, the Oklahoma Department of Transportation, the Federal Highway and Transit Administrations, other transportation agencies and stakeholders, and the public to prepare federally required long-range transportation plans and short-range implementation programs. Such plans and programs are a prerequisite for receiving federal transportation dollars.

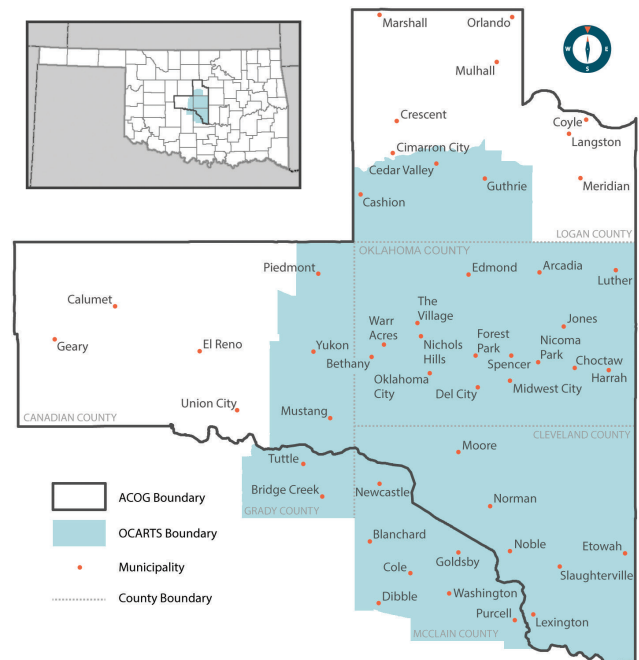
THE PLANNING AREA

ACOG's transportation planning efforts are focused within a geographic area known as the Oklahoma City Area Regional Transportation Study (OCARTS) region. This planning boundary includes 2,085 square miles and 37 communities located within Oklahoma and Cleveland Counties and portions of Logan, Canadian, Grady, and McClain Counties (Figure 1.1). The OCARTS boundary was expanded to its current size in 2002, following the 2000 Census. It is reviewed after each decennial census to ensure that the urban and urbanizing portions of the region, linked by a common economy and transportation system, are included in the MPO's transportation planning efforts.

Beginning in 2000, the U.S. Census Bureau delineated two urbanized areas within the OCARTS boundary based upon its criteria for population size and density. The Oklahoma City Urbanized Area (UZA) is considered a large UZA because it includes a population greater than 200,000, and the Norman Urbanized Area is a small UZA because it is greater than 50,000 but less than 200,000 in population. The region's urbanized areas are reflected in Figure 1.2. (On page 10)

Because the OCARTS area contains a census-delineated large urbanized area, it is also designated a Transportation Management Area (TMA) by the Federal Highway and Federal Transit Administrations. This TMA designation requires that ACOG also maintain a plan for managing current and future

FIGURE 1.1: OCARTS AND ACOG AREAS



congestion, and affords the MPO project selection authority for certain suballocated federal funds.

Thus, the terms "OCARTS area," "MPO area or boundary," "Transportation Management Area," and "transportation planning boundary" all refer to the same geographic area in which transportation planning for Central Oklahoma is conducted.

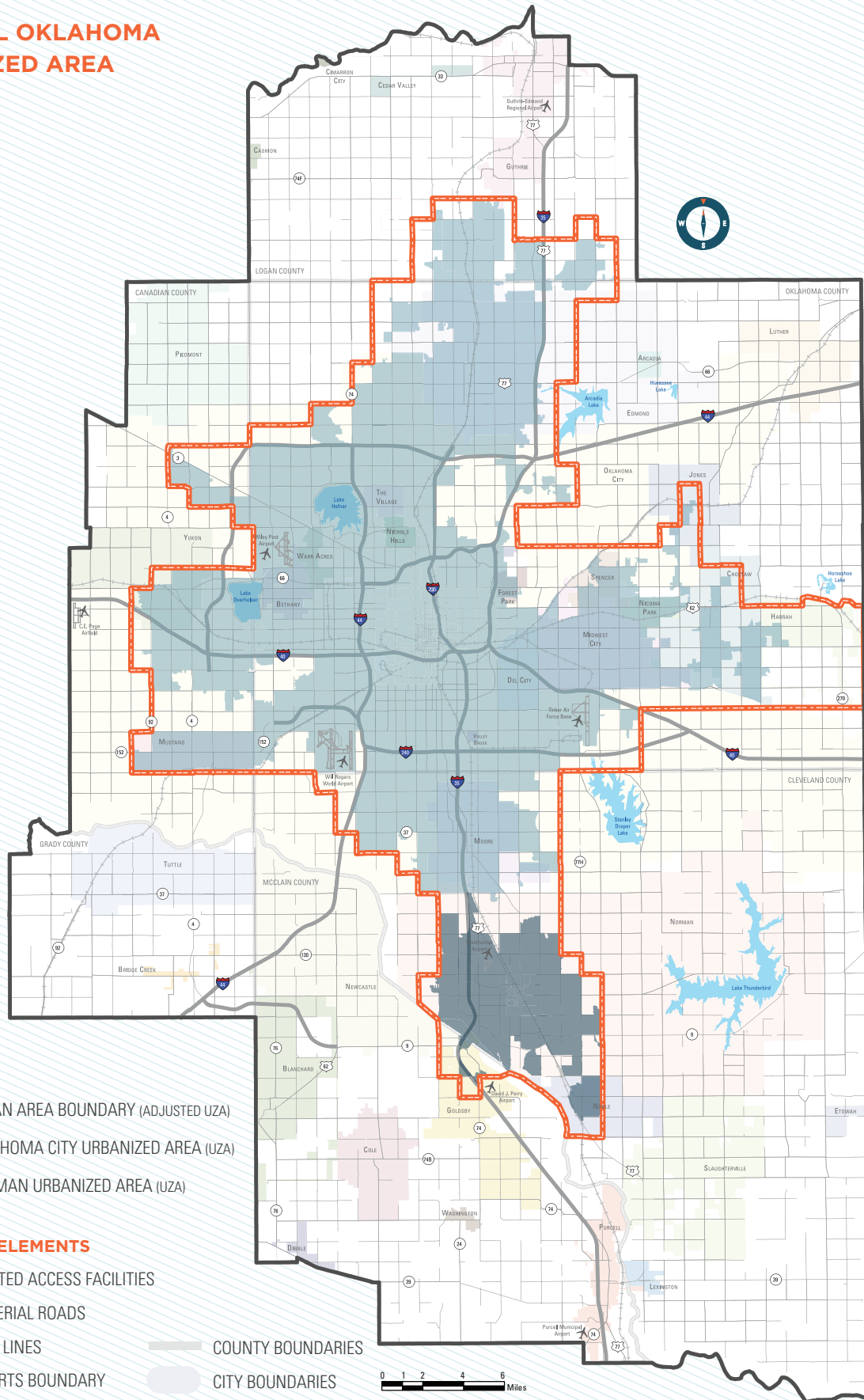
THE PLANNING PROCESS

The OCARTS planning process follows the requirements outlined by the Federal Transit and Federal Highway Administrations of the U.S. Department of Transportation. ACOG coordinates its transportation planning process with federal, state, local, and tribal entities responsible for land use, natural resources, and environmental planning, as well as private sector transportation interests and local citizens.




The metropolitan transportation planning process provides a unified voice among the planning partners. The OCARTS planning process is based upon a Memorandum of Understanding (MOU) among the Oklahoma Department of Transportation (ODOT), the Central Oklahoma Transportation and Parking Authority (COTPA),

FIGURE 1.2: OCARTS TRANSPORTATION MANAGEMENT AREA AND URBAN AREA

**CENTRAL OKLAHOMA
URBANIZED AREA**



LEGEND

-  URBAN AREA BOUNDARY (ADJUSTED UZA)
-  OKLAHOMA CITY URBANIZED AREA (UZA)
-  NORMAN URBANIZED AREA (UZA)

BASE MAP ELEMENTS

-  LIMITED ACCESS FACILITIES
-  ARTERIAL ROADS
-  RAIL LINES
-  OCARTS BOUNDARY
-  COUNTY BOUNDARIES
-  CITY BOUNDARIES

0 1 2 4 6 Miles

Cleveland Area Rapid Transit (CART), and ACOG. Policy direction is provided through a committee structure that consists of the Intermodal Transportation Policy Committee (ITPC), the Intermodal Transportation Technical Committee (ITTC), and several advisory committees and subcommittees as shown in Figure 1.3.

The ITPC is responsible for regional transportation policy and decisions that include adoption of the metropolitan long-range transportation plan and short-range transportation improvement programs. Its voting membership includes elected officials from city, town and county governments within the region and representatives from ODOT, the local transit authorities and the Oklahoma City Airport Trust. Federal aviation, transit and highway officials are also included as non-voting ITPC members, as well as representatives of Tinker Air Force Base.

ENCOMPASS 2040 GUIDES HOW THE REGION WILL INVEST MORE THAN \$10 BILLION IN ITS MULTIMODAL TRANSPORTATION SYSTEM OVER THE NEXT 25 YEARS.

The policy committee is supported by a technical committee generally comprised of city engineers, traffic managers, and city/county planners. This committee also includes representation from state and local agencies responsible for various modes of travel and environmental quality. The ITTC provides technical expertise on transportation plans and programs and serves as a recommending body to the ITPC.

The MPO utilizes numerous advisory committees and subcommittees to focus on specific aspects of the planning process including air quality, regional transit, bicycle and pedestrian interests, and congestion management. With each update of the metropolitan transportation plan, a Citizens Advisory Committee (CAC) participates in the review and development of all phases of the plan and provides its recommendations directly to the ITPC.

The Transportation & Planning Services Division of ACOG is responsible for administration of the regional transportation planning process. ACOG coordinates the preparation of an annual Unified Planning Work Program (UPWP) and provides staff support for the policy, technical, and advisory committees. Regular meetings are held at the ACOG offices to provide a forum for communication and decision making.

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FEDERAL TRANSPORTATION PLANNING REQUIREMENTS

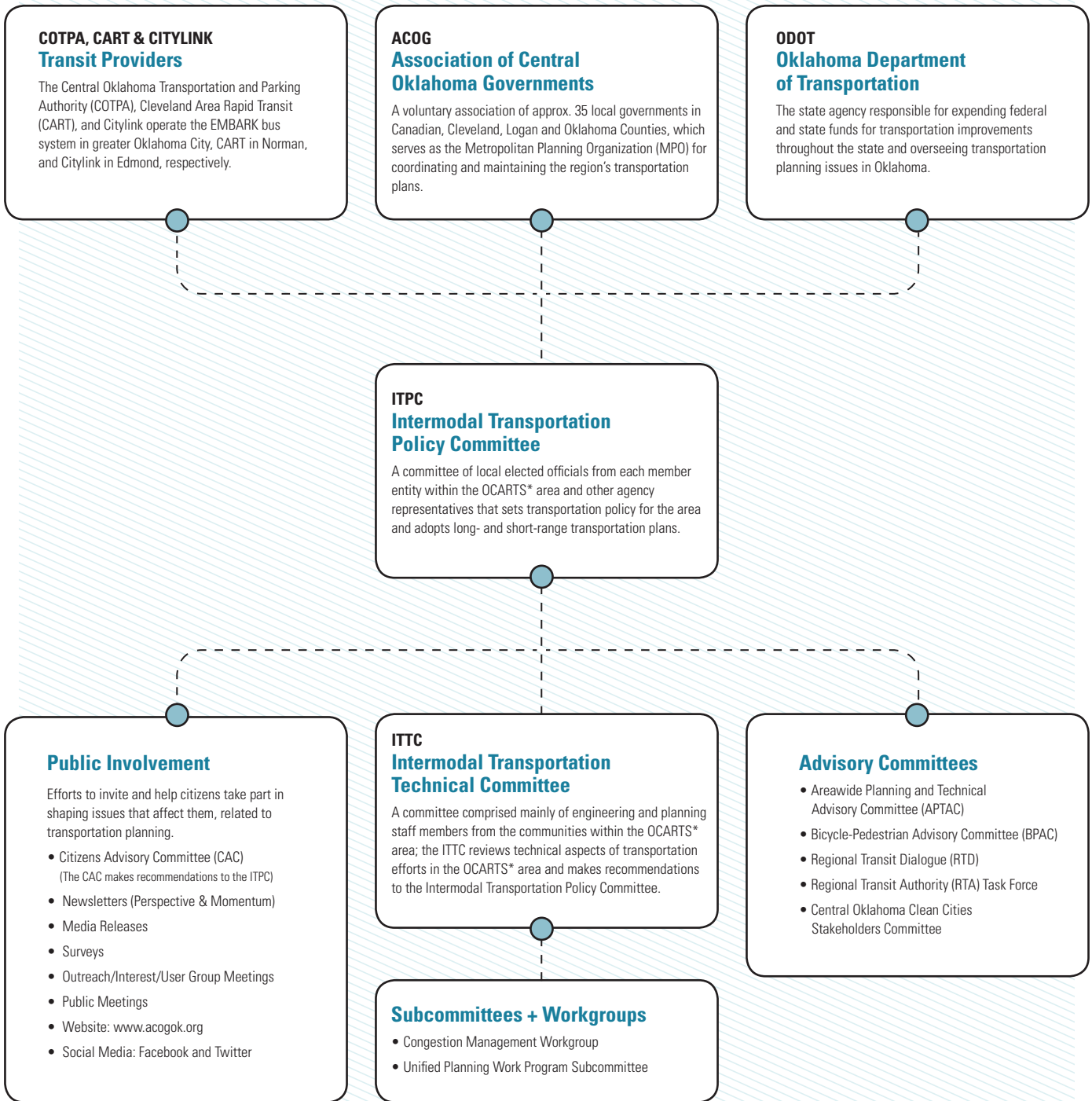
Encompass 2040 was developed in conformance with the Fixing America’s Surface Transportation Act (FAST Act), which was signed into law on December 4, 2015. Federal surface transportation law is approved by the U.S. Congress approximately every six years in order to establish transportation planning priorities and the funding programs and levels to implement those priorities within states and metropolitan areas throughout the country.

The FAST Act authorized highway, highway safety, transit, and other surface transportation programs, and continued the federal priorities and programs of the previous Moving Ahead for Progress in the 21st Century (MAP-21) Act, signed into law on July 6, 2012. The FAST Act is set to expire September 30, 2020.

Federal guidelines emphasize the role of state and local officials, in cooperation with transit operators, for tailoring the transportation planning process to meet local needs. These guidelines also emphasize protection of the natural environment and advancement of the nation’s economy and competitiveness domestically and internationally through efficient, multimodal transportation.

Under the FAST Act, the Federal Highway and Federal Transit Administrations require that all metropolitan areas conduct a comprehensive, coordinated, and continuing transportation planning process which includes development of long and short-range plans and programs. The long-range plan must be updated every five years (every four years for air quality non-attainment areas), include a forecast period of at least 20 years and address several federal planning priorities, known as planning factors.

FIGURE 1.3: ORGANIZATIONAL CHART



* The Oklahoma City Area Regional Transportation Study (OCARTS) area includes all of Oklahoma and Cleveland Counties and portions of Canadian, Logan, Grady and McClain Counties that are urbanized or are expected to be urbanized within the next 20 years.

The FAST Act continued the new MAP-21 requirement that states and MPOs conduct performance-based planning. The objective is to invest resources in projects that will collectively progress toward the achievement of national goals. States and MPOs are to work collaboratively to establish targets and measures that will improve performance in these areas:

- Safety
- Infrastructure condition
- Congestion reduction
- System reliability
- Freight movement and economic vitality
- Environmental sustainability
- Project delivery delays

Performance-based planning is to be integrated into the MPO's processes for MTP and TIP project selection and implementation.

Within the nation's larger metropolitan areas, planners are also required to maintain a congestion management process (CMP) that provides accurate, up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meet state and local needs.

In addition, the FAST Act encourages proactive and inclusive public involvement in the development of the long-range plan, consistent with a locally-developed Public Participation Plan (PPP). The PPP outlines opportunities for the public to provide input into key short and long-range transportation planning decisions.



ENCOMPASS 2040 DEVELOPMENT PROCESS

Metropolitan transportation planning is a continuous process. It involves a number of steps that begins with monitoring base year conditions such as population, employment and travel patterns. Population and employment growth are then forecast to identify projected land use changes and major growth areas that will influence future travel within the region.

This information is used by planners to identify transportation problems and needs, and to establish goals and strategies that strive to mitigate those identified problems and transportation needs. By analyzing a number of alternate networks, and their costs, an affordable long-range plan is developed which includes capital and operational improvements for moving people and goods using anticipated revenues through the plan's forecast year. The plan is also evaluated in relation to its potential environmental and social impacts upon the region.

Once the plan is adopted, it is implemented by state and local government entities using the federal funds provided through federal surface transportation legislation and state and local sources. Implementation of the long-range plan is accomplished through a short-range, project specific document called the Transportation Improvement Program, which lists the region's annual transportation funding priorities.

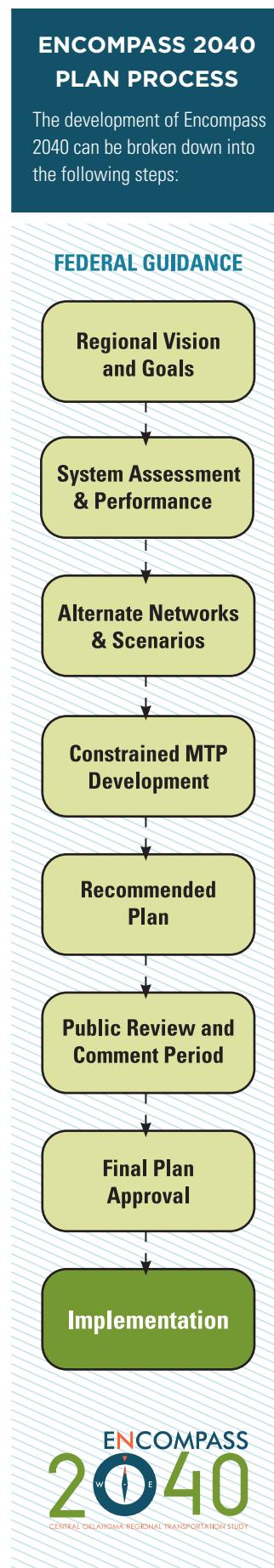


FIGURE 1.4: ENCOMPASS 2040 PLAN PROCESS

Encompass 2040 is the first OCARTS area long-range transportation plan to include a scenario planning exercise. Scenario planning is a process that evaluates the effects of alternative land use policies on future travel within a community or a region. This activity can provide information to decision-makers as they develop transportation plans, and by testing various scenarios, decision-makers can identify actions that will lead toward a shared vision.

While not a federal planning requirement, land use/transportation scenario planning has become increasingly common in regional and sub-regional planning processes. Encompass 2040 was developed using two potential growth scenarios:

- **Scenario 1** continued the region's historical trend of outward growth.
- **Scenario 2** focused on growth that would encourage infill, nodal, and downtown development within communities, which would be more supportive of future regional transit.

ENCOMPASS 2040 PLAN REPORT

The purpose of this Plan Report is to provide citizens, business leaders, and elected officials with a non-technical document, highlighting the transportation planning process that led to the adoption of the long-range transportation plan for Central Oklahoma. Greater detail on specific topics discussed in this report may be obtained from ACOG.

The Encompass 2040 Plan Summary, also available on ACOG's website, serves as an executive summary of this report. The ACOG Encompass 2040 metropolitan transportation plan, as well as the long-range plans developed for the Tulsa and Lawton metropolitan areas, is included by reference in the 2015-2040 Oklahoma Long-Range Transportation Plan, which was adopted by the Oklahoma Transportation Commission in August 2015.

STATE OF THE TRANSPORTATION SYSTEM



Like most Americans, residents in Central Oklahoma rely heavily on the automobile as their primary means of travel. In 2010, the average daily vehicle miles traveled in the OCARTS area was about 30 million miles, which equates to each person traveling about 26.5 miles per day. In 2040, the OCARTS area average daily vehicle miles of travel is expected to grow to roughly 46 million—a 54 percent increase.

This increased growth in travel will likely result in more congestion, and traffic incidents, which may lead to higher levels of auto emissions. Although Central Oklahoma is one of the more heavily developed urban areas in the state, its large geographic area and relatively low density results in almost exclusive reliance on automobile travel. If current development patterns continue, commute times will worsen in coming years as a result of increased travel distances and increased congestion.

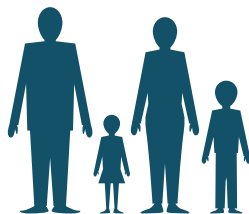
The Federal-Aid Highway Act of 1956 set the stage for highway travel being the nation's primary means of mobility and goods movement. This Act called for the completion of a 40,000-mile national system of interstate and national defense highways. With the interstate system, nearly complete by the late 1980s, Congress began to focus on a more multimodal approach to transportation with the passage

of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. ISTEA emphasized the need for more alternatives to private automobile travel—public transportation, bicycle networks and sidewalk systems—and established the statewide and metropolitan planning requirements to accomplish those goals. The Transportation Equity Act for the 21st Century (TEA-21) of 1998 and the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) of 2005 built upon the foundation of ISTEA. They continued the focus on multimodal transportation options, while also promoting system maintenance, air quality, safety and security. During the development of the Encompass 2040 long-range transportation plan, two additional federal surface transportation bills were passed, the Moving Ahead for Progress in the 21st Century (MAP-21) Act of 2012 and the Fixing America's Surface Transportation (FAST) Act of 2015. Each continued to emphasize the creation of a more safe, equitable, and efficient transportation system while also increasing accountability by implementing transportation system performance measures.

The following sections provide a brief snapshot of each travel mode that makes up Central Oklahoma's regional transportation system. Each of these will be discussed in greater detail in subsequent chapters of this report.

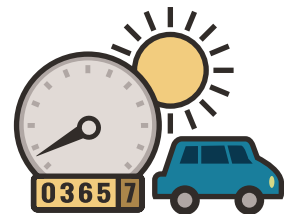
Population

2010 Estimate – 1,142,338
 2040 Estimate – 1,595,168
Percent Change – 40%



Vehicle Miles Traveled (VMT) Daily

2010 Estimate – 30,266,000
 2040 Estimate – 46,550,000
Percent Change – 54%



Employment

2010 Estimate – 601,839
 2040 Estimate – 875,402
Percent Change – 45%



Freight Tonnage (annual)

2010 Estimate – 101,845,268
 2040 Estimate – 137,859,602
Percent Change – 35%



STREETS AND HIGHWAYS

In 2010, the base year of Encompass 2040, the OCARTS area street and highway system consisted of 201 linear miles of interstates, freeways and expressways; 59 linear miles of turnpikes; and 1,899 linear miles of arterials. The remainder of the network is comprised of numerous miles of local and collector streets. Improvement and maintenance of these facilities generally fall under the jurisdiction of the Oklahoma Department of Transportation (ODOT), the Oklahoma Turnpike Authority (OTA), and local city and county governments, respectively.

The street and highway system provides the foundation for all modes of transportation. In addition to serving automobile and truck traffic, it provides the infrastructure upon which public and private transit services are operated and provides direct access to the region's airports, trucking terminals, freight and passenger rail services, and recreational trails. Safe and efficient operation of the metropolitan street and highway system, therefore, strengthens the productivity, safety, and efficiency of all transportation modes.

TRANSIT

Total transit ridership within the OCARTS area in 2010 was 15,800 trips per day. This represents less than half of one percent of the total daily trips made throughout the region. With these figures, it goes without saying that Central Oklahoma is woefully deficient in use of public transportation for a metropolitan area of its size. The amount of public transportation services available is directly tied to the level of funding spent on it from all sources—federal, state, and local. Currently, about \$35 per capita is spent within our region for transit, compared to an average of \$80 per capita for similar sized metro areas. Central Oklahoma currently has no dedicated local funding source for transit, unlike most other major metropolitan areas. Therefore, the public bus services that do exist are funded, in part, from local general revenues that must compete with other local needs such as roads, parks, and fire and police protection.

However, public desire for broader and better public transportation has been steadily growing within Central Oklahoma in recent years. In 2005, the Central Oklahoma Transportation and Parking Authority (COTPA) commissioned the Regional Fixed Guideway Study (FGS) that resulted in

a system plan for the year 2030. The FGS examined eleven corridors throughout the OCARTS area and recommended transit technologies for each that, as a whole, would create a regional public transportation system, connecting the downtown core with various suburban communities. Following the Fixed Guideway Study, ACOG conducted an independent study to examine various corridors and their potential for hosting enhanced and expanded public transit options. Titled CentralOK!go, this Commuter Corridors Study of Central Oklahoma highlighted several major corridors and access points within the region that could benefit from enhanced transit services and a commuter rail system linking the region from Edmond to Norman.

Building upon the recommendations of the Fixed Guideway Study, ACOG initiated a visioning process known as the Regional Transit Dialogue (RTD) in 2009. Its purpose was to engage locally elected officials, policy stakeholders, private sector leaders, and the general public in a discussion about how the region could develop a more comprehensive public transportation system in the years and decades to come. Utilizing a steering committee and several working subcommittees, the RTD also explored potential governing concepts, funding strategies, and transit supportive land use policies. Following the Commuter Corridors Study in 2015, a Task Force was established between six stakeholder cities (Edmond, Del City, Midwest City, Moore, Norman, and Oklahoma City) in Central Oklahoma to push forward with the creation of a Regional Transit Authority (RTA). The Task Force has conducted public outreach and polling efforts, and plans to use local funding options to create and establish a commuter rail transit line for the region.

REGIONAL BIKE NETWORK

Communities within Central Oklahoma have become increasingly engaged in planning for and implementing bicycle facilities over the past two decades. This coincides with the federal emphasis placed on bicycle planning as part of ISTEA in 1991 and in subsequent federal surface transportation laws. New requirements were put in place for MPOs to include regional bicycle plans as part of their long-range transportation plans and each state department of transportation was required to hire a bicycle/pedestrian coordinator to help implement this federal priority.

During the development of Encompass 2040, ACOG adopted a regional bike master plan and seven OCARTS area communities adopted trails master plans, including a 450-mile system adopted by the City of Oklahoma City. In total, the region has about 428 miles of existing bike facilities, and another 866 planned miles. Several federal-aid funding categories traditionally used for road projects now include bicycle and pedestrian improvements as eligible projects. In addition to these federal sources, several of Central Oklahoma’s local governments have provided significant local funds to implement their bike networks. For example, a general obligation bond issue approved by Oklahoma City voters in 2007 included funding for bicycle improvements and the Oklahoma City Metropolitan Area Projects 3 (MAPS 3) sales tax package includes \$40 million to continue implementation of the City’s planned bike trails.

As part of each long-range plan update, ACOG provides a forum for its member communities to evaluate regional connections that will enhance their individual trails plans and establish a regional network that will eventually provide a transportation alternative.

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PEDESTRIAN SYSTEM

While there is no regional network of planned sidewalks and walking trails, all OCARTS area communities are encouraged to provide sidewalks to enhance the walkability of their communities and the region. Currently, ten communities have ordinances that require sidewalk construction along arterial streets as part of the subdivision or building permit process.

The City of Oklahoma City developed a sidewalk master plan, passed in 2012, that builds upon an analysis of existing, under construction, and funded sidewalks within the City. The Oklahoma City MAPS 3 sales tax vote included a budget of \$10 million to construct sidewalks in priority locations throughout the city. One of the key considerations will be locations that provide access to bus stops. The lack of sidewalks near bus stops has been a recurring complaint among area residents for years, especially those with a disability.

Sidewalks are a federal priority and most federal-aid funding categories include construction of sidewalks and other pedestrian walkways as eligible activities. The MPO criteria for evaluating and distributing the federal funds provided to ACOG for local government projects also reflect an emphasis on sidewalks constructed both independently and in conjunction with roadway improvements.

GOODS MOVEMENT

Transportation of freight is often considered the lifeline of a region because of the essential need for movement of goods and products. Our local and national economies rely on efficient, safe, and secure freight transportation to connect businesses, suppliers, markets, and consumers. Goods movement generally involves the shipment of products by truck, rail, water, air and pipeline, or a combination of two or more of these modes.

The OCARTS area includes about 443 trucking companies, two Class I and two Class III freight rail lines, four rail terminals, and seven public airports. In 2012, 69.32 percent of all OCARTS area freight tonnage was transported by truck, another 3.5 percent was shipped by rail and less than one percent by air. As evidenced by these numbers, and typical for most metropolitan areas, truck traffic dominates the inbound, outbound, and intra-freight movements in Central Oklahoma, and this trend is expected to continue.

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AIRPORT ACCESS

The OCARTS area includes seven public airports: Will Rogers World Airport, Wiley Post Airport, and Clarence E. Page Airport in Oklahoma City, Max Westheimer Airport in Norman, Guthrie-Edmond Regional Airport in Guthrie, David Jay Perry Airport in Goldsby, and Purcell Municipal Airport. Additionally, Central Oklahoma is home to Tinker Air Force Base, one of the nation’s three Air Logistics Centers, located about eight miles southeast of downtown Oklahoma City. Opened originally in 1941 as the Midwest Depot, Tinker AFB now employs roughly 25,000 military personnel, federal civilians, and contractors, making it the largest single-site employer in Oklahoma.

The focus of Encompass 2040 in relation to air cargo, passenger air travel, and military operations is to address improvements that will enhance airport access by other modes—streets and highways, transit, and rail. This Plan does not address airport operations, development, or land use within the individual airport properties. Each airport operator maintains an airport master plan to focus on its future needs and to guide growth and development within the individual airport “fence lines.”