

ALTERNATIVES DEVELOPMENT AND SCREENING REPORT

The purpose of the Kimball Junction Environmental Impact Statement (EIS) is to address transportation-related safety and mobility for all users of the Kimball Junction area by:

- Improving operations and travel times on SR-224 from the I-80 interchange through Olympic Pkwy.
- Improving safety by reducing vehicle queues on I-80 off-ramps
- Improving pedestrian and bicyclist mobility and accessibility throughout the evaluation area
- Maintaining or improving transit travel times through the evaluation area

EIS ALTERNATIVE SCREENING PROCESS

Level 3 screening criteria eliminated alternatives (potential transportation improvements) that do not meet the purpose and need of the project. Level 4 screening criteria eliminated alternatives that meet the purpose and need but would have unreasonable impacts on the natural and human environment, would not meet regulatory requirements, or could be replaced by a less costly concept with similar impacts.

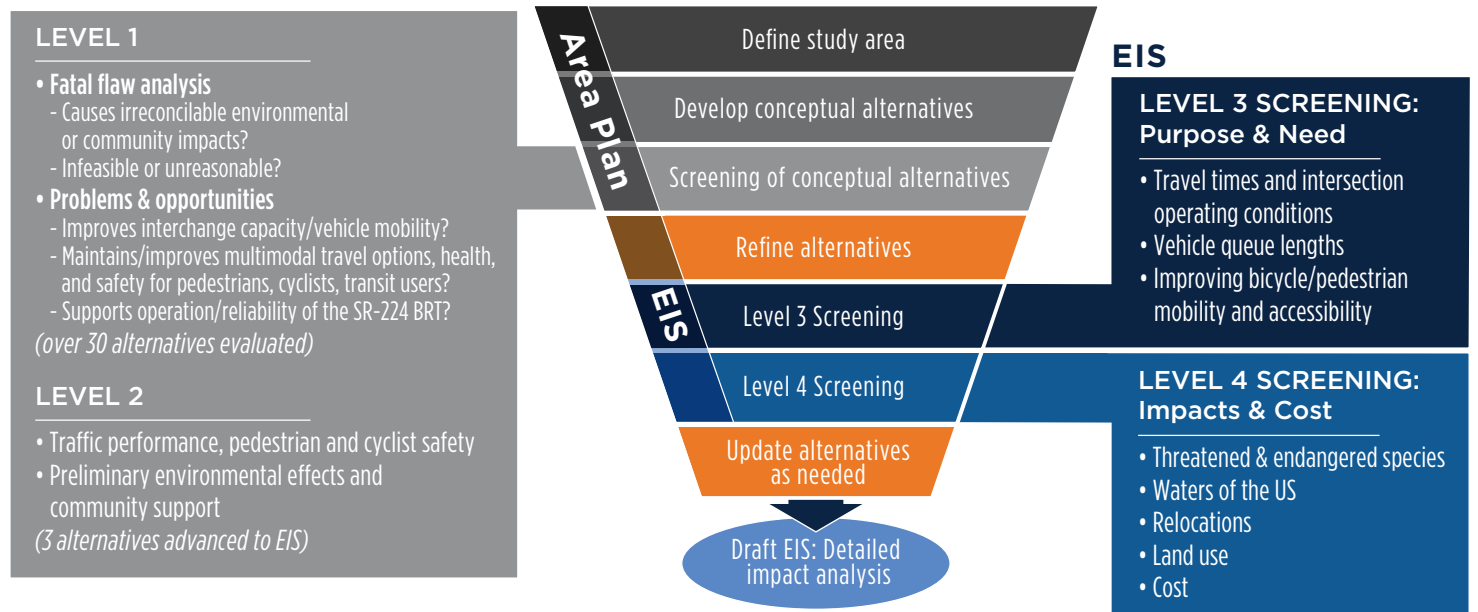
LEVEL 3 SCREENING

UDOT conducted an initial traffic evaluation on the conceptual alternatives from the 2021 Area Plan. All the conceptual alternative designs were refined and the refined alternatives were carried through the full Level 3 screening process. Alternative B did not meet the project purpose and did not pass Level 3 screening—however, it was carried forward in Level 4 screening for comparison.














LEVEL 4 SCREENING

Two alternatives, refined Alternatives A and C, passed Level 4 screening and are being advanced for detailed impacts analysis in the Draft EIS. Because refined Alternative B does not meet the purpose of the project and would have the most Waters of the US (WOTUS) impacts, the most relocations, and the highest cost without substantially greater benefits, it was not advanced for further evaluation in the Draft EIS.

Area Plan



SCREENING RESULTS SUMMARY *(More detailed information in Draft Alternatives Development and Screening Results Report Tables 5-2 & 5-4)*

Criteria	Measure	Data	What does this mean to me?	Existing Conditions (2022)	2050 No-Action Alternative	Alternative A (Refined) <i>Split-Diamond Interchange With Intersection Improvements</i>	Alternative B (concept from Area Plan) <i>(intersections fail: not fully evaluated)</i>	Alternative B (Refined) <i>Grade-Separated Intersections With One-Way Frontage Roads To The I-80 Interchange</i>	Alternative C (Refined) <i>Intersection Improvements With Pedestrian Enhancements</i>
Level 3 - Purpose & Need									
Improving operations & travel times on SR-224 from I-80 interchange through Olympic Parkway	Provides reliable through-traffic travel time on SR-224 during the AM and PM peak hour? (yes/no)	 Travel time <i>(average speed in mph)</i>	<i>I'm not stuck in slow moving traffic</i>	AM SB - 6:15 (17) PM NB - 7:45 (13)	AM SB - 11:30 (9) PM NB - 9:30 (11)	Yes: AM SB - 4:30 (25) PM NB - 4:15 (23)	Not evaluated	Yes: AM SB - 3:15 (33) PM NB - 2:45 (37)	Yes: AM SB - 3:15 (33) PM NB - 3:45 (26)
	Meets a level of service of LOS D for as many intersections as possible.	 Number of intersections at LOS E or F	<i>I'm not sitting through multiple light cycles all the time</i>	AM - 1 PM - 2	AM - 1 PM - 5	AM - 1 PM - 0	AM - 2 PM - 8	AM - 0 PM - 0	AM - 0 PM - 0
Improving safety by eliminating vehicle queues on I-80 off-ramps	Is the percent served improved during the peak hour? (yes/no)	 Percent served	<i>I can travel through the area</i>	99%	86%	Yes: 100%	No: 92% AM, 79% PM	Yes: 100%	Yes: 100%
	Are the off-ramp vehicle queue lengths eliminated on I-80 mainline through lanes? (yes/no)	 Length of vehicle queue <i>(feet)</i>	<i>Traffic isn't backed up on the I-80 mainline</i>	No: 2,600	No: >5,000	Yes: 600	No: >5,000	Yes: 900	Yes: 400
Maintaining or improving transit travel times through evaluation area	Does the alternative maintain or improve the SR-224 BRT transit travel times through the evaluation area? (yes/no)	 Total BRT Travel Time (NB+SB, AM+PM) Savings from No-Action <i>(min:sec)</i>	<i>Public transportation will work more efficiently</i>	N/A	16:30	14:00 Yes: (- 2:30)	Not evaluated	14:15 Yes (- 2:15)	14:30 Yes (- 2:00)
Improving pedestrian & bicyclist mobility and accessibility through evaluation area	Does the level of traffic stress improve in the vicinity of SR-224? (yes/no)	 Level of Traffic Stress (LTS) <i>(1-4 scale, L1 - low stress, L4 - high stress)</i>	<i>Pedestrians and cyclists can travel better in the area</i>	Yes: Trail - L1 Intersections - LTS3	Yes: Trail - L1 Intersections - LTS3	Yes: Ped Undercrossing improves Ute crossing to LTS1	Not evaluated	No: (same as No-Action) Trail - LTS1 Intersections - LTS3	Yes: Ped Undercrossing improves Ute crossing to LTS1
	Do the walk times improve for key origin-destination pairs? (yes/no)	 Total Walk Time Savings from No-Action for 4 O/D Pairs <i>(min:sec)</i>	<i>Pedestrians and cyclists have higher level of comfort</i>	53:30	54:00	52:30 Yes: (- 1:30)	Not evaluated	57:45 No: (+ 3:45)	53:45 Yes: (- 0:15)
Level 4 Screening - Cost and Impacts to the Built and Natural Environment									
Natural Environment Impacts	Threatened and Endangered Species	 Acres	<i>How will this impact protected species in the area?</i>	-	-	0	Not evaluated	0.001	0.001
	Wetlands & Waters of the United States	 Acres and types of aquatic resources <i>(ditches, open water, wetlands, perennial streams)</i>	<i>How will this impact federally protected wetlands and waters?</i>	-	-	0.131	Not evaluated	0.186	0.012
	Section 4(f) resources	 Number and type of Section 4(f) use	<i>Lands from a historic site or protected public resources</i>	-	-	0	Not evaluated	0	0
Built Environment Impacts	Relocations	 Number of potential residential or business relocations	<i>Potential property impacts to community members</i>	-	-	0	Not evaluated	3 businesses 0 residential	0
	Land Use	 Compatibility with current land use plans	<i>Does it meet our community land use goals?</i>	-	-	Yes	Not evaluated	No	Yes
Cost	Construction Cost Estimate	 \$2025 in millions	<i>What is the expense to the statewide community?</i>	-	-	\$108M	Not evaluated	\$201M	\$41M

PUBLIC INVOLVEMENT

30-DAY COMMENT PERIOD

FEBRUARY 26 - MARCH 27, 2024

UDOT is asking for public input on the Alternatives Development and Screening Report. Please provide comments on the alternative screening process in the report, the initial impacts analysis, and the alternatives advanced for detailed evaluation in the Draft EIS.

PUBLIC ENGAGEMENT ACTIVITIES:



LOCAL GOVERNMENT PRESENTATIONS



PUBLIC COMMENT PERIOD



SOCIAL MEDIA



WEBSITE

COMMENTS CAN BE SUBMITTED THROUGH:



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PROCESS & SCHEDULE



ONGOING STAKEHOLDER ENGAGEMENT

• Public engagement	• Public engagement	• Council Presentations • Open house • 37-day comment period	• Public engagement • 30-day comment period	• Council Presentations • Public engagement • 30-day comment period	• Council Presentations • Public hearing • 45-day comment period	• Public engagement
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REGULAR UPDATES WILL BE PROVIDED TO THE PUBLIC THROUGH EMAIL, SOCIAL MEDIA, AND THE STUDY WEBSITE

Individuals Requiring Accommodations: For those without internet access or needing accommodations including but not limited to translation or captioning, please notify the project team by **March 18, 2024** at 435-255-3168 for assistance with viewing materials or providing comments.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated May 26, 2022, and executed by FHWA and UDOT.