

## **3.0 FUTURE OF THE INTERMODAL SYSTEM**

This chapter describes key attributes of the future Intermodal system. The highway system is emphasized in this chapter. The Intermodal transportation initiatives provided in Chapter 5 cover all modes based on material from all previous task reports. Chapter 3 includes future levels of service, degree of needed highway system repair, and state and local initiatives identified to respond to the needs and views of the future system from stakeholder surveys and interviews.

### **3.1 Expected Future Highway System Levels of Service (LOS)**

#### **3.1.1 Statewide LOS**

The ODOT 2005–2030 Statewide Intermodal Transportation Plan has identified 17 preliminary Transportation Improvement Corridors and Congress has designated four National High Priority Corridors in the state (Figure 3.1: Transportation Improvement Corridors, 2005-2030 Statewide Intermodal Transportation Plan). ODOT developed the 17 preliminary corridors by taking the Needs Study Traffic and using historical growth factors to update the projected traffic to 2030. Then ODOT established capacity at LOS C with varying capacities based upon terrain types; thus, LOS C has a volume/capacity ratio of 1.0. Anything beyond a volume/capacity ratio of 1.0 was considered a candidate for a Transportation Improvement Corridor. All of the 2030 traffic was assigned to the State Highway System by control sections. The resulting map had a number of discreet segments. These segments were consolidated into logical termini sections. Segments that were confined to very small areas and which would be amenable to spot improvements rather than long corridor capacity upgrades between logical termini were eliminated. Figure 3.1 is the result although it is still preliminary.

#### **3.1.2 Oklahoma City LOS**

The Association of Central Oklahoma Governments (ACOG) conducted a regional transportation study for the Oklahoma City area in 2000 (Figure 3.2: 2000 Oklahoma City Area Regional Transportation Study Area). The result of the study was the 2025 Oklahoma City Area Regional Transportation Study (OCARTS) Plan. This plan addressed methods for improving mobility and accessibility using a multimodal approach to moving people and goods and improving the connections between modes. The 2025 OCARTS Plan was developed in accordance with the federal planning requirements established by TEA-21. The Plan must address transportation problems at least 20 years into the future and is based on past trends, population and employment. Figure 3.3: 2025 OCARTS Plan Network shows the roadways predicted to be congested in 2025. As shown in Figure 3.3, all of the Interstate Highways and some of the US and State Highways leading into Oklahoma City will be moderately to seriously congested by 2025.

#### **3.1.3 Tulsa LOS**

The Indian Nations Council of Governments (INCOG) is in the process of developing the 2030 Long Range Transportation Plan Update for the Tulsa Metropolitan Area - Destination 2030. The Long Range Transportation Plan is a 25 year vision plan that anticipates the future transportation needs for the whole region and identifies various modes such as roadways,

bicycle, pedestrian, public transportation, and freight systems and how they interrelate with each other. Consequently, LOS information is not available at this time.

Figure 3.1 Transportation Improvement Corridors, 2005-2030 Statewide Intermodal Transportation Plan

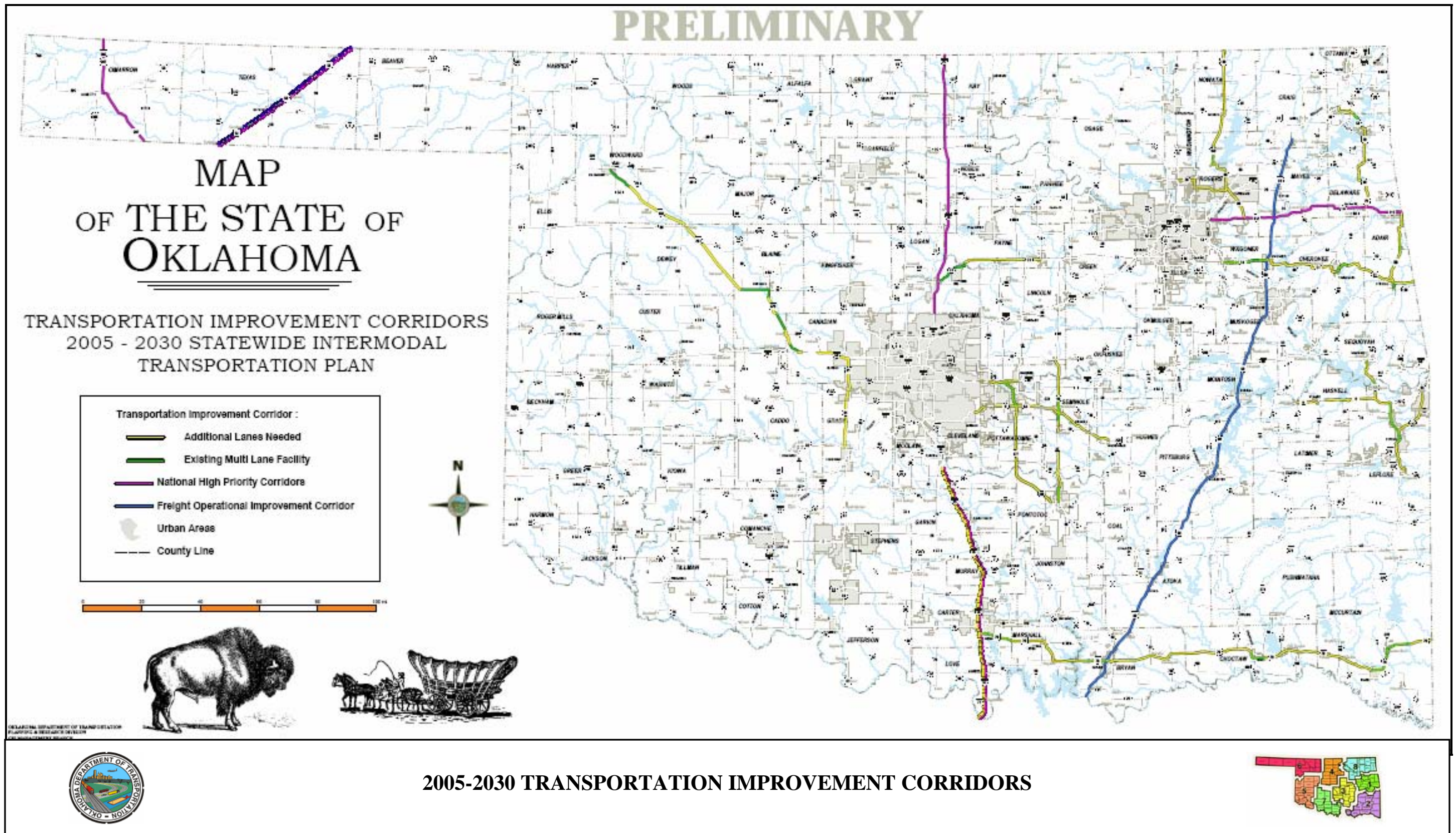


Figure 3.2 2000 Oklahoma City Area Regional Transportation Study Area

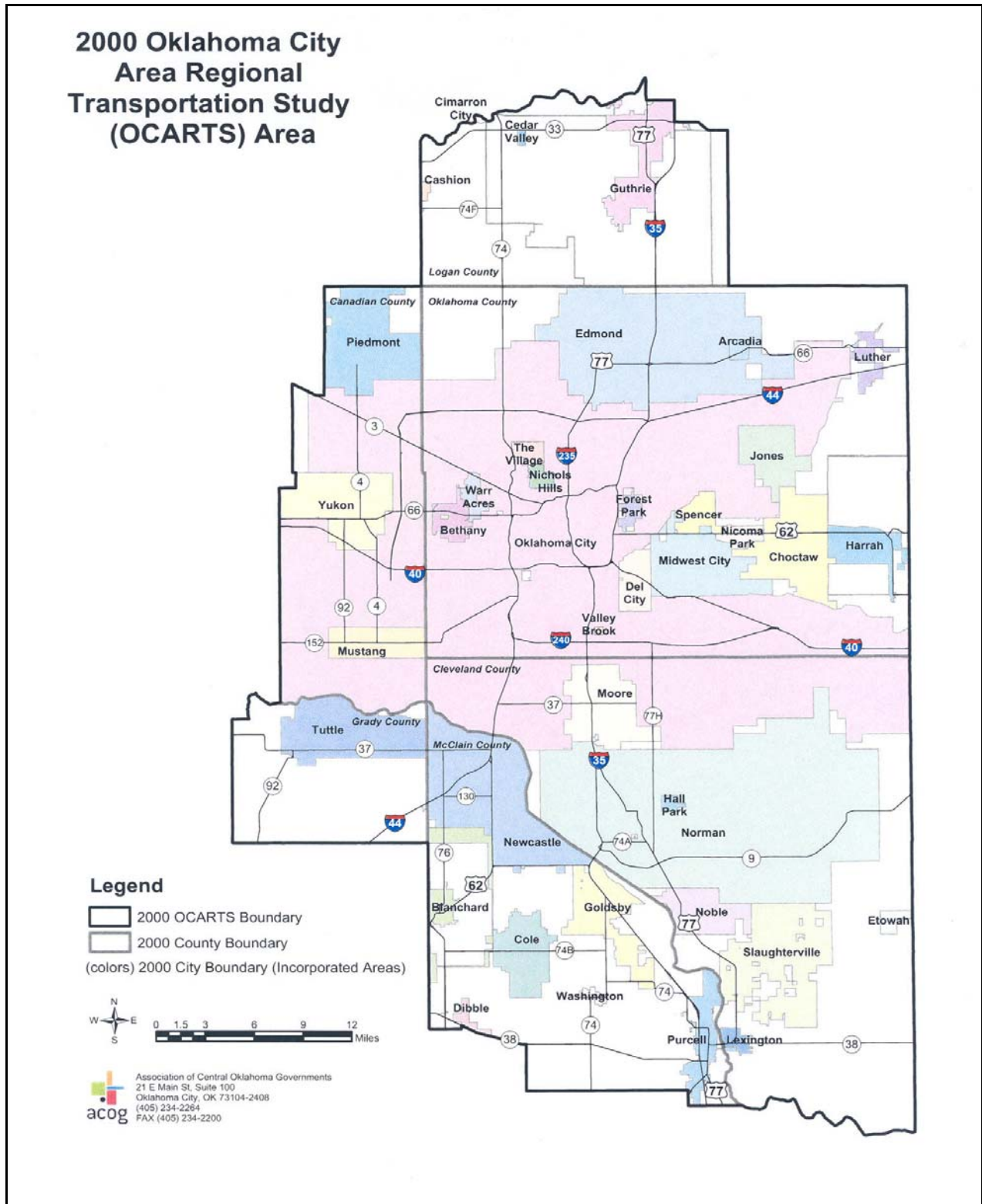
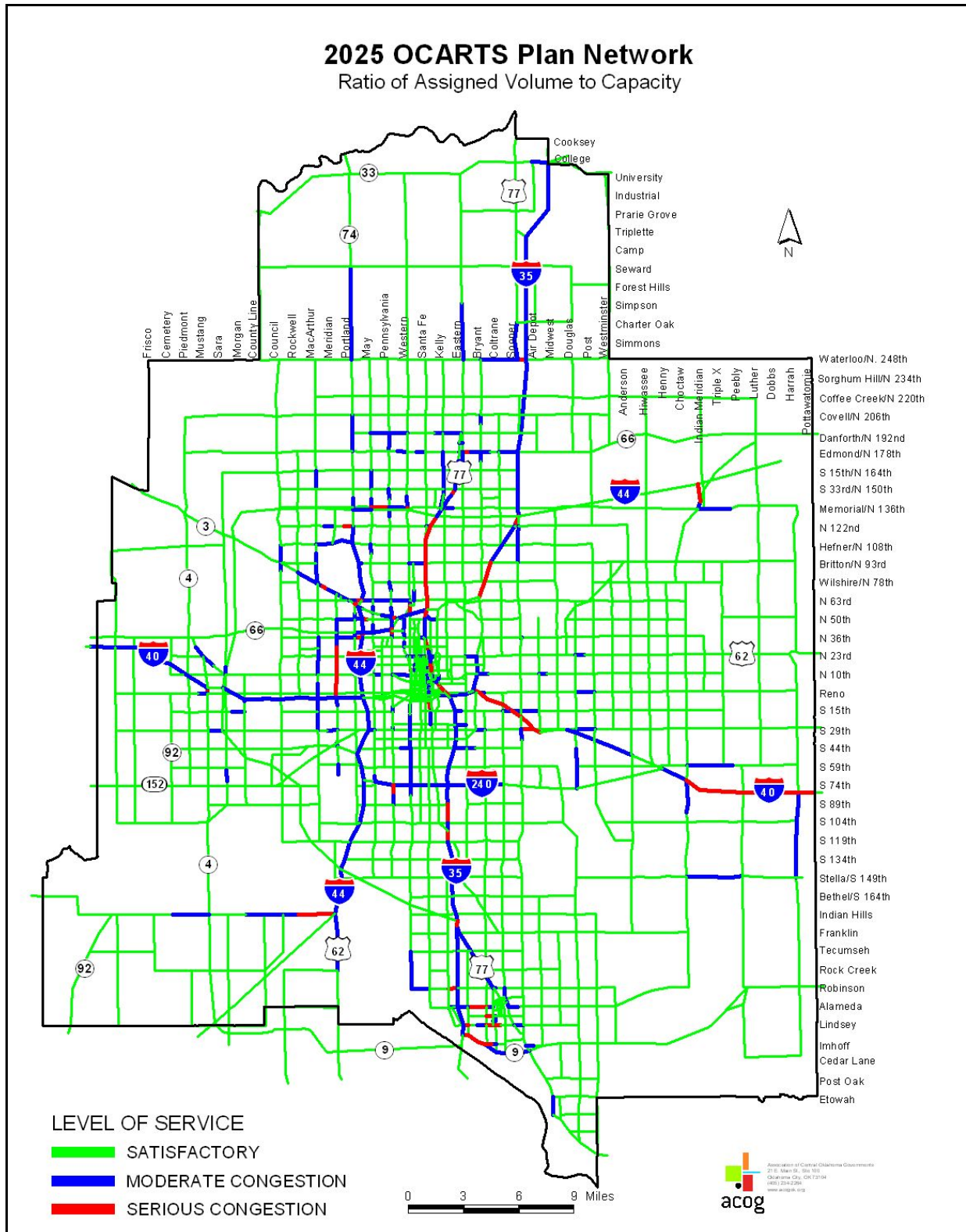


Figure 3.3 2025 OCARTS Plan Network



## 3.2 Expected Future Levels of Highway System Repair

### 3.2.1 State Highway Road Surface Conditions

Without adequate funding, roadways and bridges in Oklahoma will continue to deteriorate faster than they can be repaired. The estimated highway infrastructure replacement cost is \$35 billion, which is almost seven times the annual state budget (Source: *Oklahoma Road and Bridges Still in Need of Help*. May 5, 2004. Oklahoma Trucking Association. [www.oktrucking.org](http://www.oktrucking.org)). According to Gary Ridley, ODOT's Director, there is not enough funding to catch up with the road maintenance backlog. Since 1985, ODOT's appropriation from state fuel taxes has dropped 6.4 percent, from \$209.3 million in 1985 to \$195.9 million in 2004. During the same time period, traffic volumes have increased 25 to 30 percent (Source: *ibid*).

### 3.2.2 Bridge Deficiencies (Structurally Deficient, Functionally Obsolete, and Load Posted)

Bridge deficiencies can be attributed to aging structures and the rate at which they are replaced. As shown in Figure 3.4, it is projected under Oklahoma's current program that 26 of the 162 bridges 80 years or older would be replaced in 2005. In the program year for 2010, 137 bridge replacements would occur but the number of aging bridges increases to 513. By 2014, the number of aging bridges will have increased to 1,143 but only 324 would be replaced. Thus the rate of bridges aging significantly exceeds the rate of replacement and will only exacerbate the existing problem.

A bridge is classified as structurally deficient if there is significant deterioration of the bridge deck, supports, or other major components. This does not necessarily imply that the bridge is unsafe. Bridges that are structurally deficient are often posted to only carry lower weight vehicles or are closed if they are unsafe. A bridge is classified as functionally obsolete if it no longer meets current highway design standards such as narrow lanes, inadequate under clearances, or poor alignment, all of which reduce highway safety.

Many of the structurally deficient bridges in Oklahoma are load posted. Load posting is often required for structures that do not have the structural capacity to safely carry the State Legal Loads. Many older bridges were designed at a time when the design truck for a particular stretch of roadway had a gross truck load of 20,000 to 30,000 pounds. As more and more bridges become structurally deficient, more and more of them will become load posted.

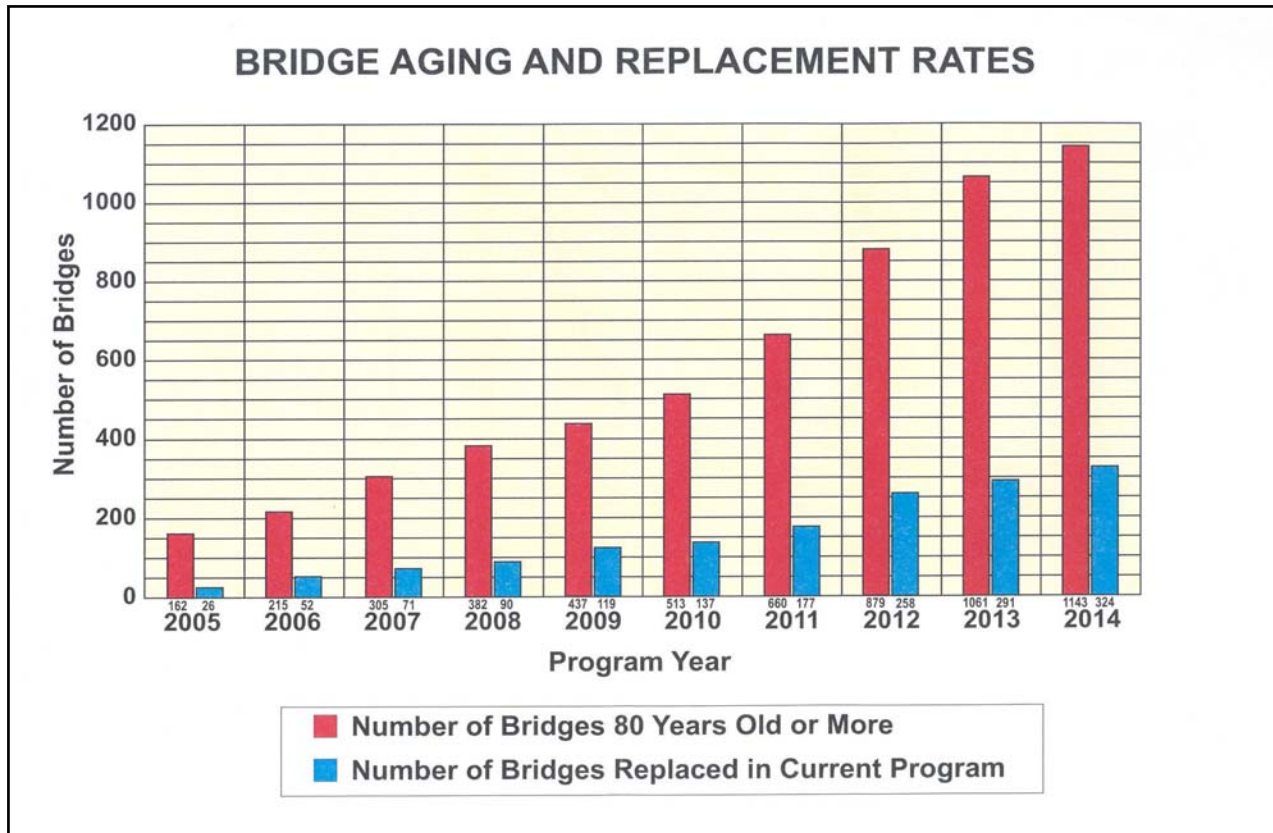


Figure 3.4 Bridge Aging and Replacement Rates

### 3.3 Major ODOT and Local Transportation Initiatives

#### 3.3.1 ODOT Initiatives

##### Transportation Improvement Corridors and National Priority Corridors

The ODOT 2005–2030 Statewide Intermodal Transportation Plan has identified 17 preliminary Transportation Improvement Corridors and Congress has designated four National High Priority Corridors in the state (Figure 3.1: Transportation Improvement Corridors, 2005-2030 Statewide Intermodal Transportation Plan). ODOT developed the 17 preliminary corridors by taking the Needs Study Traffic and using historical growth factors to update the projected traffic to 2030. Then ODOT established capacity at LOS C with varying capacities based upon terrain types; thus, LOS C has a volume/capacity ratio of 1.0. Anything beyond a volume/capacity ratio of 1.0 was considered a candidate for a Transportation Improvement Corridor. All of the 2030 traffic was assigned to the State Highway System by control sections. The resulting map had a number of discreet segments. These segments were consolidated into logical termini sections. Segments that were confined to very small areas and which would be amenable to spot improvements rather than long corridor capacity upgrades between logical termini were eliminated.

The preliminary Transportation Improvement Corridors shown in Figure 3.1 are further identified by locations where additional lanes are needed. Another unique aspect of the designated Transportation Improvement Corridors is the inclusion of a Freight Operational

Improvement Corridor. This unique corridor follows US 69 from the border with Texas to I-44 northeast of Tulsa through the eastern part of the state.

### **Trucking One-Stop Shop Act**

One obstacle to the movement of commerce in Oklahoma was that commercial trucks, especially those involved in interstate commerce, were required to obtain various documents and credentials from as many as three state agencies in order to operate. The agencies and their functions are listed as follows:

- Oklahoma Corporation Commission (OCC) Transportation Division: Requirements Department (authority licensing, registration, certification, renewals), Safety Administration Department (USDOT numbers, safety inspections, hazardous waste permits, compliance workshops), Administrative Support Department (enforcement citations and warnings records, docketing and tracking, complaints tracking), Enforcement Department (oversight, investigations, inspections).
- Oklahoma Tax Commission (OTC): Motor Carrier Enforcement (apportioned tags, fuel tax permits, trip permits, weigh stations), International Fuel Tax Agreement (taxes – miles based, IFTA Stickers, CAB Cards, quarterly reports, receive and audit IFTA quarterly report), and International Registration Plan (fees – mileage based).
- Oklahoma Department of Public Safety (DPS) Size and Weights Permits Division: Permits/Licenses (overweight, oversize, load limits), Escort Vehicles (training, certification).

Obtaining all of the necessary credentials, documents, licenses and paying the required fees was frequently a confusing and time-consuming process that increased the cost of moving commerce in Oklahoma.

On July 1, 2004, the first component of Senate Bill 141, now known as the Trucking One-Stop Shop Act went into effect. The purpose of the Trucking One-Stop Shop Act is to consolidate operations of state agencies relating to the trucking industry. The new law transferred the personnel, property and computer systems of the OTC to the OCC. The consolidation of enforcement and cross training of enforcement personnel will allow for greater enforcement coverage, increased safety compliance, and less down time for vehicles stopped by OCC enforcement. The second component of Senate Bill 141 will go into effect on July 1, 2005 and will transfer the personnel, property and computer systems of the International Registration Plan (IRP), International Fuel Tax Agreement (IFTA), and IRP/IFTA Audit Sections from the OTC to the OCC. This part of the Act will create the “One Stop Trucking Shop”. Registrants no longer have to bounce between state agencies to meet their regulatory obligations. It is the goal of the OCC to create a single integrated database for all motor carrier regulatory processing. When developed, identifying information will be entered once into a single transportation database. This system will allow for web-based credentialing, electronic file exchange, and electronic payment options. In addition, the new law includes an increase in fines for overweight violations and for various other offenses related to vehicle registration. It also provides funding to maintain and improve the state’s weigh stations.

The advantages of the One-Stop Shop Trucking are coordination of agency functions, elimination of duplication, and ease of compliance for the trucking industry. Two other states, Texas and Virginia, use a “one-stop” concept for trucking.



### 3.4 Stakeholder Views of the Future Intermodal System

Responses from the mailed surveys and the stakeholder interviews suggested a series of future concerns which are summarized below.

#### 3.4.1 Bridges

A clear signal from the surveys and interviews, across a range of institutions and interest groups, is that deteriorated and substandard (from current standards) bridges are impeding the state economy and potentially inhibiting economic development. Were this to become a focused program effort, an important component would be setting criteria for determining which bridges are attended to first. And among the key criteria might be locations with existing or future economic development potential, particularly where intermodal connections (e.g., rail, port) might be facilitated.

#### 3.4.2 Roadway Expansion

While roadway and bridge maintenance, particularly on major interstate routes, is the highest priority issue, there is substantial call for expanding Oklahoma's roadway capacity and statewide access to facilitate passenger and goods movement. Additional capacity in interstate corridors, particularly I-35 and I-44 to Lawton and the Texas state line; upgrading capacity on US 69, US 75 and US 70 and developing interstate quality corridors to/from Northwest and Southeast Oklahoma; truck lanes and truck roads and adequate interchanges at major trucking hubs, and connection roads to major potential/proposed plant sites were among the suggested improvements. Given funding shortfalls, expansion would seem to take a back seat to maintaining the current system. Still, if Oklahoma strives to pursue a concerted transportation and economic development strategy, focused highway improvements clearly must be part of that strategy – and funding for highway expansion will be a key component of whether or not any expansion is possible.

Within this general category, a focused program of key **grade separations** would address safety issues as well as impediments to both highway and rail and both passenger and freight movement. An example cited for particular attention because of congestion is on US 69 at the railroad spur south of 69A.

Another subcategory of highway infrastructure improvements might be those where investment in **technology**, such as Intelligent Transportation System (ITS) technologies, might be used to get more, at low cost, out of the existing system (congestion management, incident management, traffic enforcement, variable message signing, truck toll collection, etc.). ITS technologies specifically can be used to facilitate truck movement in Oklahoma (e.g., open road tolling); a key component of such application might also be tied to funding, cost allocation and revenue collection.

#### 3.4.3 Multimodal/Intermodal Facilities

Truck-to-rail and rail-to-truck intermodal improvements, transloading/transshipment facilities, and a major rail yard/off-loading facility and rail hub -- as well as rail/highway/air facilities with on-site warehousing and processing/distribution -- were among the many recommended improvements to address impediments to goods movement in Oklahoma. These appear to cover a range of sizes and costs, and the locations recommended were equally wide ranging, including

the cities of Oklahoma City and Tulsa or midway between them, the major Oklahoma City and Tulsa airports, and the Port of Catoosa, among others. But all are tied directly to existing and future needs of Oklahoma businesses (their direct demands on the transportation system). As such, they offer a challenge and opportunity for ODOT and ODOC to work in partnership with private sector businesses and the railroads (starting with the short line railroads with which the State is already in partnership) in determining locations, specific design issues/needs, estimating potential demands, developing alternative funding sources, programming – and working with the short line and Class I railroads to bring some of these to fruition. [An important function for ODOT/ODOC would be simply to facilitate discussions between potential users/businesses and the railroads because they may be willing to share information with each other that, primarily for competitive reasons, they may not be willing to share directly with State government.]

#### **3.4.4 Public Transportation Services**

A significant number of comments regarded the lack of, and/or the lack of coordination of, public transportation services. This was frequently expressed in terms of providing mobility choices for Oklahomans. The impediments and needs cited were so broad-based, and across all interest and geographic sectors (urban, rural, statewide access, interconnectivity, airport access, etc.), that there would appear to be an important role for ODOT in coordinating the State's response. However, several focused proposals emerged from the surveys and interviews which could be addressed by ODOT, in partnerships with others. These included extension of the Heartland Flyer to the north to link with other Amtrak services, providing space for tour buses at the Oklahoma City station, and assuring better public transit connections to/from the station to meet incoming trains.

#### **3.4.5 Regulatory/Administrative Improvements**

In the face of a funding shortfall, it behooves Oklahoma to do everything it can prudently to remove regulatory and administrative impediments to potential passenger and goods movement improvements. A significant number of survey respondents and interviewees mentioned regulatory and administrative changes that might be considered, and a focused effort to cut red tape would no doubt unearth far more. Among the varied actions recommended were: tying infrastructure investments to specific land use and economic development goals and plans; developing a better system and process for prioritizing needs and projects that would be defensible and could stand on its own independent from the political process; strengthening ties to Oklahoma's educational institutions, and reconsidering Oklahoma's workers compensation law and process in light of its effect on goods movement and the state's economy. Together with some of the needs described under Funding above, much of what is needed here may not cost much relative to the cost of infrastructure improvements, but addressing regulatory and administrative barriers can take more effort and time than building new infrastructure. Undertaking such an effort would have the added benefit of demonstrating Oklahoma's commitment to (and marketing of itself as focused on) cutting red tape to facilitate economic development.