Section IX

Transportation

Transportation in Hampton Roads

The transportation network in Hampton Roads has garnered considerable attention as aging infrastructure and traffic congestion are closely tied to the economy and quality of life within the region. The recent downturn in the economy has affected many aspects of the Hampton Roads transportation system, with growth in roadway travel coming to a halt and a decrease in air travel from Hampton Roads airports.

Over the last decade, Hampton Roads has experienced a decrease in terms of per capita vehicle miles traveled. In addition, the region also has a lower level of vehicle miles traveled per capita and a lower mean travel time to work than most of the other competitor regions.

In spite of relatively lower amounts of travel per capita in Hampton Roads than in competitor regions, congestion is a significant issue in the area, particularly at the bridges and tunnels. According to INRIX, among competitor regions, only Washington, DC, Baltimore, and Atlanta had a higher INRIX Index (which measures the extra amount of time trips take in each region during congested peak travel periods) than Hampton Roads did in 2011.

Public transportation continues to play a small role in the region when compared to some other areas of similar size due in part to low population density. Norfolk has completed building the region's first light rail line, running 7.4 miles from Eastern Virginia Medical Center to Newtown Road. Light rail has the capability to impact future land use decisions and encourage increased density in development.

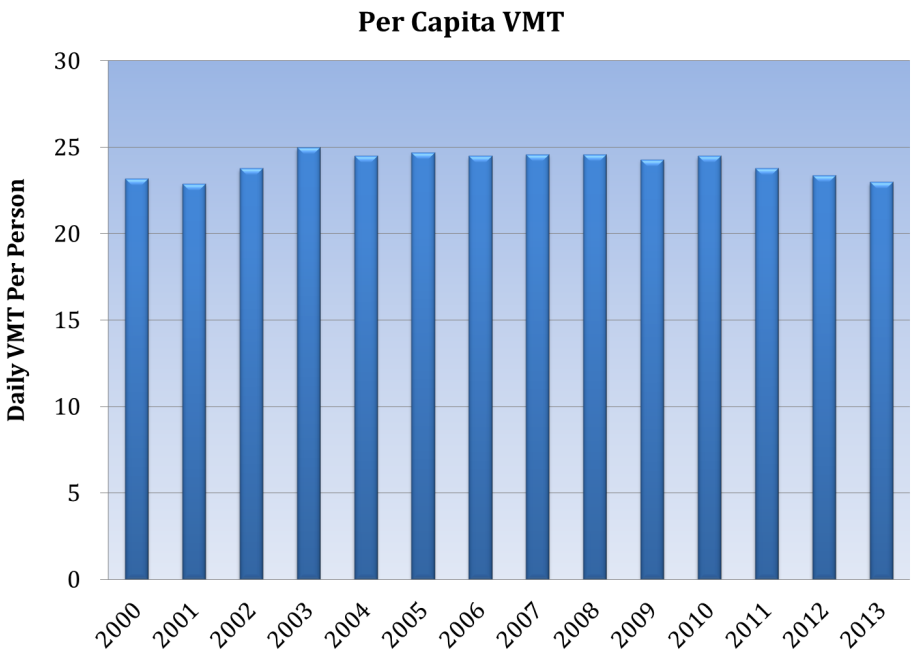
Figure 9.1 Per Capita Daily Vehicle Miles Traveled in Hampton Roads

Why is it important?

Per capita vehicle miles traveled (VMT) is the industry standard in determining the amount of traffic generated per person. Increased sprawl, higher employment to population ratios, and low transit usage can put upward pressure on a region's per capita VMT.

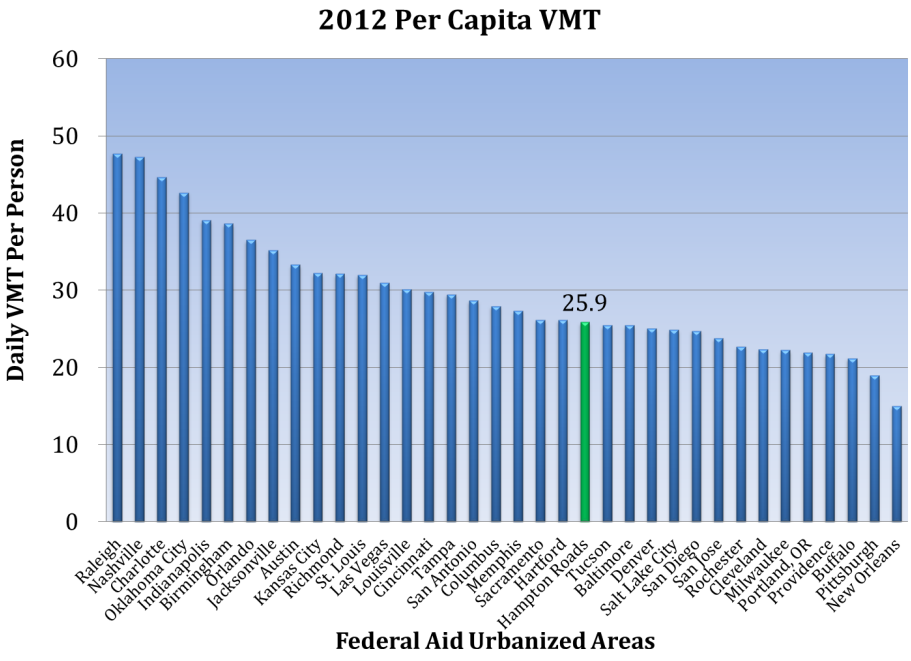
How are we doing?

Per Capita Vehicle Miles Traveled has declined slightly from its peak in 2003, but overall has been-remarkably stable until the recent decline starting in 2011.



Source: Federal Highway Administration, HRPDC

Figure 9.2 Per Capita Daily Vehicle Miles Traveled in Hampton Roads and Reference Metro Areas



Why is it important?

Traffic patterns and congestion have a bearing on regional competitiveness and quality of life. Per capita VMT is a reflection of a region's commuting distance, density, and transit usage.

How are we doing?

When comparing the Vehicle Miles Traveled to this region's reference metropolitan areas, it indicates that Hampton Roads falls in the middle of vehicle miles traveled per capita.

Source: Federal Highway Administration, HRPDC

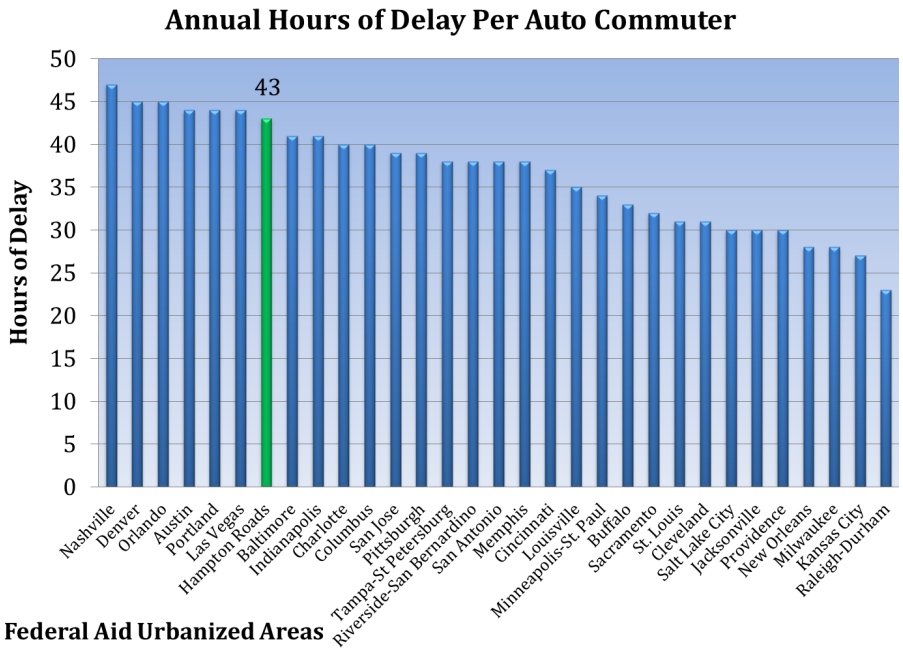
Figure 9.3 Annual Hours of Delay Per Auto Commuter in 2012 in Hampton Roads and Reference MSAs

Why is it important?

While VMT refers to the distance traveled, annual hours of delay reflects the degree of congestion. Comparing the annual hours of delay illustrates how local congestion compares with congestion in competing metro areas.

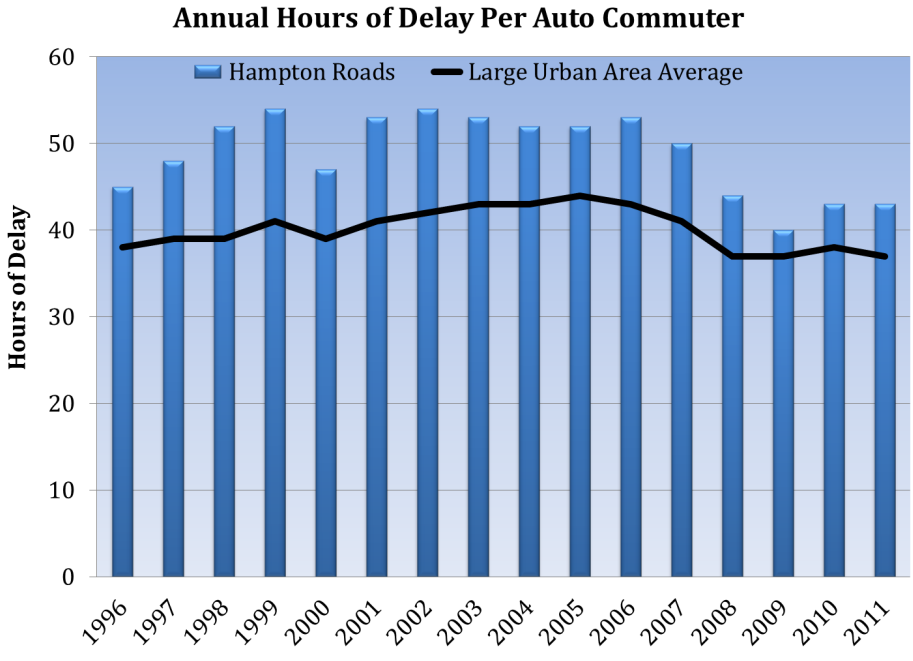
How are we doing?

Hampton Roads annual hours of delay is comparable to other similar sized southeastern metropolitan areas that face the same land use decisions.



Source: Texas Transportation Institute, HRPDC

Figure 9.4 Annual Hours of Delay Per Auto Commuter in Hampton Roads



Why is it important?

Congestion trends are very important because of the large impact that congestion has on both the cost of businesses and quality of life. Residents and businesses base their estimation of congestion on prior commuting experiences when planning for the future.

How are we doing?

Average hours of delay declined both regionally and nationally as a result of the recession, but crept up in Hampton Roads as soon as economic growth returned.

Source: Texas Transportation Institute, HRPDC

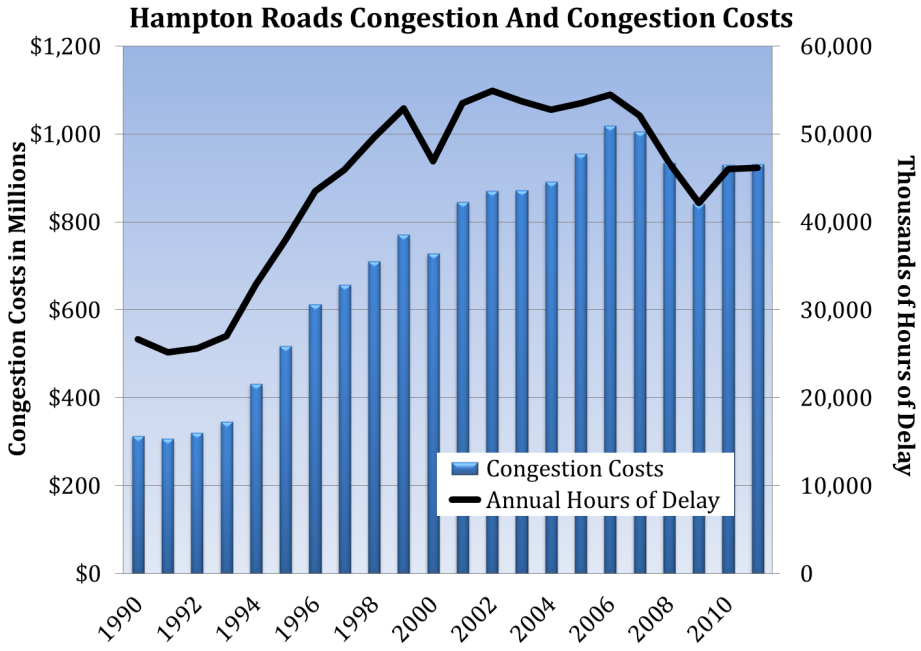
Figure 9.5 Hampton Roads Congestion and Congestion Costs

Why is it important?

Time spent in traffic comes at a cost for both residents and businesses. Increased congestion adds to the cost of doing business and decreases the quality of life.

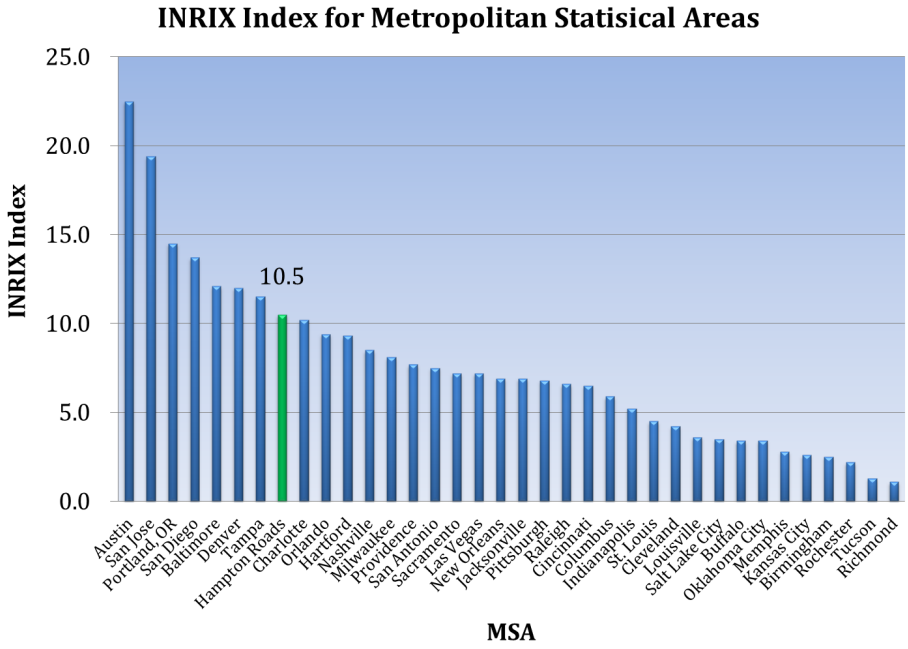
How are we doing?

Congestion costs rose substantially through the nineties. In 2011 congestion costs in Hampton Roads reached $932 million. Continued congestion will inhibit the ability of the Port to be competitive, restrict the flow of tourists, and reduce the quality of life for Hampton Roads residents.



Source: Texas Transportation Institute, HRPDC

Figure 9.6 Peak Period Travel Time Tax 2013 (Measured by the INRIX Index)



Source: INRIX Inc., HRPDC

Why is it important?

INRIX data combines real-time data from over 4 million GPS-equipped vehicles with traditional sensors to develop a database of traffic speeds and major traffic events. The INRIX Index (formerly the Travel Time Tax) effectively conveys the concept that traffic harms economic activity and vitality in a region.

How are we doing?

The data indicates that Hampton Roads has the fifth worst peak period congestion among southeastern regions, and eight worst among MSAs with populations between 1 and 3 million.

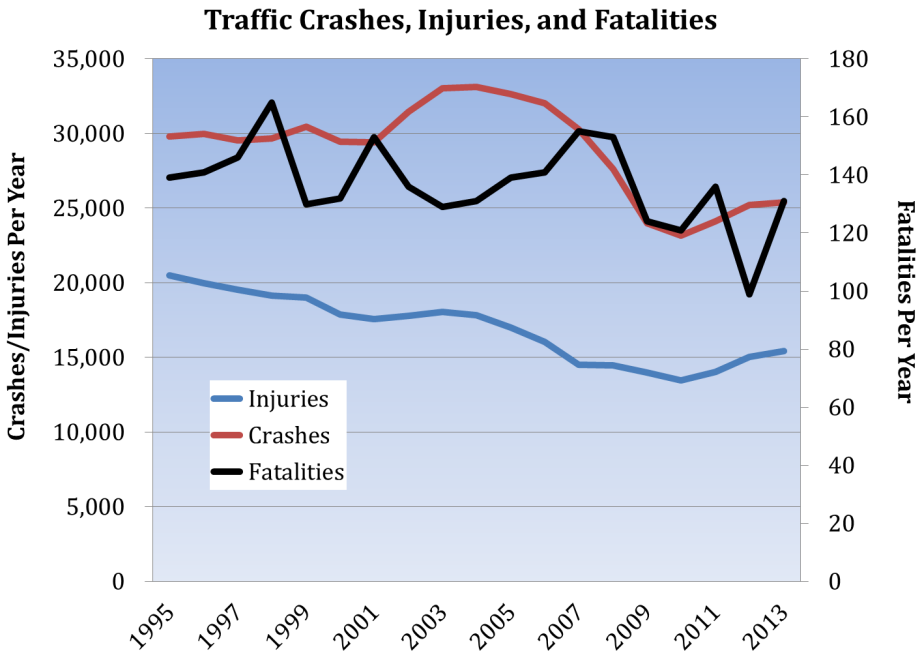
Figure 9.7 Hampton Roads Traffic Crashes

Why is it important?

One of the costs of driving that receives less attention then it deserves is the risk of injuries and fatalities.

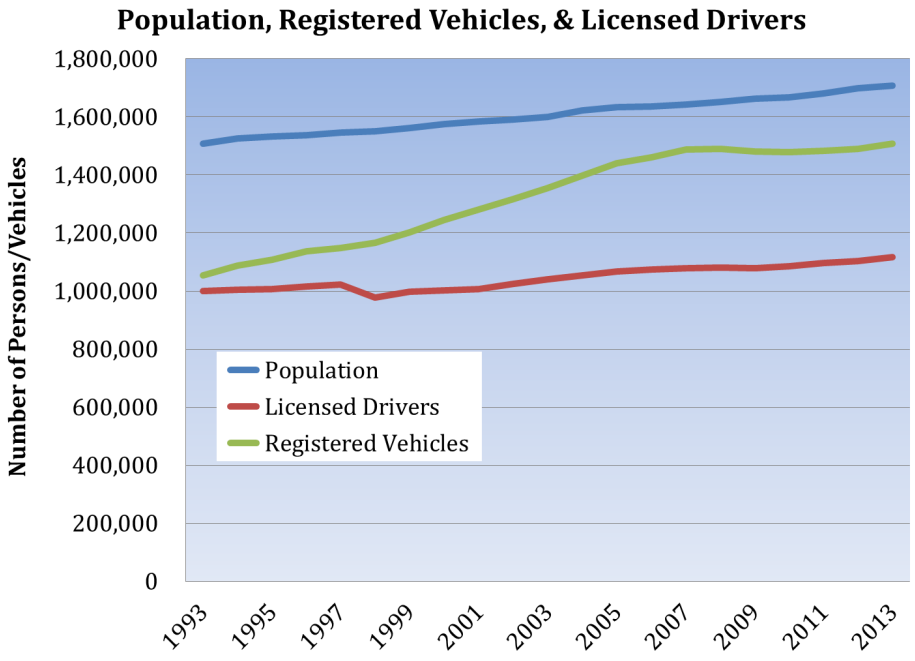
How are we doing?

Fatalities due to traffic crashes in Hampton Roads have averaged 140 per year over the past decade, roughly 8.5 deaths per 100,000 residents. The decrease in the numbers of injuries and crashes can be attributed in part to improved safety standards for both roadways and automobiles, as well as reduced alcohol-related crashes.



Source: Virginia Department of Motor Vehicles, HRPDC

Figure 9.8 Hampton Roads Vehicle Registrations



Source: Virginia Department of Motor Vehicles, Weldon Cooper Center, HRPDC

Why is it important?

Population, the number of licensed drivers, and the availability of automobiles are all factors in determining automobile usage.

How are we doing?

As the Hampton Roads population increases, so do the number of licensed drivers. Precipitous growth in the number of registered vehicles has increased the availability of automobiles subsequently increasing the number of vehicles on the road, though that growth has leveled off since the recession.

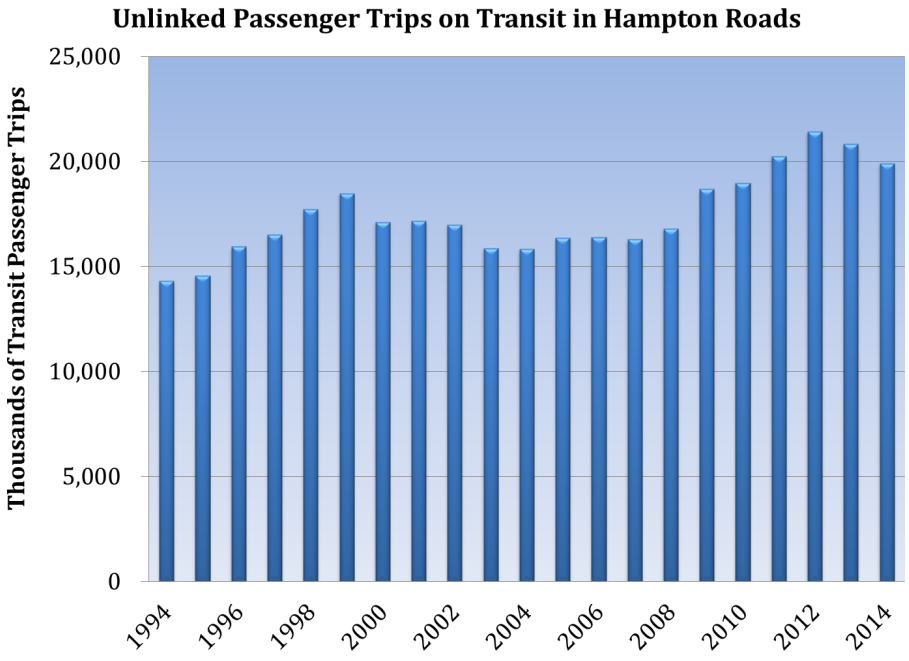
Figure 9.9 Transit Passenger Trips in Hampton Roads

Why is it important?

Public transit serves both as primary transportation for those without cars and an alternate source of transportation for commuters. Transit can also help to alleviate roadway congestion. Transit ridership is typically a function of availability, necessity and opportunity.

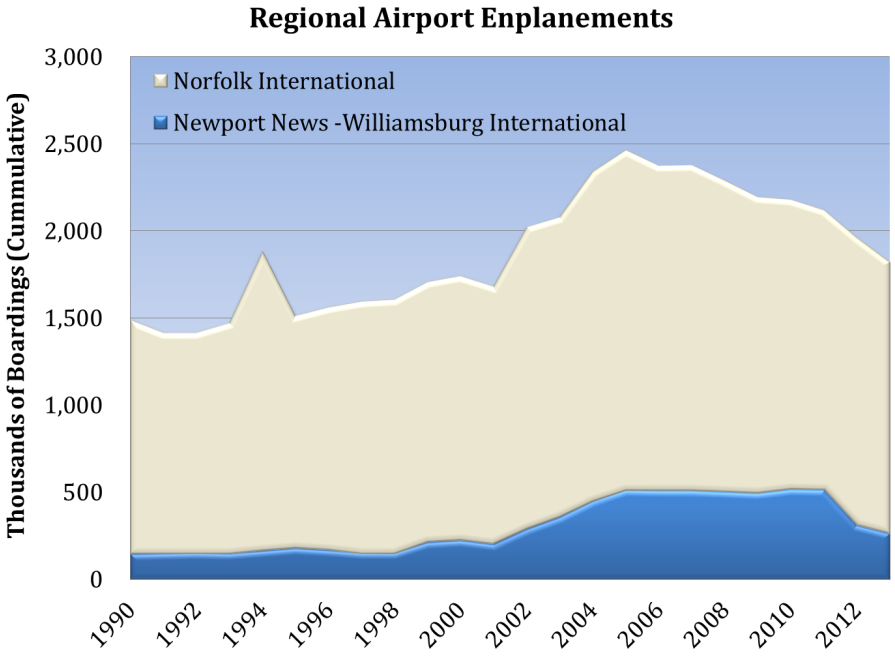
How are we doing?

Passenger trips taken on public transit increased through the latter half of the nineties and again starting in 2007 before declining the past two years.



Sources: Federal Transit Administration, APTA, HRPDC

Figure 9.10 Airport Enplanements at Hampton Roads Major Airports



Source: Federal Aviation Administration, HRPDC

Why is it important?

As the world inches ever closer to a global economy, access to airports and air travel becomes increasingly important.

How are we doing?

Value priced airlines entering the market in the early 2000's increased competition, both driving down the cost of tickets and increasing the number of enplanements. With airline consolidation and higher fuel costs, increasing ticket prices added to a weaker economy since 2007, the number of enplanements had been declining since their peak in 2005.

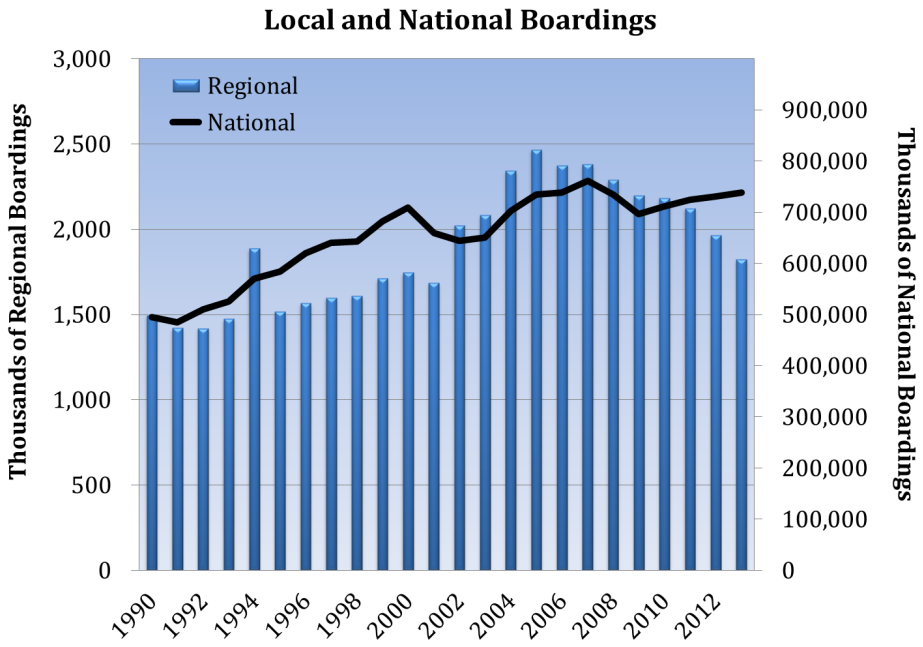
Figure 9.11 Enplanement Trend in Hampton Roads Compared to the National Enplanement Trend

Why is it important?

The market for air travel is influenced by several factors including price and consumer confidence. Referencing national air travel trends provides a context with which to better understand regional air travel.

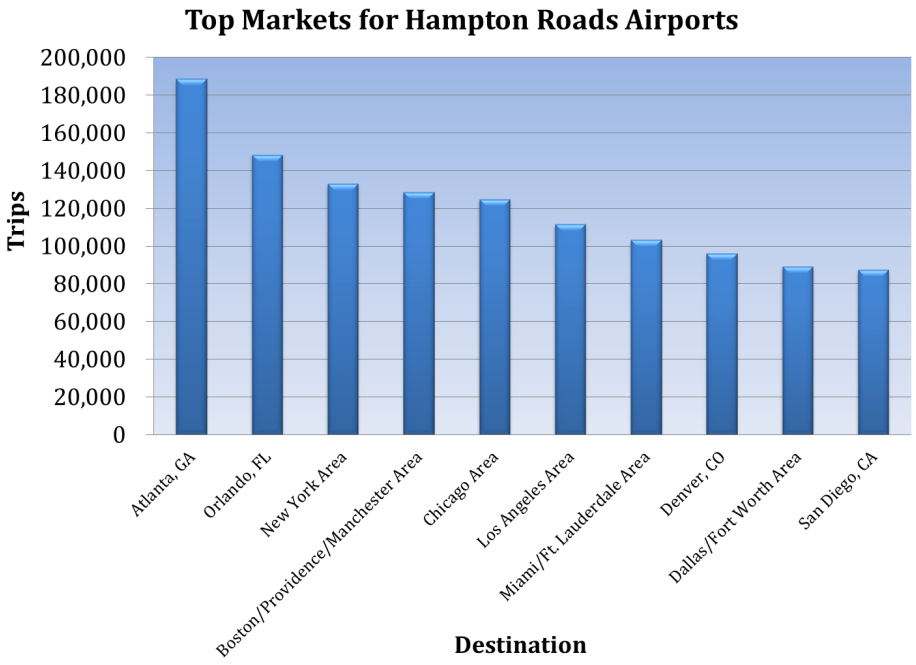
How are we doing?

Regional enplanements have lagged the national trend due to the decline in military travel as a result of federal budget cuts, as well as decreased service to Newport News.



Source: Federal Aviation Administration, HRPDC

Figure 9.12 Top Markets for Hampton Roads Airports



Why is it important?

This graphic shows the top final destinations and points of orgin for air travel to and from this region, showing where there are commerce connections to Hampton Roads.

How are we doing?

The destinations that have the greatest number of Hampton Roads trips also have some of the highest populations. One notable exception is Orlando, a tourism hub.

Source: Federal Aviation Administration, HRPDC

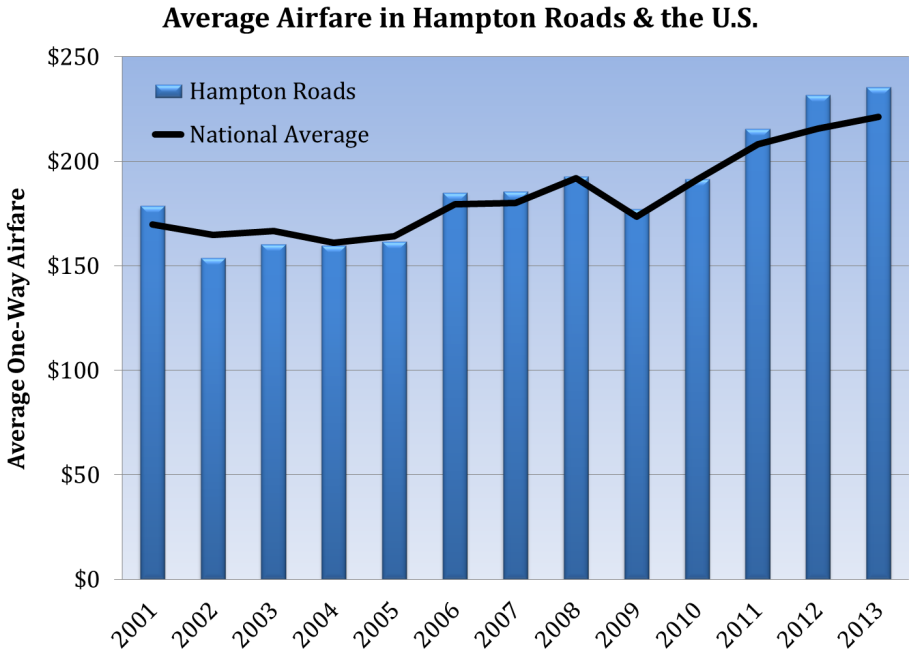
Figure 9.13 Average One-way Airfare in Hampton Roads & the U.S.

Why is it important?

Price is one of the most significant factors determining air travel demand. Several factors determine prices, including airline competition and oil prices.

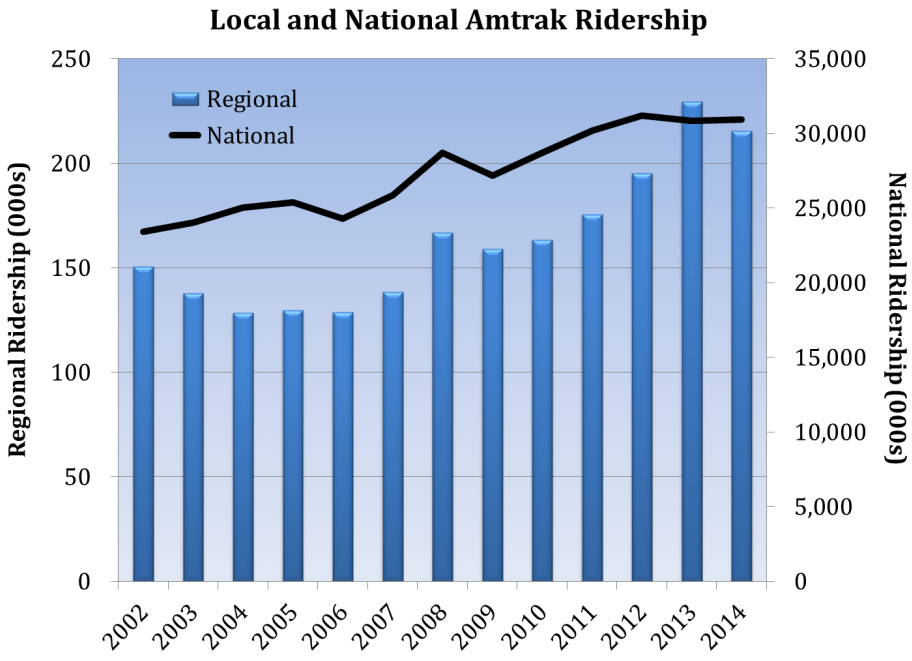
How are we doing?

Recently Hampton Roads' average airfares have tracked the national average airfares, signaling that this market has sufficient competition among airlines. As with all air travel, the price of oil will continue to have major impacts on this region's transportation network.



Source: Federal Aviation Administration, HRPDC

Figure 9.14 Local and National Amtrak Ridership Trend



Why is it important?

As increased attention is placed on transit and environmental issues, train ridership continues to be an area of focus with planners.

How are we doing?

Hampton Roads' passenger train ridership grew strongly from 2007 to 2014, outpacing the national growth rate. There was a slight decline in 2014.

Source: Amtrak, HRPDC

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