

Regional Projects

Estimate & Funding Record for
Active and Recently Completed Projects

How to Read a Project Page

Project → **UPC 13551 - Rte 360 Widening**

Sponsor → Hanover County



← Pending Application

Fiscal Year & Notes →

- Old Project (pre-2004)
- Scope expanded over time
- Originally full TPO funding

TPO share →

- 45% funded by TPO

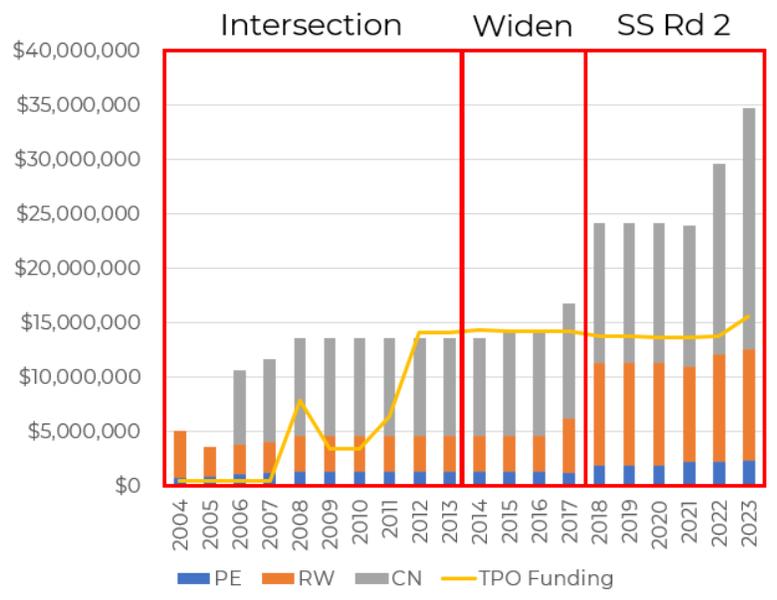
Cost change →

- **156%** increase in cost since full award (FY12)
- TPO funds **15%** above estimate at selection

Fund change →

- Locally administered

Administration



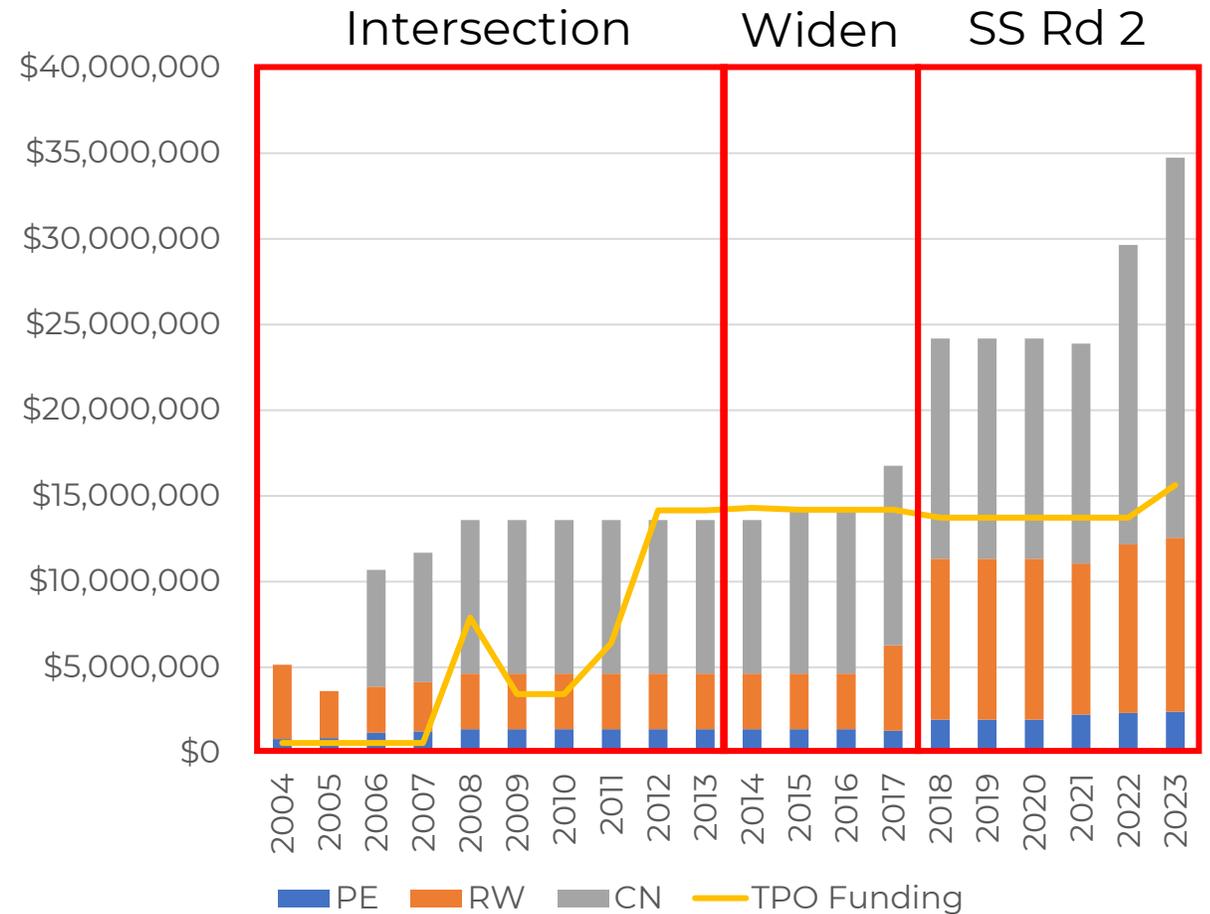
← History of Estimate by Phase and Year, TPO funding



UPC 13551 - Rte 360 Widening

Hanover County

- Old Project (pre-2004)
- Scope redefined over time
- Originally full TPO funding
- 45% funded by TPO
- **156%** increase in cost since full award (FY12)
- TPO funds **15%** above estimate at selection
- Locally administered

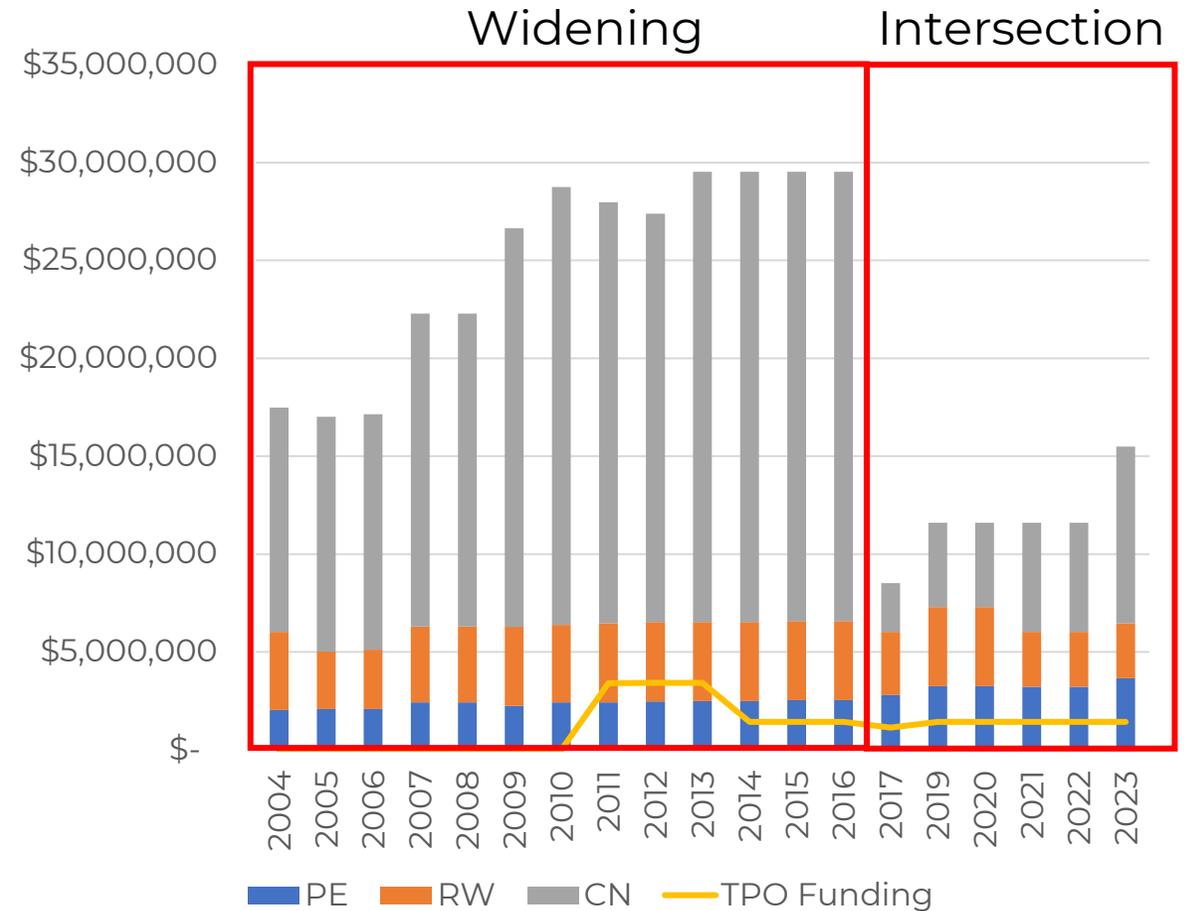




UPC 15955 – Rte 1 Intersection Imprvmnt

City of Richmond

- Old Project (pre-2004)
- Scope change
- 12% funded by TPO
- **45%** increase in cost from rescope estimate (2017)
- **0%** change in TPO funding since rescoping
- VDOT administered

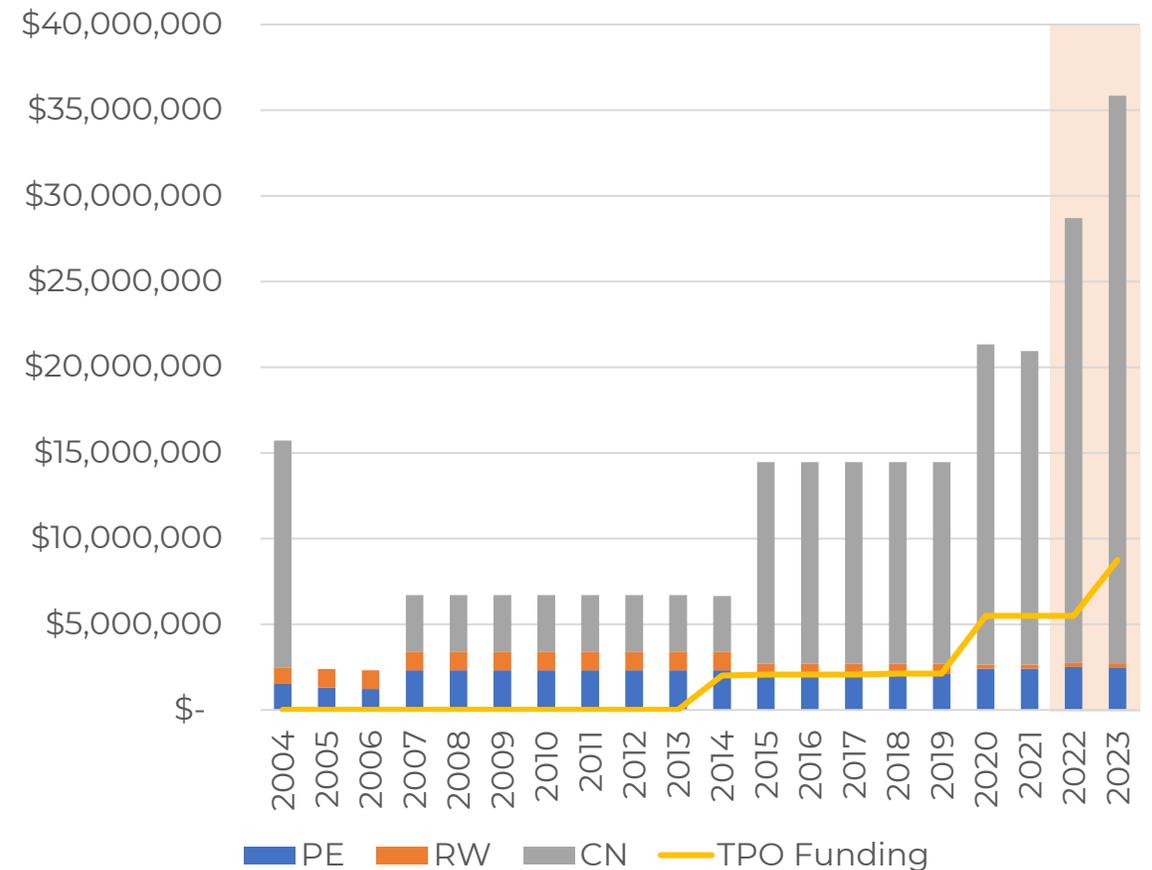




UPC 15958 – Commerce Rd Widening

City of Richmond

- Old Project (pre-2004)
- Selected in FY 2014
- Bid previously (post-bid history highlighted)
- 24% funded by TPO
- **439%** increase in cost since selection
- TPO funds **32%** above original full estimate
- Locally administered

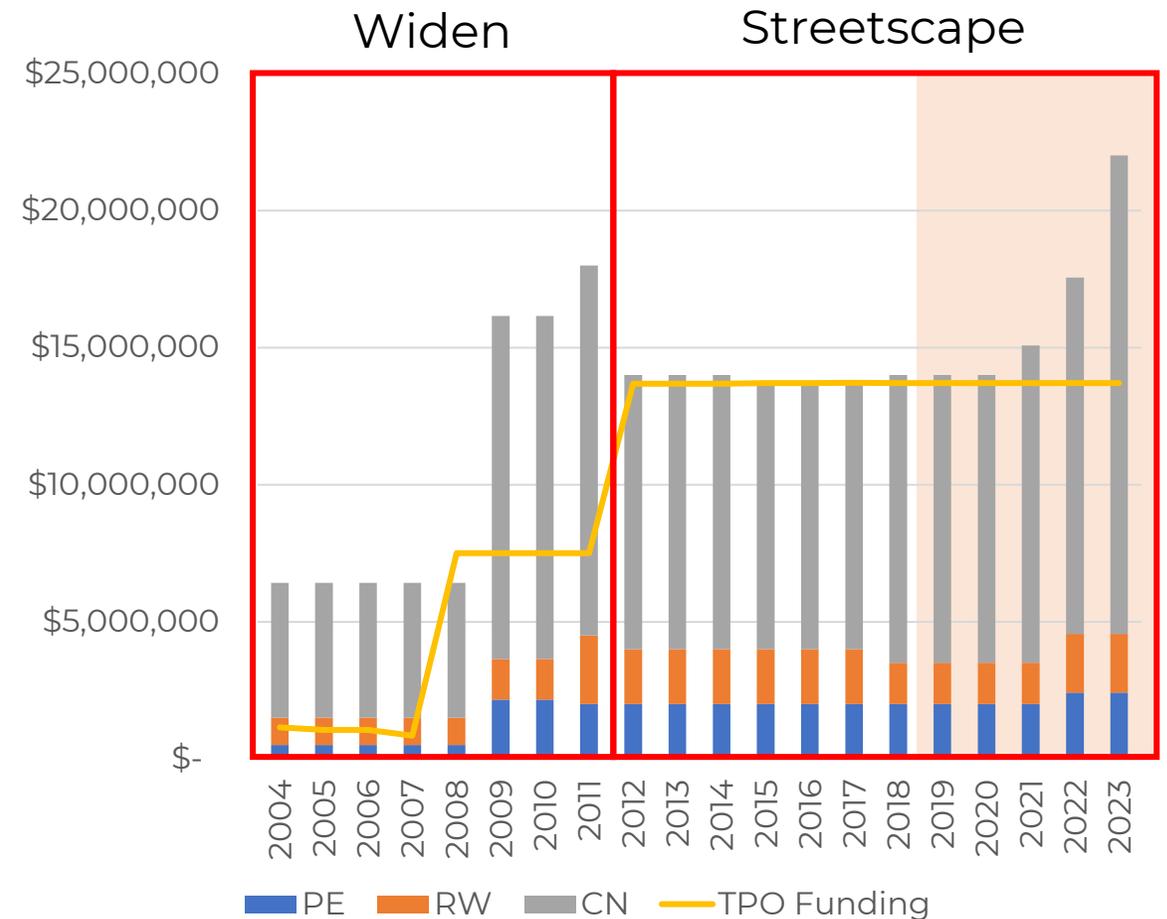




UPC 19035 – Jahnke Rd Improvements

City of Richmond

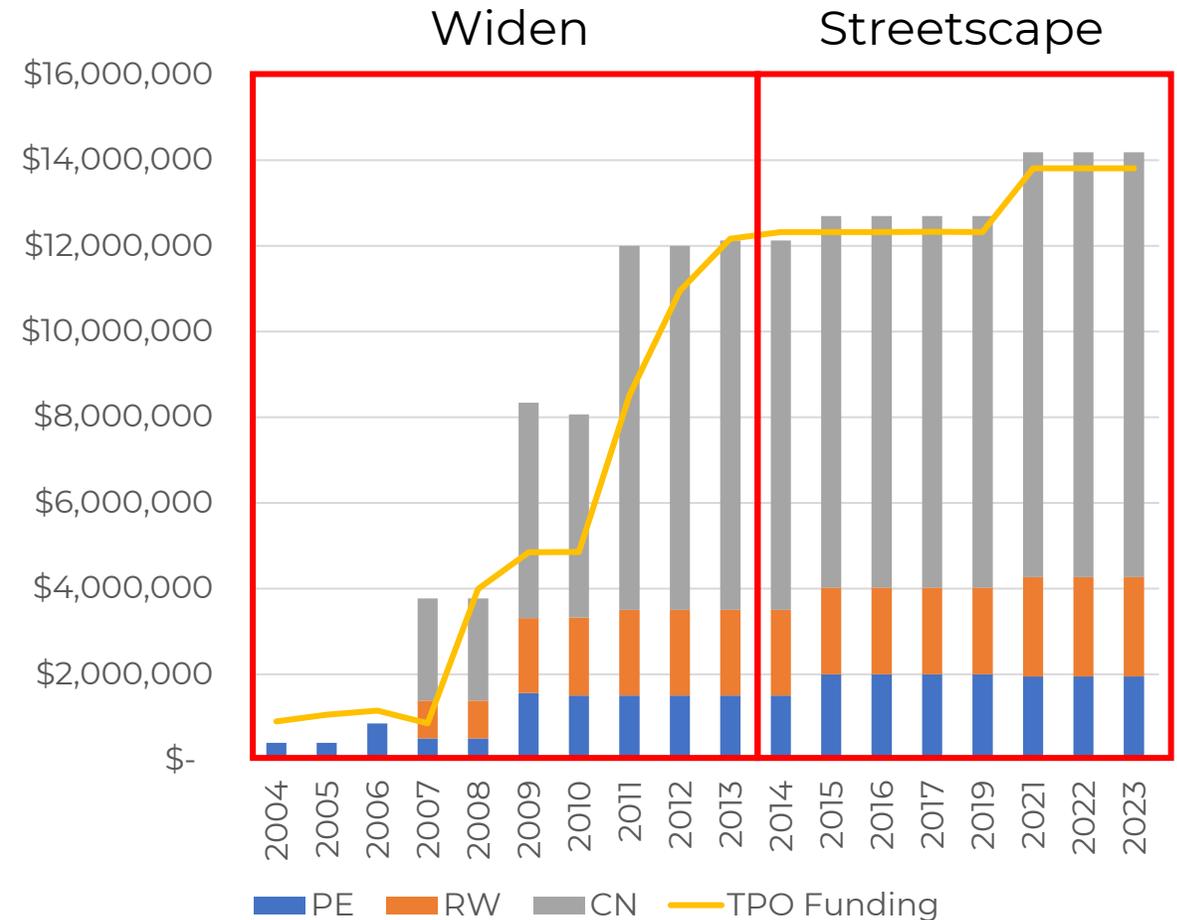
- Old Project (pre-2004)
- Major scope change
- Bid previously (post-bid history highlighted)
- 62% funded by TPO
- **243%** increase in cost since full award (FY08)
- TPO funds **114%** above original estimate
- Locally administered



UPC 19036 – Forest Hill Ave

City of Richmond

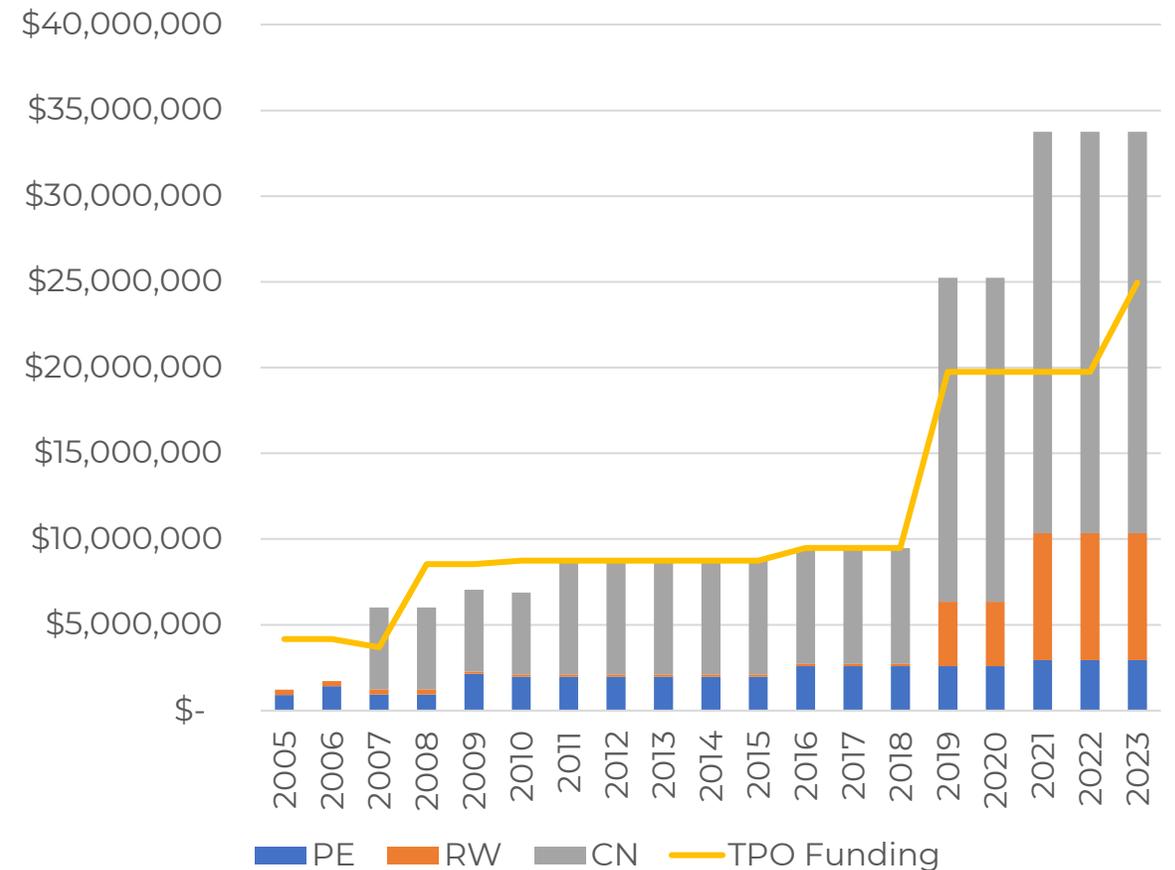
- Old Project (pre-2004)
- Major scope revisions
- Earliest estimates PE only
- 97% funded by TPO
- **276%** increase in cost since first full estimate; **17%** since rescoped
- TPO funds **166%** above first full estimate; **14%** above rescoped estimate
- Locally administered



UPC 50528 & 50529 – Three Chopt Rd

Henrico County

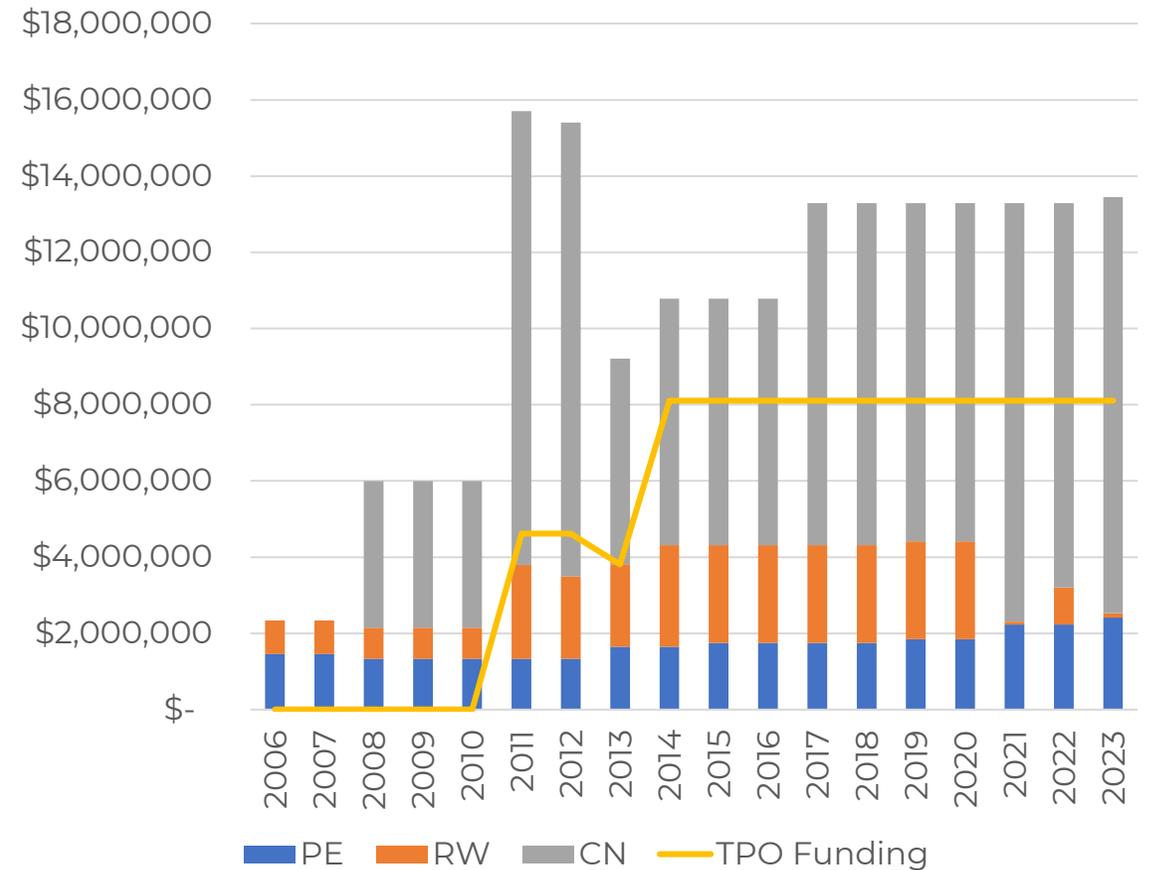
- Old Project (pre-2004)
- Phases split into 2 UPCs
- 74% funded by TPO
- **461%** increase in cost since first full estimate
- TPO funds **315%** above first full estimate
- Locally administered



UPC 60933 – Dabbs House Rd

Henrico County

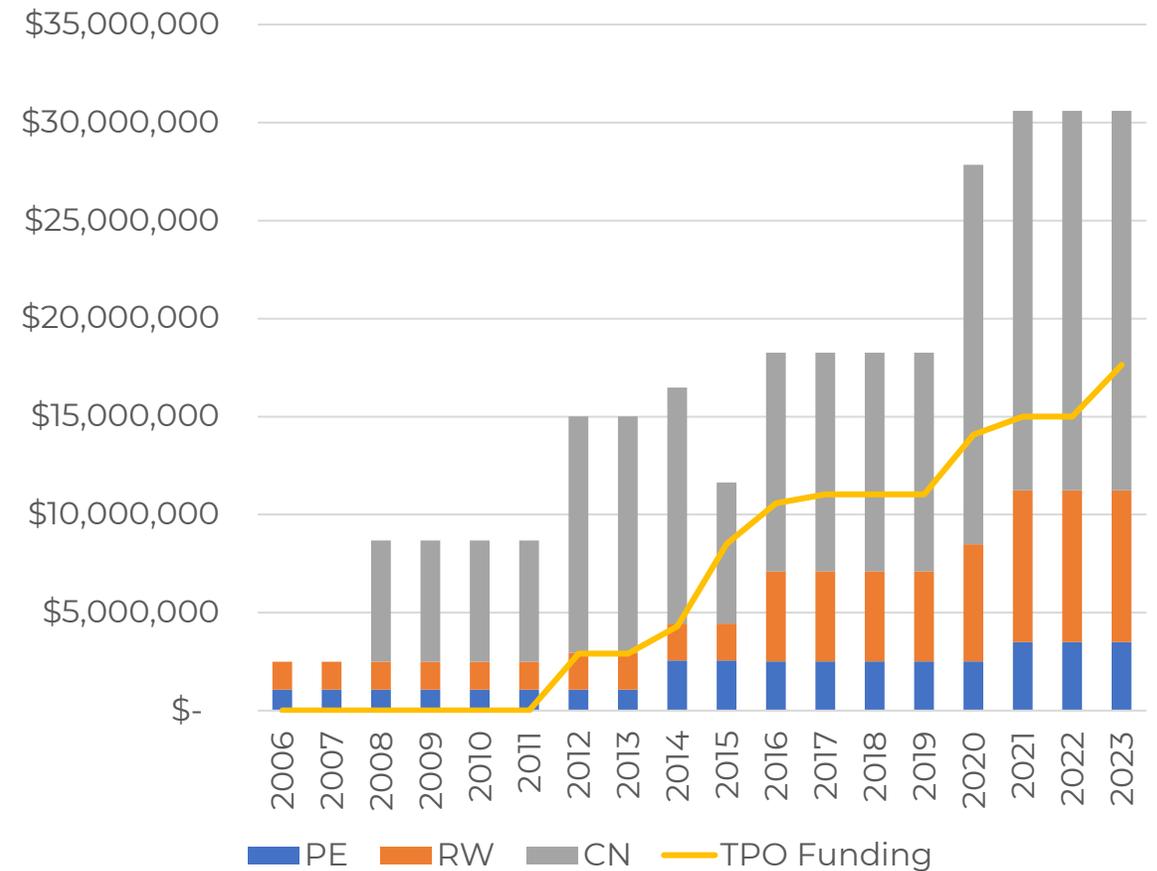
- FY 2006 project
- FY 2011 TPO selection
- 60% funded by TPO
- **14%** decrease in estimate since selection
- **76%** increase in TPO funding awarded
- Locally administered



UPC 60934 & 104148 – Sadler Rd

Henrico County

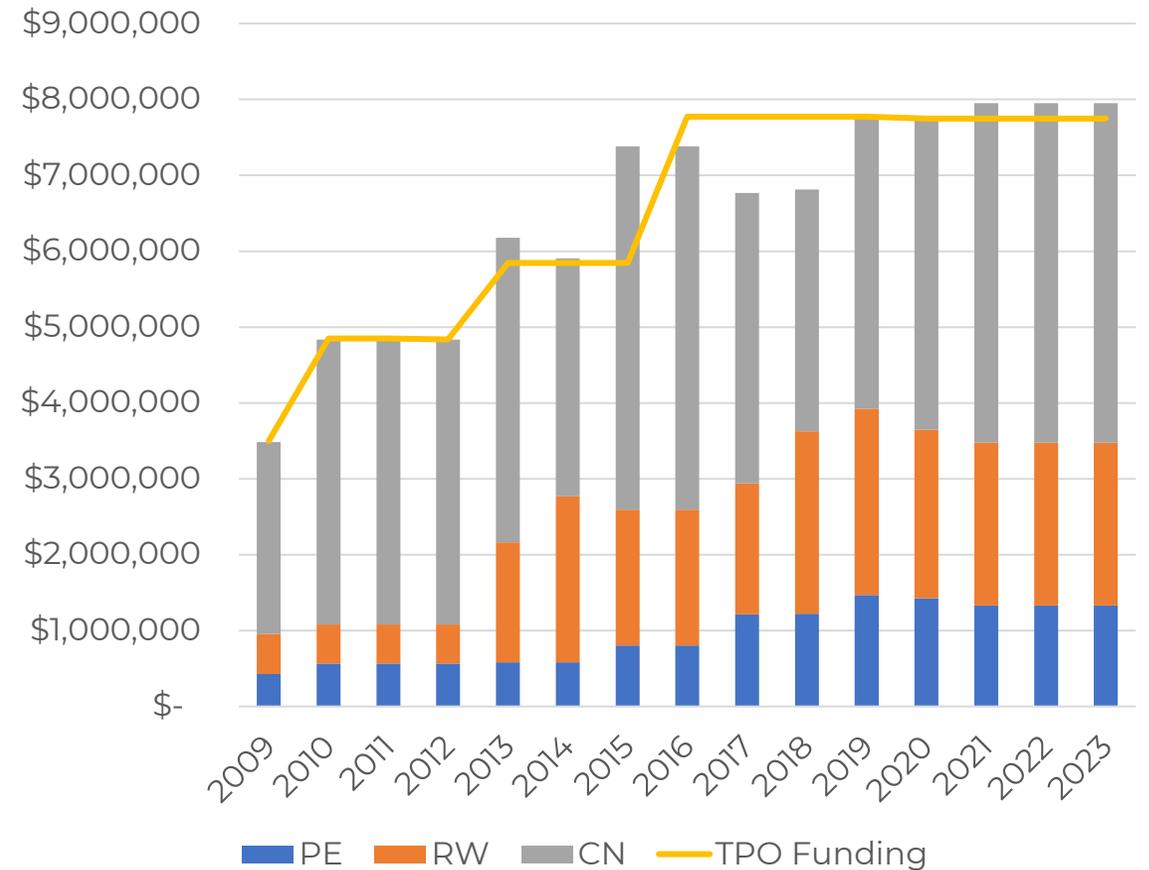
- FY 2006 project
- FY 2012 TPO selection
- Phases split into 2 UPCs
- 58% funded by TPO
- **104%** increase in cost since selection
- TPO funds **18%** above full estimate at selection
- Locally administered



UPC 81667 – Creighton & Cold Harbor

Hanover County

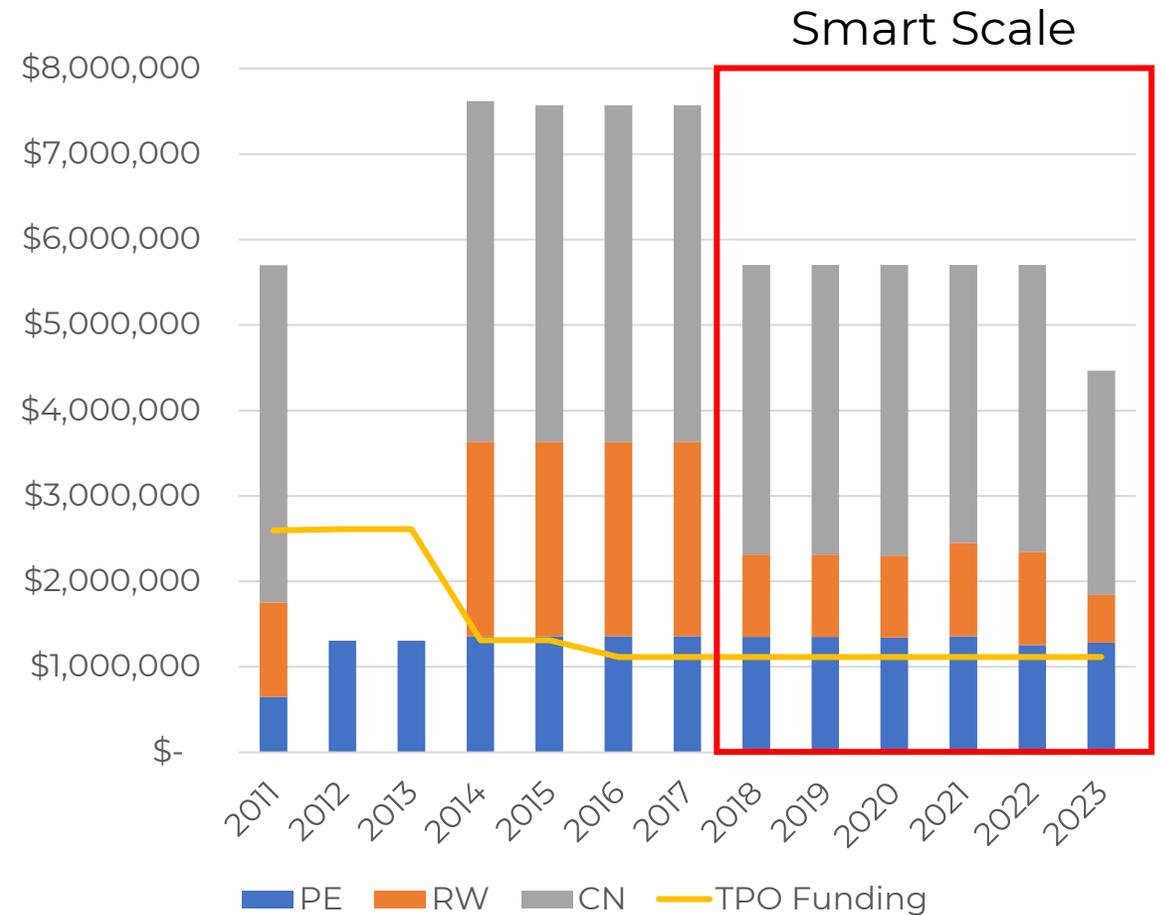
- FY 2009 project
- 97% funded by TPO
- **121%** increase in cost since selection
- TPO funds **120%** above estimate at selection
- Locally administered



UPC 92652 – Rte 155 Widen Shoulders

New Kent County

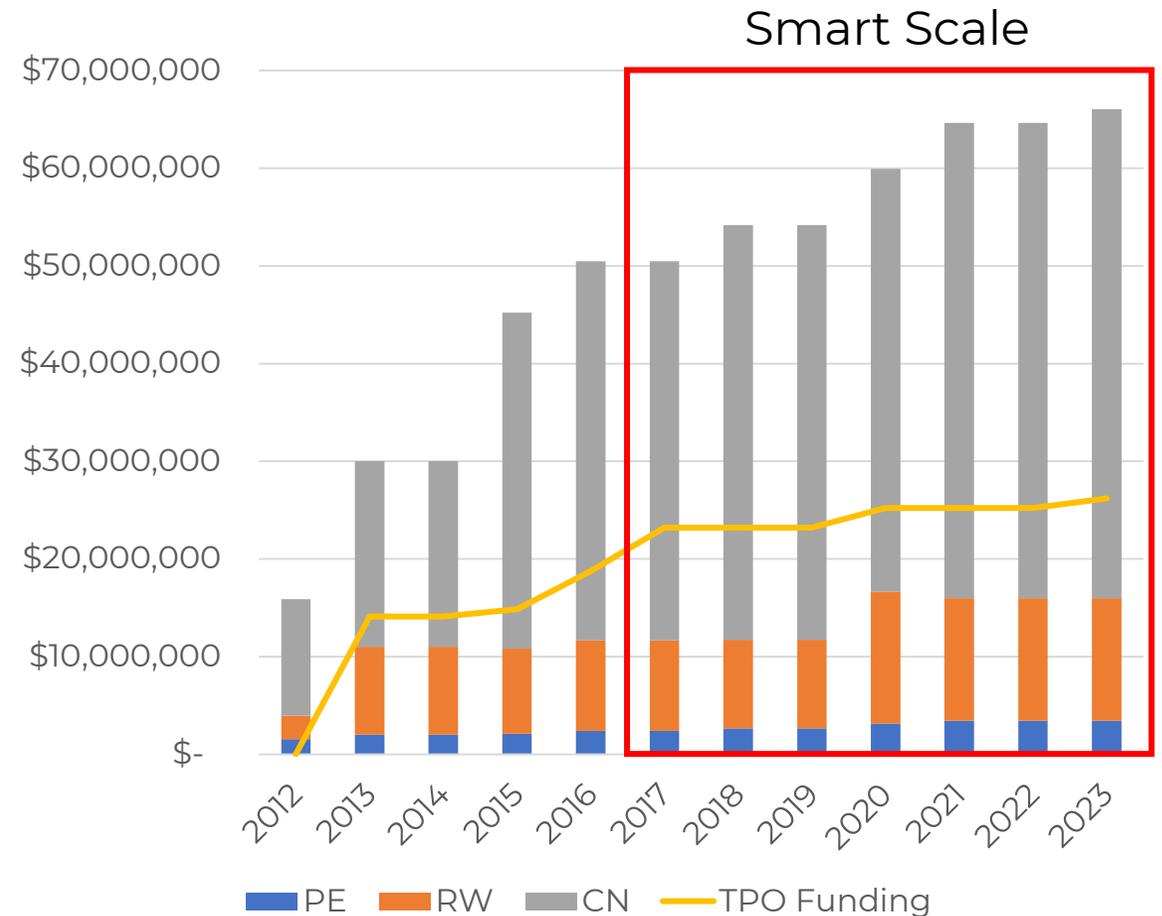
- FY 2011 project
- TPO funding transitioned to PE only
- 25% funded by TPO
- **22%** decrease in cost since TPO selection
- TPO funds **57%** below original award
- VDOT administered



UPC 101020 – Rte 10 Superstreet

Chesterfield County

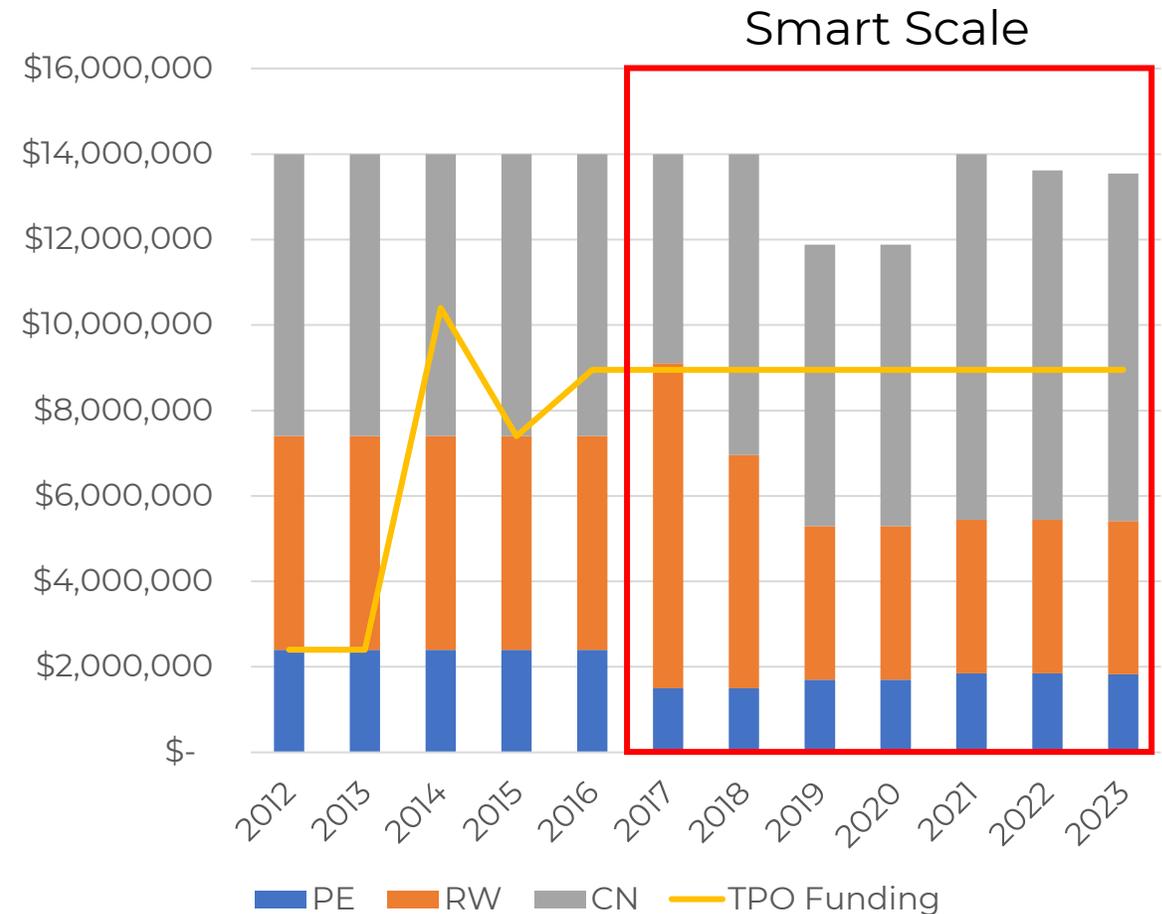
- FY 2012 project
- FY 2013 TPO selection
- Smart Scale project
- 40% funded by TPO
- **120%** increase in cost since selection
- TPO funds **86%** above original award
- Locally administered



UPC 101034 – Parham & Patterson

Henrico County

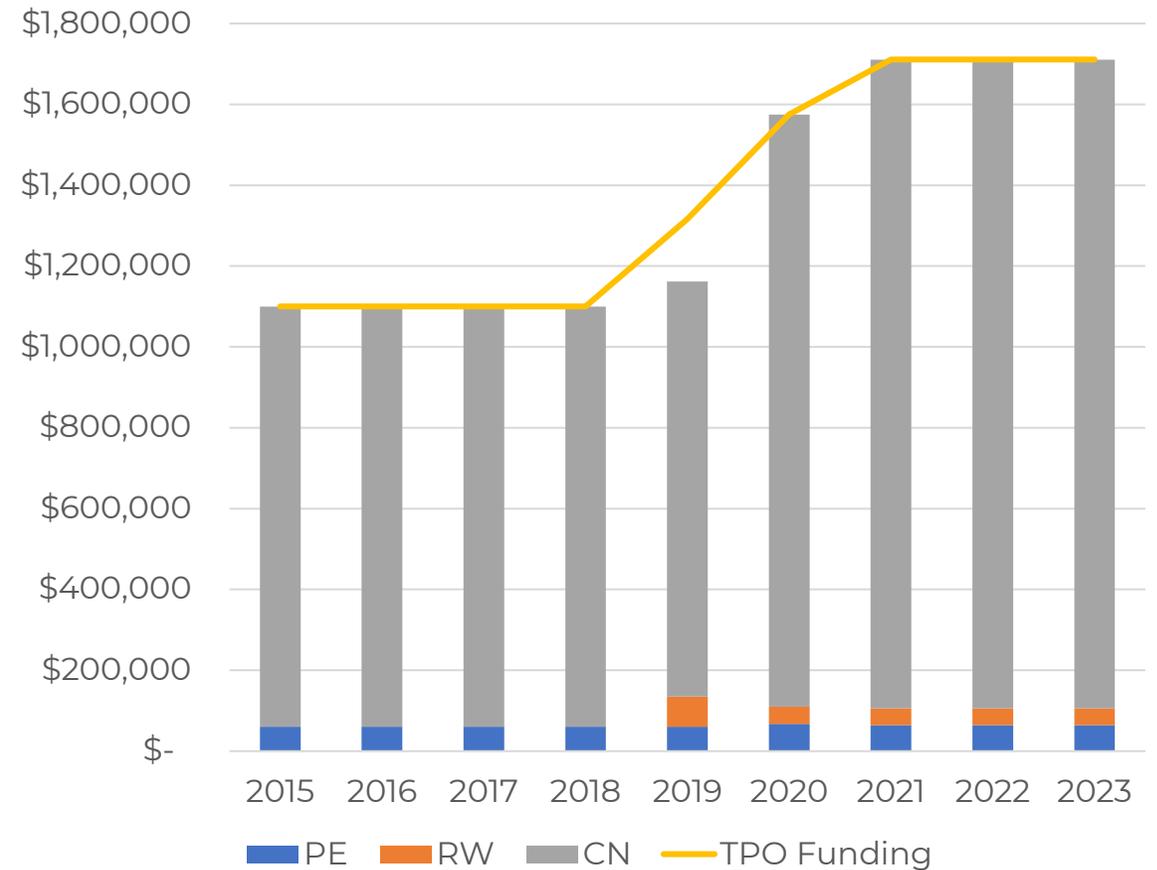
- FY 2012 project
- Smart Scale Rd 1 project
- PE funding only in first year
- 66% funded by TPO
- **3%** decrease in cost since selection
- **14%** decrease in TPO funding awarded from peak (FY14)
- VDOT administered



UPC 103393 – Trolley Line Trail

Town of Ashland

- FY 2015 project
- Split from older project (FY11)
- 100% TPO funded
- **55%** increase in cost since selection
- TPO funds **55%** above original award
- Locally administered

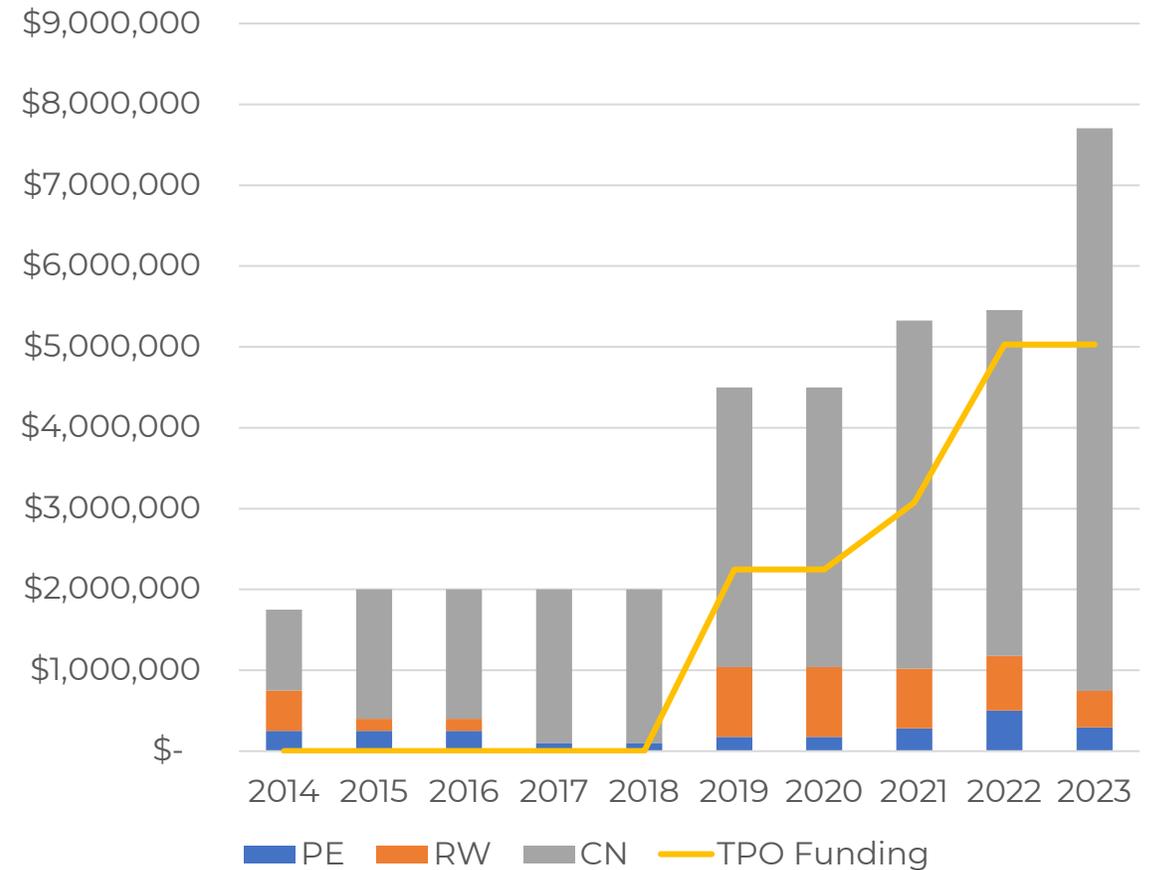




UPC 104281 – Deepwater Terminal Ext.

City of Richmond

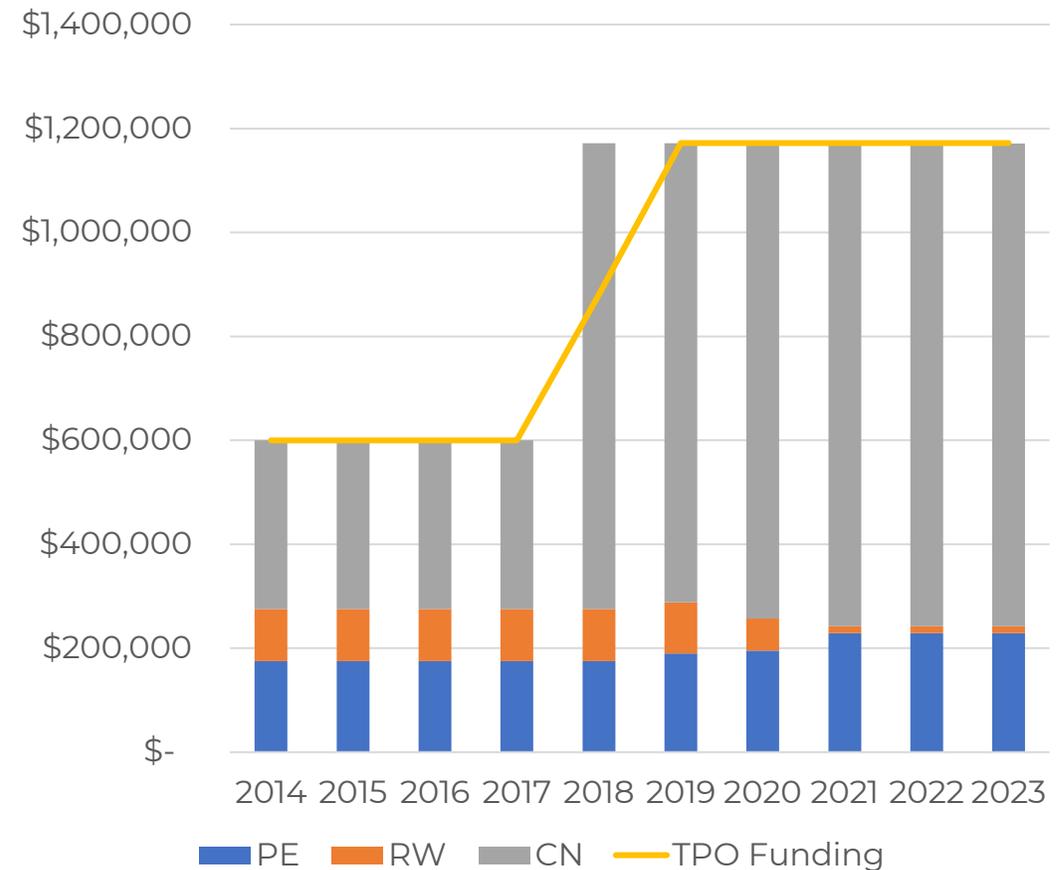
- FY 2014 project
- FY 2019 TPO selection
- 65% TPO funded
- **71%** increase in cost since selection
- TPO funds **124%** above original award
- Locally administered



UPC 104880 – Ridgefield Pkwy Sidewalk

Henrico County

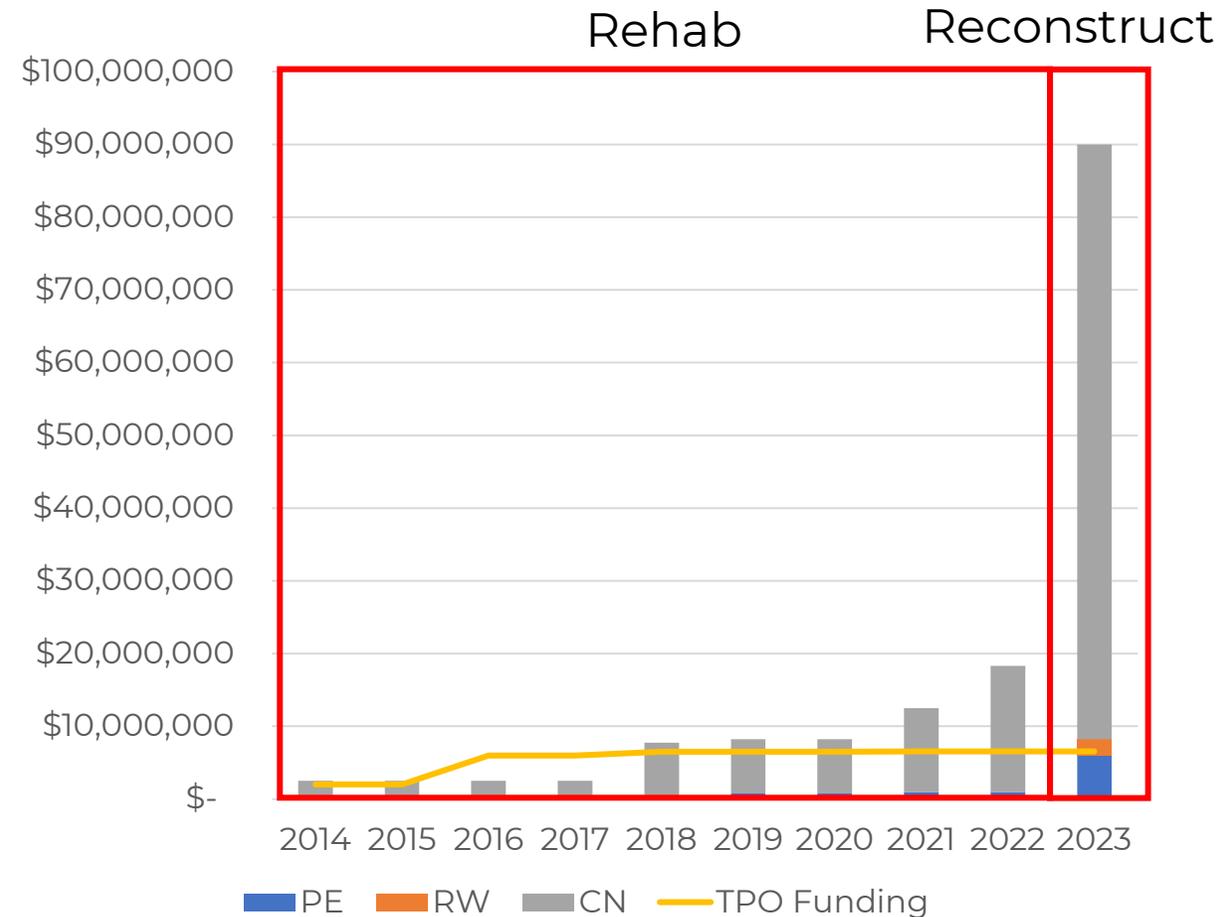
- FY 2014 project
- 100% TPO funded
- **95%** increase in cost since selection
- TPO funds **95%** above original award
- Locally administered



UPC 104888 – Mayo Bridge

City of Richmond

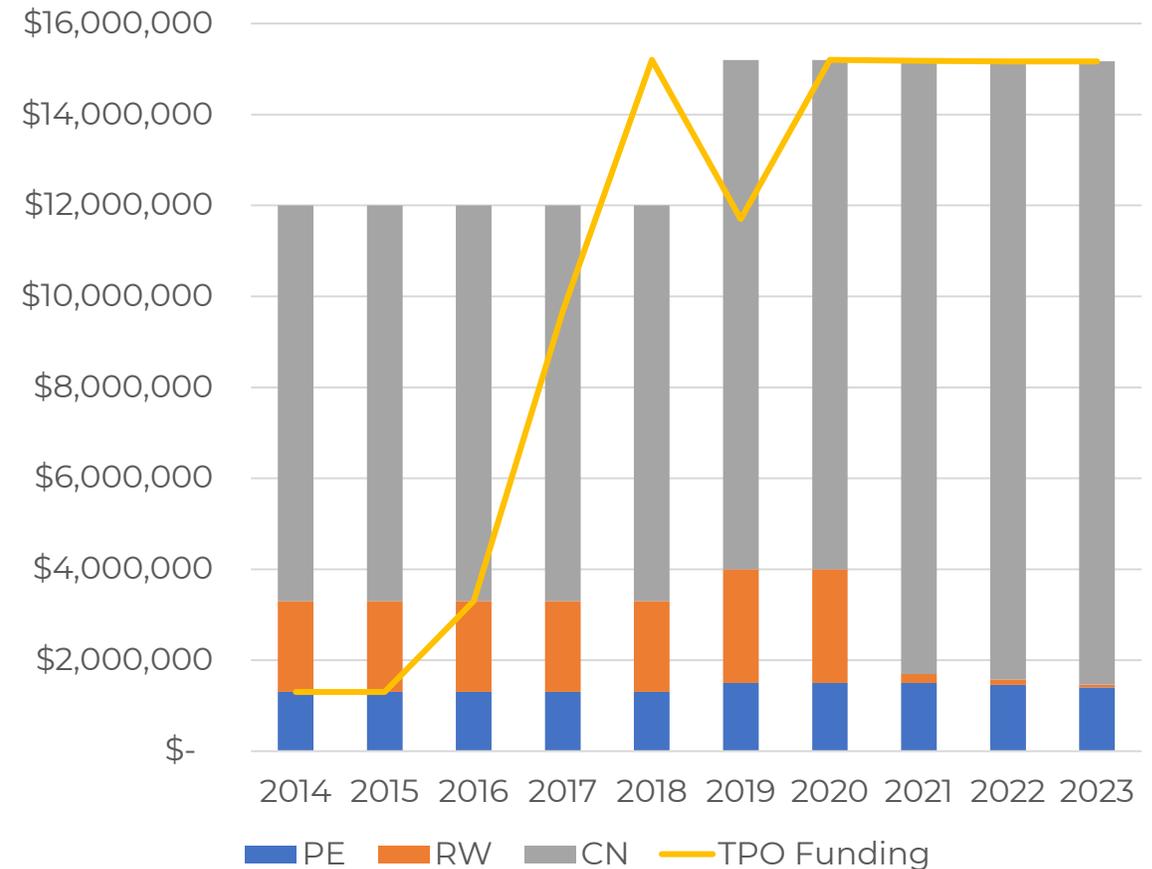
- FY 2014 project
- Major scope change from rehab to replacement
- 7% TPO funded
- **4400%** increase in cost since selection; **0%** since rescoped
- TPO funds **161%** above estimate at selection
- Originally locally administered; VDOT administered with new scope



UPC 104889 – Rte 10 Widening

Chesterfield County

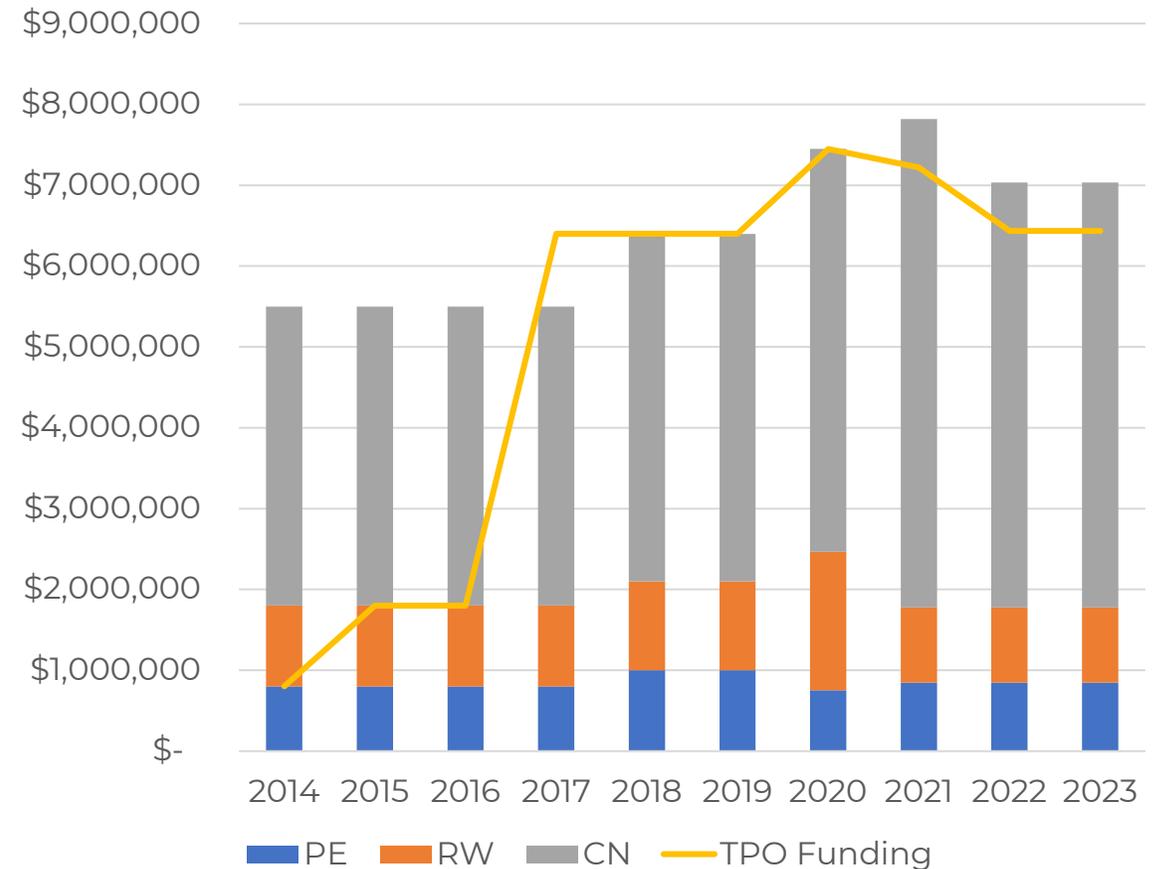
- FY 2014 project
- Originally PE only funding, intent to fund full project
- 100% TPO funded
- **26%** increase in cost since selection
- TPO funds **26%** above estimate at selection
- Locally administered



UPC 104890 – Rte 360 E Widening

Chesterfield County

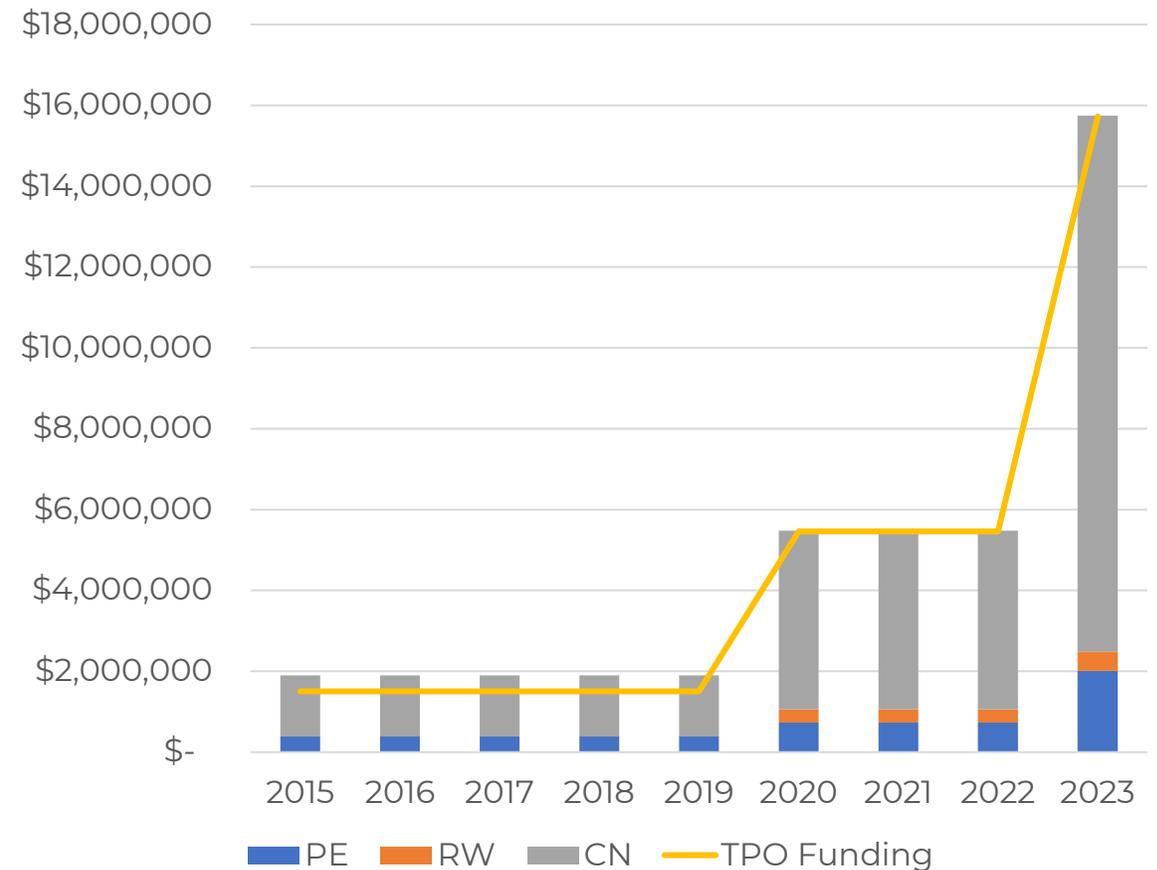
- FY 2014 project
- Originally PE only funding, intent to fund full project
- 92% TPO funded
- **28%** increase in cost since selection
- TPO funds **17%** above estimate at selection
- Locally administered



UPC 105733 – Rte 623 Intersection

Goochland County

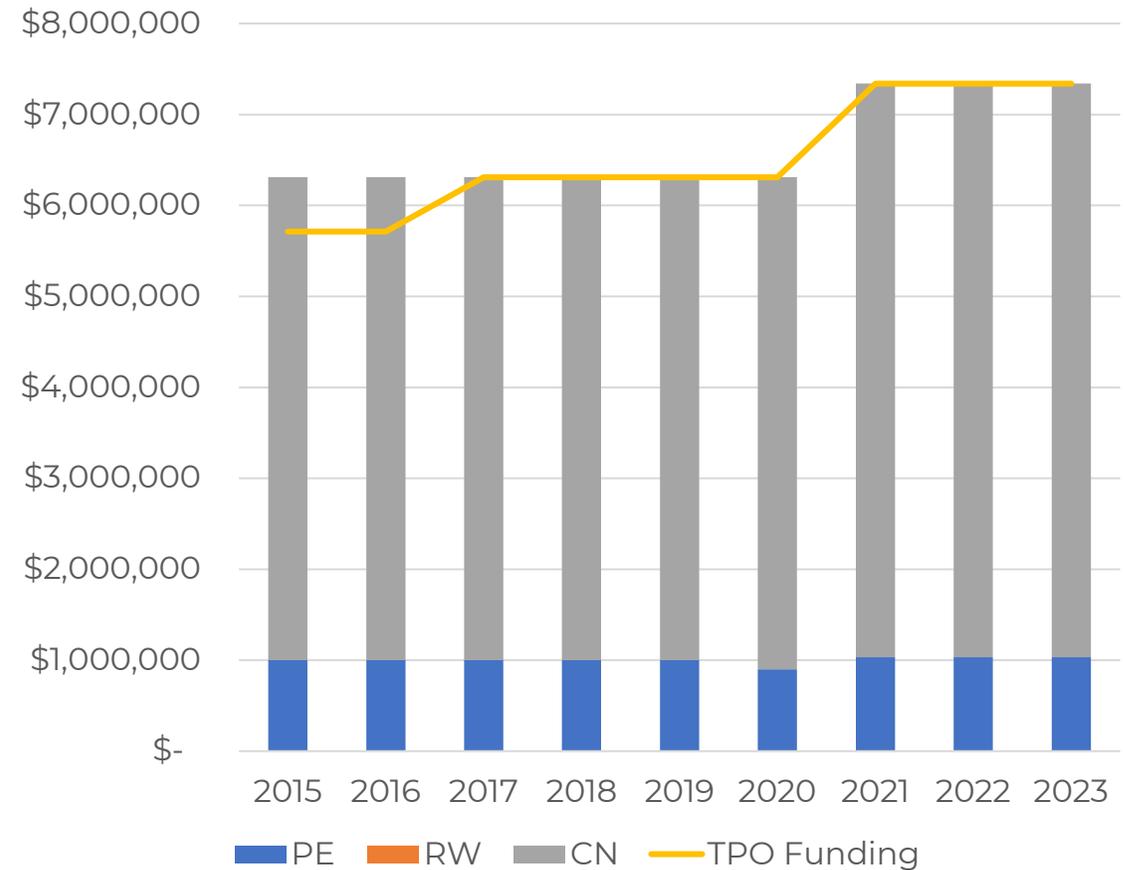
- FY 2015 project
- 99% funded by TPO
- **729%** increase in cost since selection
- TPO funds **949%** above original award
- Originally expected to be locally administered; now VDOT administered



UPC 105890 – Signal System

City of Richmond

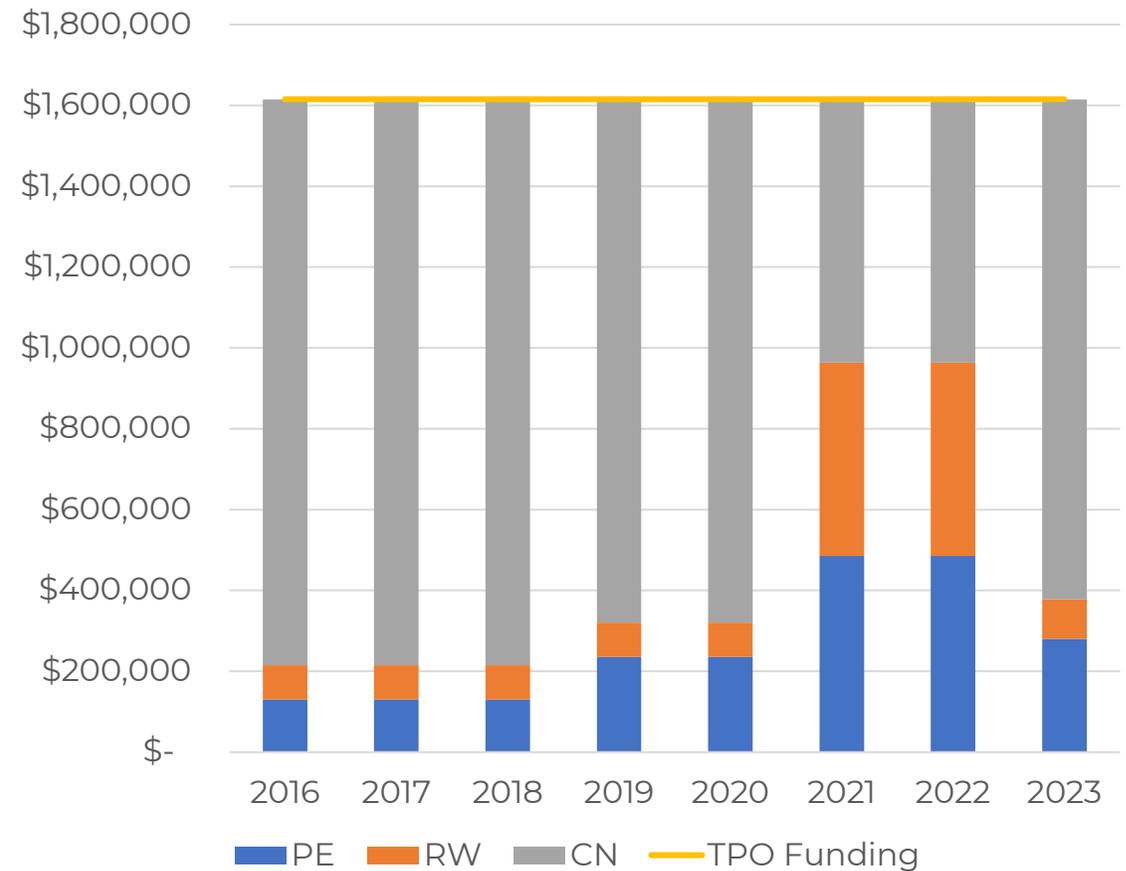
- FY 2015 project
- 100% funded by TPO
- **16%** increase in cost since selection
- TPO funds **16%** above estimate at selection
- Locally administered



UPC 106299 – Azalea Ped & Signal Imp.

Henrico County

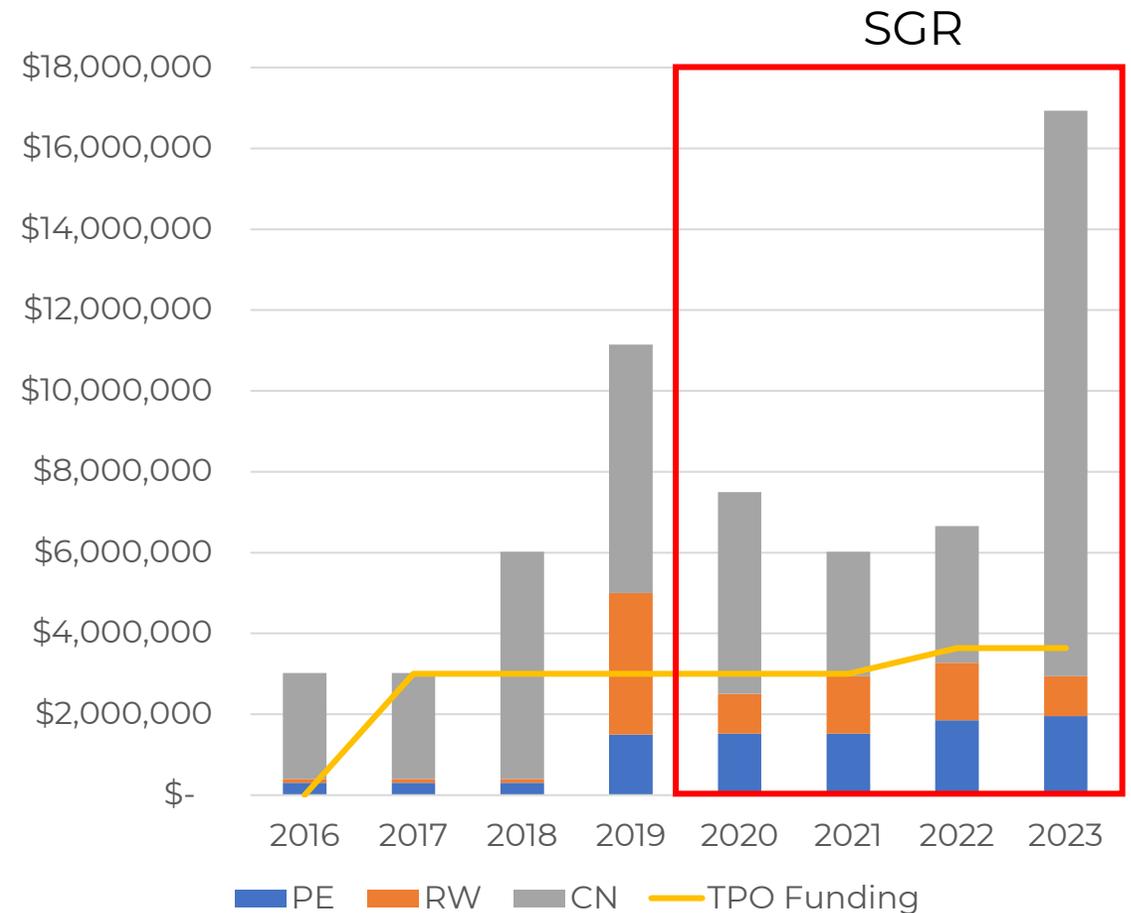
- FY 2016 project
- 100% funded by TPO
- **0%** increase in cost since selection
- TPO funds **0%** above estimate at selection
- Locally administered



UPC 107085 – Dundas Rd Bridge

Chesterfield County

- FY 2016 project
- Originally new ped bridge; now bridge replacement w/ sidewalk
- 21% funded by TPO
- **461%** increase in cost since selection; **126%** above new scope baseline
- TPO funds **21%** above original estimate
- VDOT administered

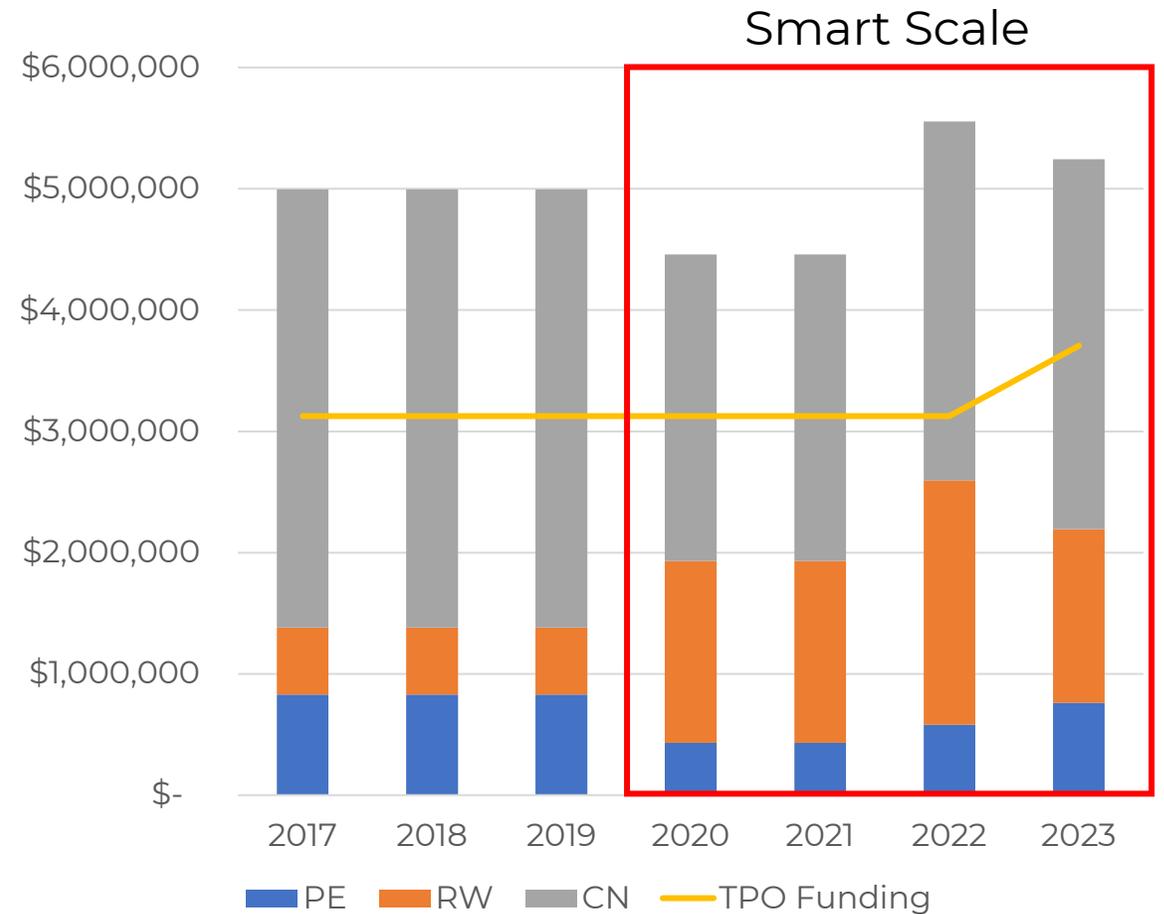




UPC 109194 – Parham Signal & Sidewalk

Henrico County

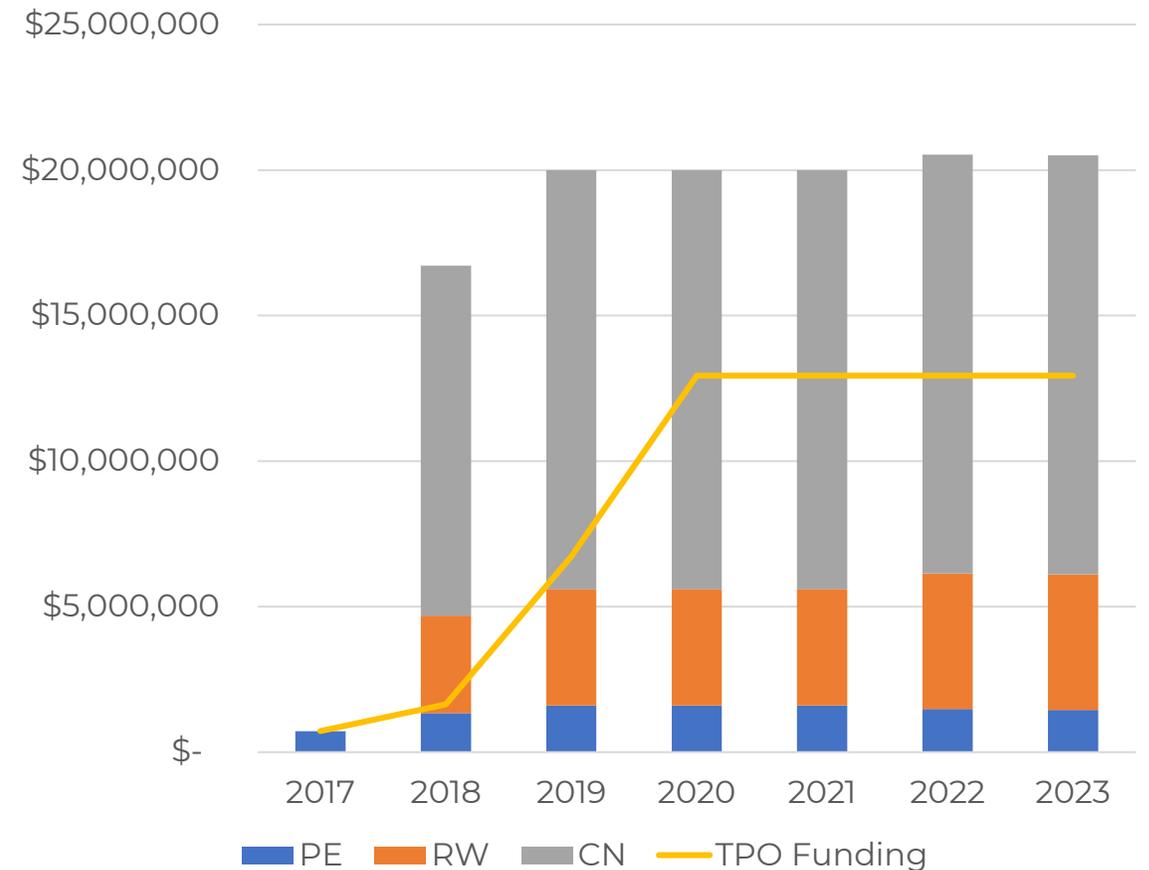
- FY 2017 project
- Smart Scale Rd 3 project
- 71% TPO funded
- **5%** increase in cost since selection
- TPO funds **19%** above original award
- VDOT administered



UPC 109260 – Pole Green Widening

Hanover County

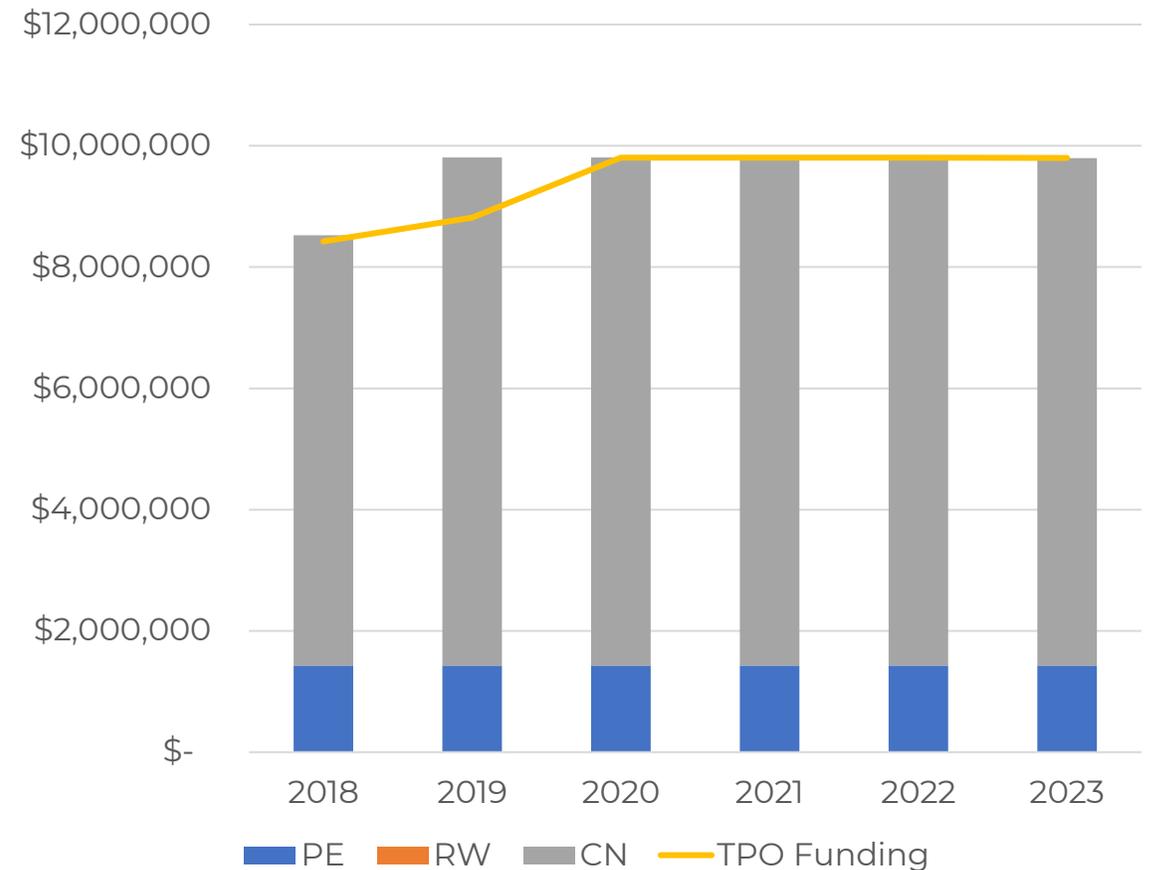
- FY 2017 project
- Originally PE only funding
- 63% TPO funded
- **23%** increase in cost from first full estimate
- TPO funds **0%** above full project award (2020)
- Locally administered



UPC 109951 – Auto. Traffic Manage. Sys.

Henrico County

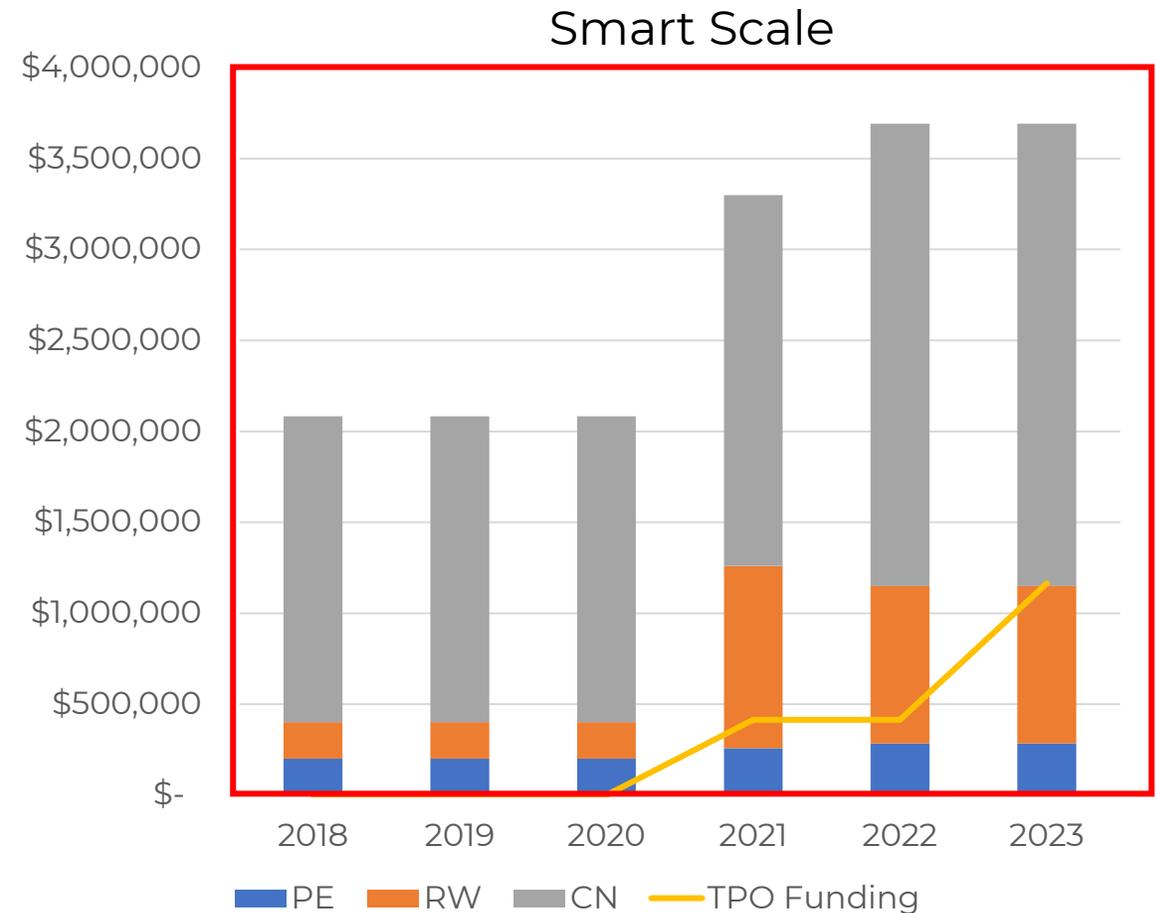
- FY 2018 project
- 100% TPO funded
- **15%** increase in cost since selection
- TPO funds **16%** above original award
- Locally administered



UPC 111712 – Rte 1 SW/Fall Line Trail

Chesterfield County

- FY 2018 project
- Smart Scale Rd 2 project
- Scope evolved with Fall Line
- 32% funded by TPO
- **12%** increase in cost since selection
- TPO funds **181%** above original award
- Expiring CMAQ funds awarded in FY23 to advance Fall Line
- Locally administered

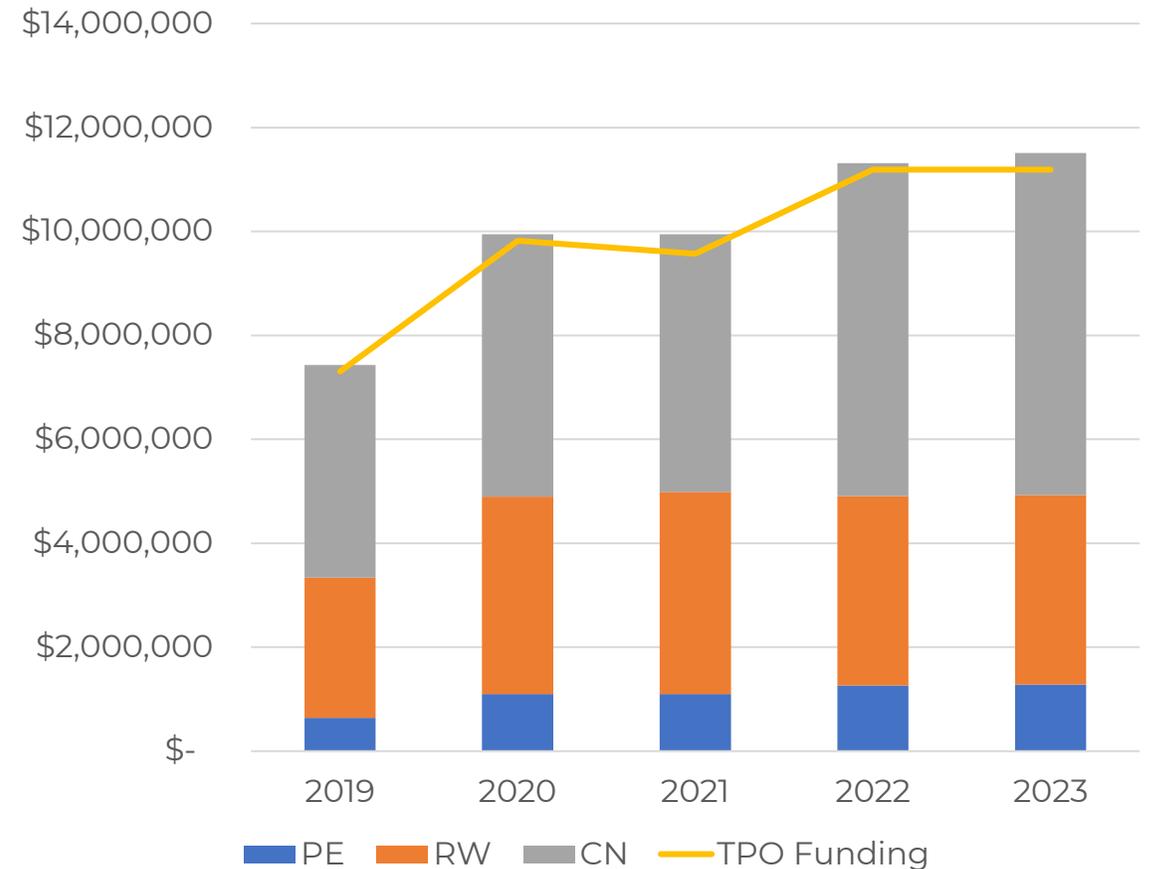




UPC 112042 – Rte 1 Improvements

Town of Ashland

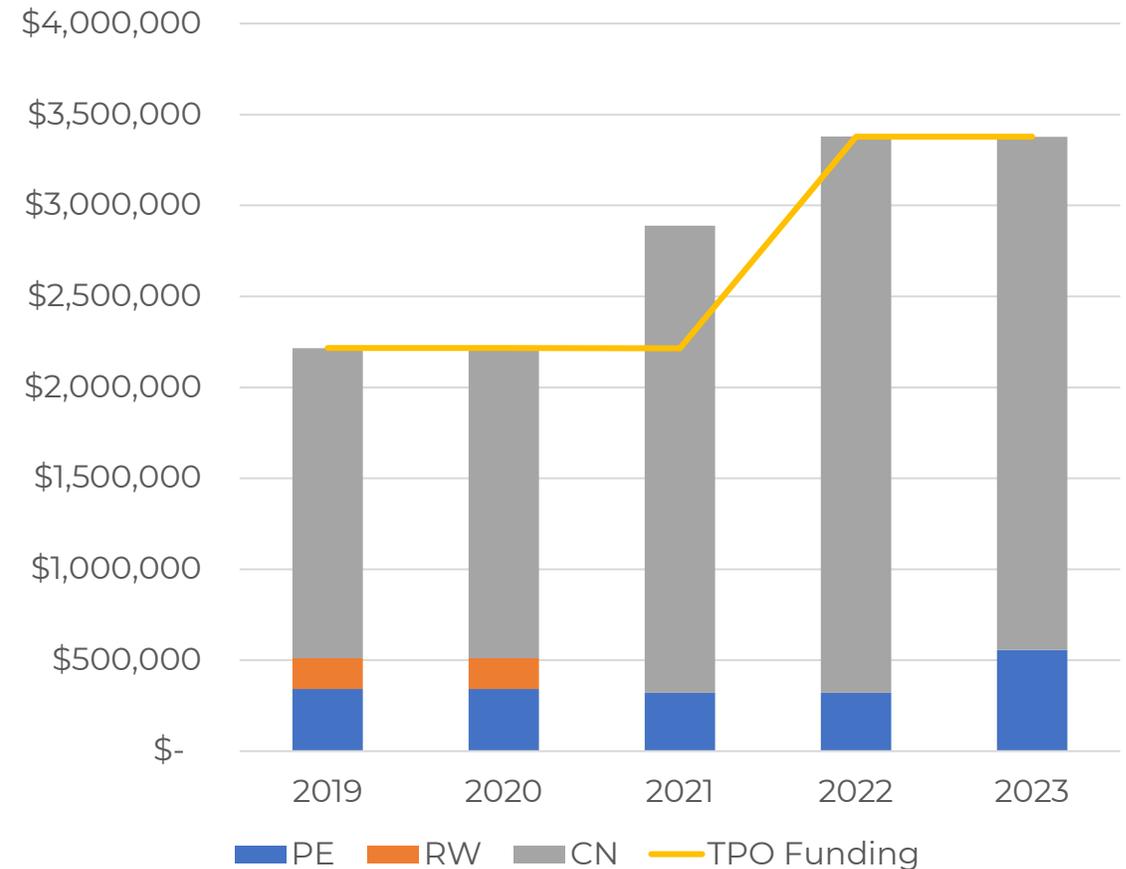
- FY 2019 project
- 97% TPO funded
- **55%** increase in cost since selection
- TPO funds **53%** above original award
- VDOT administered



UPC 113832 – RMT Gate Impr & Drop Lot

City of Richmond/Port of Virginia

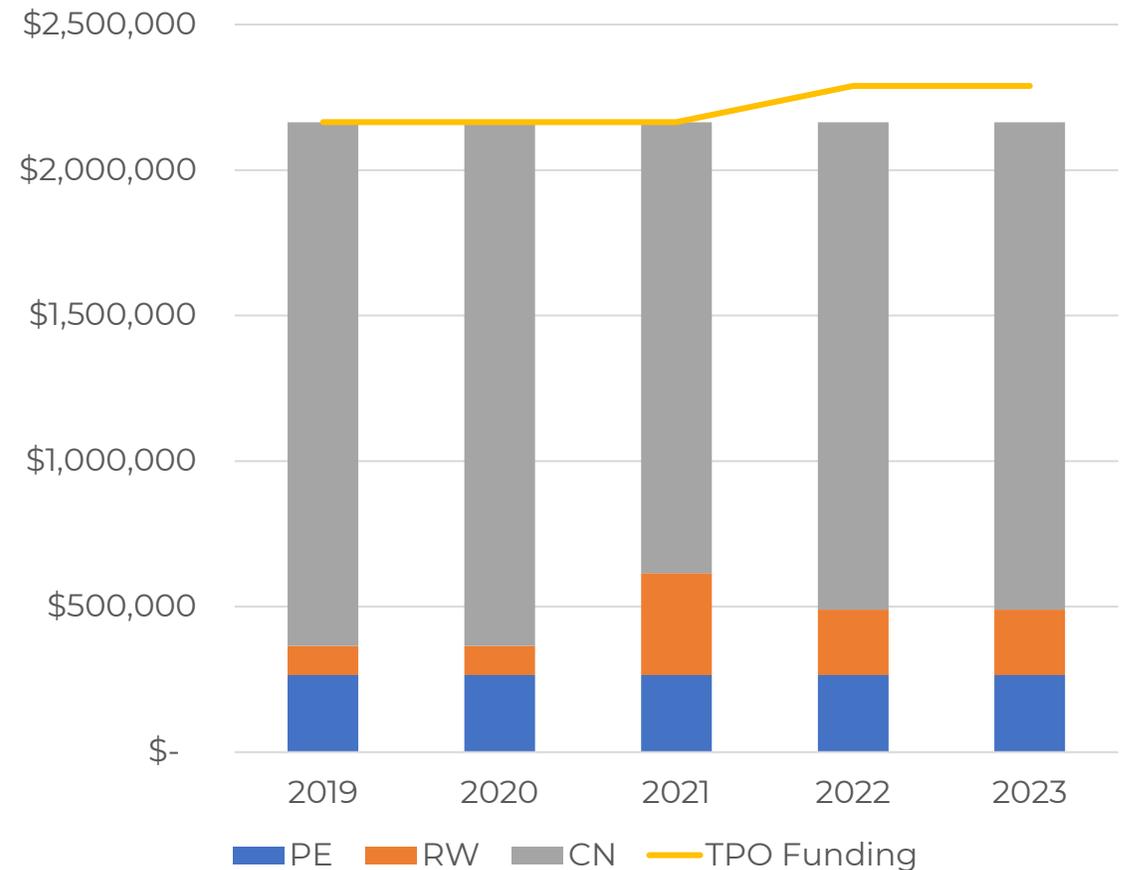
- FY 2019 project
- Split among 4 UPCs now for procurement purposes
- 100% funded by TPO
- **52%** increase in cost since selection
- TPO funds **52%** above original estimate
- Locally administered



UPC 113833 – Three Chopt Rd Sidewalk

Henrico County

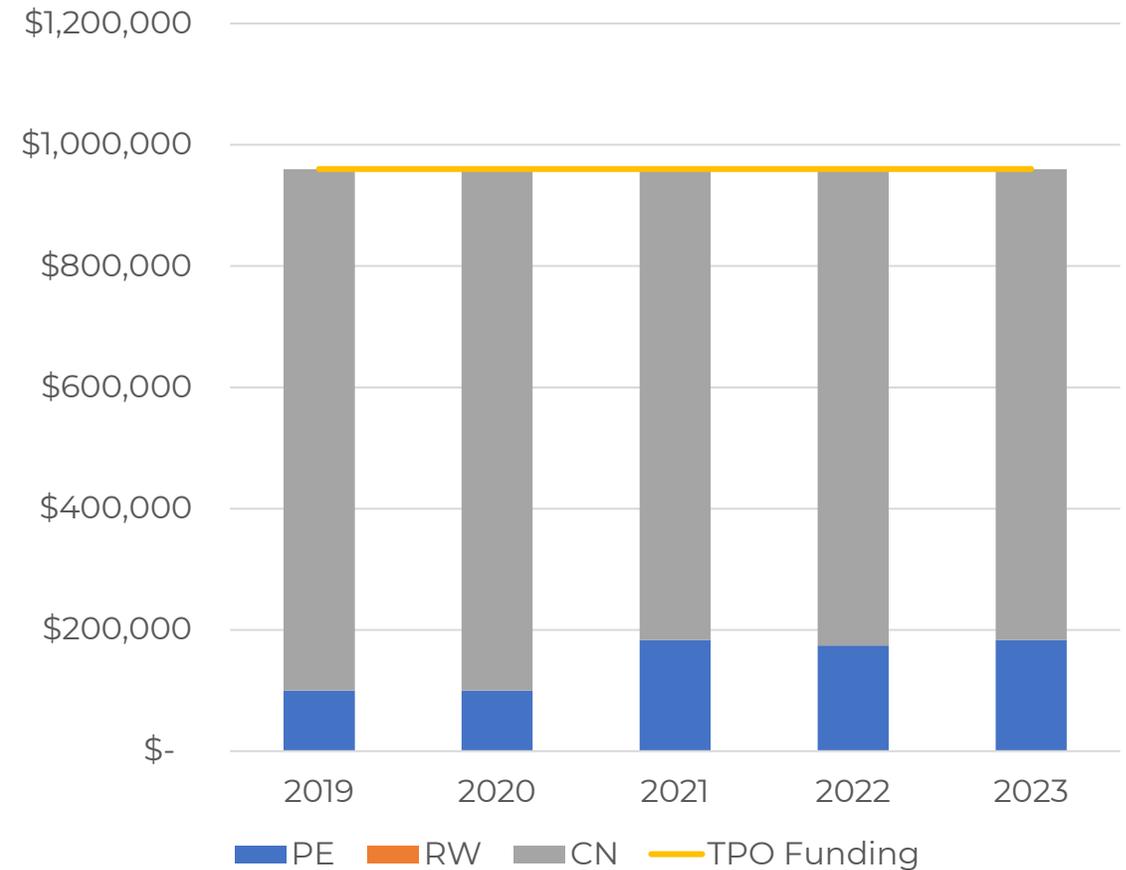
- FY 2019 project
- 100% funded by TPO
- **0%** increase in cost since selection
- TPO funds **6%** above original estimate
- Funding increased to advance RW phase schedule
- Surplus left on project pending construction contract in FY23
- Locally administered



UPC 113835 – Transit Stop Access

City of Richmond

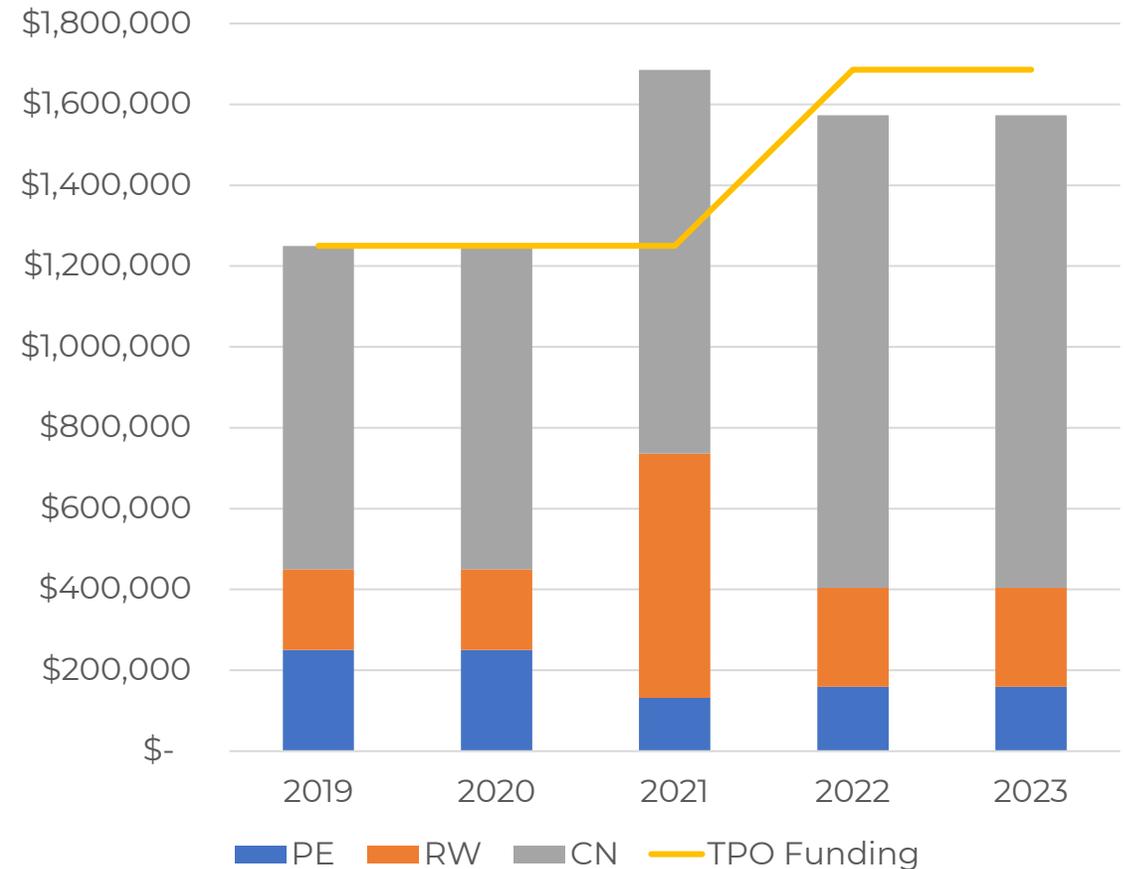
- FY 2019 project
- 100% funded by TPO
- **0%** change in cost estimate
- **0%** change in TPO funding awarded
- Project scaled back to stay within budget
- Locally administered



UPC 113843 – Rte 1 Sidewalk

Chesterfield County

- FY 2019 project
- 100% funded by TPO
- **16%** increase in cost since selection
- TPO funds **35%** above original estimate
- Funding increased in FY22 to reflect then current estimate
- Surplus to be addressed at CN
- Locally administered

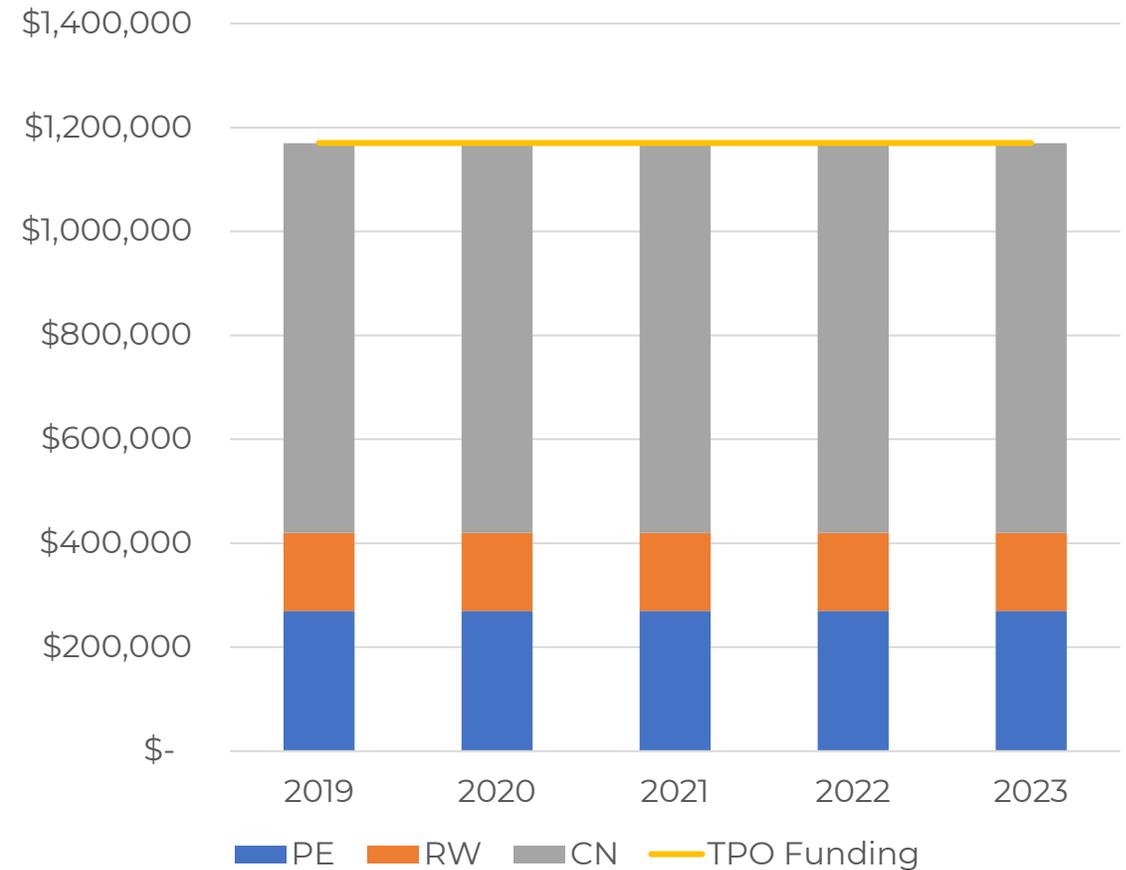




UPC 113846 – Early Settlers Rd Sidewalk

Chesterfield County

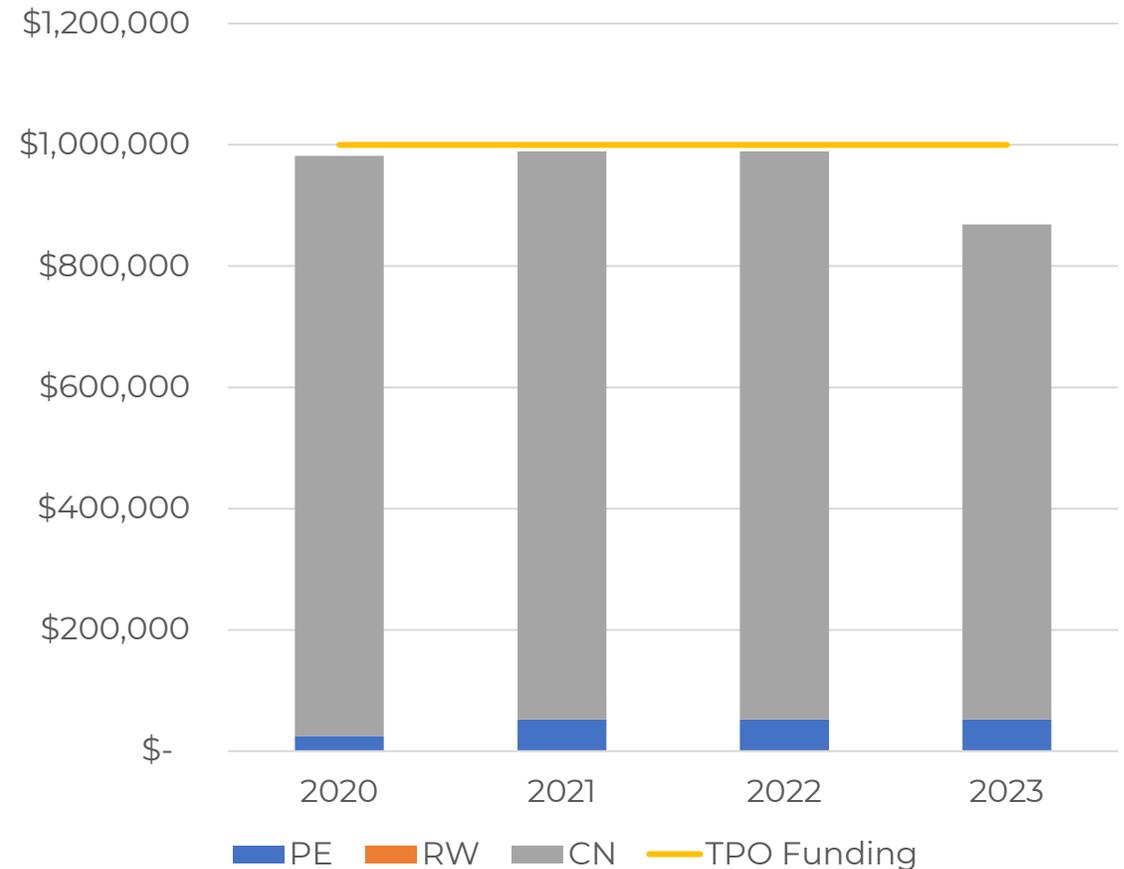
- FY 2019 project
- 100% funded by TPO
- **0%** increase in cost since selection
- TPO funds **0%** above original estimate
- Locally administered



UPC 114631 – RMT Bulkhead Repair

City of Richmond/Port of Virginia

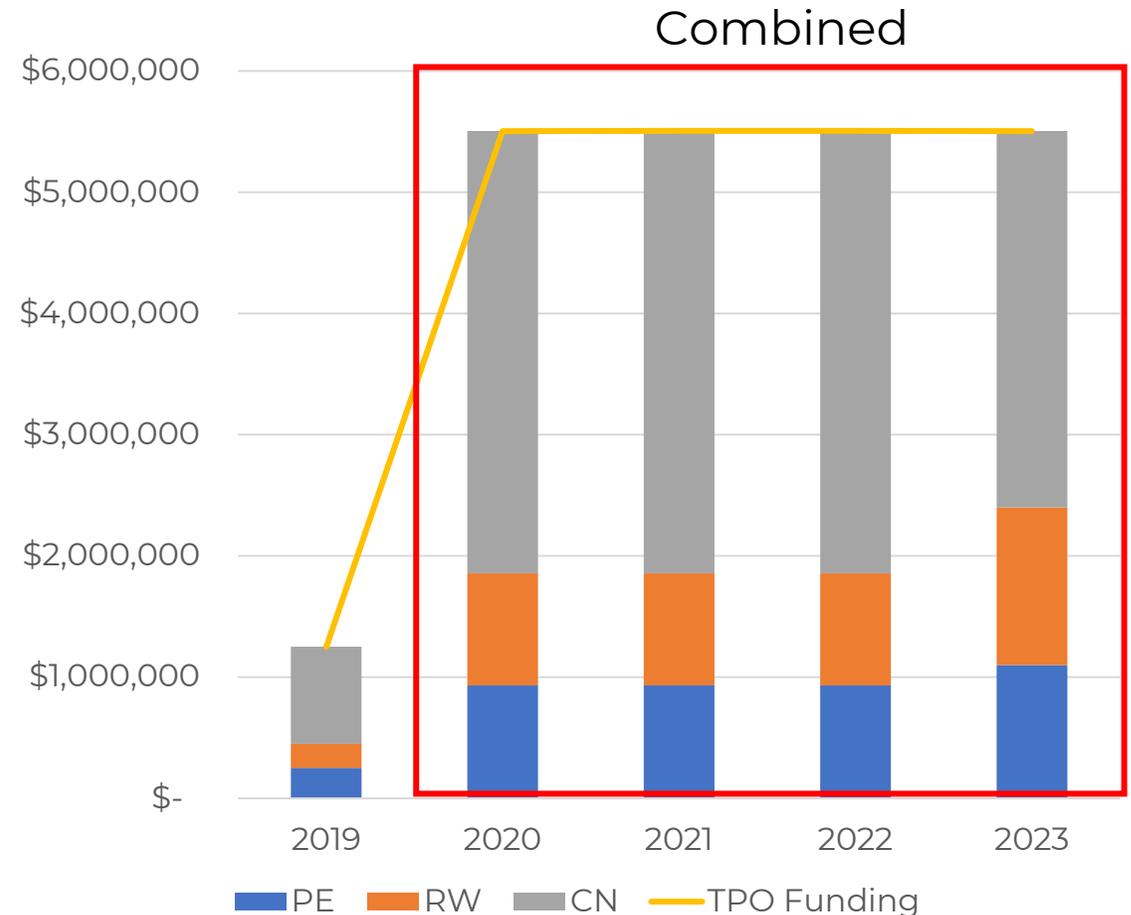
- FY 2020 project
- 100% funded by TPO
- **12%** decrease in cost since selection
- TPO funds **0%** above original award
- Surplus funds will return to TPO upon completion
- Locally administered



UPC 115063 – Rte 60 Shared Use Path

Chesterfield County

- FY2019 & FY 2020 projects
- Adjacent projects merged under later UPC
- 100% funded by TPO
- **0%** increase in cost since selection
- TPO funds **0%** above combined original estimate
- Locally administered

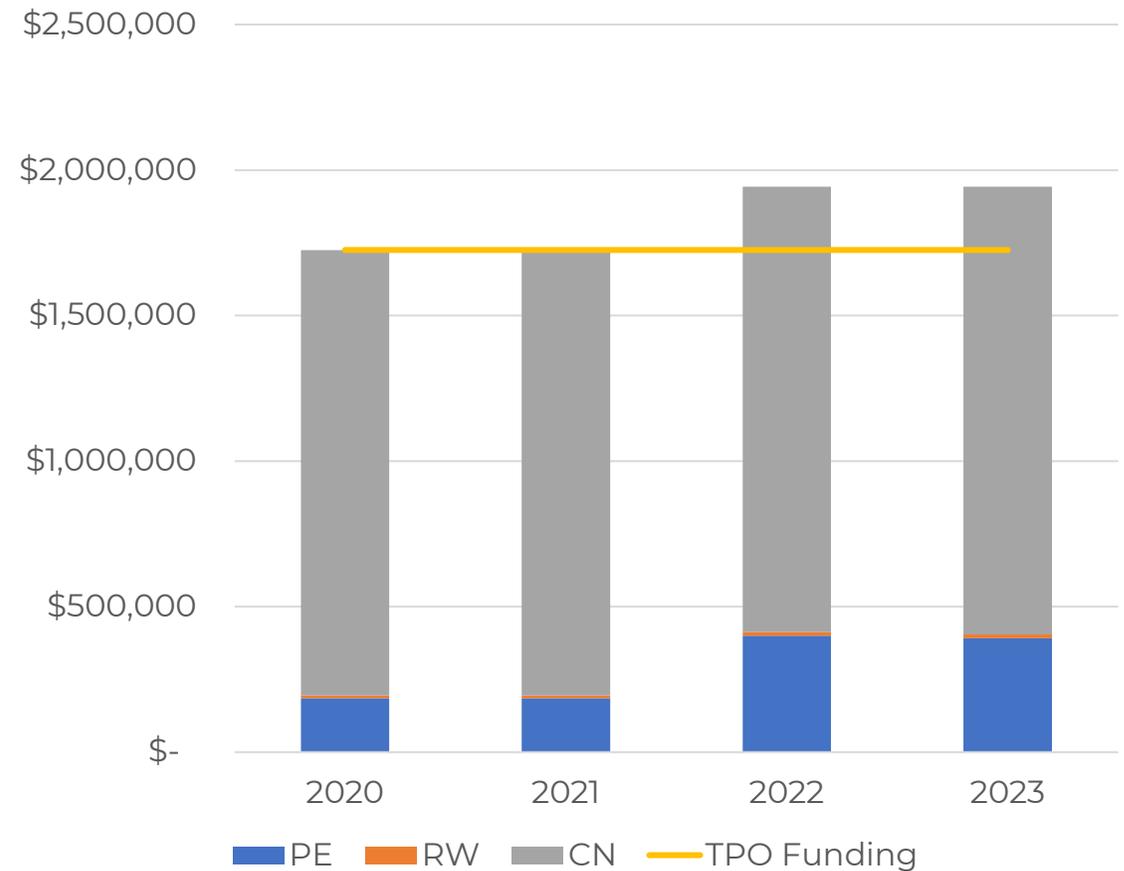




UPC 115769 – Libbie Ave Road Diet

Henrico County

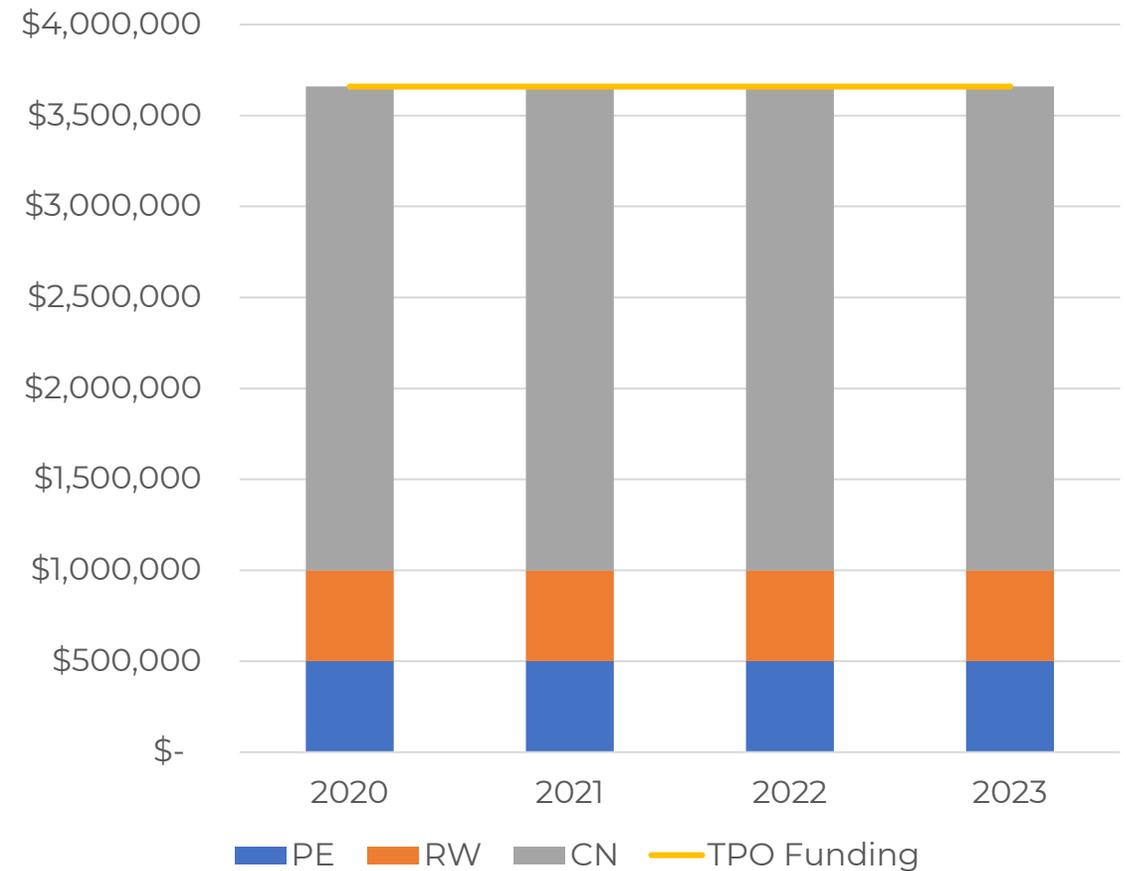
- FY 2020 project
- 89% funded by TPO
- **13%** increase in cost since selection
- TPO funds **0%** above original estimate
- Locally administered



UPC 115784 – Meadowdale Bike-Ped

Chesterfield County

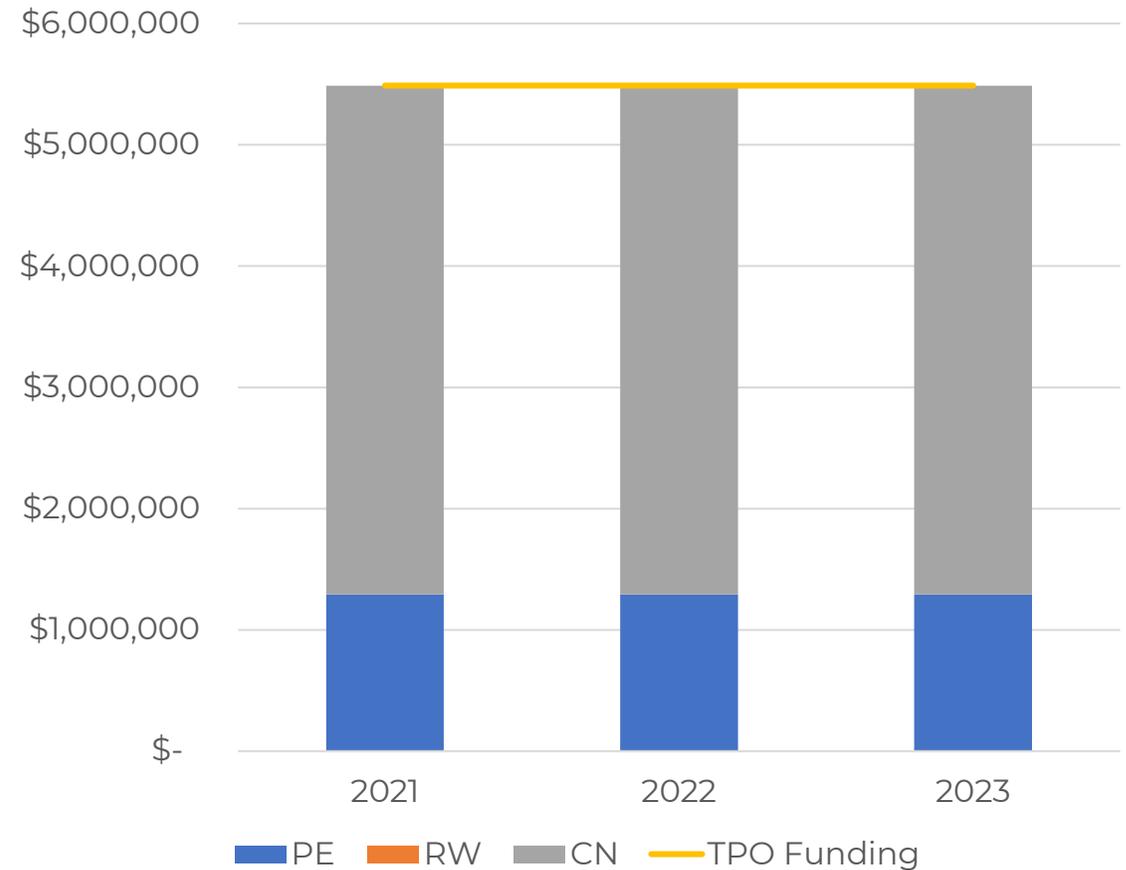
- FY 2020 project
- 100% funded by TPO
- **0%** change in cost since selection
- TPO funds **0%** above original estimate
- Locally administered



UPC 118148 – Signal System – Phase IV

City of Richmond

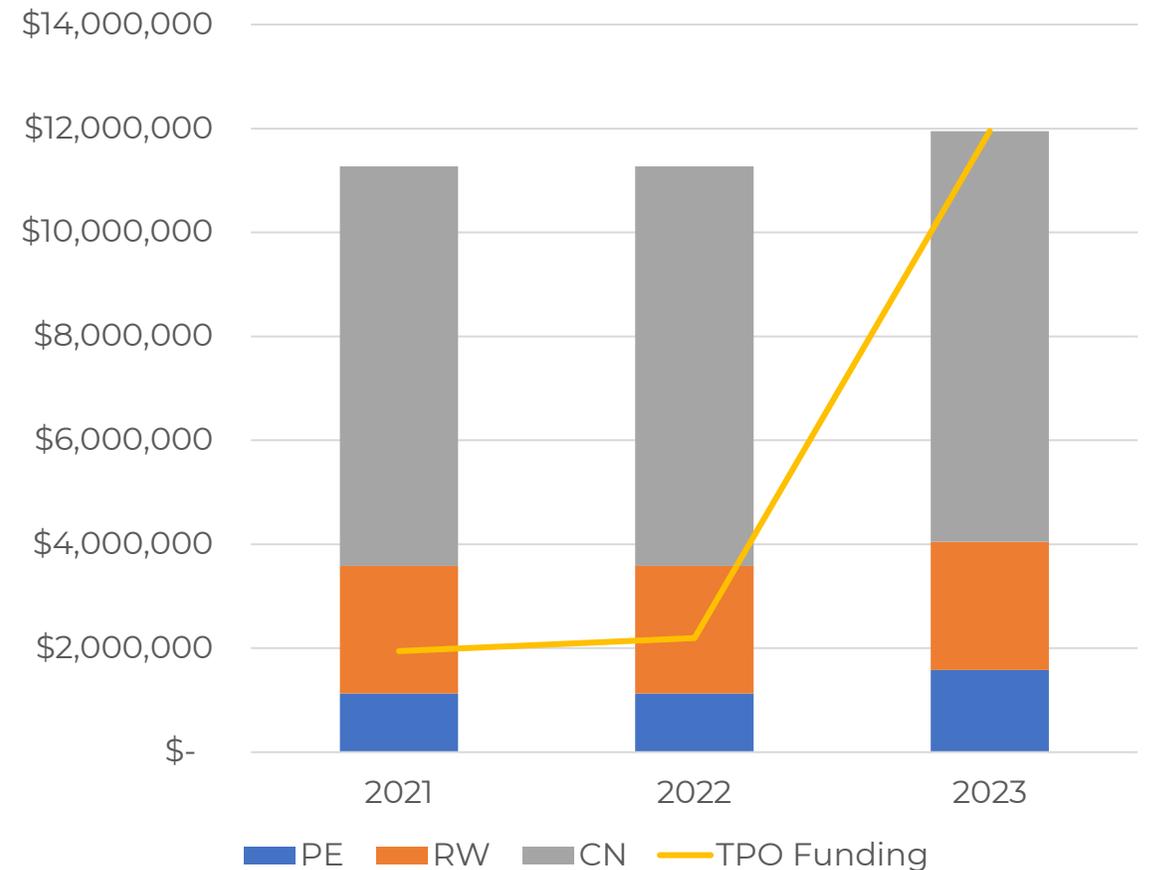
- FY 2021 project
- 100% funded by TPO
- **0%** change in cost since selection
- TPO funds **0%** above original estimate
- Locally administered



UPC 118470 – W Broad Ped/Transit Imps

Henrico County

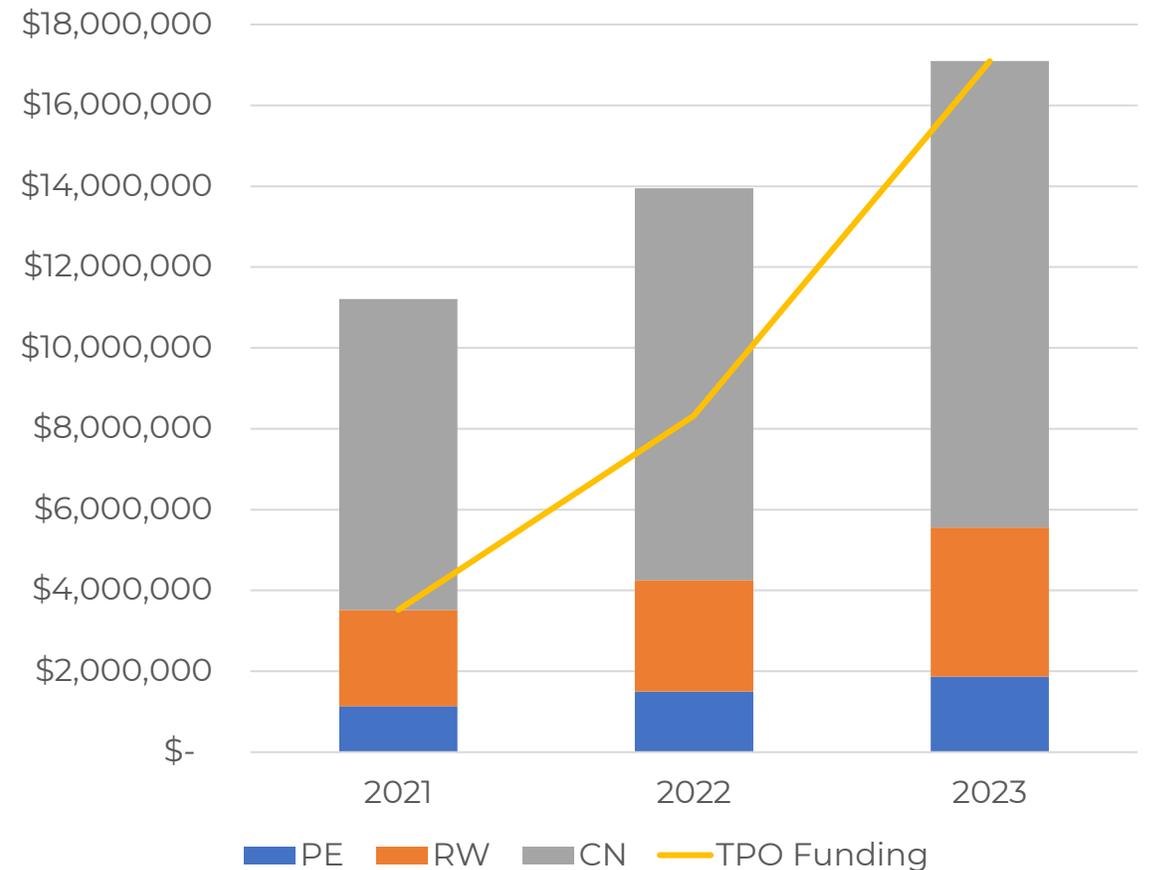
- FY 2021 project
- Intent to fund full project
- 100% TPO funded
- **6%** increase in cost since selection
- TPO funds **6%** above estimate at selection
- Originally local, now VDOT administration



UPC 118157 – W Broad at Dominion/Cox

Henrico County

- FY 2021 project
- Intent to fund full project
- 100% TPO funded
- **52%** increase in cost since selection
- TPO funds **52%** above estimate at selection
- PE start moved FY21 to FY23
- Originally local, now VDOT administration



Actual vs. Expected Performance



Current Program Summary

- **39 projects** underway or awaiting closeout analyzed
- Varying stages of development
- Median project within expected range:
 - Estimate: **+26%**
 - TPO Funds: **+19%**
- A small group of mostly older projects skew the *mean*:
 - Estimate: **+198%**
 - TPO Funds: **+71%**
- **11 projects** (28%) with estimates 2x or more of original baseline
 - 6 from 2000s or earlier
 - 5 from early 2010s
- **8 projects** (20%) with TPO funding 2x or more of original baseline
- **29 projects** (74%) are locally administered

Reducing Impacts of Overruns

1. Use more conservative assumptions:
 - Use VDOT estimates & assumptions (Smart Scale)
 - Require risk-based contingency (Estimating Manual)
2. Increase project definition before selection:
 - More engineering upfront (10% or 30% design)
3. Reduce exposure:
 - Fund only part of a project i.e., a single phase
 - Award fixed dollar amount
4. Improve Time to Delivery:
 - Award funds contingent on specific schedule

Trade-offs to Consider

- Higher estimates reduce overruns, but reduce number of projects in program
- Surplus funding that sits on a project loses value for new projects due to inflation
- Localities have tools available (like utility franchise agreements) that are not easily standardized, not captured in VDOT estimate assumptions
- Additional design requires non-TPO funding upfront
- Partial funding requires sponsors to compete for multiple sources of funding, can delay implementation
- Removing funding once under development is difficult