System Feasibility Study Overview

• Study to identify the ideal number of lanes, lane configuration, and intersection control for the SH 60 corridor from I-25 to WCR 19 for the Year 2045
• Provide Johnstown and CDOT with a strategy to prepare future improvements for increased traffic flow along SH 60 from numerous developments and projected growth of the North Front Range
• Confirms recommendations from the SH 60 Environmental Overview Study (EOS)
Study Process

Data Gathering
Obtained Town development plans/traffic studies and existing traffic counts

Traffic Projections
Estimated new vehicle trips along SH 60 by the Year 2045

Traffic Analysis
Created software models of existing, minimal-build, and full alternatives to compare

Feedback
Present a summary of findings to Town Council and CDOT for feedback

System Feasibility Report
Traffic Projection

- Projected traffic along SH 60 to the Year 2045 using traffic studies from proposed developments
- All older traffic studies updated to reflect ITE Trip Generation 11th Edition
- Assumed all roads within developments are built and access SH 60 as proposed
  - Includes an expanded High Plains Blvd corridor
- Approximately 7,000 housing units, 1,950,000 sf of retail, and 750,000 sf of office space, and 800,000 sf of industrial space

<table>
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<th>Segment</th>
<th>Peak Hour Volume (Vehicles)</th>
<th>Growth</th>
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<tbody>
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<td>I-25 to High Plains Blvd</td>
<td>1092</td>
<td>5561</td>
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<tr>
<td>High Plains Blvd to Colorado Blvd</td>
<td>1069</td>
<td>3303</td>
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<tr>
<td>Colorado Blvd to Telep Ave</td>
<td>1130</td>
<td>2454</td>
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<tr>
<td>Telep Ave to Parish Ave</td>
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<td>2102</td>
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<tr>
<td>Parish Ave to WCR 19</td>
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Scenarios

- EOS Recommended model (base proposed model)
  - I-25 to Telep Ave – 4 Lanes Divided
  - Telep Ave to Great Western Railroad – 3 Lanes with Two Way Left Turn Lane
  - Great Western Railroad to Weld County Road 19 – 2 Lanes with Continuous Eastbound Acceleration/Deceleration Auxiliary Lane
  - Used recommended side street geometry and turning/auxiliary lanes from various traffic studies
  - Traffic signals added at Vista Commons collector street, High Plains Blvd, Ledge Rock Center collector street, Carlson Blvd, Zack Pl, and WCR 19

- Alternative 1 – Same as EOS model with ¾ intersections at Vista Commons collector street and Rolling Hills Ranch Dr and a traffic signal at Johnstown Center Dr

- Alternative 2 – Same as Alternative 1 with a Right-In Right-Out at the east entrance of Johnstown Center (directly south of the McDonalds)
Alternatives – Intersection Changes from EOS

SH 60 System Feasibility Study Work Session
Alternatives – Intersection Changes from EOS

Johnstown Center Drive Traffic Signal
• Left turning movement exceeds Level of Service D
• Crosswalk usage already high enough to implement a Rapid Flashing Beacon
• Increase safety for all turning movements and pedestrians

Vista Commons Collector Rolling Hills Ranch Dr. 3/4 Access
• Eliminates conflict points caused by left turns from minor to major road
• Low volume left turn movement onto major road exceeds Level of Service D

Johnstown Center at Parish Ave Right-In Right-Out (RIRO)
• Prevents vehicles from crossing double yellow and blocking Parish Ave northbound left turn lane
• Reduces traffic volume for Parish Ave northbound movements
Corridor Travel Times

- Travel times recorded from simulations of SH 60 traffic from I-25 northbound ramps to approximately 500 feet east of WCR 19
- Current Travel Time = ~8 minutes
- Future with Minimal Improvements = ~31 minutes
- Future with EOS or Alternative Improvements = 10-11 minutes

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<th>Volume</th>
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<td>Future (2045)</td>
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<td>Alternative 2</td>
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Final Recommendation

• JWO & Benesch recommend the Town of Johnstown implement Alternative 2

• Alternative 2 provides:
  • Acceptable arterial levels of service along the SH 60 corridor from I-25 to WCR 19
  • Acceptable levels of service for all intersections, including all approaches
  • Least amount of conflict points at minor intersections

• ¾ Intersection at Vista Commons Collector and Rolling Hills Ranch

• Right-In Right-Out implemented at Johnstown Center entrance off Parish Ave
SH 60 Corridor Conceptual Flyover
Colorado Blvd

Improvements budgeted for 2023
Questions?