

Road Maintenance and Preservation (MaP)

Putting Additional Resources to Work

With legislative action in June 2016, beginning with the 2018-19 budget and concluding with the 2027-28 budget, the General Assembly concurred with the Secretary of Transportation and voted to cap the expenditures from the Motor License Fund going toward the State Police budget.

- Over the 10-year period from 2018-19 to 2027-28, 4% additional revenue each year will accrue to **PennDOT highway and bridge construction totaling an estimated \$2.1 billion**. This is 4% of the 2017-18 PSP allocation, \$802 million.
- Of this, **\$1 billion will be allocated to county maintenance** over the 10 year period to support **basic system preservation needs** by supplementing the 67 county budget allocations which haven't changed since 2005-06.
- Another **\$1.1 billion** over this period will go toward **highway and bridge capital projects**. Of this, \$500 million will be allocated to an **Interstate preservation and reconstruction program**, bringing that total program, begun in 2016, to \$1 billion over the next 10 years. Another \$600 million will go toward highway and bridge capital projects, with priority given to **rehabilitation and reconstruction needs** identified through our district and regional planning efforts.
- **This preservation initiative and additional maintenance funds to the counties will allow all maintenance projects listed in Act 89's Decade of Investment to be completed by 2028.**

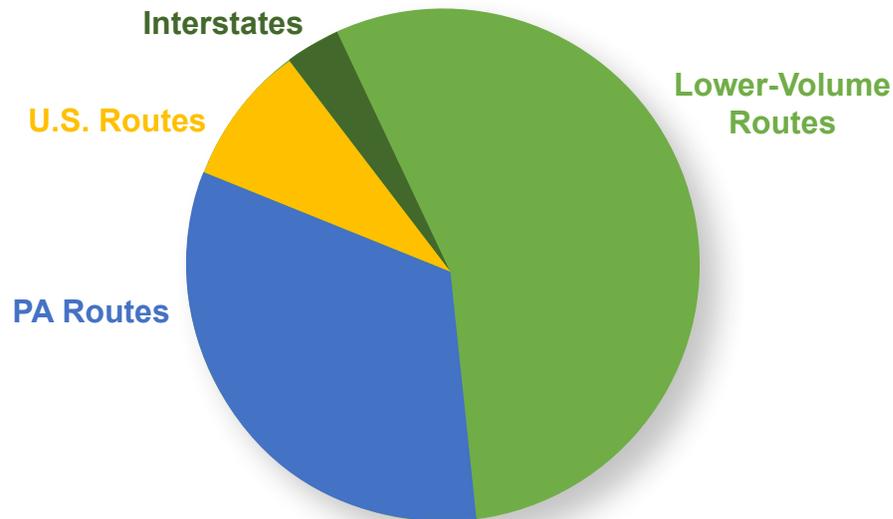
Maintenance and Stewardship

- Though maintenance on all of our assets is vital, resources have often been directed to higher-volume roadways.
- Maintenance funding for our county budgets has been flat at \$1.3 billion since 2006, making it even more difficult for our workforce to perform basic maintenance on cycles that allow for longest asset life.
- To maximize available funding and continually improve our year-round operations, county staff have aggressively managed their flat budgets over the past decade in such a way to maximize every maintenance dollar.
- A County Transformation Program was launched in 2015, re-emphasizing and reinvigorating initiatives over the previous decade **making possible \$1.7 billion in maintenance projects by contract** from 2012-13 through 2028.
- Examples of **how our staff are achieving these efficiencies** are sharing services and equipment more broadly, optimizing snow-plow routes and reviewing staffing to efficiently meet their core mission.
- To complement local efficiencies, the department is freeing up funds for its county operations by centralizing Intelligent Transportation System (ITS) budgeting, assisting with statewide strategic investments.
- Act 89 is making it possible to increase our focus on the roads where many Pennsylvanians live and that connect our communities.

Maintenance and Stewardship continued:

- Of the nearly 40,000 miles of PennDOT-maintained roads, more than half are lower-volume routes. Of those, more than 16,000 are in rural areas with a population less than 5,000.

PennDOT-Maintained Mileage



Sustainable Focus

- Department forces will aggressively address relatively low-volume roads with a reinvigorated initiative to use recycled asphalt to preserve and upgrade the condition of these roads.
- Recycled Asphalt Paving (RAP), which repurposes materials from projects onto other roadways by mixing ground millings with oil, allows us to **pave less-traveled roads that otherwise would not be paved, or to reinforce roadway shoulders.**
- RAP is an environmentally conscious method that saves the need to purchase new virgin material, stretching dollars to impact more miles of secondary roadways.
- In one PennDOT region where RAP is being deployed, they estimate roughly **\$5.4 million in annual savings due to RAP usage.**
- In 2017 the department is developing a plan for RAP usage, largely on its lowest-traffic roadways, with expanded RAP usage occurring in 2018.

Local Bridge Bundling Program for Counties Underscoring Transportation's Value

- The department will work with county governments to establish a program making opportunities available for counties who have taken steps to enhance their transportation networks by passing resolutions to collect the \$5 Vehicle Registration Fee enabled by Act 89.
- This supports the 6,485 locally owned bridges statewide, 2,115 of which are structurally deficient.
- Initially, \$2 million will be reserved for each county that has passed a resolution, with a 50% local match commitment required to secure the program funding.
- Any remaining funds after an initial offering would be made available to the rest of those same counties again. If any funds remain after that offering, they would be used for other Local Bridge Bundling programs.

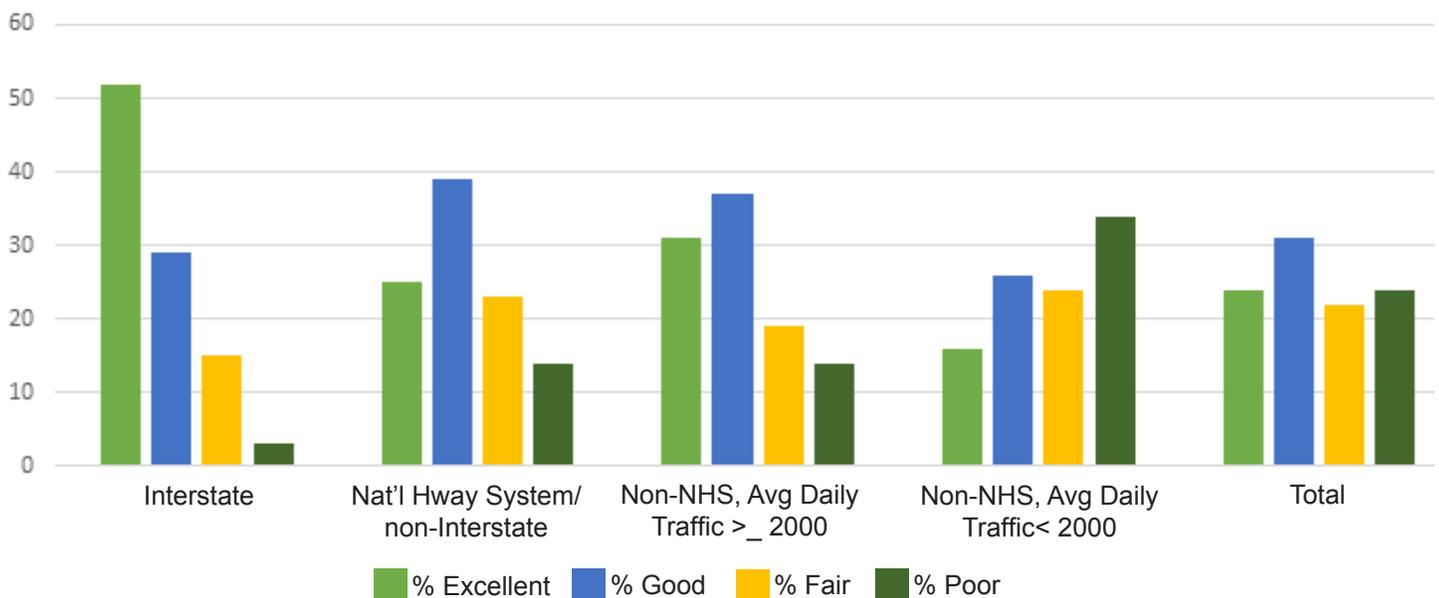
The Need: Interstates

- While the majority of Pennsylvania Interstates are in-cycle for resurfacing, 59% are out of cycle for reconstruction.
- Interstates should be considered for reconstruction every 40 years. More than 1,600 segment miles of Interstate, or **59%, are older than 40 years**.
- Reconstruction is \$2.6 million per lane mile and \$5.2 million if the segment mile of interstate has two lanes. The cost for a resurfacing is roughly \$1 million per mile for a two-lane interstate.
- Of the 2,691 PennDOT-owned Interstate bridges, **nearly 40% have exceeded their original 50-year design life and 44 of them are older than 65 years**.

The Need: Lower-Volume Roads

- There are **18,000 miles of PennDOT-owned, low-volume bituminous roadways** that are maintained with seal coating (oil and chip) and resurfacing.
- The desired cycle to **seal coat is every 4-7 years** and complete structural resurfacing every 15-20 years.
- More than 3,200 miles (18%) have not been seal coated in **7+ years**, and more than 4,300 miles (24%) **have not had structural resurfacing in 20+ years**.
- Some miles are out of cycle in both categories, which means more than 6,900 (39%) miles of these roads are out of cycle.
- The cost to seal coat is \$24,700 per mile; resurface is \$101,400 per mile; and rehabilitation is \$910,000 per mile.
- Of the PennDOT-maintained roads that aren't Interstates or on the National Highway System, **27% are rated as "Poor"** on the International Roughness Index which rates pavement smoothness.

PA Roadway International Roughness Index (IRI) Ratings



Act 89 Progress

Pennsylvania has roughly as many state-maintained miles as New England, New York and New Jersey combined – 40,000. For our **fifth-largest roadway system** and **third-largest number of bridges**, Act 89 has made critical improvements possible:

- Construction contracts increased to \$2.4 billion annually compared to roughly \$1.5 billion possible without Act 89.
- Structurally deficient bridge number cut to 3,512 from a high of 6,034 in 2008.
- Despite this progress, with our harsh winters, aggressive freeze-thaw cycle and high average bridge age, **Pennsylvania is still among the states with the highest number of structurally deficient bridges.**

Projects:

- As of February 15, more than 2,682 projects were completed or in progress that were made possible or accelerated by Act 89.
- **Full Act 89 implementation and reinvestment of Motor License funds allows PennDOT to program the maintenance-related Act 89 projects over the next 10 years.**
- The public can view all active and planned projects, including those accelerated or made possible by Act 89, at www.Projects.PennDOT.gov.



Decade of Investment Projects

