Infrastructure

Objective:
Support a strong, diverse, and sustainable economy

Strategy:
Maintain infrastructure that facilitates the efficient movement of freight and goods to promote trade across the region

Why is this strategy important?
Infrastructure like good roads and facilities that serve the movement of people, freight, and goods is essential to maintaining the economic growth of King County. Maintaining the driving surface and structural integrity of the county's 1,500 mile road system in good condition is important to ensure a reliable transportation system.

How is our performance?
King County International Airport (Boeing Field) has maintained and improved capacity to support some increases in cargo since 2008. While the rate of growth in cargo has slowed, so has the economy. Boeing Field is now ranked 25th nationally as a cargo center.

The King County Road Services Division performs both routine pavement maintenance tasks such as pothole patching and crack sealing and more extensive preservation work such as pavement overlay and road reconstruction projects.

The county's pavement condition standard is to keep 80 percent or more of the road system at a Pavement Condition Score (PCS) of 40 or better in order to optimize lifecycle costs. The Road Services Division was successful in meeting this target through 2009, despite steep increases in the price of asphalt. However, local and arterial pavement quality has been decreasing since 2008. A deep economic downturn, passage of statewide initiatives, annexations, and rising materials and fuel costs have all had significant impacts on King County's ability to preserve and maintain its unincorporated roadways. In 2010 and 2011, both arterial and local access roadway pavement conditions fell below the county's standard as the result of inadequate resources.

Moving forward
King County International Airport is one of the nation's busiest general aviation airports, and operations are expected to increase by 50 percent over the next two decades to meet growing demand. The Airport’s Master Plan focuses on ways to best satisfy the growing aviation demands, within the airport's existing boundaries, while meeting the strictest aviation safety standards. The airport is also working to improve the permitting process for activities at the airport and to partner more
collaboratively with local business to improve conditions for sustainable business activity.

King County will need to revisit the pavement performance standards as there is no expectation we will be able to meet the current standard unless there is a change to our revenue structure.

King County has implemented a tiered service level framework to direct limited resources to keeping the most vital components of the road system operational for customers. The division ranked each of over 1,500 miles of roadway into one of five tiers. Tier 1 roads will receive the most service, while Tier 5 roads will receive the least. The criteria used to make tier assignments included traffic volume, projected lengths of detours, and whether the road provides sole access, is a lifeline route, or is important for transit or freight.

In response to the rising cost of maintaining and preserving the oldest road network in the state, the County has taken significant measures to be more efficient and productive and is also seeking new and sustainable state and local revenue sources to better care for the road system.

The pavement condition measure looks at the surface condition of the county road system, and does not address roadway subsurface conditions. Recent testing has found evidence of subsurface structure fatigue and deficiencies on many arterial roads. Considerable resources will be required to address these concerns and will likely involve roadway reconstruction in many cases.

**Related Links**

- Airport Cargo Data
- King County Airport
- King County Roads Future

**Technical Notes**

The Pavement Condition Score (PCS) is a standard government pavement condition measure. Scores correspond to the following categories: 50-100 Good to Excellent; 30-49 Fair; 0-29 Poor. Pavement Condition Scores are determined by visual inspection of the road surface. A PCS of 100 indicates a pavement surface with no visible distress. The County’s established Government Accounting Standard Board (GASB) standard for pavement condition is to maintain 80% of the road system at 40 PCS or better. Meeting this standard optimizes lifecycle costs. King County evaluates arterial/collector roads over a two year cycle and local roads over a three year cycle.
King County International Airport (Boeing Field)
Weight of Annual Cargo Traffic

Source: Federal Aviation Administration

Pavement Condition of Roads in Unincorporated King County

Data from King County Roads Division
Pavement Condition on Unincorporated King County Roads

Data from King County Roads Division

Legend:
- Arterial road miles meeting standard
- Local road miles meeting standard
- Target (80% of miles at 40 PCS or better)