US 180 Corridor Master Plan Final Recommendations















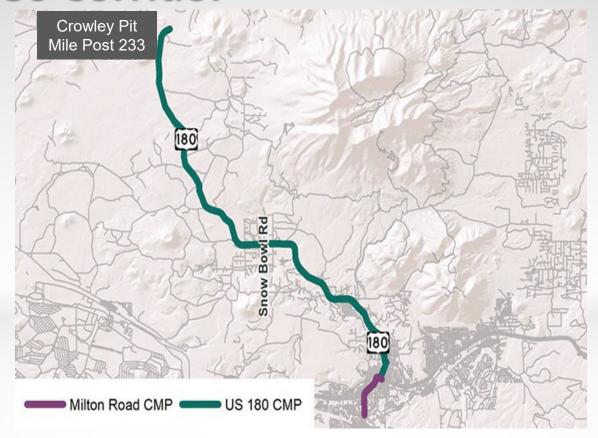




August 2022



US 180 Corridor





















Schedule

Alternatives Analysis



Fall 2017

Start

Summer 2018

Public Meeting
1

Fall-Winter 2020

Public Meeting 2

Jan 2021

Select Recommended Alternatives Spring 2021

Refine Recommended Alternatives **Summer 2022**

Final Report /
Finish



















US 180 CMP Objectives

Address congestion (with a special emphasis on winter congestions) and safety on US 180 Identify the long-term (20-year) vision of the corridor Obtain public and stakeholder input on alternatives, including multimodal alternatives

Prioritize implementation projects for design Assist NAIPTA in completing its Bus Rapid/Transit/High Capacity Transit system 6 design Follow the Planning and Environmental Linkages (PEL) process to carry forward decisions into the design and NEPA





long-term vision



Scope out and further implement previous and new strategies, consistent with the







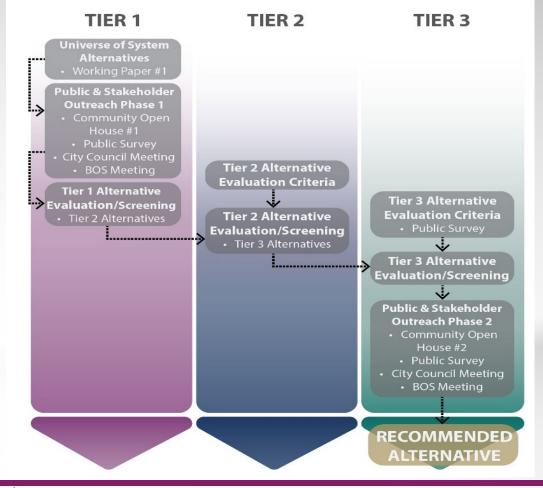






Alternatives Analysis Process

Next slides show
Alternatives
Analyzed















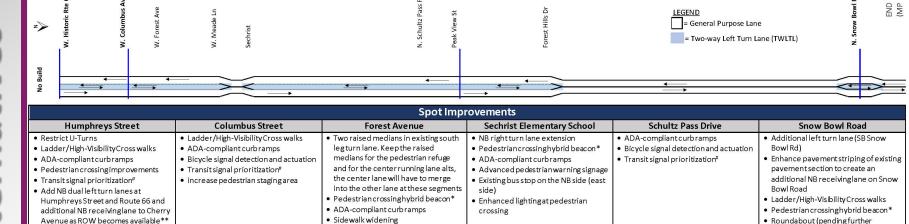






No-Build Plus

Segment 1



Additional Spot Improvements

- DMS Signage
- Rumble strips in non-residential areas Safety edges
- Delineators
- Guard rails
- Turn lane extensions
- Speed feedback signage (temporary applications only)
- Wildlife crossing at MP 224.8, MP 228.8, and MP 218
- · Add sidewalk where not present within City of Flagstaff limits

- Shoulder widening between Magdalena Rd (MP 219.16) and Hidden Hollow Rd (MP 219.65)
 - Restrict U-Turns
 - Right turn restrictions
 - · Enhanced crosswalks

 - Pedestrian scale lighting (FUTS)

 - · Pedestrian warning signage
 - Pedestrian hybrid beacon crossing at Humphreys Stand Fine St. and on US 180 at Meade St, Anderson St, near the Museum, and Blue Willow St*Bicycle signage
 - Enhanced Transit Shelters Planned bus stop on the NB side of Anderson Road (east side)

for these features and believes the warrants should meet prior installing the features.

*Proposed transit signal priority is for future consideration only, and will be considered for implementation upon meeting ADOT warrant and/or TIA that concludes no negative impacts to vehicular operations.

· Combined Bike Lane/Right Turn Lane

for WB Forest Ave. to NB US 180 with bicvcle shared-lane markings

**The NB dual left turn lane at Humphreys Street and Route 66 and receiving lane to Birch Street are intended to be implemented as part of redevelopment. The location of where the NB receiving lane drops (Birch St) should be reevaluated durina desian.

*ADOT requires ped crossing and new signals to meet ADOT warrants prior to installing them on Milton and US 180. The project partners would like for monitored test crossings to be allowed, where appropriate. ADOT has warranting criteria







Segment 2











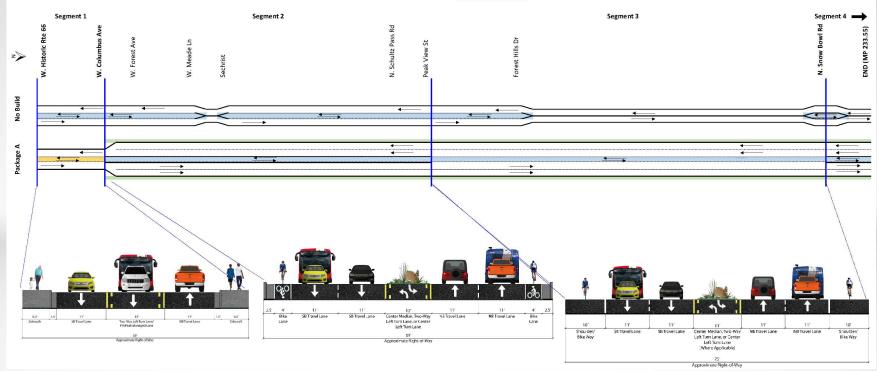
Segment 3



· Roundabout (pending further

consideration)

Alternative Package **Alternative Package A** Segment (Alt 17 - Wing Mtn Rd) (Alt 18 - Hidden Hollow) Alt 2 Alt 2 Alt 2 Alt 2 Route 66 to Columbus - AM no change - AM no change AM no change - AM no change No Build No Build (Urban) - PM SB managed lane LEGEND Alt 4B (Transit) No Build = General Purpose Lane = Two-way Left Turn Lane (TWLTL) Columbus to Peak View Alt 6 (Transit) Alt 3 Suburban AM managed lane NB - AM Bus NB No Build No Build - SB bus lane (Suburban) = Bike Lane/Bikeway = TWLTL or Peak Hour Managed Lane - All Traffic - PM managed lane SB - PM Bus SB Peak View to Snowbowl Rd Alt 6 (Transit) Alt 6 (Transit) Alt 6 (Transit) = Dynamic Shoulder = TWLTL or Peak Hour Managed Lane - Transit Only Alt 3 Rural No Build No Build - SB bus lane - SB bus lane - SB bus lane Snowbowl Rd to MP 233.55 No Build Alt 3 Rural No Build No Build No Build No Build











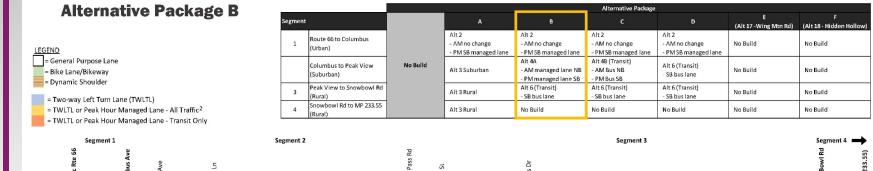


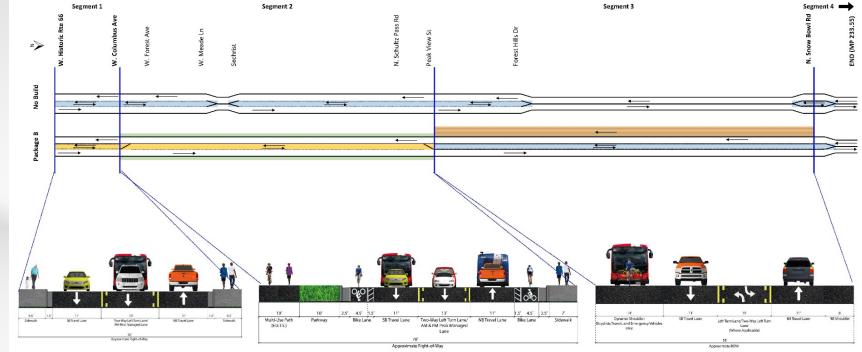






















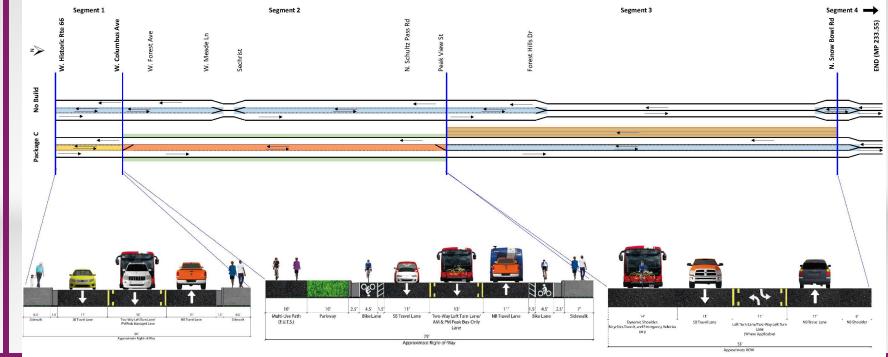








Alternative Package C Alternative Package Segment (Alt 17 -Wing Mtn Rd) (Alt 18 - Hidden Hollow) Alt 2 Alt 2 Alt 2 Alt 2 Route 66 to Columbus - AM no change - AM no change AM no change - AM no change No Build No Build (Urban) - PM SB managed lane Alt 4A Alt 4B (Transit) <u>LEGEND</u> Columbus to Peak View No Build Alt 6 (Transit) - AM Bus NB No Build Alt 3 Suburban - AM managed lane NB No Build = General Purpose Lane = Two-way Left Turn Lane (TWLTL) (Suburban) - SB bus lane - PM managed lane SB - PM Bus SB = Bike Lane/Bikeway = TWLTL or Peak Hour Managed Lane - All Traffic Peak View to Snowbowl Rd Alt 6 (Transit) Alt 6 (Transit) Alt 6 (Transit) Alt 3 Rural No Build No Build = Dynamic Shoulder = TWLTL or Peak Hour Managed Lane - Transit Only (Rural) - SB bus lane SB bus lane - SB bus lane Snowbowl Rd to MP 233.55 No Build No Build No Build No Build Alt 3 Rural No Build (Rural)













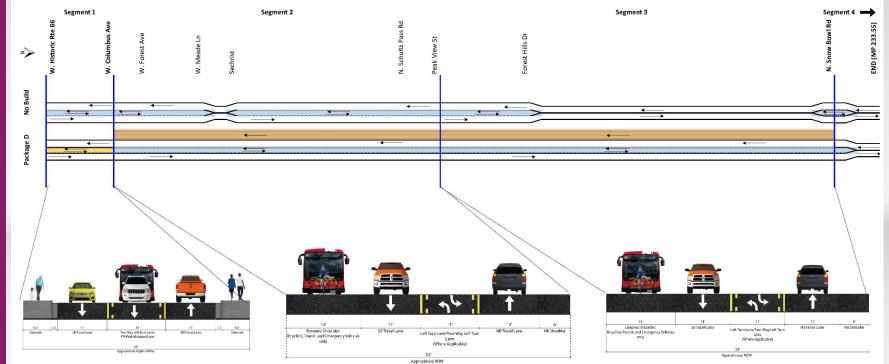








Alternative Package **Alternative Package D** Segment (Alt 17 - Wing Mtn Rd) (Alt 18 - Hidden Hollow) Alt 2 Alt 2 Alt 2 Alt 2 Route 66 to Columbus - AM no change - AM no change - AM no change - AM no change No Build No Build (Urban) - PM SB managed lane PMSB managed lane - PM SB managed lane - PM SB managed lane Alt 4B (Transit) = General Purpose Lane = Two-way Left Turn Lane (TWLTL) Columbus to Peak View No Build Alt 6 (Transit) Alt 3 Suburban - AM managed lane NB - AM Bus NB No Build No Build (Suburban) - SB bus lane = Bike Lane/Bikeway = TWLTL or Peak Hour Managed Lane - All Traffic PM managed lane SB - PM Bus SB Peak View to Snowbowl Rd Alt 6 (Transit) Alt 6 (Transit) Alt 6 (Transit) = Dynamic Shoulder = TWLTL or Peak Hour Managed Lane - Transit Only Alt 3 Rural No Build No Build (Rural) SB bus lane - SB bus lane - SB bus lane Snowbowl Rd to MP 233.55 Alt 3 Rural No Build No Build No Build No Build No Build





















		Alternative Package							
Segment							E (Alt 17 - Wing Mtn Rd)	F (Alt 18 - Hidden Hollow)	
1 1	Route 66 to Columbus (Urban)	No Build	Alt 2 - AM no change - PM SB managed lane	Alt 2 - AM no change - PM SB managed lane	Alt 2 - AM no change - PM SB managed lane	Alt 2 - AM no change - PM SB managed lane	No Build	No Build	
2	Columbus to Peak View (Suburban)		Alt 3 Suburban	Alt 4A - AM managed lane NB - PM managed lane SB	Alt 4B (Transit) - AM Bus NB - PM Bus SB	Alt 6 (Transit) - SB bus lane	No Build	No Build	
1 3	Peak View to Snowbowl Rd (Rural)		Alt 3 Rural	Alt 6 (Transit) - SB bus lane	Alt 6 (Transit) - SB bus lane	Alt 6 (Transit) - SB bus lane	No Build	No Build	
1 4	Snowbowl Rd to MP 233.55 (Rural)		Alt 3 Rural	No Build	No Build	No Build	No Build	No Build	

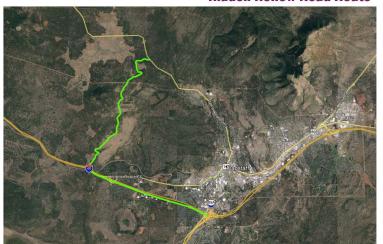
Alternative Package E

Wing Mountain Road Route

Alternative Package F

Hidden Hollow Road Route























US 180 Corridor Travel Times

		AM Pe	ak Hour		PM Peak Hour				
Alternative	Westbound		Eastbound		Westbound		Eastbound		
Alternative	Travel Time	Travel Time %	Travel Time	Travel Time %	Travel Time	Travel Time %	Travel Time	Travel Time %	
	(min)	Change	(min)	Change	(min)	Change	(min)	Change	Overall Impact
No Build	16.3	•	15.7	-	15.9	•	16.9	•	Neutral
А	15.9	2.8%	15.2	3.2%	15.5	2.4%	16.4	2.9%	Positive, yet neglibile
В	16.5	-1.1%	16.4	-4.7%	16.0	-0.4%	19.8	-17.1%	Negative
С	16.5	-1.2%	15.6	0.1%	16.3	-2.5%	20.5	-21.3%	Negative
D	17.2	-5.5%	15.7	-0.1%	16.2	-1.8%	20.2	-19.4%	Negative
E Wing Mntn bypass	15.6	4.5%	15.6	0.4%	15.7	1.2%	16.3	3.8%	Positive, yet neglibile
F Hidden Hollow bypass	15.9	2.9%	15.7	0.0%	15.8	0.9%	16.1	4.5%	Positive, yet neglibile



















US 180 Public Results

Alternative	Total Score	Rank	% Opposed	% Neutral	% Support
No Build	-224	6	56%	20%	24%
No Build Plus	211	1	23%	23%	53%
Alternative Package A	-102	4	46%	23%	31%
Alternative Package B	-173	5	48%	30%	22%
Alternative Package C	-248	7	53%	31%	15%
Alternative Package D	-258	8	56%	29%	16%
Alternative E - Wing Mntn Bypass	-77	3	44%	18%	39%
Alternative F - Hidden Hollow Bypass	-47	2	43%	16%	41%



















US 180 Vision Statement

The Vision for the US 180 Corridor (which includes Humphreys Street and Fort Valley Road) is to enhance community character while maintaining acceptable operations in a manner that respects all users, modes of travel, local business, residential property, and the environment. The Vision for US 180 balances improvement with preservation. The improvements to US 180 will help create an environment of shared benefits. The US 180 Corridor Master Plan has determined—through extensive analysis and public input—that ADOT cannot simply build its way out of congestion within this corridor. Therefore, it is recommended here that US 180 be enhanced within the confines of the existing roadway prism.

Specifically, this means that for at least a 20-year period (through 2041), no new through lanes are recommended for US 180 and no US 180 to I-40 bypasses are recommended. All multimodal improvements, as specified below, are designed to avoid or minimize encroachment and impacts to existing businesses or property to the best extent practicable.



















US 180 Recommended Alternative:

No Build Plus

 The No Build Plus alternative on US 180 would offer bicycle, pedestrian, bus user, wildlife, and intersection (safety) improvements without adding new travel lanes or bypasses.











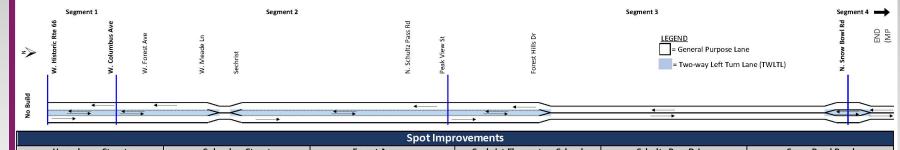








No-Build Plus



Spot Improvements										
Humphreys Street	Columbus Street	Forest Avenue	Sechrist Elementary School	Schultz Pass Drive	Snow Bowl Road					
Restrict U-Turns Ladder/High-VisibilityCross walks ADA-compliant curbramps Pedestrian crossing improvements Transit signal prioritization ^a Add NB dual left turn lanes at Humphreys Street and Route 66 and additional NB receiving lane to Cherry Avenue as ROW becomes available**		Two raised medians in existing south leg turn lane. Keep the raised medians for the pedestrian refuge and for the center running lane alts, the center lane will have to merge into the other lane at these segments Pedestrian crossing hybrid beacon* ADA-compliant curb ramps Sidewalk widening Combined Bike Lane/Right Turn Lane for WB Forest Ave. to NB US 180 with bicycle shared-lane markings	Enhanced lighting at pedestrian crossing	ADA-compliant curbramps Bicycle signal detection and actuation Transit signal prioritization*	Additional left turn lane (SB Snow Bowl Rd) Enhance pavement striping of existing pavement section to create an additional NB receiving lane on Snow Bowl Road Ladder/High-Visibility Cross walks Pedestrian crossing hybrid beacon* Roundabout (pending further consideration)					

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- Safety edges
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Implementation

- Cost Estimate: *\$2,824,000
 - ADOT to construct improvements that meet ADOT standards as funding becomes available
 - Partners to fund improvements that exceed ADOT standards as funding becomes available

*Funding has not yet been identified to implement the Short-term or Long-term Improvements.

















Questions?

www.azdot.gov/US180CorridorMasterPlan

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