Regional Performance Measures

Roadway Performance Measures Summary

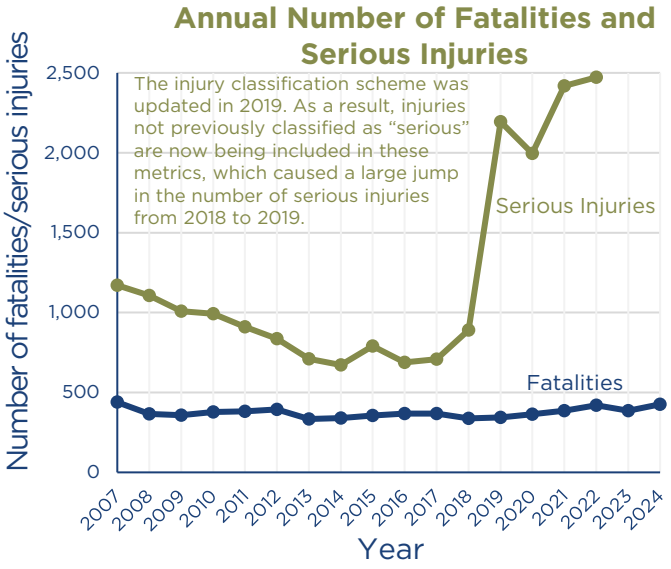
Regional performance measures for the NJTPA area dealing with roadways cover four modes of travel: passenger vehicles, bicycles, pedestrians, and trucks. Roadway performance measures include those found in the overall categories of Safety, Roadway Conditions, Environmental Conditions, Reliability, Access/Mobility, and Competitiveness.

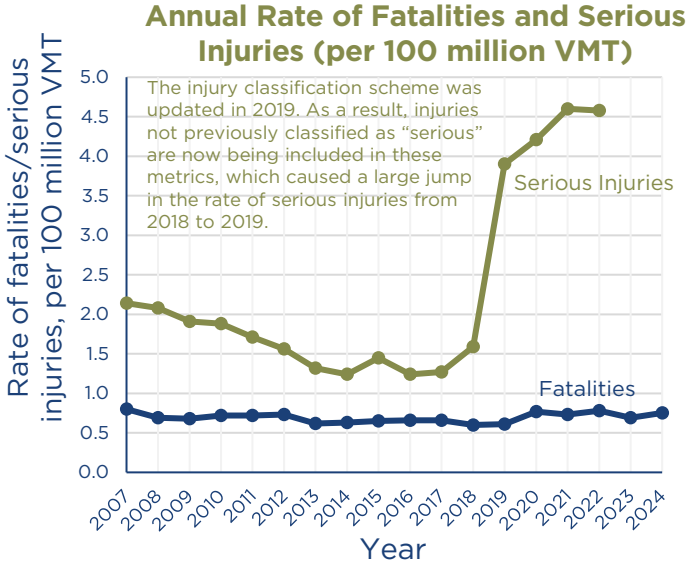
How safe are our roads for all users?

NJDOT data on all public roadways in the NJTPA region are used to analyze these measures. They are the same as the national performance measures, although annual numbers and rates are shown rather than 5-year rolling averages used for the national measures.

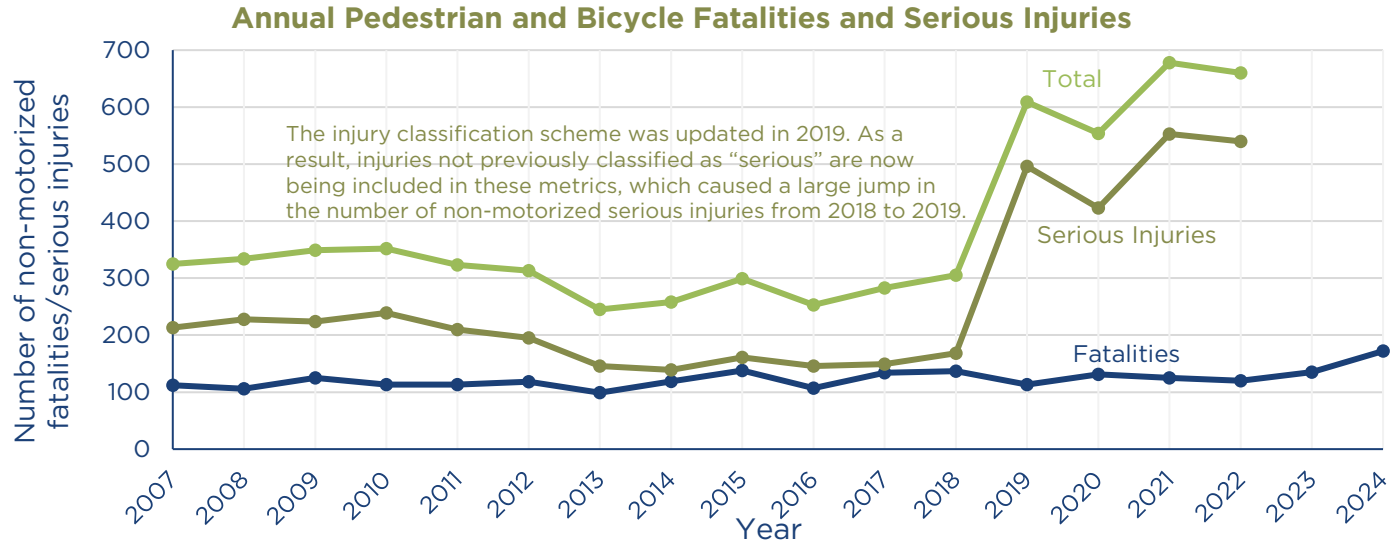
Roadway Fatalities and Serious Injuries

"Rate" measures represent fatalities or serious injuries per 100 million vehicle-miles traveled (VMT).



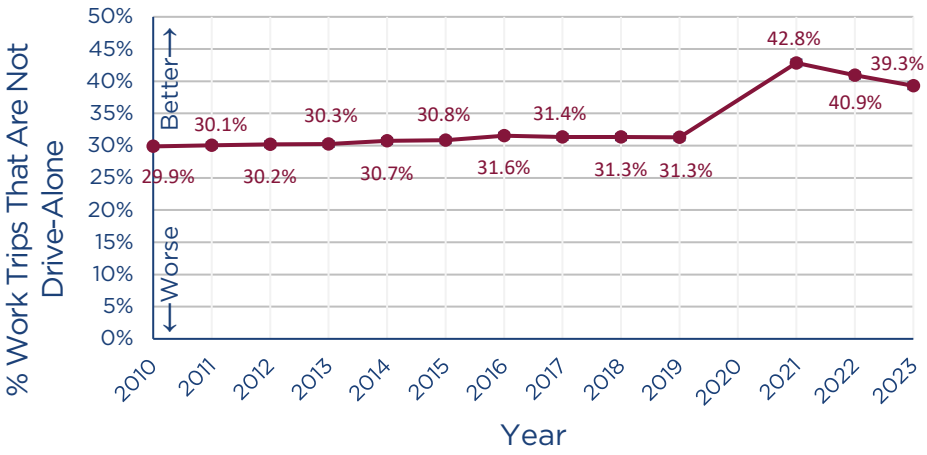


Pedestrian and Bicycle Fatalities and Serious Injuries



What share of work trips are not “drive alone”?

The percentage of workers living in the NJTPA region who do not drive alone is computed using data from the annual American Community Survey. Workers who do not drive alone may be using transit, ridesharing, walking, biking, or teleworking. Over the last several years, the share of work trips that do not involve driving alone has increased slightly.



How much excessive traffic delay do people experience?

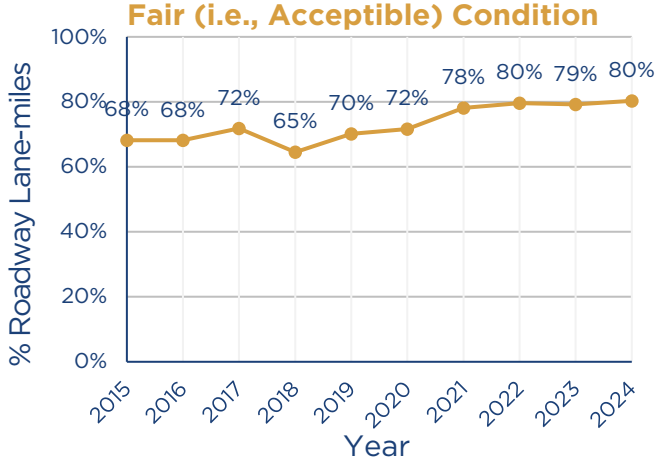
The measure of peak hour excessive delay (PHED) helps assess the amount of significant delay that people experience during weekday peak morning and afternoon hours. The term “excessive delay” is defined as the time spent traveling below the larger of (a) 60% of the posted speed limit, or (b) 20 miles per hour (mph). For instance, on a road with a 55 mph speed limit, travel slower than 33 mph. PHED is calculated for travel on roads that are on the National Highway System (NHS) in the New Jersey portion of the New York-Newark NY-NJ-CT Urbanized Area. The figures are presented on a per capita basis by dividing the amount of excessive delay (experienced by drivers and passengers) by the total urbanized population (including people who are not driving on these roads). This measure is computed using federal data based on probe readings on road segments.

Annual Hours Per Capita of “Peak Hour Excessive Delay” on NHS Roads

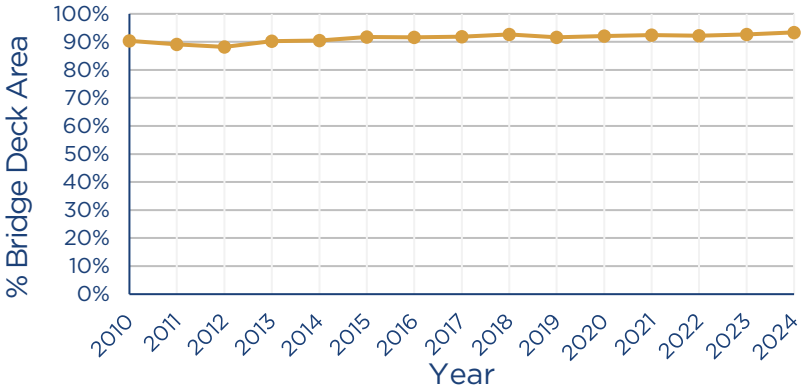
What is the condition of roads and bridges?

Pavement condition is assessed based on different pavement distresses such as roughness, rutting, faulting, and cracking. NJDOT rates the condition of pavements on and off the National Highway System (NHS). The regional measure for pavement condition is similar to the federal pavement performance measure but goes beyond the NHS roadways that are the focus of the federal measure, and uses a different definition of good and poor condition in order to be consistent with more stringent operational criteria used by the New Jersey Department of Transportation. Pavements in good or fair condition are considered acceptable, while pavements in poor condition are considered deficient.

% Roadway Lane-Miles in Good or Fair (i.e., Acceptible) Condition



% Bridge Deck Area in Good or Fair (i.e., Acceptable) Condition

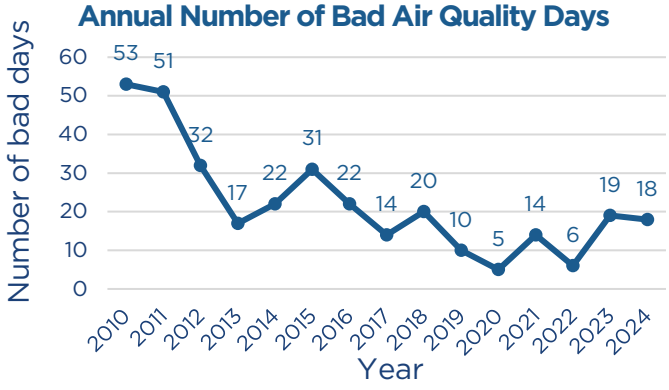


The bridge deck condition measure is used to evaluate all bridges in the NJTPA region that are recorded in the NJDOT Bridge Management System (including bridges that cross the Hudson and Delaware Rivers). Bridge condition ratings are computed every two years, based on federal definitions of good, fair, and poor condition, but the regional measure is not limited to bridges on the NHS. Bridges with decks that have a good or fair rating are deemed acceptable.

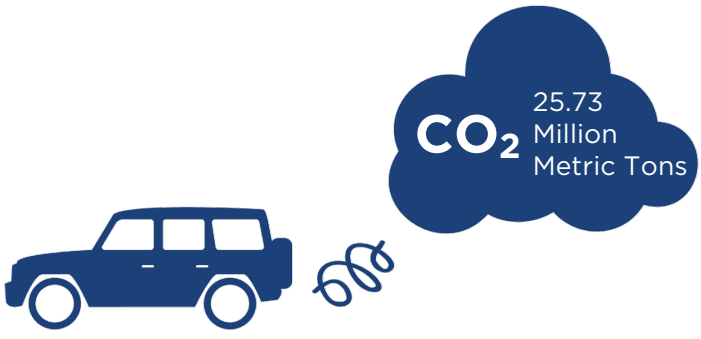
How clean is the air?

Greenhouse gas (GHG) emissions contribute to climate change, which creates risks to the region's residents due to rising seas, stronger storms, and increased health risks. GHGs have different potencies in trapping heat in the atmosphere (global warming potential). GHG emissions are expressed in terms of carbon dioxide (CO2) equivalent, and are calculated using travel and emissions modeling outputs for the NJTPA region.

Annual Number of Bad Air Quality Days



Annual Mobile Source Greenhouse Gas CO_2 Emissions in 2021



How reliable are our roads?

This measure is similar to the federal performance measure of roadway reliability and covers the NJTPA region.

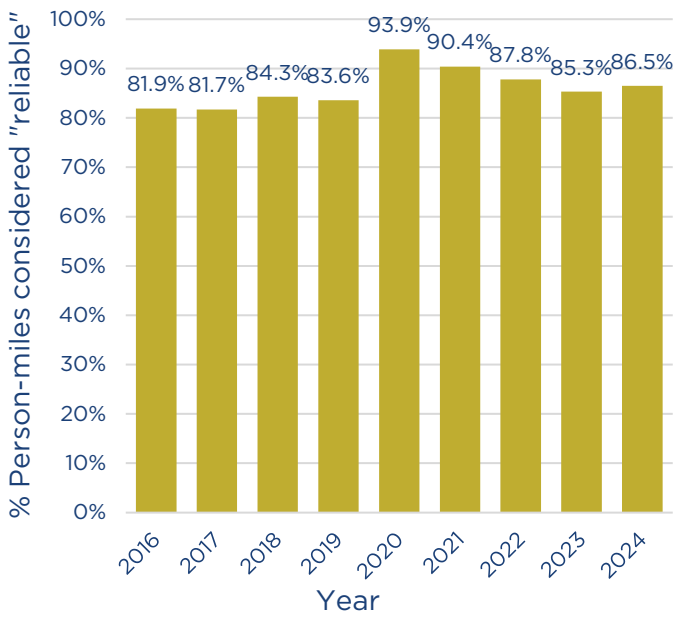
It measures the percentage of person-miles traveled that are considered reliable from a travel time perspective for two types of roadways: Interstate highways and all other roadways on the National Highway System (NHS). Other NHS roads include many of the region's urban, suburban, and rural arterials.

This measure is computed using federal data based on probe readings on segments of roadways during 15-minute reporting periods. The measure covers each day of the week, from 6AM to 8PM.

% Person-Miles Traveled Considered "Reliable"

Interstate Highways

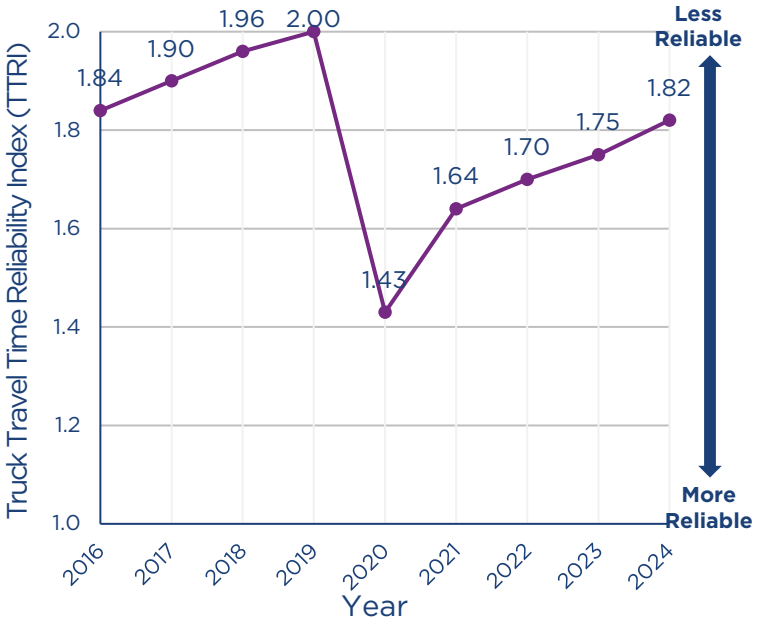
Other National Highway System Roads



How reliable is truck travel time on NJTPA Interstate highways?

The Truck Travel Time Reliability (TTRI) Index is a federally-defined index that is used to measure the reliability of travel times for freight trucks on Interstate highways. This measure is calculated here for the NJTPA region rather than the State of New Jersey as a whole. The index is calculated **such that a lower value of the index reflects less variability of travel time, meaning that trucks have more reliable travel time on the Interstate highways.**

Data to analyze this measure is based on the probe readings of trucks on segments of Interstate highways during 15-minute reporting periods, obtained from the federal government. This measure is computed based on data for each day of the week, all hours of the day.



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