I-95 Corridor Study

Phase II Highway Element

CTAC

June 13, *2018*

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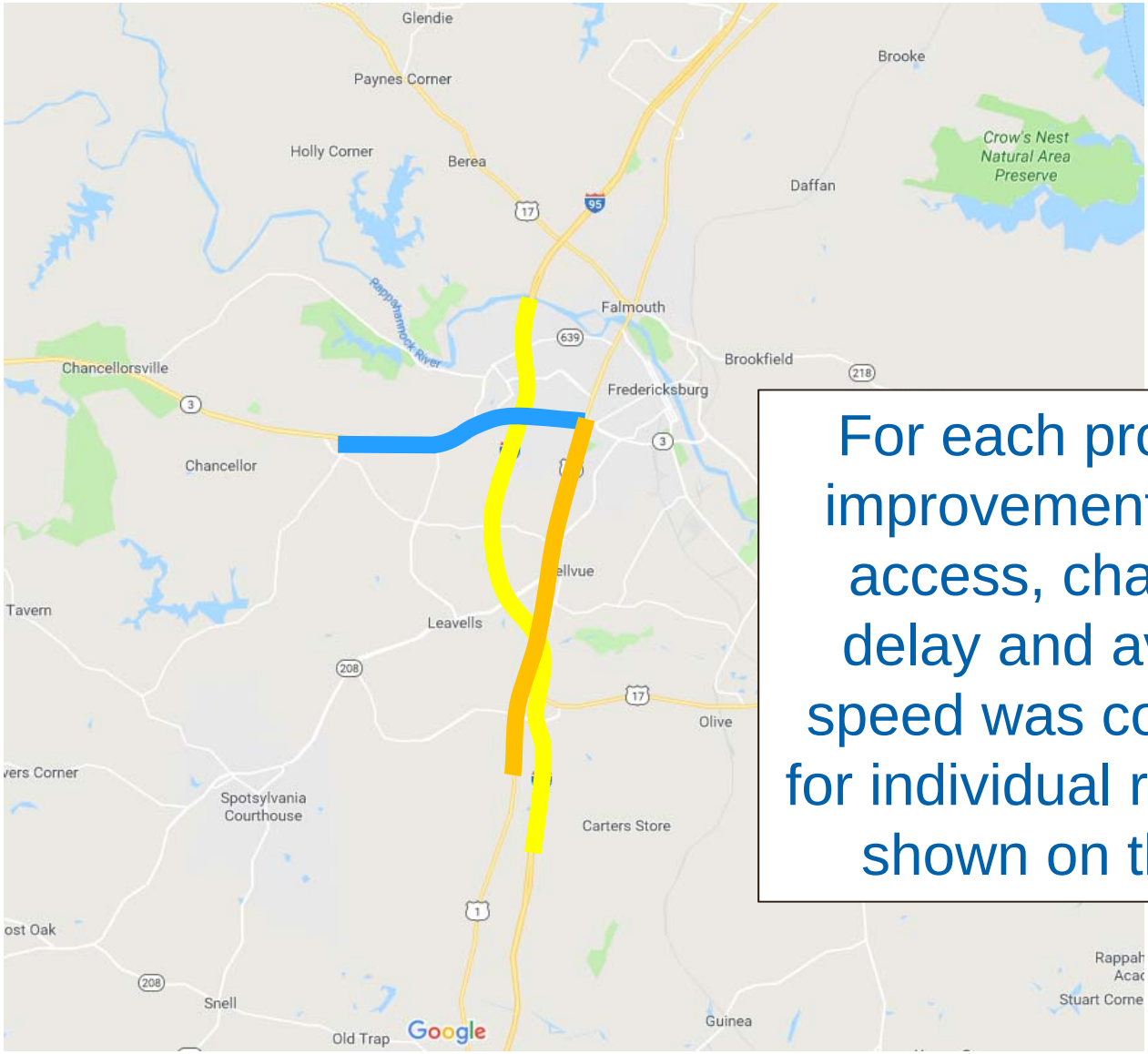
Four New/Modified I-95 Access Scenarios

1) New full access near milepost 131 (near Rest Area)
2) New full access near milepost 128 (Harrison Rd)
3) Improved access at existing Exit 126 (Super-ramp)
4) New full access near milepost 124 (Jackson Village)

No-Build Network Assumptions

1) Includes I-95 Southbound River Crossing
2) Includes I-95 Northbound River Crossing
3) Includes 4 lanes on southbound and northbound I-95 between Exits 126 and 130

Key Roadways



For each proposed improvement in I-95 access, change in delay and average speed was computed for individual roadways shown on the left

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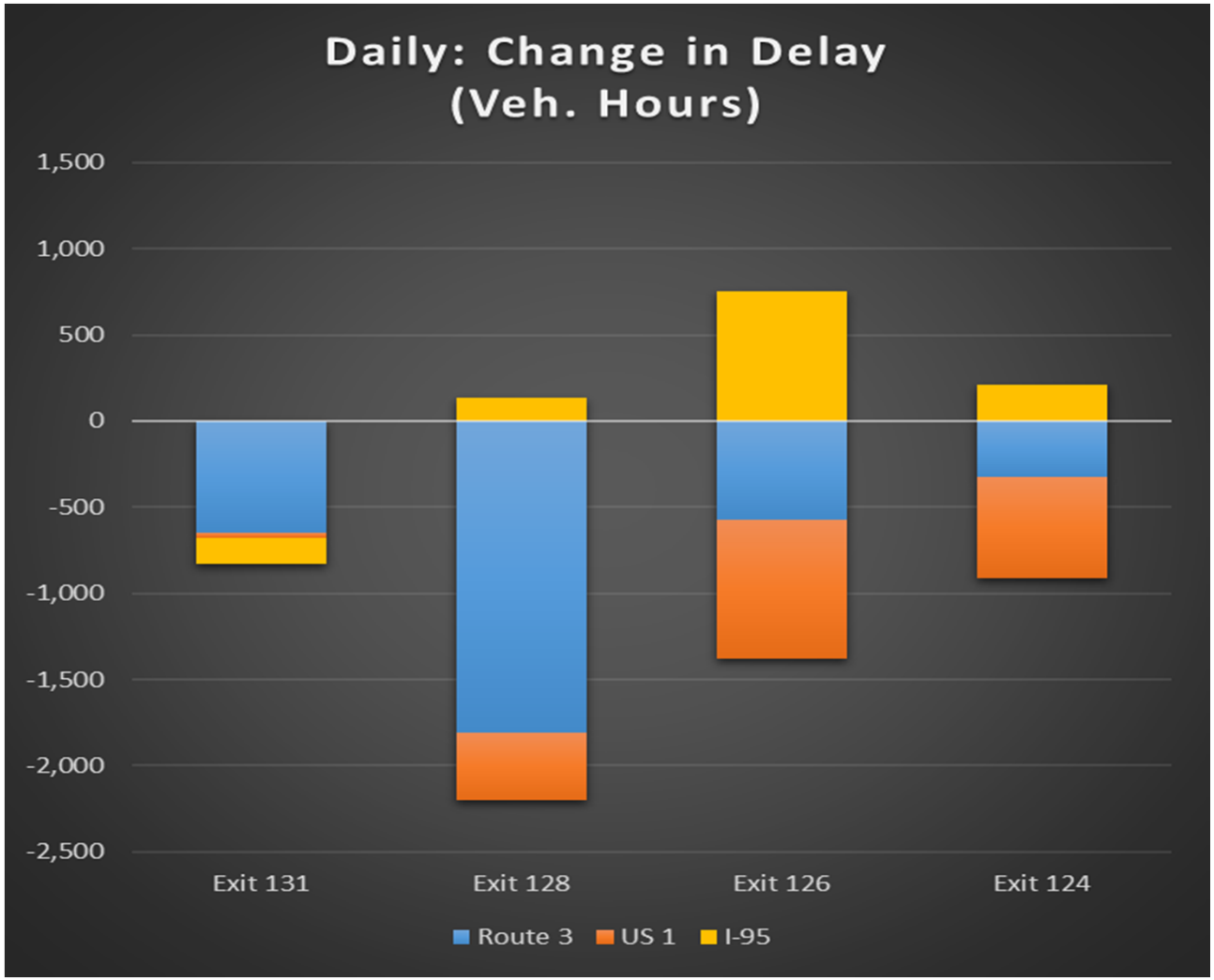
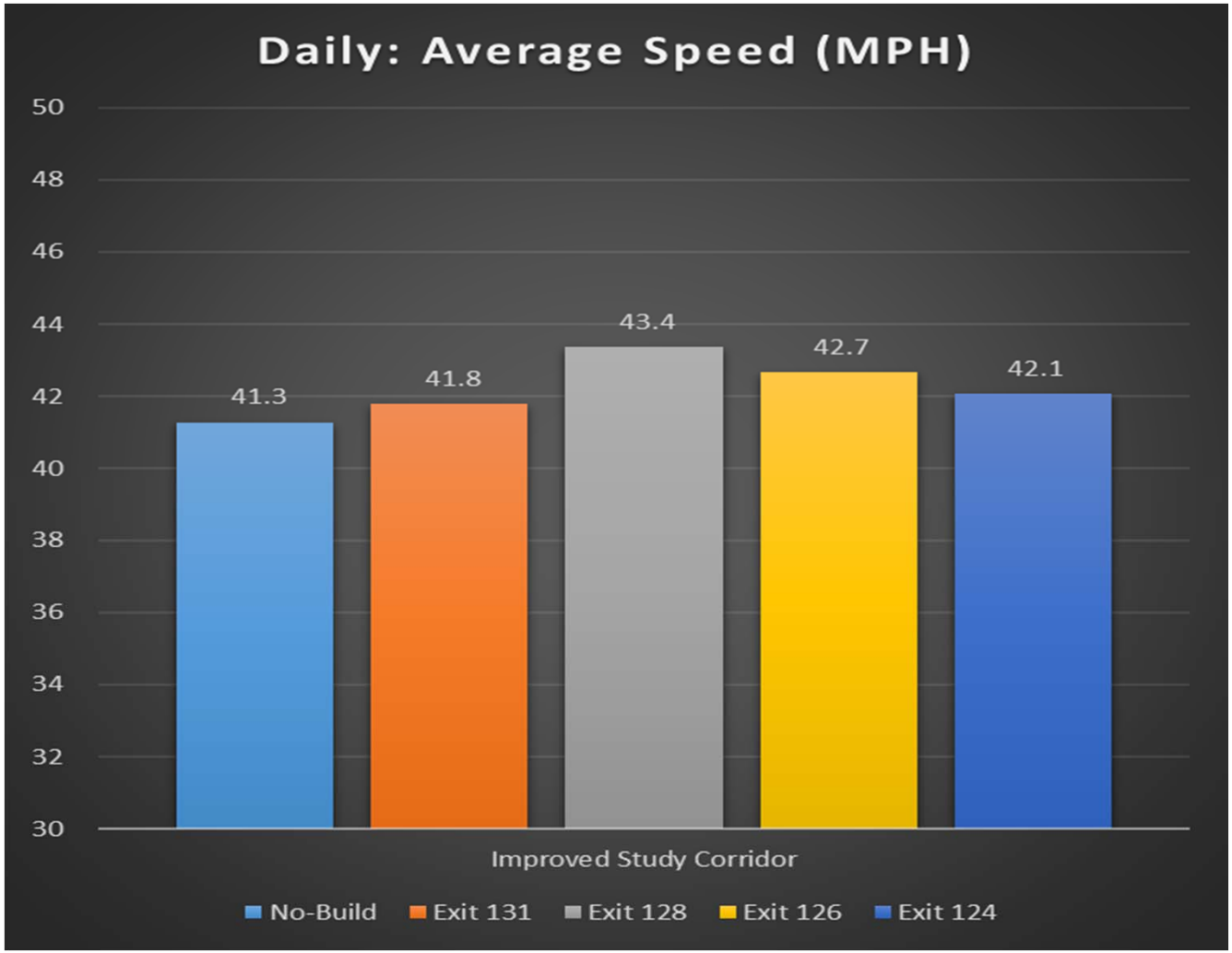
Key Roadways – 2045 traffic impacts



Study Corridor – 2045 traffic impacts



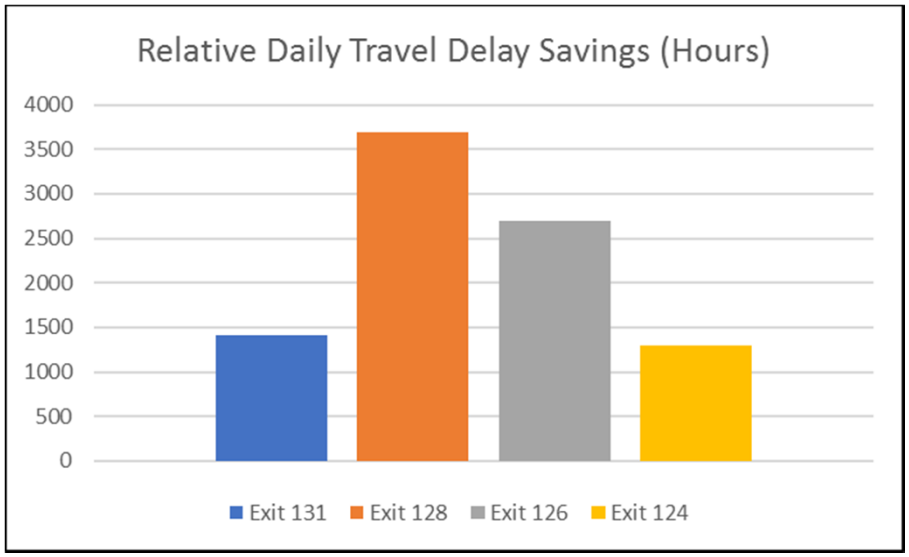
Impacts to Roadway Performance

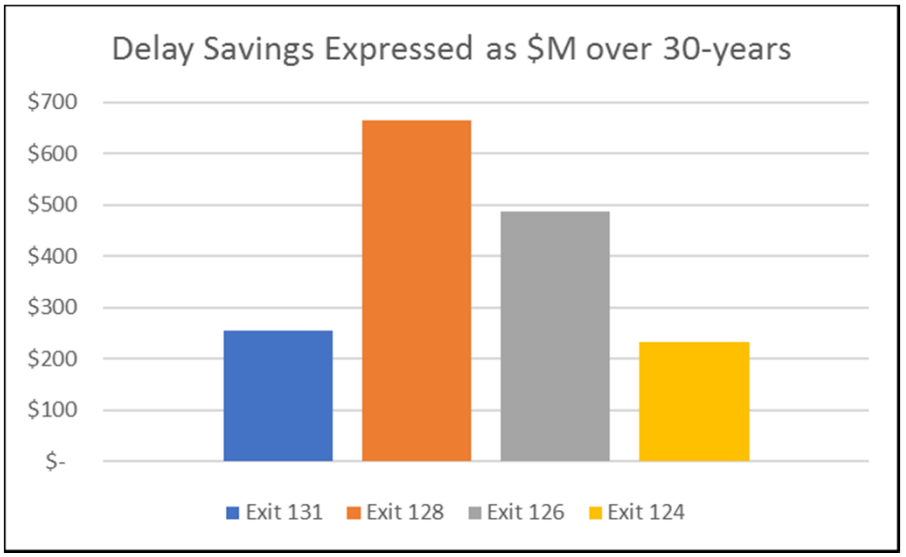
- Route 3 experiences the most delay in the corridor, so any alternative that benefits Route 3 yields the greatest decrease in delay
- Alternatives that draw traffic to I-95 tend to increase delay on I-95 and result is a lower reduction in total delay in the study corridor
- Speeds generally stay the same or improve on key roadways, with the exception of I-95 in the Exit 126 alternative

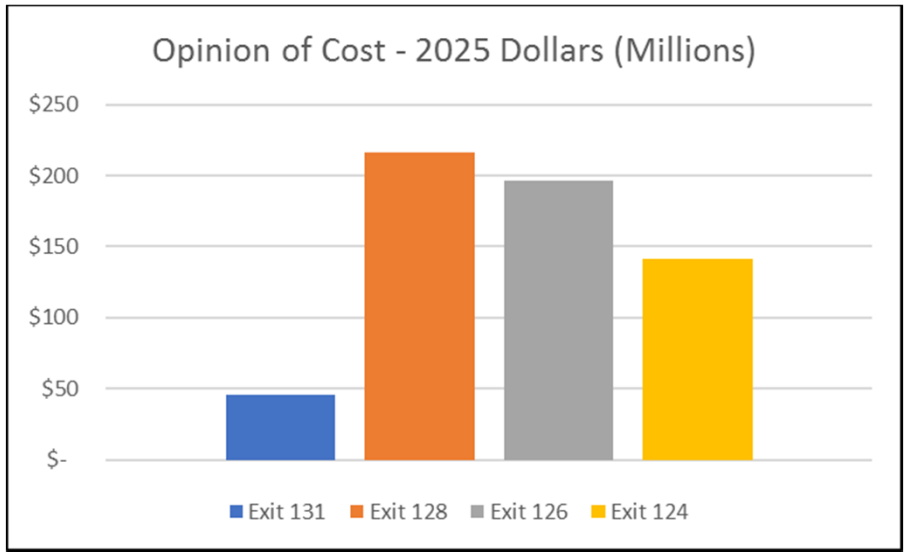
B/C Quotient Methodology Summary

- 'Delay' is defined as the difference between congested travel time and free-flow travel time within the defined study area.
- Forecasted reduction in daily delay for each of the scenarios was converted to equivalent dollars considering items such as:
  - Number of weekdays and weekend days per year
  - Value of time for workdays and weekends
  - Consumer Price Index
  - 30-year lifespan for infrastructure
  - Regular background traffic growth
- Cost estimates were developed through consultation with VDOT or from other sources
- The resulting ratio between benefit and cost is not a comprehensive Benefit/Cost Analysis but is instead a relative quotient between the limited items identified above

B/C Quotient inputs







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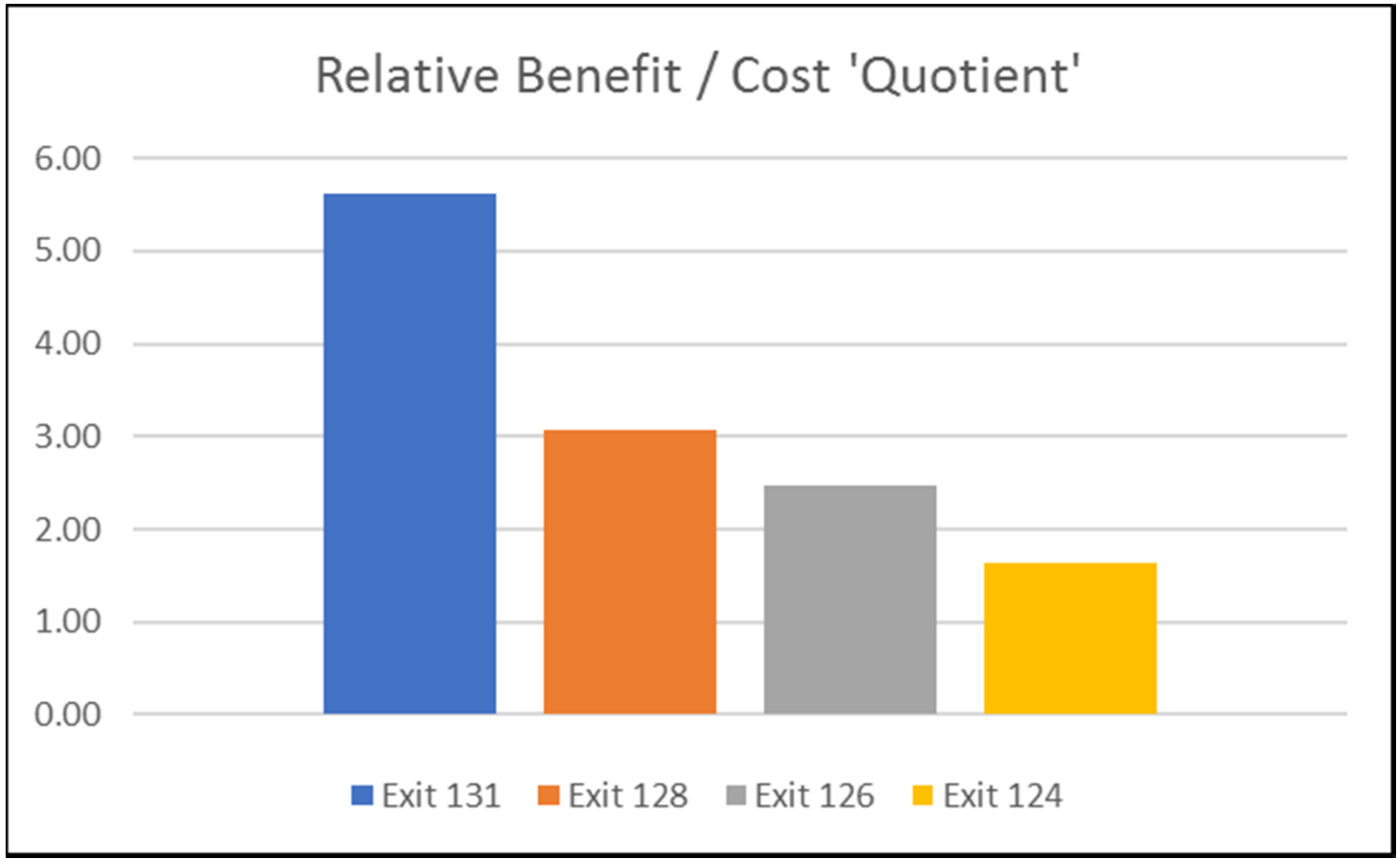
B/C Quotient Results



The benefit / cost quotient above is not a comprehensive Benefit/Cost Analysis but is instead a relative quotient between a limited number of available factors

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