Regional Projects

Estimate & Funding Record for
Active and Recently Completed Projects
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 rescoped 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

![Graph showing TPO Funding over years](image)
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

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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

![Graph showing funding for fiscal years 2019 to 2023 with TPO Funding highlighted.](image-url)
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

![Chart showing budget allocations for years 2021, 2022, and 2023.](chart.png)
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
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