

ALTERNATIVES DEVELOPMENT AND SCREENING

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 Parkway
- 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

PRELIMINARY EVALUATION OF ALTERNATIVES

The Kimball Junction Area Plan (2021) alternatives evaluation process included a two-level screening process that consisted of developing screening criteria based on addressing the problems and opportunities and study goals, developing a full range of alternatives, and documenting the elimination of alternatives.

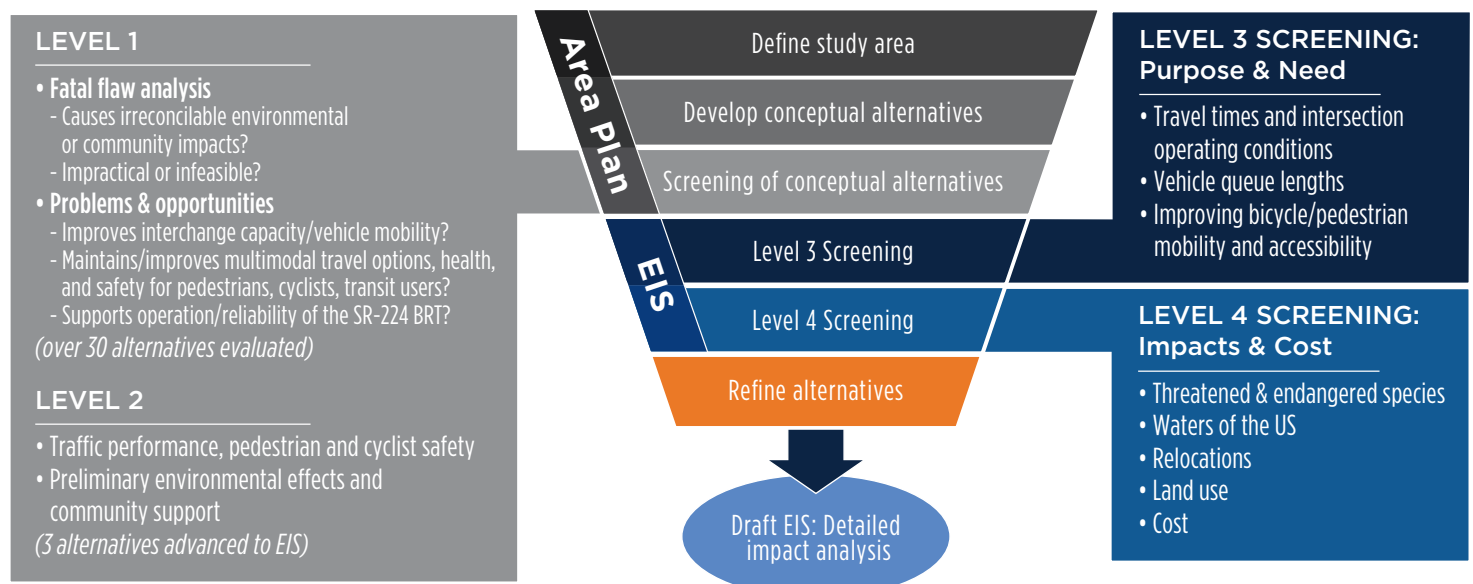
AREA PLAN ALTERNATIVE SCREENING

Level 1 screening determined whether each alternative had a “fatal flaw” or whether it did not meet the problems and opportunities of the study. Level 2 screening of the remaining alternatives included more quantitative objectives as well as a comparative evaluation of technical screening criteria.

EIS ALTERNATIVE SCREENING







Level 3 screening criteria will eliminate alternatives that do not meet the purpose and need for the project. Level 4 Screening screening criteria will eliminate alternatives that meet the purpose and need for the project but would be unreasonable for other reasons—for example, an alternative option that would have unreasonable impacts to the natural and human environment, would not meet regulatory requirements, or could be replaced by a less costly concept with similar impacts to the natural and human environment.

ALTERNATIVES SCREENING PROCESS



LEVEL 3 SCREENING - PURPOSE & NEED

Identifies alternatives that meet the purpose and need of the project.

Criterion	Measure	Data Evaluated
Improving operations & travel times on SR-224 from I-80 interchange through Olympic Parkway	Does the alternative provide reliable through-traffic travel time on SR-224 during the AM and PM peak hour? (yes/no)	 Travel time (average speeds on SR-224 to equate to arterial LOS*)
	Meet a level of service of LOS D for as many intersections as possible.	LOS Intersection LOS* (overall LOS and turning LOS)
	Is the percent served improved during the peak hour? (yes/no)	 Percent served**
Improving safety by eliminating vehicle queues on I-80 off-ramps	Are the off-ramp vehicle queue lengths eliminated on I-80 mainline through lanes? (yes/no)	 Length of vehicle queue (feet)
Improving pedestrian and bicyclist mobility and accessibility throughout the evaluation area	Does the level of traffic stress improve in the vicinity of SR-224? (yes/no)	 Level of traffic stress
	Do the walk times improve for key origin-destination pairs? (yes/no)	 Walk times
Maintaining or improving transit travel times through the evaluation area	Does the alternative maintain or improve the SR-224 BRT transit travel times through the evaluation area? (yes/no)	 Travel times

***Level of service (LOS)** is a measurement of the vehicle-carrying capacity and performance of a street, freeway, or intersection. When the capacity of a road is exceeded, the result is congestion, delay, and a poor level of service. Level of service is represented by a letter “grade” ranging from A for excellent conditions (free-flowing traffic and little delay) to F for failing conditions (extremely congested, stop-and-go traffic, and excessive delay).

A | NO DELAYS

Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed.

B | NO DELAYS

Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability.

C | MINIMAL DELAYS

Stable traffic flow, but less freedom to select speed.

UDOT Goal

D | NOTICEABLE DELAYS

Traffic flow becoming unstable. Speed subject to sudden change.

E | CONSIDERABLE DELAYS

Unstable traffic flow. Speed changes quickly and maneuverability is low.







F | CONSIDERABLE DELAYS

Heavily congested traffic. Demand exceeds capacity and speed varies greatly.

****Percent served** is the number of vehicles able to travel through the road network in fixed amount of time compared to the total number of vehicles attempting to travel through the road network.

LEVEL 4 SCREENING - IMPACTS

Focuses on the alternatives' impacts to the natural and built environment, along with estimated project costs.

Criteria	Measure
 Threatened and Endangered Species	<ul style="list-style-type: none">• Acres and types of habitat
 Waters of the United States	<ul style="list-style-type: none">• Linear feet of creeks affected• Acres and types of aquatic resources
 Section 4(f) resources*	<ul style="list-style-type: none">• Number and type of Section 4(f) uses
 Relocations	<ul style="list-style-type: none">• Number of potential residential or business relocations
 Land use	<ul style="list-style-type: none">• Compatibility with current land use plans
 Cost	<ul style="list-style-type: none">• Estimated project cost

*Section 4(f) properties include significant publicly owned public parks, recreation areas, and wildlife or waterfowl refuges, or any publicly or privately owned historic site listed or eligible for listing on the National Register of Historic Places.



PUBLIC INVOLVEMENT

30-DAY COMMENT PERIOD

APRIL 28 - MAY 28, 2023

UDOT is seeking public input on the Alternatives Development and Screening Methodology Report, which identifies criteria and measures for evaluation and guides which alternative(s) is carried forward for detailed evaluation in the Environmental Impact Statement (EIS).

PUBLIC ENGAGEMENT ACTIVITIES:



COMMENTS CAN BE SUBMITTED THROUGH:



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PROCESS & SCHEDULE



ONGOING STAKEHOLDER ENGAGEMENT

- | | | | | | |
|---------------------|---|--|---------------------|---|---------------------|
| • Public engagement | • Open house
• 30-day comment period | • Public engagement
• 30-day comment period | • Public engagement | • Public hearing
• 45-day comment period | • Public engagement |
|---------------------|---|--|---------------------|---|---------------------|

REGULAR UPDATES WILL BE PROVIDED TO THE PUBLIC THROUGH MEDIA AND WEBSITE UPDATES

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 May 10, 2023 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.