"What we are - Our Transportation System"

Highways

Kentucky's highway system is composed of over 78,000 miles of public roads and streets, including nine interstate highways and nine state parkways. The State maintains about 35 percent of the total highway system in Kentucky, over 27,500 miles or 60,781 lane miles. The Commonwealth of Kentucky also has over 13,500 bridges, of which approximately 9,000 are statemaintained.

State Primary Road System	<u>Miles</u>	<u>% Miles</u>	<u>% Traffic</u>
Interstates	762	2.8	31.2
Parkways	648	2.4	5.1
Primary Roads	3,567	13.0	11.1
State Secondary Roads	7,654	27.9	26.8
Rural Secondary Roads	12,844	46.8	8.5
Supplemental Roads	1,979	7.2	1.4

Note: Miles/percentages represent state-maintained roads only



Kentucky has 2,870 miles on the National Highway System. Kentucky's interstates total 3,550 lane miles over which 31.2 percent of all traffic in Kentucky travels. Over 46.8 billion vehicle miles are traveled annually on Kentucky's public highways with approximately 40.8 billion vehicle miles on the state-maintained system.

In addition, over 42,000 freight carriers are authorized to operate on Kentucky's highways.



Safety

In 2004 there were 964 fatalities on the state's highways – one every 9 hours. In 2005 the number of fatalities on Kentucky's highways rose by 2.2 percent to 985. However that number fell to 909 in 2006.

Kentucky has a large number of traffic crashes due in part to the fact that it has nearly 6,000 miles of state roadways with narrow lane widths or shoulders, or both, mostly in rural areas of the state. Sixty percent of Kentucky's major roads, excluding interstates, have a lane width of 10 feet or less – the third highest percentage in the nation, behind only Virginia and West Virginia.



Fatalities

Total Fatalities in Kentucky 1985-2006

Source: KYTC Division of Traffic Operations

More than half (58 percent) of Kentucky's traffic fatalities in 2005 occurred on rural roads. Over 40 percent of highway fatalities resulted from collisions with fixed objects along narrow roadways. Kentucky can significantly reduce these numbers by working to widen these narrow roads and shoulders

KENTUCKY LONG-RANGE STATEWIDE TRANSPORTATION PLAN

The KYTC, however, is taking a proactive approach through "safety conscious planning" efforts to integrate safety issues into every phase of transportation planning and the development of projects to address our needs. In addition, Kentucky has established the Governor's Committee on Highway Safety to address Kentucky's safety needs. Through the efforts of this statewide committee and KYTC's Department of Transportation Safety, the first strategic highway safety plan, *Kentucky's Roadmap to Safer Highways* was developed in 2006. This plan serves as a guide for increasing coordination, communication and cooperation among state, federal and local agencies, non-profit organizations and other highway safety advocates.





Total Collisions in Kentucky 1995-2005



Source: KYTC Division of Traffic Operations

The plan sets out strategies to achieve a goal of reducing annual highway fatalities to no more than 700 by the end of 2008 and includes the following emphasis areas: impaired driving, young drivers, occupant protection, incident management, commercial vehicle safety traffic records, and legislative issues.

Pavement:

Pavements in Kentucky are deteriorating due to KYTC's inability to sustain a funding level sufficient to maintain its pavements. Thirty-three percent of Kentucky's interstate highway pavements and 47 percent of parkway pavements are in poor condition and need repair. Ten years ago, about ten percent of interstate pavements and less than five percent of parkway pavements were rated poor. For all other Kentucky highway systems, the ride quality had improved through 1991, and then remained essentially unchanged through 1997. After 1997, rideability for these systems began to decrease. Driving on bad roads costs Kentucky residents an average of \$198 per person per year in additional operating and repair costs. Poor pavements also increase congestion and decrease safety on our roads.

This graph shows that the percentage of interstates with pavement in "good" condition had increased steadily from around 1997 through 2001, after which the percentage began to decline. However the percentage of interstates with pavement in "poor" condition has increased fairly consistently since 1992.

Pavement Conditions Kentucky Interstates and Parkways



Kentucky Interstate Pavement Condition



Source: KYTC Division of Operations

This map illustrates the number of interstates and parkways whose remaining pavement life is less than four years and the large number of segments where the pavement condition has deteriorated to the point of no remaining pavement life at all.

KENTUCKY LONG-RANGE STATEWIDE TRANSPORTATION PLAN

Bridges:

Like many states, a large number of the bridges in Kentucky were constructed during the interstate construction boom of the 1950s and 1960s. With a typical life span of 50 years for a bridge, many of these bridges are reaching the end of their estimated life. Data shows that nearly one-third of all bridges in Kentucky need repair or replacement. Almost 30 percent (1,200) of these bridges show "significant" deterioration and are either closed or have posted reduced weight limits.



According to the KYTC inventory data and as shown in the pie chart, about 70 percent of the state-maintained bridges are performing the function they were designed to fulfill. However 21 percent of the state-maintained bridges are functionally obsolete and nine percent of the statemaintained bridges have significant deterioration.



Congestion

Traffic congestion in Kentucky is also on the rise. Vehicle miles traveled increased 18.26 percent over the ten-year period from 1993 to 2003. The average commute in Kentucky took 23.5 minutes in 2000, up from 20.7 minutes in 1990. The 2000 U.S. Census showed that over 28.9 percent of Kentucky's workers, who work outside of the home, traveled 30 minutes or more to work daily.



Source: Kentucky Transportation Cabinet

Congestion costs drivers millions of dollars in delays and operating costs and also increases the likelihood of traffic accidents. If traffic continues to increase at the current rate, projections show that most of Kentucky's interstate system and other major highways in the urban areas will become severely congested over the next twenty-five years, increasing delays, decreasing safety, and possibly affecting the air quality in the urban areas.

Source: Kentucky Transportation Cabinet

Boone

Oldham

Jefferson

Bullitt

Kenton

Campbell

Boyd

Kentucky

Air Quality

Although Kentucky is largely a rural state, air quality is still a major concern. The Kentucky counties which are classified as "nonattainment" or "nonattainment with a maintenance plan" for air quality according to the National Ambient Air Quality Standards (NAAQS) are shown on these maps. The remainder of the commonwealth is in attainment for present air quality standards.

Kentucky has three urban areas which do not meet the minimum standards for

the 8-hour ozone standard or the fine particulate matter (PM2.5) standard: Ashland (Boyd), Northern Kentucky (Boone, Kenton and Campbell), and Louisville (Bullitt, Jefferson and Oldham). In addition, Christian County in southwestern Kentucky has been classified as nonattainment for the 8-hour ozone standard, but has recently been redesignated as attainment with a maintenance plan.

Christian

AIR QUALITY

NONATTAINMENT AREAS

2005

8 - Hour Ozone



Kentucky is particularly concerned about the air quality in the Northern Kentucky counties and the Jefferson/Bullitt County area where congestion on major interstates is projected to become severe over the next twenty-five years.

These areas are required to comply with transportation conformity regulations for a minimum ten-year period, but are also eligible for Congestion Mitigation and Air Quality Improvement funds (CMAQ).

Access Management

Kentucky recognizes that there is a growing awareness that capital improvements alone are not enough to solve traffic congestion and safety problems. As a result, Kentucky continues to look for better, more efficient ways to build and manage the existing highway system to achieve maximum performance. Access management is one of the most effective strategies to preserve the safety and efficiency of Kentucky's roadways.

Kentucky is working to form an access management program that includes roadway design applications, permitting standards and procedures to best provide vehicular access to land development. These measures will allow for the systematic control of the location, spacing, design and operation of driveways, traffic signals, median treatments, median openings, interchanges, and street connections to a roadway.





In the access management program, roadways are classified by function and roadway characteristics such as traffic volume, speed and the environment. Standards are assigned on the basis of the priority given to land access versus through-traffic movement (see figure). Access management is particularly important along arterials and other primary roads that are expected to provide safe and efficient movement of traffic, as well as access to property. However, it is still necessary on lower-functioning roadways such as minor collectors and local streets, where much of the responsibility lies with local governments, to address the numerous safety considerations.