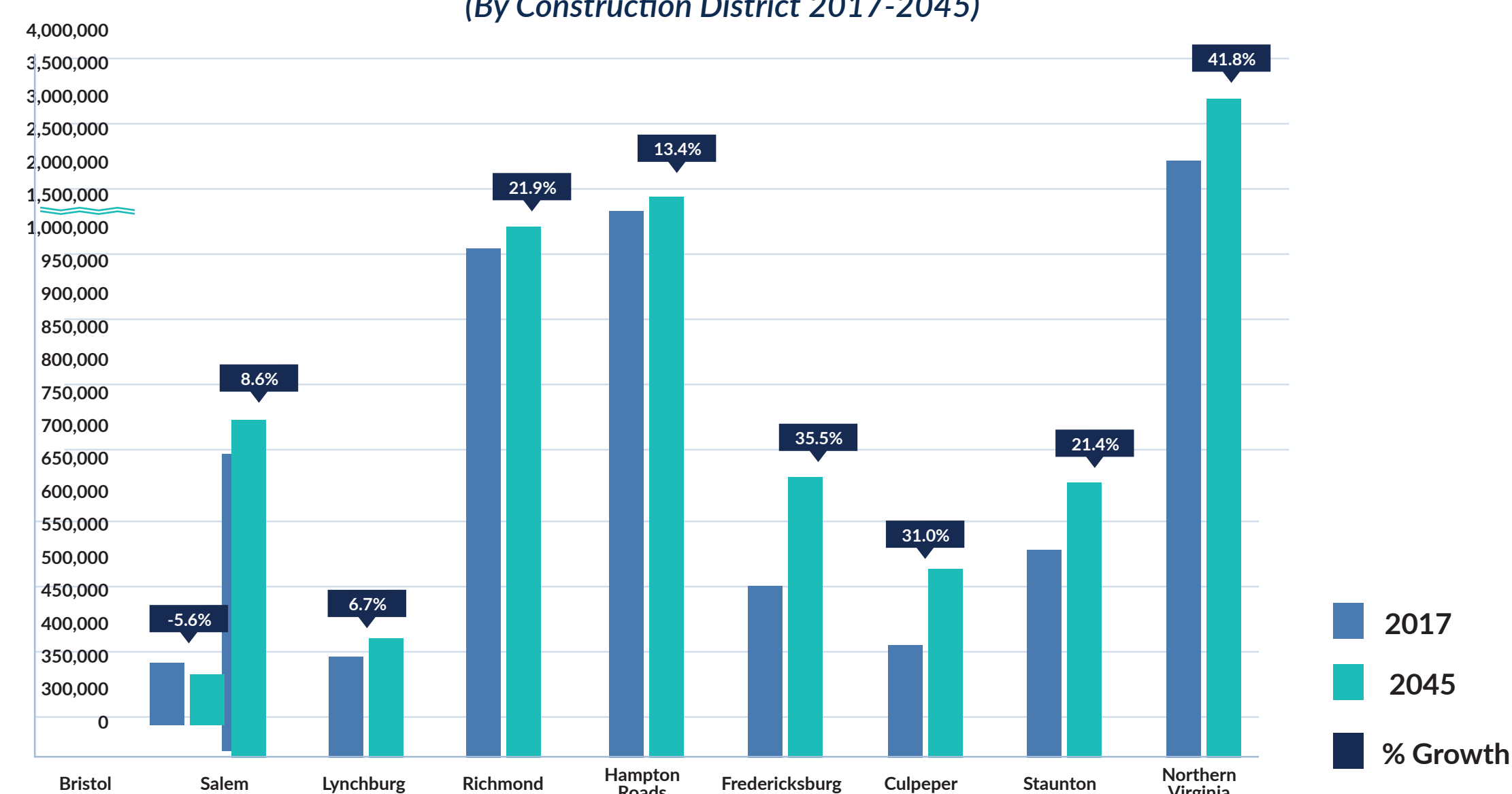
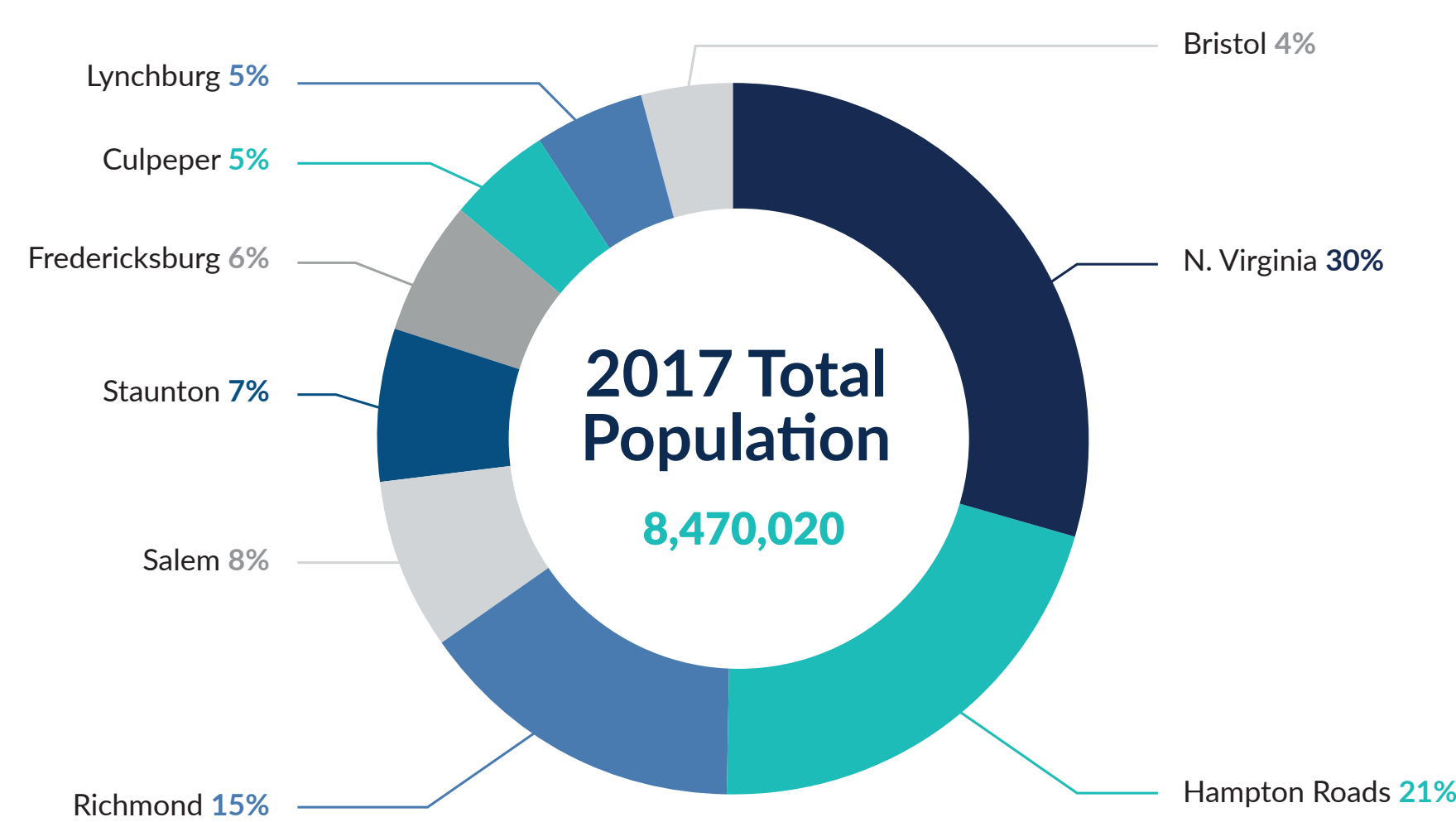
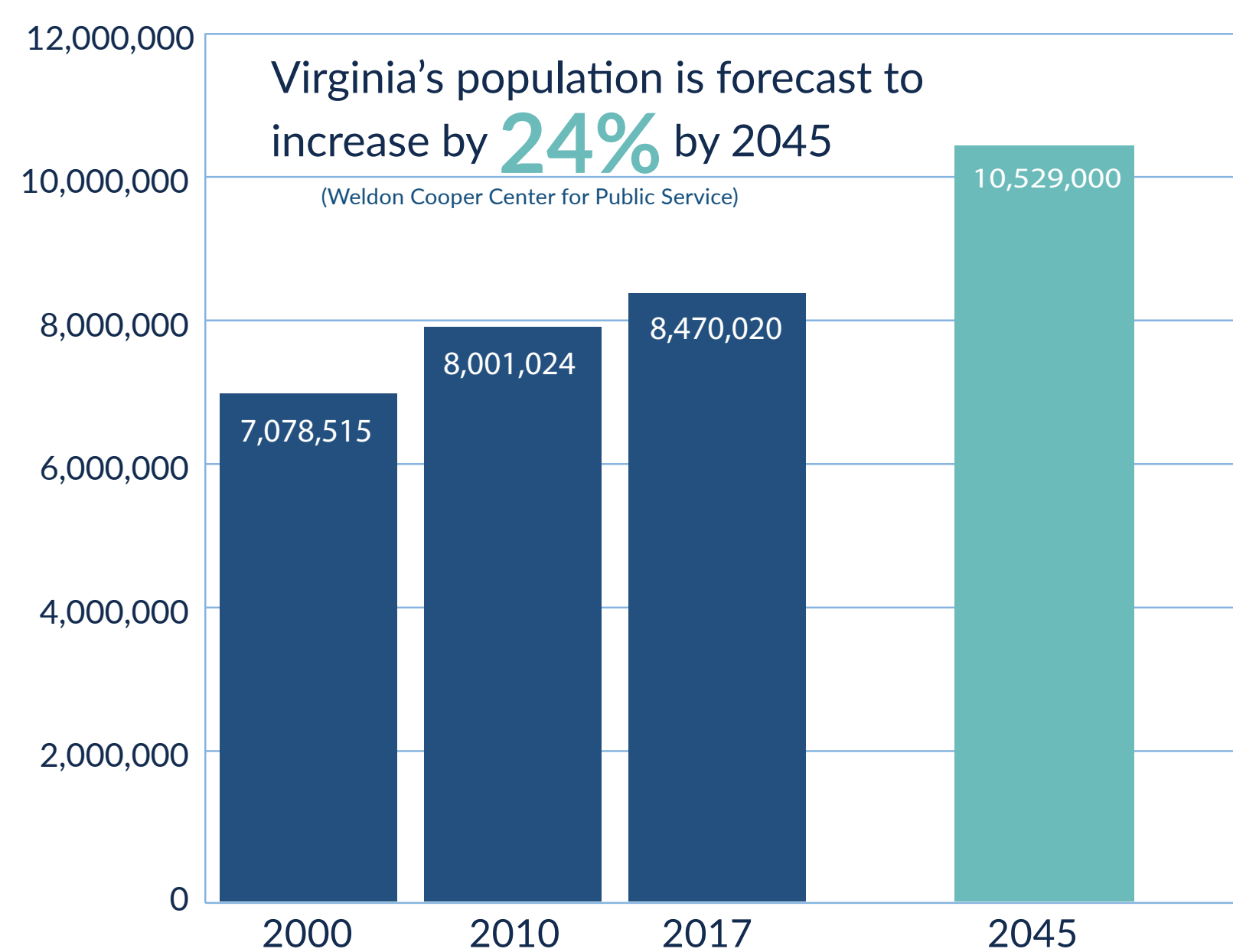


Demographic Trends

Forecast Change in Population Growth (By Construction District 2017-2045)

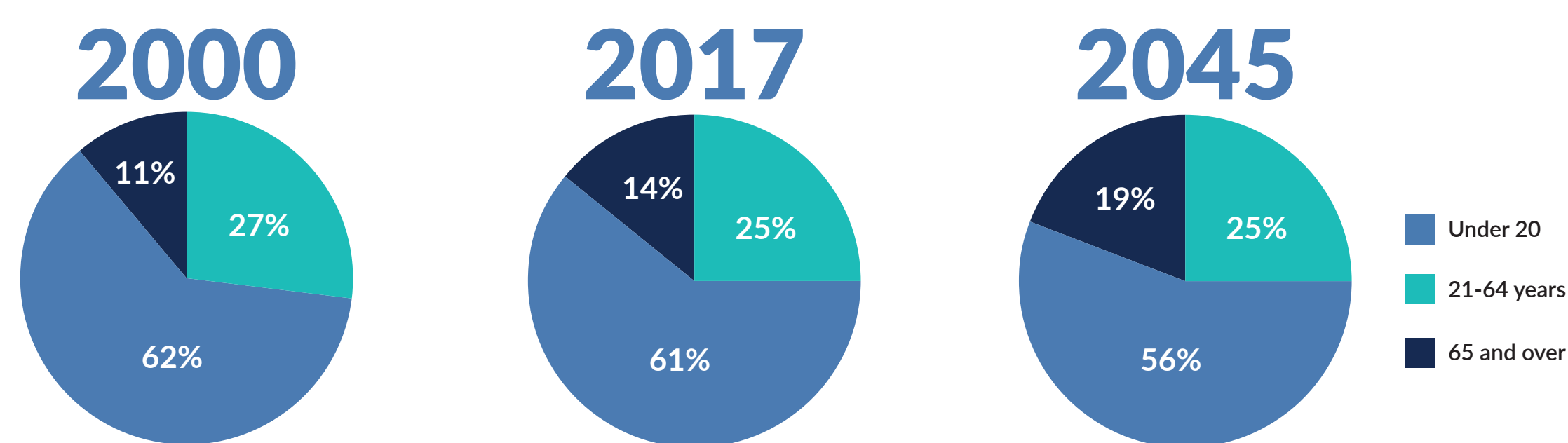


Total State Population (millions)



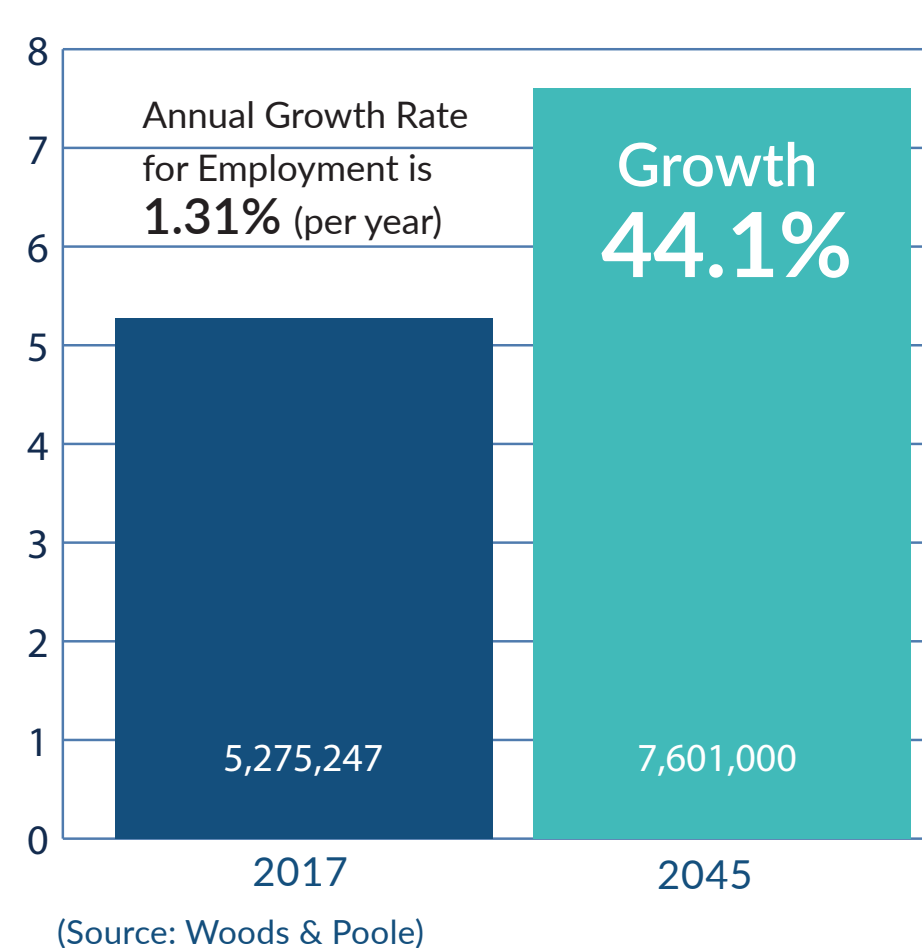
- » Percentage of Population in Construction Districts (2017 Estimates from Weldon Cooper Center for Public Service)
- » Three Construction Districts (Northern Virginia, Richmond, and Hampton Roads) account for two-thirds of Virginia's population (Year 2017)

Total Persons (by age group)



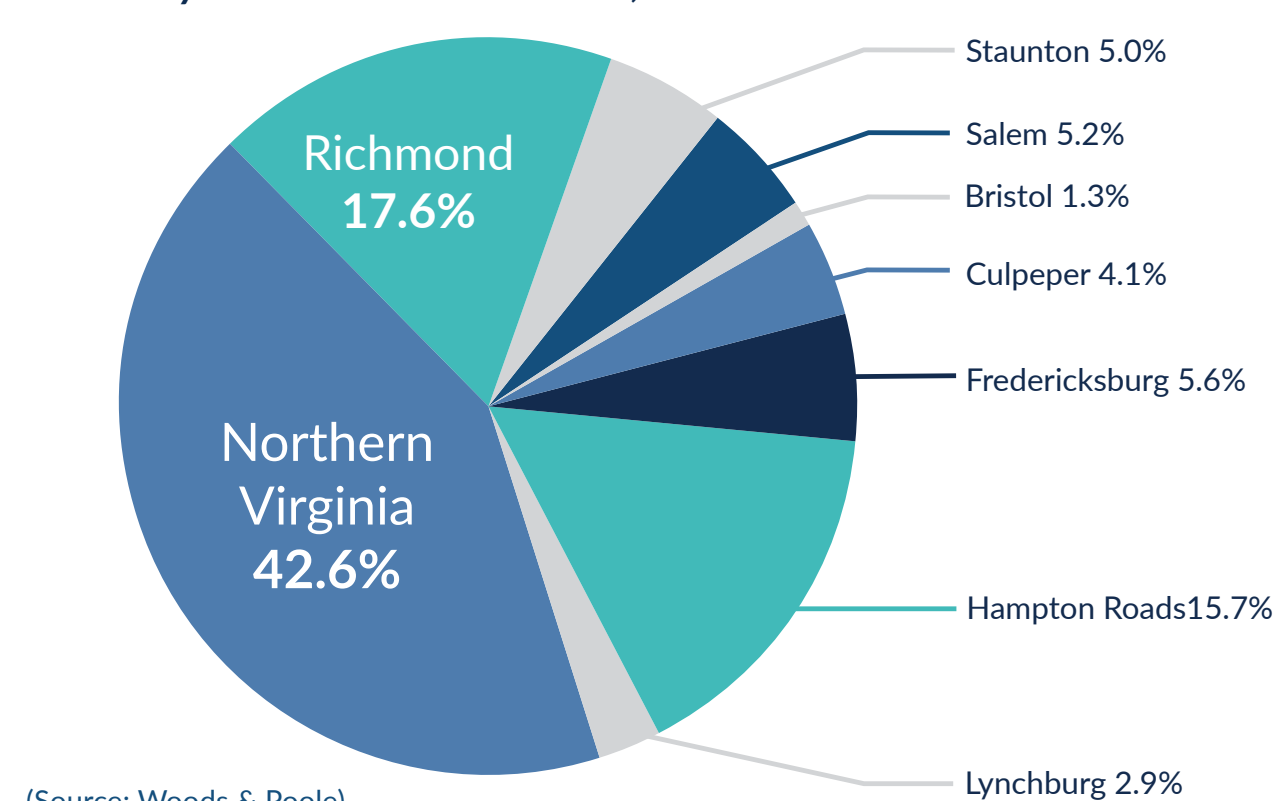
Virginia's population aged 65+ is forecast to increase from 1.27 million to between 1.98 million and 2.26 million between 2017 and 2045.

Total Employment in millions



(Source: Woods & Poole)

Employment Change by Construction District, 2017 to 2045



(Source: Woods & Poole)

Transportation Trends

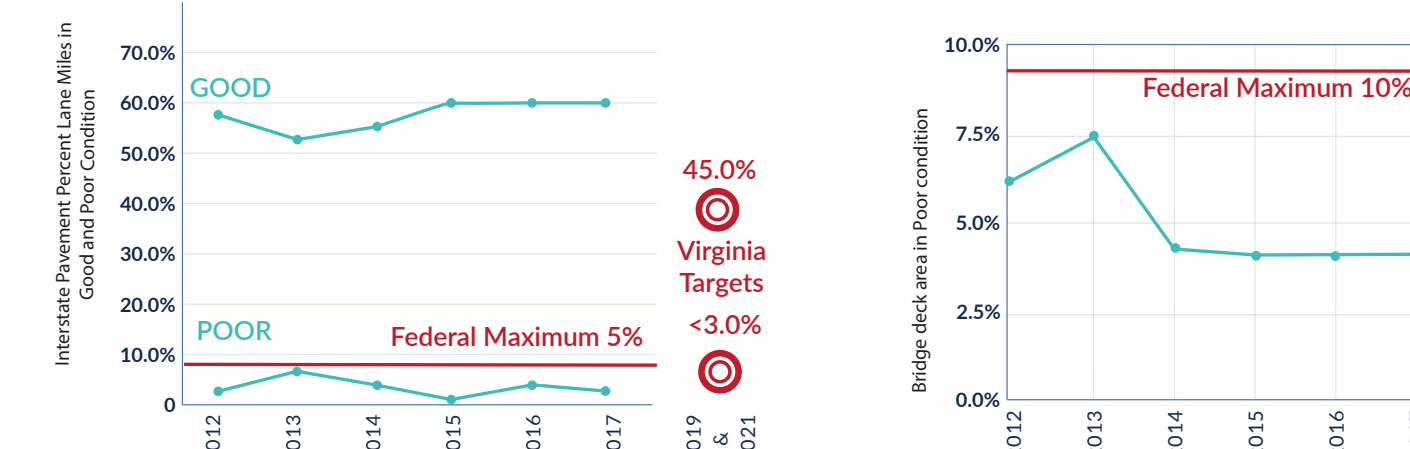
PAVEMENT AND BRIDGE CONDITION

What do we measure?

Percentage of pavement (lane miles) and bridges (deck area) in good, fair, and poor condition based on defined measurement standards.

What does the data tell us?

Pavement and bridge show trends of improved conditions in the last years.



How will we get there?



How do we measure it?

VDOT collects pavement and bridge condition data yearly. FHWA has established Good and Poor performance rating thresholds.

- » Continuous digital imaging, detailed sensor data, and automated crack detection technology are used to collect pavement condition.
- » Based on National Bridge Inspection Standards, VDOT conducts regular inspections every two years to determine bridge deck, superstructure, and substructure rating.

What are our targets?

Percentage of pavement (lane miles) and bridges (deck area) in good, fair, and poor condition based on defined measurement standards.

- » Increase the lane miles of pavement in good condition and decrease lane miles in poor condition.
- » Increase bridge deck area in good condition and decrease bridge deck area in poor condition.

TRANSIT FLEET CONDITION

What do we measure?

Percentage of revenue vehicles by asset class that have met or exceed the useful life benchmark.

- » The useful life benchmark (ULB) indicates how many years a vehicle can be in service and still be in a state of good repair (typically 12 years for a bus and 4 years for a van).
- » DRPT works with each transit provider to track asset condition and support investment decisions through a decision support tool called TransAM.

What are our targets?

Tier 1 transit providers (>100 vehicles) like VRE, WMATA, HRT develop their own targets and Transit Asset Management Plans. For Tier 2 providers (<100 vehicles) DRPT develops a Group Plan and targets.

2019 Targets

Commuter Bus: 15% meet or exceed ULB

Bus: 10% at or past ULB

Van: 25% at or past ULB

33 **11.5%** **1,156**
Tier 2 providers At or past ULB Revenue vehicles

HIGHWAY SYSTEM RELIABILITY

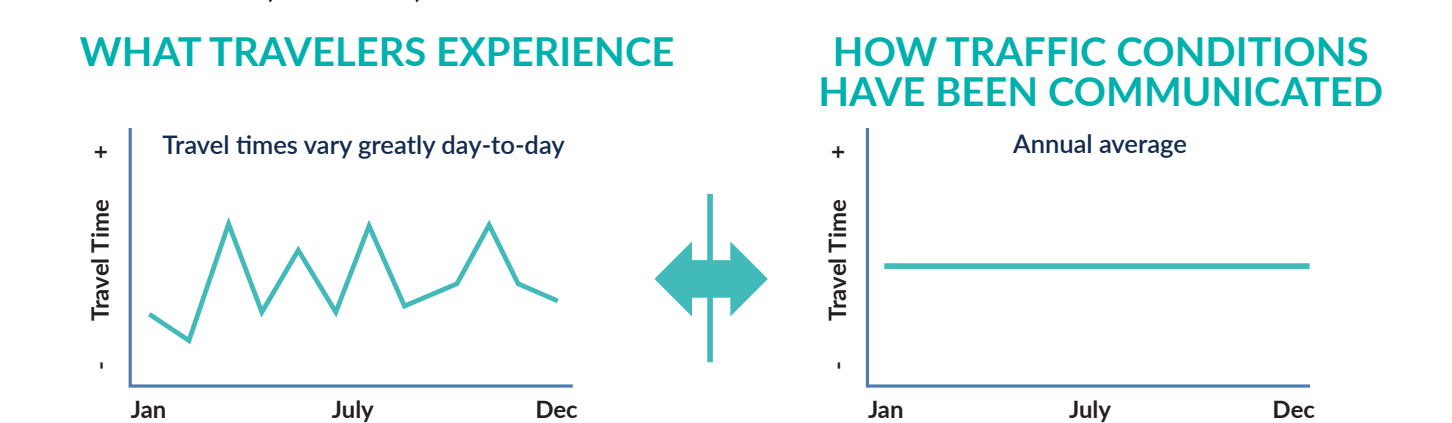
What do we measure?

Travel time reliability is the ratio of person-miles traveled on reliable segments of the National Highway System (NHS) compared to all person-miles traveled on the NHS. Truck reliability uses real truck speeds to report reliability for trucks on the Interstate system.

83%
of Interstate person-miles traveled were reliable

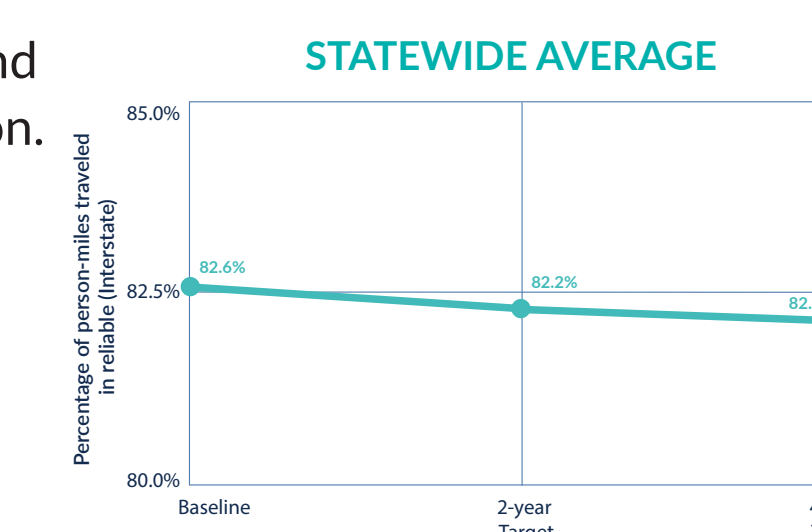
How do we measure it?

- » A road segment is determined to be unreliable if one would need to budget 50% more time compared to a typical trip to arrive on time 80% of the time.
- » Person-miles take into account the users, which include buses, autos, and trucks.



What does the data tell us?

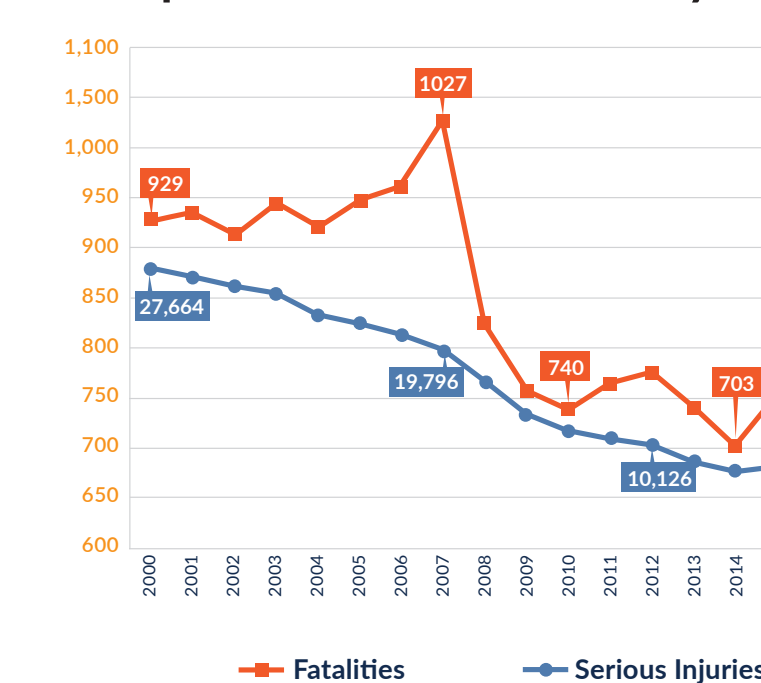
- » Reliability is impacted by traffic incidents and events, weather, work zones, and congestion.
- » Targets assume a linear growth of total person-miles traveled in future years.
- » The 2 and 4-year targets account for planned and programmed strategies aimed at minimizing reliability deterioration.



SAFETY PERFORMANCE TARGETS

Deaths on Virginia's highways and streets had been on a decline from 2007 to 2014. Due to factors such as distracted driving and growth in travel, fatalities have increased 19.9% between 2014 to 2017. Any transportation related fatality and serious injury is unacceptable.

Increasing vehicle miles traveled (VMT) and other socio-economic factors are shifting safety trends. To promote actions toward zero deaths, Virginia sets annual safety targets to evaluate progress toward fatality and serious injury reductions.



What do we measure?

- » Number of fatalities
- » Fatality rate (per 100 million VMT)
- » Number of serious injuries
- » Serious injury rate (per 100 million VMT)
- » Number of non-motorized fatalities and serious injuries

How will we get there?

Most crashes are the result of behavioral emphasis areas, such as "Impaired Driving" or "Speeding." Infrastructure improvements may prevent or reduce the severity of crashes. VDOT is developing a data-driven process to help set targets and make investment decisions. This process will consider how real projects are reducing crashes and crash severity based on actual data, not just models.