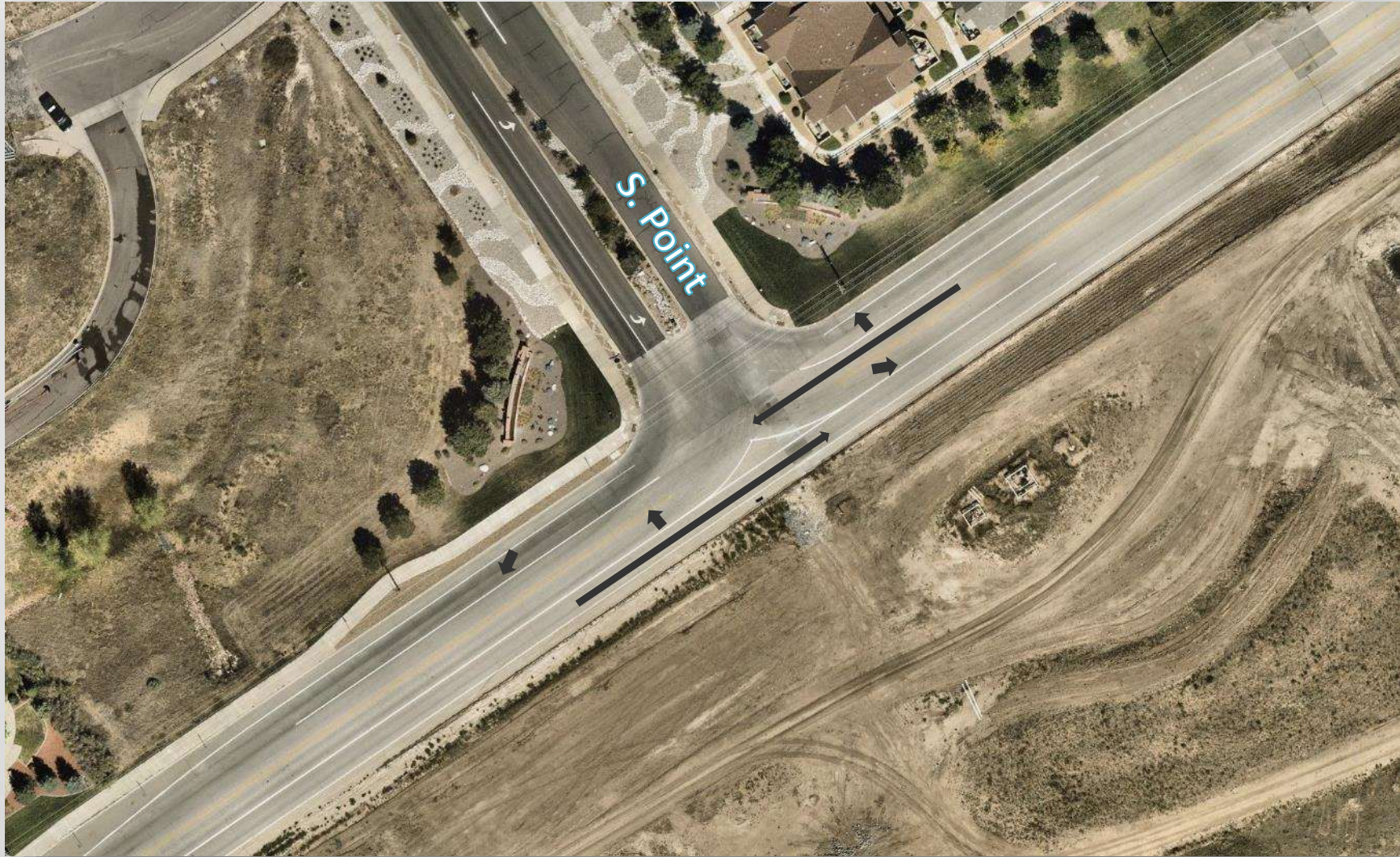


CROWFOOT VALLEY TRAFFIC CONTROL VISION

APRIL 20, 2021



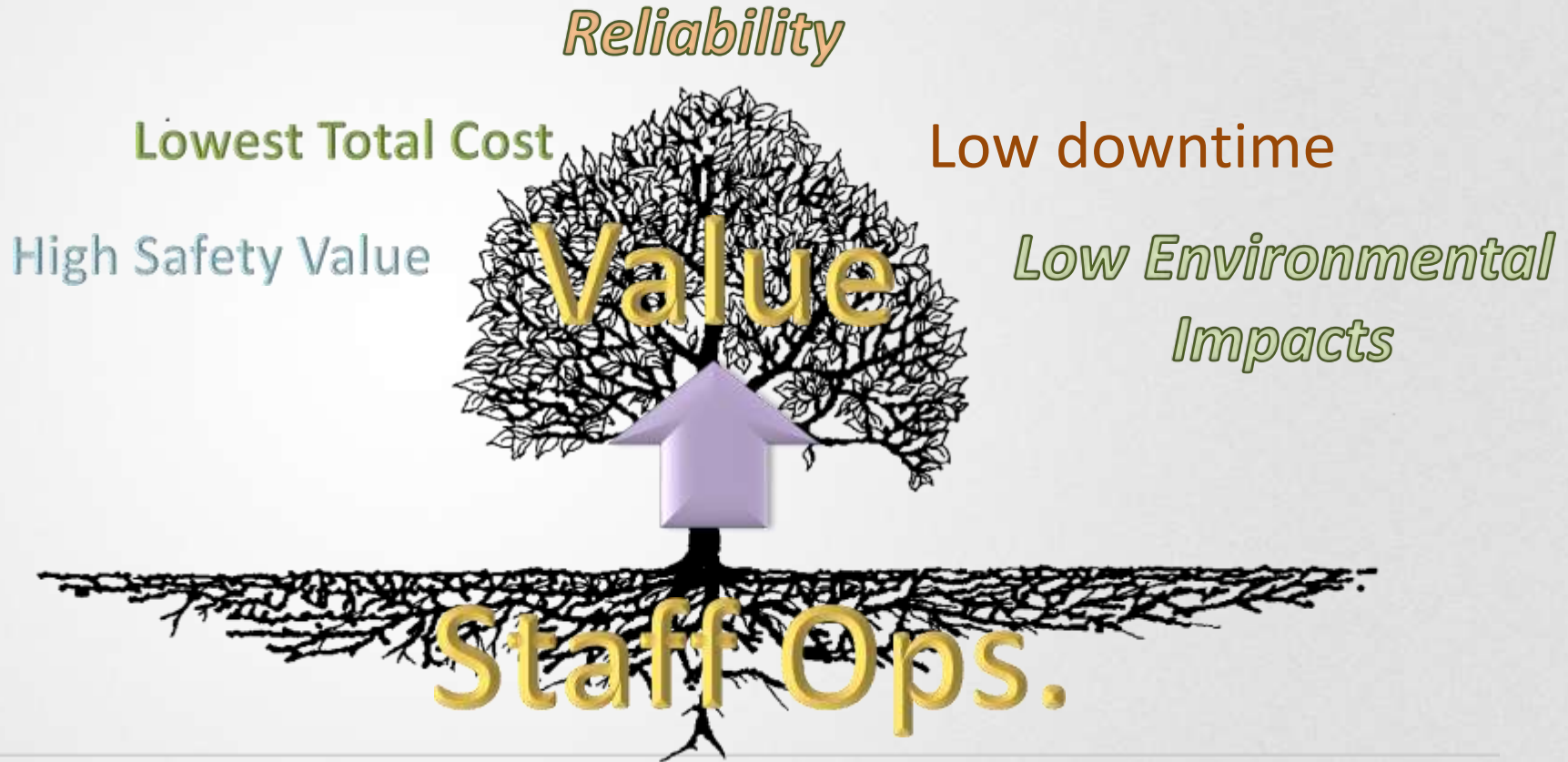








APPROACH



ROUNDBABOUTS & SIGNALS



<u>COST</u>	<u>SAFETY</u>	<u>PEDS/BIKES</u>	<u>ENVIRON.</u>	<u>VEH. OPS</u>	<u>PUB. ACCTP.</u>
Higher Initial	Less Fatalities	Less Ped. Crashes	Less Noise	High Capacity	Initial Hesitation
Lower O&M	Less Injuries	Slower Speeds	Lower Emissions	Total Day Eff.	Eventual Accept.
	Slower Speeds		Aesthetics		
	Less Conflict Pts.				
	Less Ped. Crashes				



Lower Initial	Higher Fatalities	Timing Flexability	More Noise	High Capacity	Well Known
Higher O&M	Higher Injuries	More Ped. Crashes	More Emissions	Peak Hr. Efficient	
	More Conflict Pts	Higher Speeds		Ineff. Non-Peaks	
	Higher Speeds				

5-YEAR CIP (CURRENT)

Project	Design Year	ROW Year	Construction	
			\$ Est.	Year
<i>Crowfoot Valley Road Roundabout</i>	2021	'21-'22	\$2.22M	2023
<i>Crowfoot Valley Road Widening - Town Boundary to Knobcone Dr</i>	2023	N/A	\$5.00M	2024

PUBLIC OUTREACH

Open House
January 26, 2021

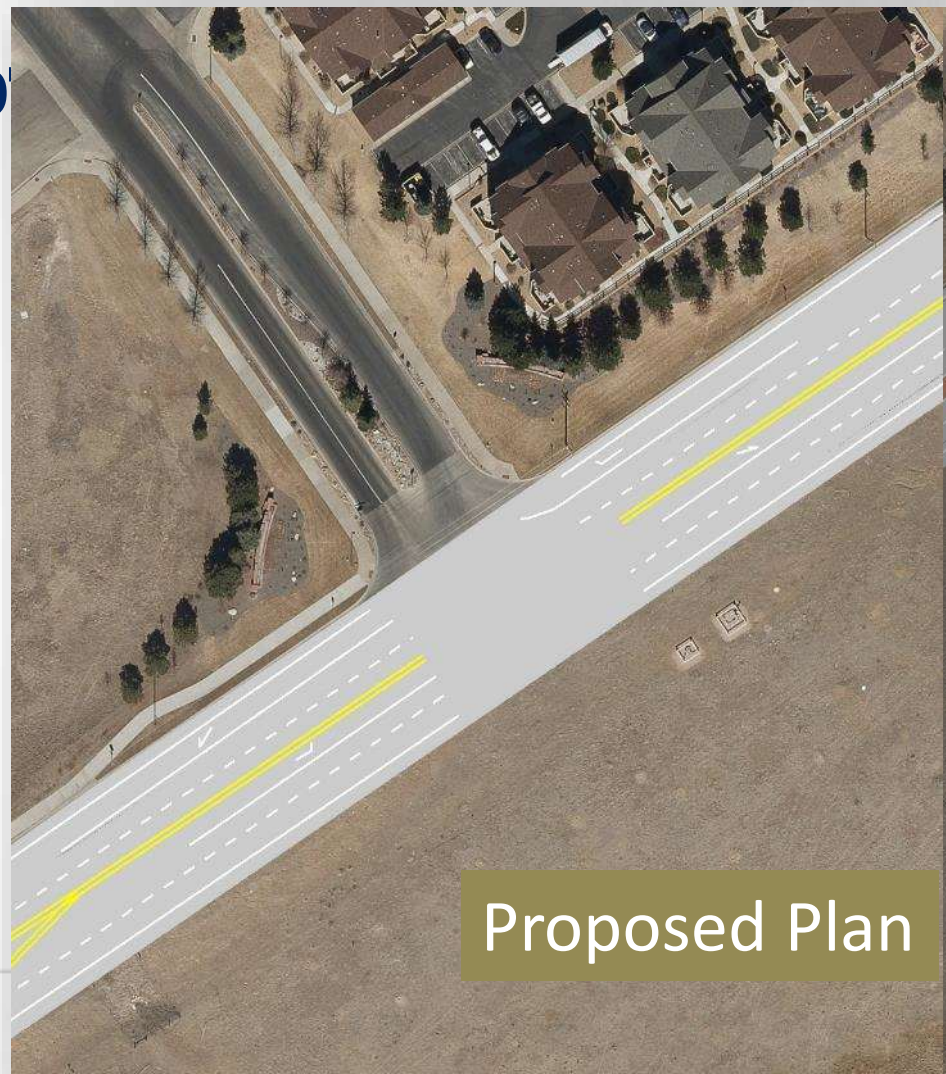
Pub. Works
Comm.
March 1, 2021

Sap. Pt. HOA
February 18, 2021

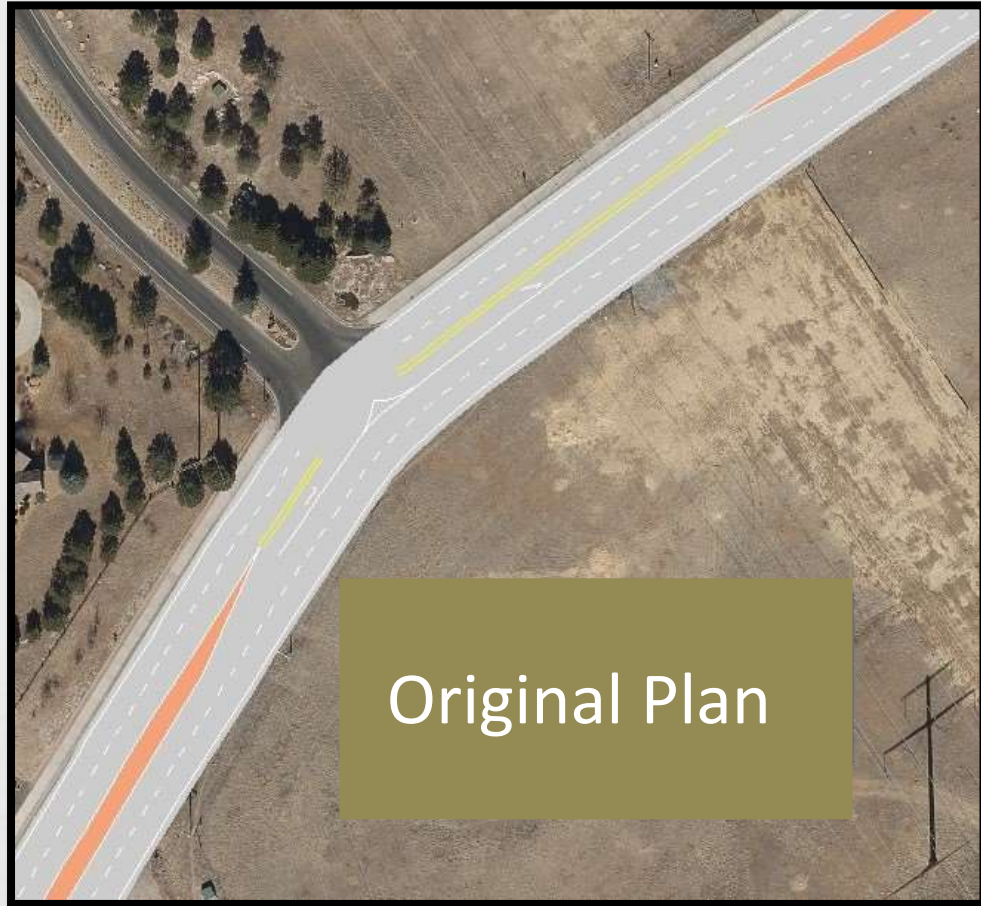
SUMMARY OF FEEDBACK

- Concerns about vehicle speeds on Crowfoot Valley Road,
- Feedback that Crowfoot Valley Road needs to be widened sooner than later,
- Keeping right turn lanes now and after the road is widened,
- Safety of the northbound left turn lane at Diamond Ridge Pkwy, and
- Various opinions about what the best traffic control option is for each intersection

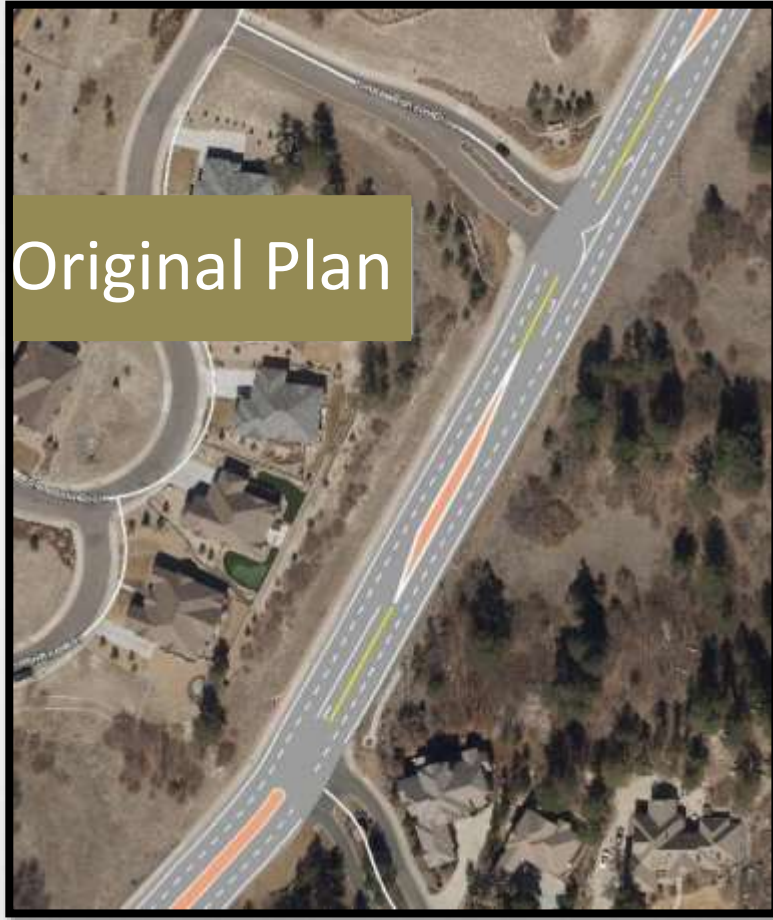
SAPPHIRE P



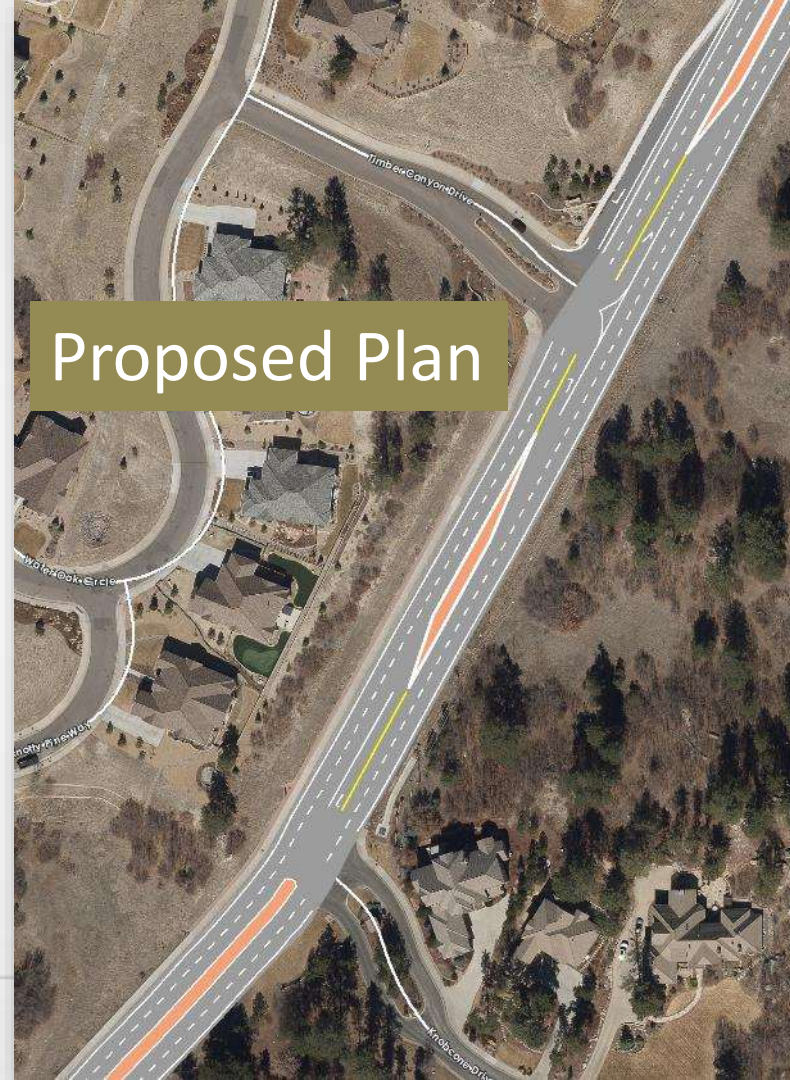
DIAMOND RIDGE



TIMBER & KC



Original Plan



Proposed Plan

SUMMARY

Location	Original Plan		
	Option	Construction Cost	Notes
Sapphire Pointe	Roundabout	\$2.22M	Construction of two lane roundabout
Diamond Ridge	Stop control	Included w/ widening	Left turn accel / decel lanes
Timber Canyon	Stop control	Included w/ widening	Left turn accel / decel lanes
Knobcone	Stop control	Included w/ widening	No auxiliary turn lanes
Corridor	Four lane roadway	\$5M	Includes bike lanes, sidewalks, and center median / left turn accel / decel lanes
Total Cost	All options above	\$7.22M	Includes items listed above

SUMMARY

Location	Revised Plan		
	Option	Construction Cost	Notes
Sapphire Pointe	Signal (when warranted)	\$800k (for new signal & right turn lane)	Construction of mast arm traffic signal. Include right turn accel / decel lanes.
Diamond Ridge	Signal (when warranted)	\$800k (for new signal & right turn lane)	Left turn accel / decel lanes. Construction of mast arm traffic signal. Include right turn decel lane.
Timber Canyon	Signal (when warranted)	\$800k (for new signal & right turn lane)	Left turn accel / decel lanes. Construction of mast arm traffic signal. Include right turn decel lane.
Knobcone	Signal (when warranted)	\$500k (for new signal)	Construction of mast arm traffic signal.
Corridor	Four lane roadway	\$5M	Includes bike lanes, sidewalks, and center median / left accel / decel turn lanes
Total Cost	All options above	\$7.9M	Includes items listed above

ADDRESSING THEMES

Location	Recommendation	Public Theme Addressed			
		Speeds	Widened Sooner	Keep Right Turn Lanes	Improve Left Turn Lane at D. Ridge
Corridor	Widen			+	+
Sapphire Pt.	Signal*		+**		
Diamond R.	Signal*		+**		
Timber C.	Signal*		+**		
Knob Cone	Signal*		+**		

*Signals to be constructed if/when warranted. Current forecasts for need is beyond 2026

**Eliminating roundabout at Sapphire Point may allow for the widening to be advanced earlier than current 2024 programmed year

SPEED LIMIT SOURCES

- Sources for information on speed limits
 - Manual on Uniform Traffic Control Devices
 - Methods & Practices for Setting Speed Limits (FHWA)
 - Speed Limit Basics (FHWA)
 - Setting Realistic Colorado Speed Limits (CDOT)

SPEED LIMIT PURPOSE

- To provide a realistic limit based on physical environment that is voluntarily obeyed by the vast majority
- To select a speed limit that provides for more uniform flow of traffic
- To define the speed at which most drivers can safely react to other vehicles, pedestrians, or obstructions in the roadway

SPEED LIMIT MYTHS

- People always obey the limit
- Lowering the limit always increases safety

COLORADO LAW

- Statutory (Model Traffic Code)
- Design based approach
- Actual operating conditions (engineering study)
 - Speed study was completed in 2017 for Crowfoot Valley Road
 - Current regulatory and advisory speeds match study recommendation

LEGAL CONSIDERATIONS

- All local traffic control devices shall conform to the Federal Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), as supplemented by the State Transportation Commission. § 42-4-105, C.R.S.
- Speed zones, other than statutory speed limits, shall only be established on the basis of an engineering study that has been performed in accordance with traffic engineering practices. MUTCD § 2B.13.

SUMMARY

- Future signal at Sapphire Point (when warranted)
- Add 3 of 4 right turn lanes to widening project (noise mitigation?)
- Continue to work with County on partnership to advance widening (future IGA)

QUESTIONS?

Recommended Motion: *“I move to adopt the recommended vision for Crowfoot Valley Rd. improvements and direct staff to continue discussions with Douglas County for possible Intergovernmental Agreement on shared funding.”*

