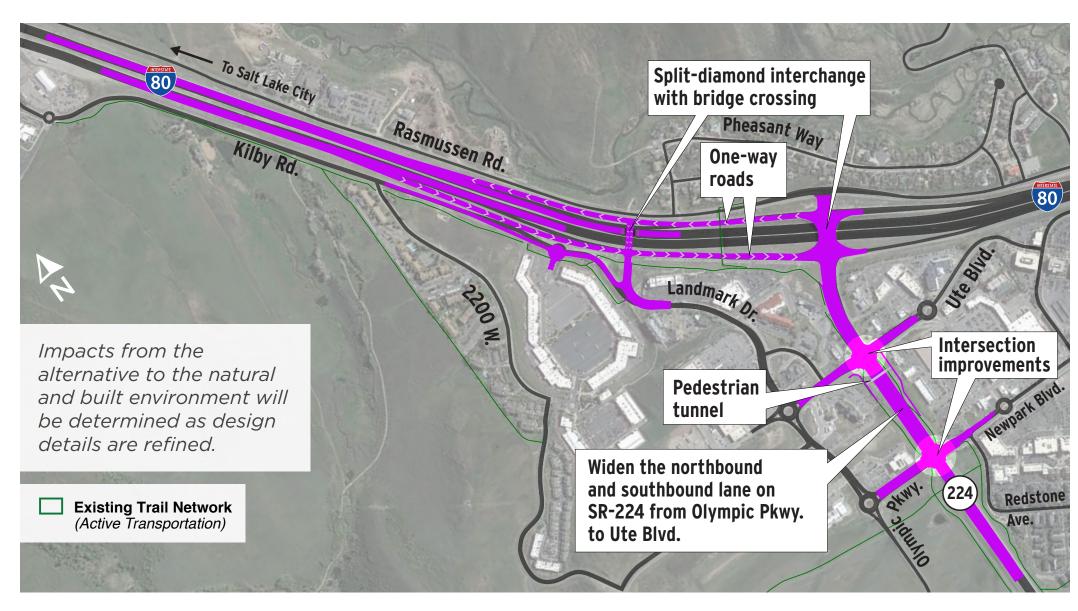
Alternative A

SPLIT-DIAMOND INTERCHANGE WITH INTERSECTION IMPROVEMENTS





DESCRIPTION

This alternative consists of a split-diamond interchange configuration on I-80 with intersection and pedestrian improvements on SR-224. The existing single-point urban interchange (SPUI) at Kimball Junction would be converted into a tight-diamond configuration (traffic signals at each off ramp), and the interchange would be split between the existing location at SR-224 and a new intersection with a bridge crossing I-80 to the west of SR-224.

One-way roads for both eastbound and westbound directions would connect the two intersections and tie into the on and off ramps for I-80.

A pedestrian tunnel at Ute Boulevard and intersection improvements along SR-224 are proposed to move all users more efficiently through the area. Intersection improvements include adding northbound and southbound through lanes on SR-224 between Olympic Parkway and I-80.

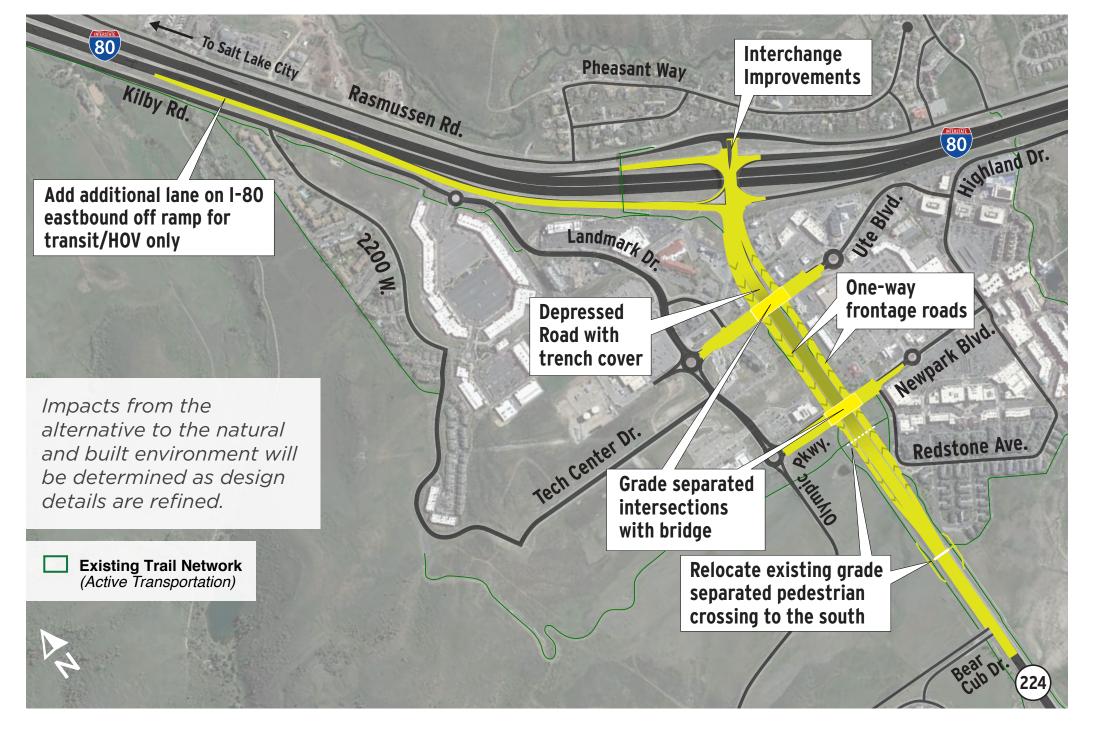
BENEFITS

- ✓ Provides new access points, better traffic dispersion and direct access into Kimball Junction on the south side of I-80
- ✓ Pedestrian tunnel would increase connectivity and comfort
- ✓ Improves travel time and mobility
- ✓ Minimize queuing onto I-80



Alternative B

GRADE-SEPARATED INTERSECTIONS WITH ONE-WAY FRONTAGE ROADS
TO THE I-80 INTERCHANGE





DESCRIPTION

This alternative consists of grade separated intersections at Ute Boulevard and Olympic Parkway that would help separate local and through traffic in the area. SR-224 would remain at or close to its current location horizontally but would be depressed below the surface streets through Kimball Junction. Entrance ramps would diverge from SR-224 to create a one-way frontage road system. Vehicles heading northbound from SR-224 to I-80 eastbound would exit onto the northbound frontage road south of Olympic Boulevard to continue north and use the existing on ramp.

A trench cover would go over the depressed SR-224 section between Olympic Parkway and Ute Boulevard. The existing pedestrian crossing south of Olympic Parkway would be relocated. Olympic Parkway and Ute Boulevard would tie into the frontage system at intersections, crossing over SR-224 on bridges.

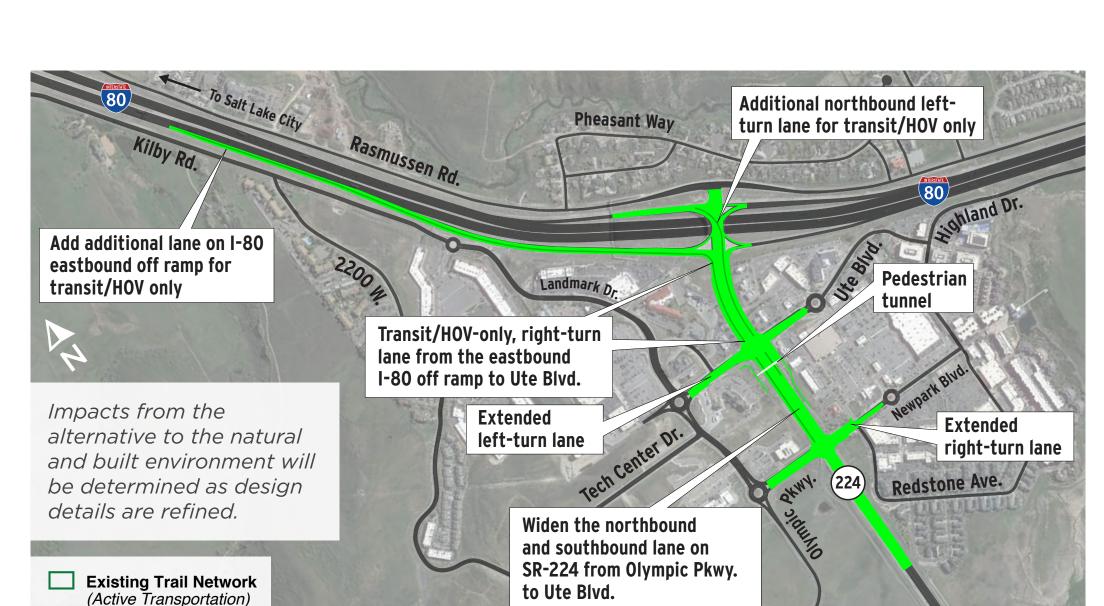
BENEFITS

- Increase walking comfort by decreasing volume of traffic next to and crossing pedestrian/bicycle routes
- By depressing the roadway through Kimball Junction, there would be fewer visual impacts
- ✓ Improves travel time and mobility
- ✓ Minimize queuing onto I-80



Alternative C

INTERSECTION IMPROVEMENTS WITH PEDESTRIAN ENHANCEMENTS



BENEFITS

- ✓ Pedestrian tunnel would increase connectivity and comfort
- ✓ Improves travel time and mobility
- ✓ People would be incentivized to have additional occupants in vehicle
- ✓ Minimize queuing onto I-80



DESCRIPTION

This alternative consists of expanding lanes for general purpose vehicles and strategic locations only for high-occupancy vehicles (HOV) while improving pedestrian and bicycle accessibility.

Potential improvements include the following options:

- Expand the I-80 eastbound off ramp for transit/HOV only. Add a transit/HOV-only, right-turn lane from the eastbound I-80 off ramp to Ute Boulevard
- Add dual left turn lanes at Olympic Parkway for southbound to eastbound movement
- Add an additional northbound left-turn lane at the existing single-point urban interchange (SPUI) for transit/HOV only
- Build a pedestrian tunnel near Ute Boulevard
- Widen the northbound and southbound lanes on SR-224 from Olympic Parkway to Ute Boulevard. A variation would be to widen only for an HOV-only lane
- Extend the westbound-to-northbound right-turn lane on Newpark Boulevard
- Extend the eastbound-to-northbound dual left-turn lane on Ute Boulevard

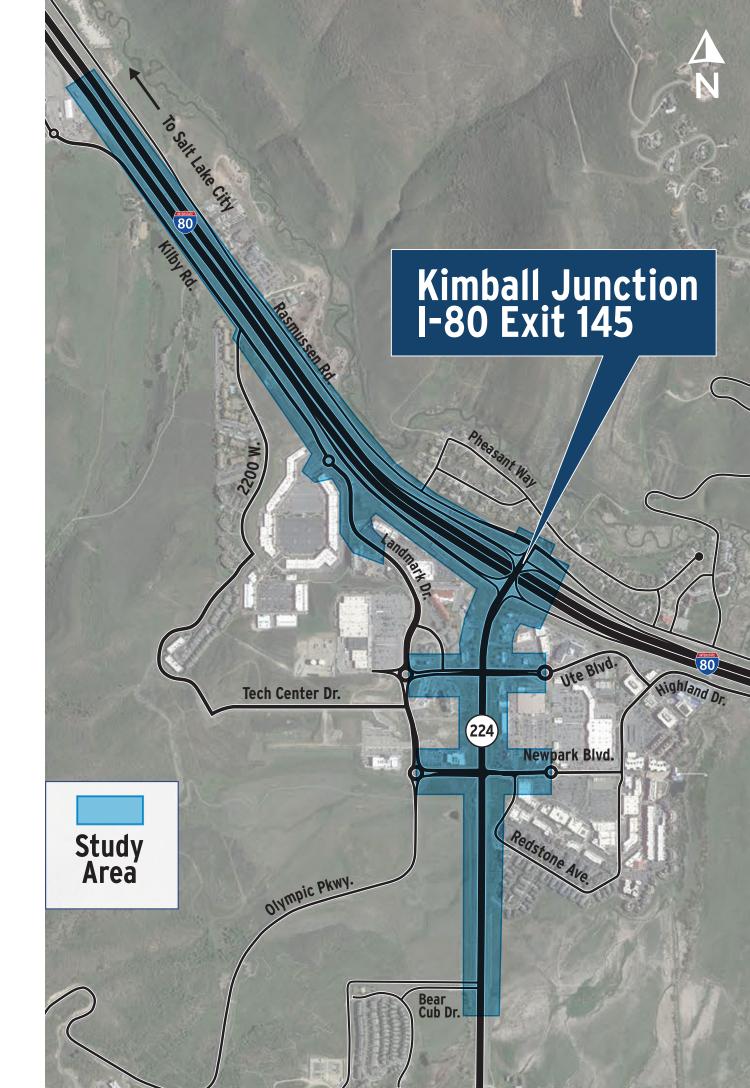


Kimball Junction & SR-224 Area Plan

- Developed multimodal & capacity transportation solutions using the Solutions Development Process
- Gathered input throughout the process
- Funded by Summit Co & UDOT
- Schedule: Nov 2019 to Mar 2021
- Recommended three alternatives for further evaluation









Kimball Junction & SR-224 Area Plan Goals

- Move people and goods more efficiently
- Improve mobility and comfort for all users through a connected network
- Contributes to improved local and regional air quality, environmental sustainability, and community health
- Maintain consistency with adopted land use and transportation plans
- Complement the evolving context and scale of the community
- Consider operational technologies and accommodate maintenance needs







Identification

Experts and the community determine a need for further action on a transportation issue

Planning

Verify the need and develop potential solutions

Kimball Junction & SR-224 Area Plan

Environmental

Define and assess potential impacts of alternative solutions

Fall 2022 - Fall 2024

Current Phase

Design

Upon environmental approval and after funding is available, professionals design the identified solutions

No funding identified

Construction

Following design, agencies construct or execute identified solutions

No funding identified

- Identified traffic need
- Developed potential alternatives
- Level 1 Screening

 Fatal flaw analysis
 (Over 30 alternatives evaluated)
- Level 2 Screening

 Traffic analysis, preliminary environmental impacts
 (4 alternatives evaluated)
- 3 alternatives advanced for further study



EIS Process & Schedule



PRE-SCOPING Spring 2022 -Fall 2022 NEPA SCOPING
Winter 2022 Spring 2023

Current Phase

ALTERNATIVES
DEVELOPMENT
Spring 2023 Summer 2023

PREPARE
DRAFT EIS
Summer 2023 Winter 2023

PUBLISH DRAFT EIS Winter 2023-Spring 2024 FINAL EIS AND RECORD OF DECISION Spring 2024-Fall 2024

ONGOING STAKEHOLDER ENGAGEMENT

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

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



Project Need (Draft)



- Future (2050) failing conditions at the SR-224 and the I-80, Ute Boulevard, and Olympic Parkway intersections create delay and unreliable travel times
- Off-ramp queues extending onto mainline I-80 resulting in unsafe travel conditions
- Growing east-west active transportation demand across SR-224







The project purpose 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







Define Study Area

Develop Conceptual Alternatives

Preliminary Evaluation of Concept/Alternatives

Level 1 Screening: Fatal Flaws

Preliminary Engineering

Level 2 Screening: Problems & Opportunities

Level 3: EIS Screening Criteria

Refine Engineering

Detailed Alternatives Evaluation in the Draft EIS AREA PLAN ALTERNATIVE SCREENING

EIS SCREENING CRITERIA (DRAFT)

Ö	Travel time
8	Intersection performance
Q-Q	Queue lengths on I-80
Koro	Pedestrian and bicycle connectivity and comfort
15	Environmental impacts



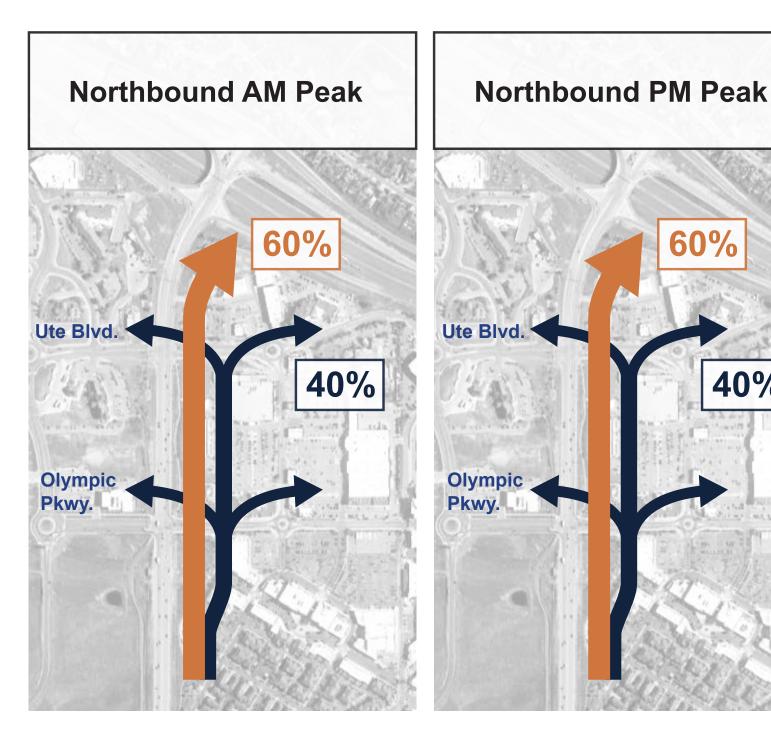
Traffic Origins



60%

40%

- Existing traffic divided between through traffic and Kimball Junction access traffic
- Business/residential traffic and through traffic are both an important concern
- Northbound traffic has similar through traffic/access traffic split in AM and PM

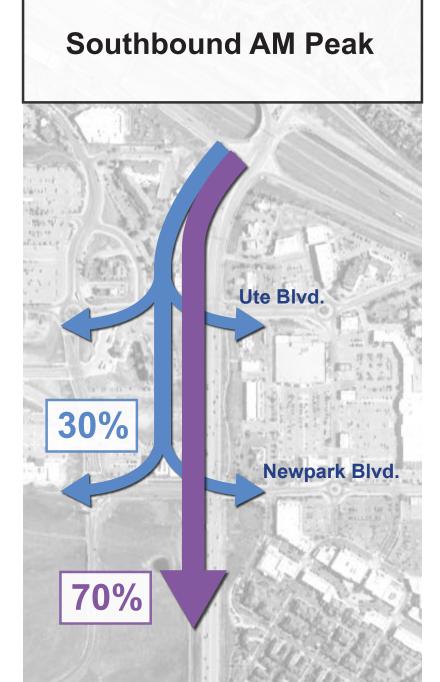


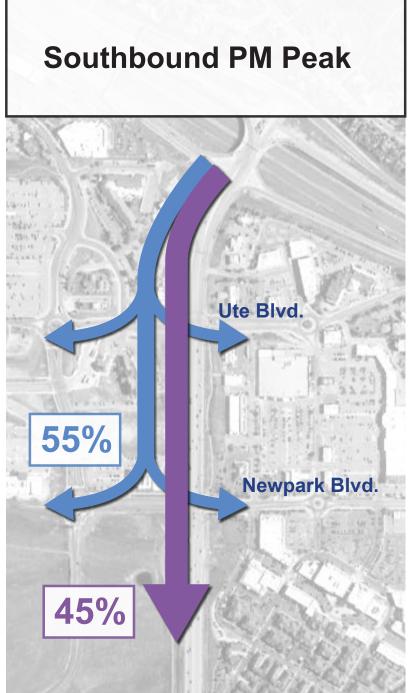


Traffic Origins



More southbound through traffic in the AM than in the PM

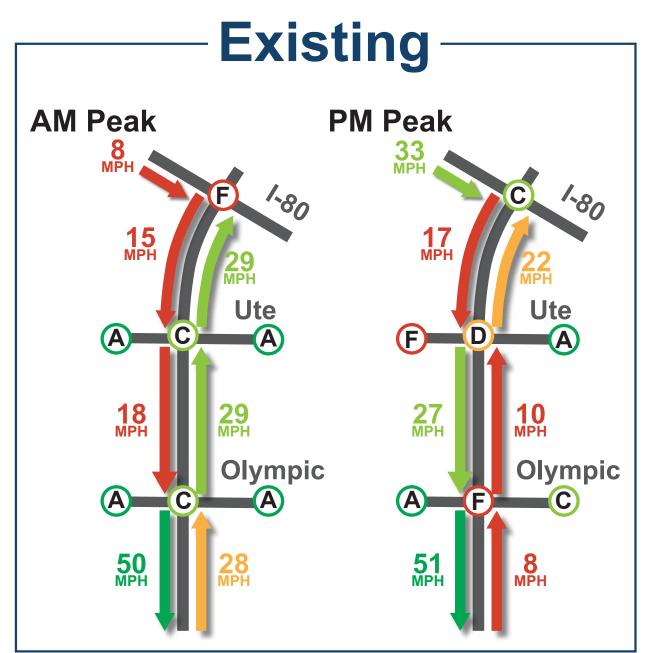


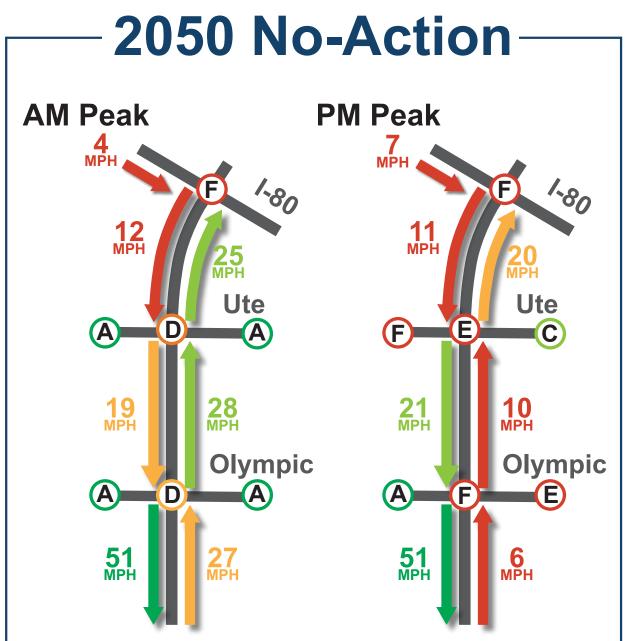




Travel Speeds & Level of Service







Level of Service

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

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.



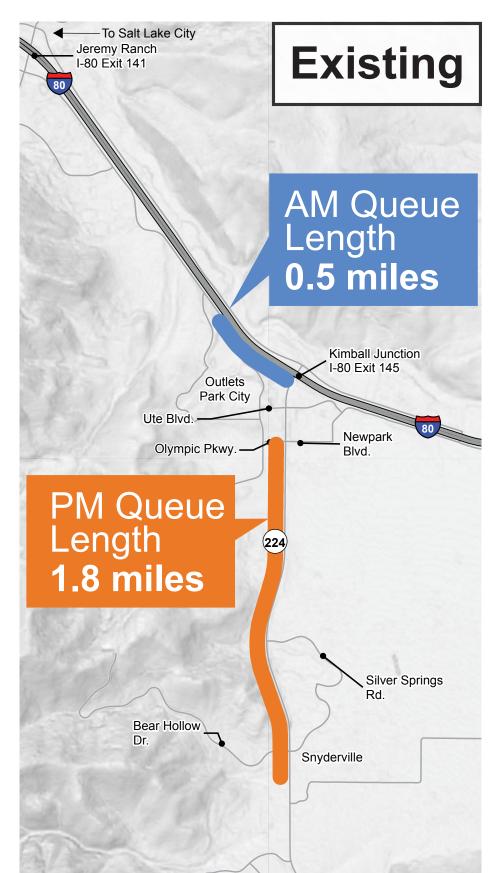
Queue Lengths

Ramp queues backed onto I-80 49 TIMES during winter 21/22



Two-mile outbound queues occurred 25 EVENINGS

during winter 21/22









Travel Times

AM I-80 off ramp travel times can grow from

to over

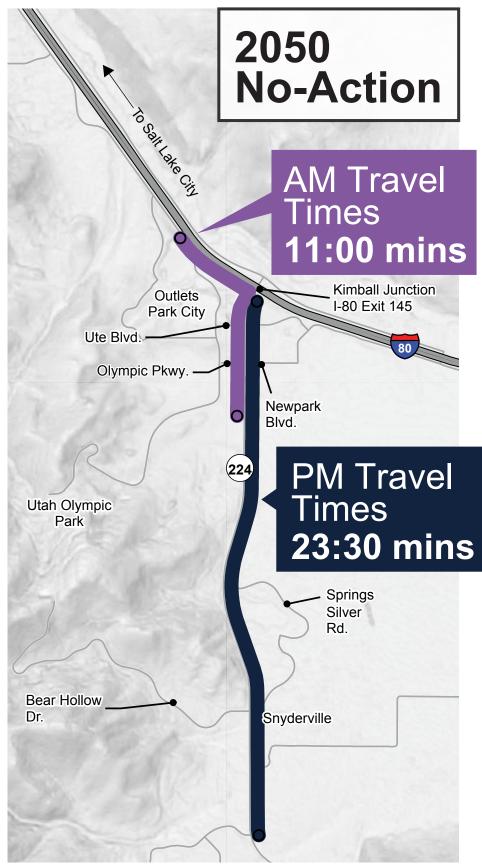
PM outbound travel times on SR-224 can grow from

to 20



Majority of worst conditions are on weekdays





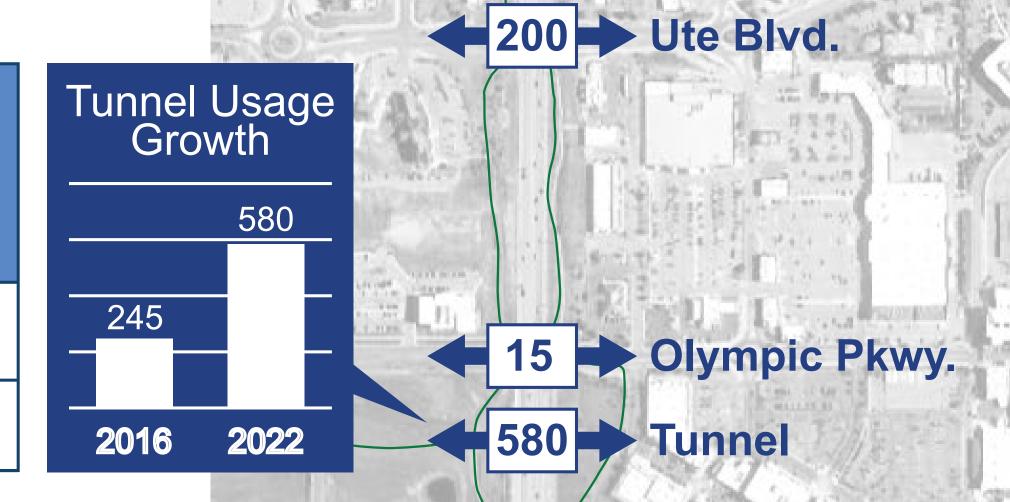




Transit & Active Transportation

Projected Kimball Junction
Transit Center Daily
Boardings (Winter)

2025	270
2050	1,700



Daily East-west

Bike/Ped Crossing (Summer)





Public Comment Period



DECEMBER 27, 2022 - JANUARY 27, 2023

COMMENTS CAN BE SUBMITTED THROUGH:



KimballJunctionEIS.udot.utah.gov



KimballJunctionEIS@utah.gov



Kimball Junction EIS c/o HDR 2825 E. Cottonwood Parkway, Suite 200 Cottonwood Heights, UT 84121



435-255-3168







The purpose of the Kimball Junction Environmental Impact Statement Project is to address transportation-related mobility for all users of the Kimball Junction area.

The proposed alternatives for the EIS include:

- ✓ Alternative A: Split-Diamond Interchange and Intersection Improvements
- ✓ Alternative B: Grade-Separated Intersections with One-Way Frontage Roads to the I-80 Interchange
- ✓ Alternative C: Intersection Improvements with Pedestrian Enhancements
- Taking no action
- **✓** Other reasonable alternatives (if identified) during the EIS process

Please provide your input on the proposed alternatives, purpose and need of the project, alternative screening criteria, potential impacts to the community and natural environment, identification of significant issues, and identification of potential new alternatives.



Key Terms



EIS: Environmental Impact Statement

Scoping: the gathering and analysis of information that a state agency will use to establish the breadth, or scope, of environmental review of a proposed project

HOV: high-occupancy vehicle

NEPA: National Environmental Policy Act

Level of Service (LOS): 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 to F for failing conditions

Purpose & Need: The purpose and need of a project defines a statement of goals and objectives that the study will address (purpose), and identifies the existing and future conditions that need to be changed (need)

Mobility: the ease with which people can move from place to place using a transportation system



Key Terms





Active transportation: A means of getting around that is powered by human energy, primarily walking and bicycling



Grade-separated intersection: A method of aligning a junction of two or more roadway axes at different heights (grades) so that they will not disrupt the traffic flow on other routes when they cross each other



Split-diamond interchange: A split-diamond interchange is a diamond interchange in which the two halves of the diamond are separated along the freeway by two lengths of frontage road. There might be additional intersections between the freeway on ramps and off ramps



Frontage road: A road that parallels an interstate to relieve traffic congestion caused by local trips



Peak hour: A specific 60-minute interval of peak traffic flow used for an analysis. The peak hours in this study were 8:00 to 9:00 AM and 4:00 to 5:00 PM

