HRPDC Benchmarking 2021

Transportation

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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 Great Recession 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. In the past few years however, several new transportation projects began construction, including the I-64 Hampton Roads Bridge-Tunnel expansion megaproject, expected to be completed at the end of 2025.

Through 2014, Hampton Roads experienced a decrease in terms of per capita vehicle miles traveled, but from 2015 to 2019, this trend reversed and pre-COVID had been holding steady at rates just slightly below the 2003 peak. 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 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 bridges and tunnels. According to the Federal Highway Administration, among competitor regions, seventeen similar sized MSAs had a higher Travel Time Index (which measures the extra amount of time trips take in each region during congested peak travel periods) than Hampton Roads did in 2019.

With the creation of the Hampton Roads Transportation Fund and the Hampton Roads Transportation Accountability Commission (HRTAC) in recent years, progress on transportation projects in the region has been swift, with interstate improvements already underway, including the widening of the Hampton Roads Bridge Tunnel (HRBT).

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. During the onset and height of the COVID-19 pandemic in 2020, public transportation service was greatly reduced due to safety concerns, and the routes are slow to recover in part due to an employee shortage.

The pandemic changed much of the way residents of Hampton Roads traveled outside of public transportation as well. With stay at home orders reducing vehicular traffic dramatically in the spring of 2020 and airline travel and prices hitting rock bottom, trends for 2020 and 2021 will look very abnormal as demand plummeted unexpectedly and soars once restrictions are lifted and vaccination rates increase. Please note: the majority of the data in this update is from 2019.
**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 remained remarkably stable overall until a dip between 2011 and 2014 that has reversed and come up to 24 miles in 2019. The vehicle miles traveled are tightly related to level of economic activity in a region.

Source: Federal Highway Administration, HRPDC

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

**2019 Per Capita VMT**

**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?**
Hampton Roads’ per capita VMT is slightly lower, but relatively similar to reference MSAs.

Source: Federal Highway Administration, HRPDC
Figure 9.3 Annual Hours of Delay Per Auto Commuter in 2020 in Hampton Roads and Reference Metro Areas

**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?**
Annual hours of delay in Hampton Roads is comparable to other similar sized metropolitan areas. Regional delay in 2020 was down significantly when compared to previous years due to declines in traffic caused by the COVID-19 pandemic.

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 important because of the impact congestion has on 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 during the Great Recession, but experienced relatively stable growth since 2012. Due to declines in travel during the onset of the pandemic, annual hours of delay in Hampton Roads decreased significantly in 2020.

Source: Texas Transportation Institute, HRPDC
Figure 9.5 Hampton Roads Congestion and Congestion Costs

Why is it important?
The 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 have been rising steadily since the nineties, having reached nearly $900 million in 2017, before beginning to come down in 2018 and 2019. COVID-related decreased congestion in 2020 decreased costs accordingly, but continued congestion will inhibit the ability of the Port of Virginia to be competitive, restrict the flow of tourists, and reduce quality of life for Hampton Roads residents.

Source: Texas Transportation Institute, HRPDC

Figure 9.6 Peak Period Travel Time Index 2019

Why is it important?
The Travel Time Index measure of congestion focuses on each trip and each mile of travel. It is calculated as the ratio of travel time in the peak period to travel time in free-flow conditions.

How are we doing?
The data indicates that Hampton Roads is about average for peak period congestion among similar sized MSAs. According to the data, it takes approximately 19% longer to make a trip during peak driving times in Hampton Roads than it would under uncongested conditions.

Source: FHWA, HRPDC
**Why is it important?**
One of the costs of driving that receives less attention than it deserves is the risk of injuries and fatalities.

**How are we doing?**
Fatalities due to traffic crashes in Hampton Roads have averaged 132 per year over the past decade, and have been increasing in recent years. The decrease in the numbers of injuries and crashes can be attributed in part to improved safety standards for roadways and automobiles, as well as reduced alcohol-related crashes. Despite a steep COVID-19 related decline in total crashes in 2020, there was a slight increase in the number of fatalities.

Source: Virginia Department of Motor Vehicles, HRPDC

**Figure 9.7 Hampton Roads Traffic Crashes**

**Figure 9.8 Hampton Roads Vehicle Registrations**

**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 Great Recession.

Source: Virginia Department of Motor Vehicles, Weldon Cooper Center, HRPDC
**Figure 9.9 Transit Passenger Trips in Hampton Roads**

**Why is it important?**
Public transportation serves as primary transport for those without access to cars and an alternate source of transportation for commuters. Transit can also help alleviate roadway congestion. Transit ridership is typically a function of availability, necessity, and opportunity.

**How are we doing?**
Passenger trips taken on public transportation has been steadily declining since 2012 as the economy recovered from the Great Recession. As much of transit was either shut down or greatly reduced during the COVID-19 pandemic, passenger trips in 2020 were at record lows.

**Figure 9.10 Airport Enplanements at Hampton Roads Major Airports**

**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 2000s increased competition, driving down ticket costs and increasing the number of enplanements. Increased ticket prices and the Great Recession contributed to decreased enplanements from 2005-2015. After a series of renovations at Norfolk International, enplanements have grown steadily through 2019, with COVID-19 closures and travel bans heavily impacting 2020 enplanements.
**Why is it important?**
The market for air travel is influenced by several factors including price and consumer confidence. Referencing national air travel trends allows us 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. The region experienced an increase over the past few years, as is the rest of the country.

**Why is it important?**
This graphic shows the top final destinations and points of origin for air travel to and from this region, showing where commerce connections to Hampton Roads exist.

**How are we doing?**
The destinations with the greatest number of Hampton Roads trips in 2019 also have some of the highest populations. One notable exception is Orlando, a tourism hub. San Diego also receives a significant number of travels from Hampton Roads, likely due to the large Navy presence in both regions.
**Figure 9.13 Average One-Way Airfare in Hampton Roads & the United States**

**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?**
Until 2012, Hampton Roads’ average airfares tracked national average airfares. The consolidation of airlines has driven up the cost of flights, and reduced competition in Hampton Roads has contributed to even higher increases in the cost of regional flights.

![Average Airfare in Hampton Roads & the U.S.](chart)

Source: Federal Aviation Administration, HRPDC

**Figure 9.14 Local and National Amtrak Ridership**

**Why is it important?**
As increased attention is placed on transit and environmental issues, train ridership continues to be an area of focus for planners.

**How are we doing?**
Hampton Roads’ passenger train ridership grew strongly from 2007 to 2014, outpacing the national growth rate. In 2020, most travel—both business and leisure—was drastically reduced due to the pandemic, apparent in both regional and national Amtrak ridership data.

![Local and National Amtrak Ridership](chart)

Source: Amtrak, HRPDC
**Figure 9.15 Travel Time to Work in Hampton Roads**

**Why is it important?**
Travel time to work refers to the total number of minutes it takes a person to get from home to work each day, and can be seen as a measure of regional quality of life.

**How are we doing?**
Mean travel time to work in Hampton Roads has remained steady between 20 to 25 minutes for the past 15 years. Travel time to work in Hampton Roads is less impacted by congestion levels since AM Peak Period congestion is lower than PM Peak Period congestion.

Source: US Census Bureau, HRPDC

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**Figure 9.16 Travel Time to Work in Reference Metro Areas**

**Why is it important?**
The longer it takes a person to get from home to work each day in some part weighs on which regions they may or may not be willing to live in, which is extremely important for talent recruitment.

**How are we doing?**
In comparison to other metro areas between one and four million residents, mean travel time to work in Hampton Roads was on the lower end at just under 25 minutes in 2019.

Source: US Census Bureau, HRPDC