

State Highway 60

System Feasibility Study

Town Council Meeting

November 7, 2022



Johnstown
Colorado



Consultant Presenters

Johnny Olson, PE

JWO – Project Principal

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Benesch – Senior Project Manager

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Johnstown Staff

Matt LeCerf

Town Manager

Troy White

Public Works Director



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

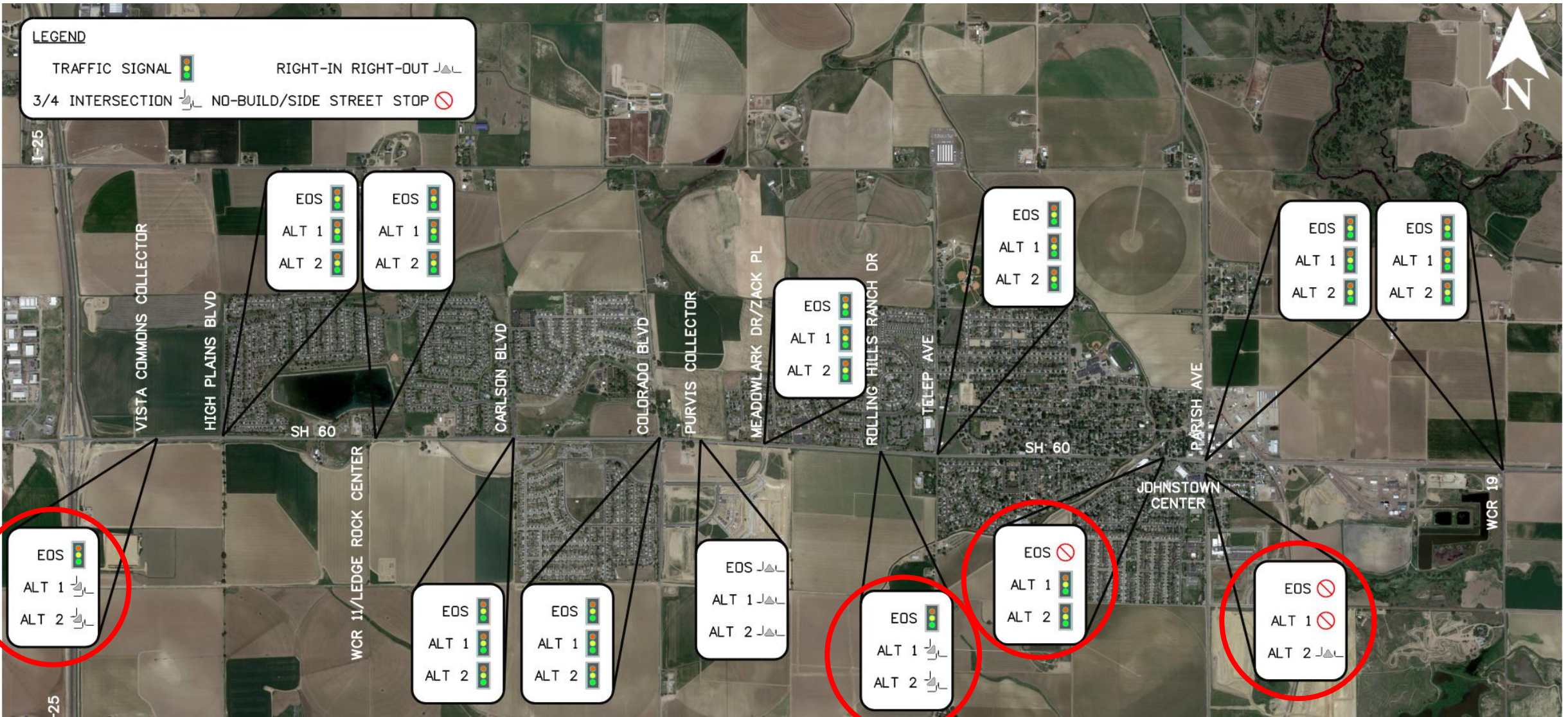
- Projected traffic along SH 60 to the Year 2045 using traffic studies from proposed developments
- All older traffic studies updated to reflect ITE Trip Generation 11th Edition
- Assumed all roads within developments are built and access SH 60 as proposed
 - Includes an expanded High Plains Blvd corridor
- 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

Segment	Peak Hour Volume (Vehicles)		Growth
	2022	2045	
I-25 to High Plains Blvd	1092	5561	409%
High Plains Blvd to Colorado Blvd	1069	3303	209%
Colorado Blvd to Telep Ave	1130	2454	117%
Telep Ave to Parish Ave	1298	2102	62%
Parish Ave to WCR 19	1199	1447	21%

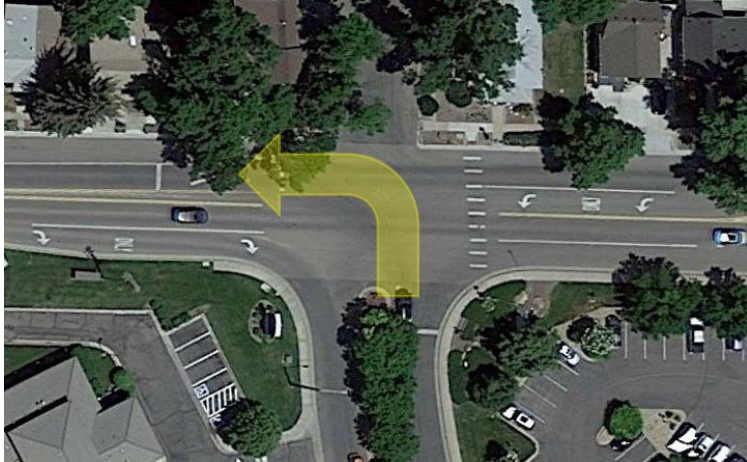
Scenarios

- 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 $\frac{3}{4}$ 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



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

Volume	Scenario	Travel Time (sec)			
		Eastbound AM	Westbound AM	Eastbound PM	Westbound PM
Existing (2022)	Existing Geometry	422	476	453	487
Future (2045)	Minimal Improvements	1155	1881	1497	1616
	EOS	552	660	651	639
	Alternative 1	566	634	659	639
	Alternative 2	573	633	665	649

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
- $\frac{3}{4}$ 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?

