Chapter 3

# **Terminal Building and Terminal Area Concepts**

#### 3.1. Introduction

The conceptual planning process is designed to evaluate the information gathered during the inventory, and capacity analysis stages of the planning process and use this information to develop preliminary concept alternatives that meet the goals and objectives of the Terminal Area Plan (TAP) for Friedman Memorial Airport (SUN or Airport). The terminal building alternatives and terminal area alternatives presented in this chapter are the result of collaboration between the Consultant Team, Airport Staff, and terminal building tenants including the airlines, the car rental companies and the Transportation Security Administration (TSA).

This chapter outlines the planning assumptions that informed the development of the terminal building and terminal area concepts as well as the goals the alternatives are designed to achieve. Terminal building opportunities and constraints are also presented. Lastly, a screening matrix is utilized to compare the terminal building and terminal area alternative concepts.

### 3.2. Assumptions and Goals

A series of fundamental reasoning assumptions and development goals drive the planning process and influence the recommendation of the long-term development program for the Airport. The following assumptions and goals guide the development and analysis of a range of alternatives designed to accommodate current and future needs of the Airport:

**Assumption One: Improvements must comply with local, state, and federal regulations.** The Airport will be developed and operated in a manner that is consistent with local ordinances and codes, federate and state statues, federal grant assurances, and Federal Aviation Administration (FAA) regulations.

Assumption Two: The role of the Airport will remain the same and terminal improvements are needed today. The Airport will continue to serve as a facility that accommodates commercial passenger service activity and general aviation activity. Improvements to the terminal and the terminal area are needed to accommodate existing activity levels as well as projected future growth.

**Assumption Three: The Airport will continue to provide a safe and reliable operating environment.** This requires that various terminal areas be segregated as much as possible and given an appropriate amount of space.

**Assumption Four: Future terminal area development must accommodate vehicle parking and access.** Impacts to the terminal curb, terminal loop roads and parking network must be considered so that convenient access for passengers, rental car companies, and other transportation stakeholders in continuously provided.

**Assumption Five: The area available for development is constrained.** Therefore, the plan for future terminal development should strive to make the most efficient use of the very limited space available.



### 3.3. Goals for Development

Complimenting these assumptions are several goals, which have been established for the purposes of directing the planning and establishing continuity for future terminal building and terminal area development. These goals consider the Airport's short-term and long-term needs and include capacity, flexibility, financial, feasibility, construction phasing, passenger service, placemaking, security, safety, and support function considerations. The goals for terminal building and terminal area development at SUN are:

- Improve passenger level of service
- Address terminal space and code deficiencies
- Provide for future facilities that are flexible, cost effective and financially feasible
- Recommend development that can be phased
- Reflect the character of Sun Valley and the existing airport environs
- Provide a flexible response to varying security requirements in a reasonable, safe, and efficient manner
- Accommodate Snow Removal Equipment (SRE)/maintenance and other airport support facilities

### 3.4. Opportunities and Constraints

The passenger terminal development area is defined by the commercial aircraft parking apron to the north, the parallel taxiway to the east, the SRE building to the south and the parking lots and vehicle access to the west. The potential area for terminal expansion in this location is very limited. **Figure 3-1** illustrates the primary opportunities (green) and constraints (red) for any potential expansion of the terminal building:

- Expansion to the north is limited by aircraft parking but needed to address departure lounge building code exceedances.
- Expansion to the east is limited by the proximity to the taxiway; however, expansion in the Security Screening Check Point (SSCP) area is necessary to the east.
- The structural and mechanical areas of the terminal limit interior renovation options.
- The Porte Cochere structure limits terminal and roadway/curb expansion to the west.
- There is underutilized space in the terminal Great Room that could potentially be converted into future departure lounge space to address building code issues.
- There is an overhang north of the baggage claim that could provide additional terminal space and there is area to the west of baggage claim that could be available for terminal expansion.

#### Figure 3-2 illustrates the primary opportunities (green) and constraints (red) for the terminal area:

- Terminal area facilities expansion is constrained by aircraft storage hangars both north and south of the terminal.
- The location of airport administrative offices and Snow Removal Equipment (SRE) storage is also constraining.
- The potential future Airport Traffic Control Tower (ATCT) sites are constraints.
- The area immediately south of the lower-level parking lot is an opportunity for parking expansion.
- The three areas off airport property to the west are opportunities for future parking expansion but would require land acquisition.



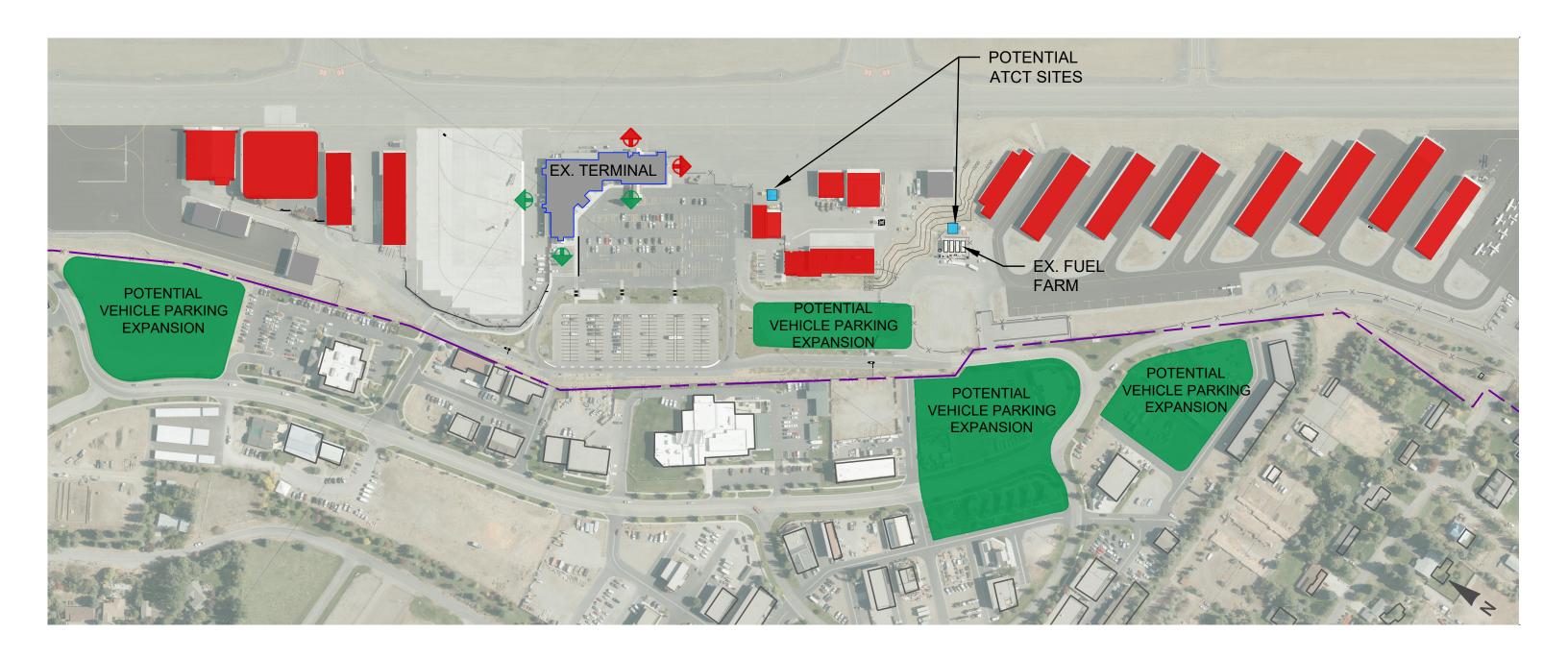


















### **Terminal Building Recommended Development Program**

The refined Terminal Building Development Program is intended to meet the Short- to Medium Term growth at Planning Activity Level (PAL) 3 at SUN and accommodate up to 130,000 annual passengers and up to 273 peak hour passengers. The PAL 3 program recommendations are included in the second column in **Table 3-1**.

Table 3-1: Refined Terminal Building Development Program Comparison

|  | 1        | 21                                  |
|--|----------|-------------------------------------|
| Note: Aviation demand is indicated by Planning           | Existing | PAL 3                               |
| Activity Levels (PALs)                                   | Facility | MP                                  |
| Annual Enplaned Passengers                               |          | 130,000                             |
| Peak Hour Enplaned Passengers                            |          | 273                                 |
|  | GSF      | Recommended Gross<br>Square Footage |
| Concourse  |          |                                     |
| Gates: Ground Boarding                                   | 0        | 4                                   |
| Departures Lounge and Gate Area                          | 3,920    | 6,996                               |
| Circulation  | 1,640    | 5,222                               |
| Restrooms  | 725      | 2,254                               |
| Concessions, Vending, Seating                            | 380      | 1,365                               |
| Concourse Total  | 6,665    | 15,837                              |
| Security Checkpoint                                      |          |                                     |
| Number of CP Lanes                                       | 1        | 2                                   |
| Passenger Screening                                      | 1,655    | 2,600                               |
| Checkpoint Queueing                                      | 540      | 800                                 |
| Checkpoint Exit  | 275      | 400                                 |
| Checkpoint Total   | 2,470    | 3,800                               |
|  |          |                                     |
| Terminal   |          |                                     |
| Baggage Carousels  | 1        | 2                                   |
| Circulation and Queuing                                  | 8,235    | 10,216                              |
| Public Seating   | 2,275    | 1,119                               |
| Bag Claim and Seating                                    | 2,160    | 6,238                               |
| Public Restrooms   | 1,215    | 2,610                               |
| Concessions and Vending                                  | 180      | 234                                 |
| Public Area Subtotal                                     | 14,065   | 20,410                              |
| (NP) Baggage Screening and Conveyors                     | 340      | 1,500                               |
| (NP) Inbound/Outbound Baggage                            | 1,700    | 3,000                               |
| (NP) Airline Areas                                       | 1,700    | 2,92                                |
| (NP) Car Rental Areas                                    | 675      | 2,92.                               |
| (NP) Leased Space  | 1,490    | 1,335                               |
| (NP) Airport Offices and Support Areas                   | 1,490    | 1,333                               |
| Nonpublic Area Subtotal                                  | 6,910    | 10,880                              |
| ויטווףשטווג הובש ששטנטנעו                                | 2,795    | 5,98                                |
| Ruilding Utilities Structure and Chases                  |          | 2.984                               |
| Building Utilities, Structure and Chases Terminal Total  |          | •                                   |
| Building Utilities, Structure and Chases  Terminal Total | 23,770   | 37,280                              |

**Source:** FAA Advisory Circulars, Airports Cooperative Research Program and Mead & Hunt.

Note: GSF = Gross Square Feet



### 3.5. Preliminary Terminal Building Alternative Concepts

A series of initial terminal building alternative concepts were developed and are presented on the following pages that delineate potential terminal footprint and configuration options for a future expanded and renovated terminal building. The purpose of these initial concepts is to explore alternative terminal layouts and configurations that can be developed in a phased manner and address the major capacity deficiencies, flow issues, and lack of space challenges in the existing terminal. Each terminal building alternative concept address the same level of forecast activity and the primary constraints and opportunities relative to the terminal area. The terminal program presented in Chapter 2 indicates that approximately 56,000 square feet of terminal space is needed by 2030; however, there are efficiencies in the space configuration of the concepts presented in this chapter, which result in a reduction of the estimated space considered necessary. Each of the three alternative concepts provides approximately 50,000 square feet of total space. It is also important to note the components of these concepts could be mixed and matched and combined in a hybrid concept to be carried forward as opposed to just selecting one single alternative.

### **Assumptions for All Preliminary Alternative Concepts**

The following alternatives concepts have different features, layouts and configurations to accommodate current and projected passenger activity at SUN. However, there are a number of assumptions/considerations that are necessary and included in ALL the following alternative Concepts. Those assumptions/considerations include:

- Additional baggage screening space is needed for both capacity and safety purposes.
- Terminal baggage screening expansion can only go east.
- Additional space is needed for security screening, and it can only go east.
- Additional departure lounge space is needed.
- Additional baggage claim space is needed.
- Additional vehicle parking is needed, and any parking lost due to terminal expansion must be at a minimum, replaced.
- The porte cochere structure needs to be removed.

### Preliminary Terminal Building Alternative Concept 1

Preliminary Terminal Building Concept 1 is illustrated in Figure 3-3 on the following page and described below.

#### Preliminary Terminal Building Alternative Concept 1 Features:

- Eastward expansion of outbound baggage makeup area and installation of two checked baggage inspection lanes, including explosive trace detection equipment.
- Westward expansion of ticketing hall and reconfiguration of entrance hall, ticketing, and airline areas.
- Relocation of TSA offices.
- Eastward expansion of TSA security checkpoint under the existing overhang to accommodate second screening lane.
- Eastward expansion of departures lounge in area where baggage claim currently exists.
- Addition of automated exit device doors to restrict movement between sterile and unsterile areas.
- Expansion of departure lounge to address building code issues through conversion of existing pre-security lounge area to post-security space featuring three new restrooms and a new mothers' room.
- Westward expansion of baggage claim area and installation of a large, sloped plate device with space for passengers to surround the device on all sides.
- Southward expansion of baggage claim hall and relocation of rental car offices and counters.
- Addition of restrooms through conversion of existing rental car space.



#### Potential Advantages of Preliminary Terminal Building Alternative Concept 1:

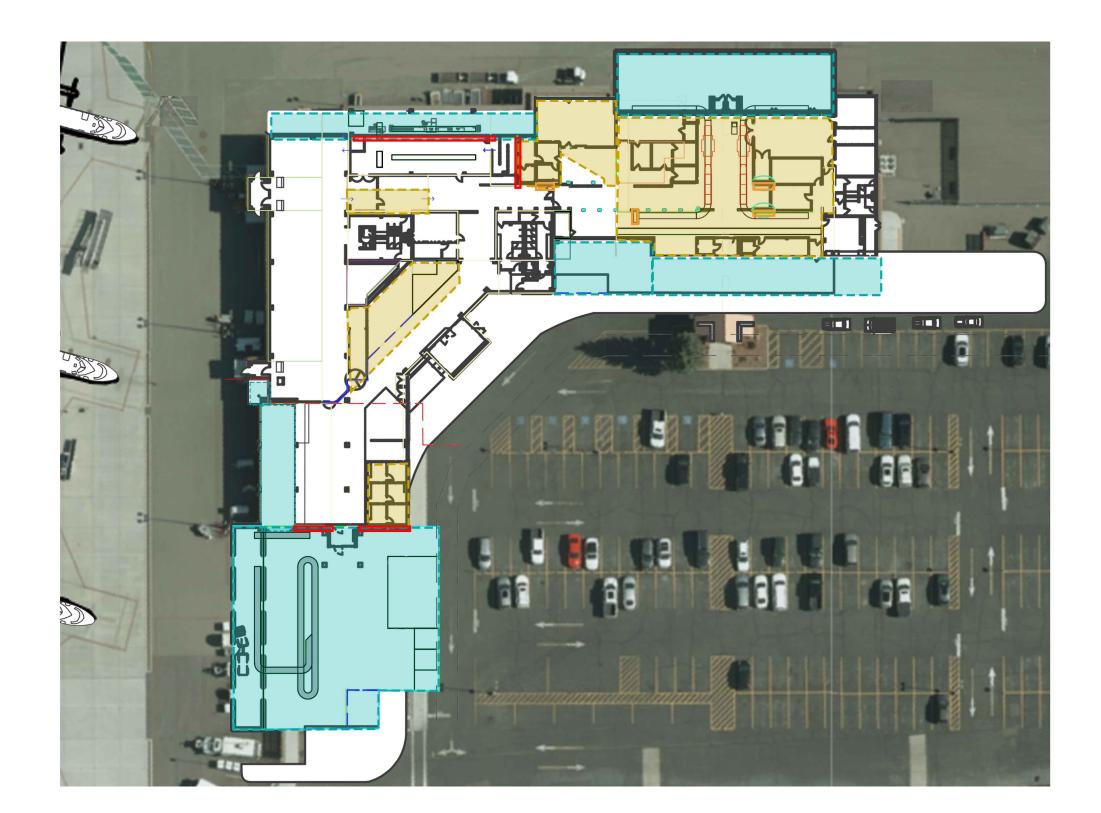
- Outbound baggage makeup area accommodates additional activity, addresses existing safety concerns, and improves the process for oversize bags.
- Ticketing hall accommodates additional passengers.
- Ticketing hall renovations fulfill needs that were identified during 2015 Runway Safety Area Program
  efforts but were never addressed and implemented.
- Airline areas have adequate space.
- TSA offices are relocated to better placement adjacent to passenger screening while maintaining access to baggage screening.
- TSA security checkpoint accommodates additional passengers and queuing.
- Departures lounge area gains recomposure area, additional restrooms, and is sized to accommodate additional passengers and flights and address building code issues.
- Automated exit device doors protect sterile area and provide access to arrivals hall/baggage claim.
- Arrivals hall accommodates additional passengers and gains additional restrooms.
- Baggage claim area accommodates additional passengers and baggage.
- Rental car area accommodates additional passengers.
- Allows for phased construction.

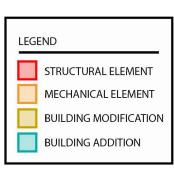
#### Potential Disadvantages of Preliminary Terminal Building Alternative Concept 1:

- TSA would prefer to combine the outbound belts in partially integrated system.
- Airlines would prefer more capacity in outbound baggage makeup to assist in meeting turnaround targets.
- The terminal expansion to the west requires reconfiguration and remarking of terminal loop road lanes.
- The expansion to the west would also require replacement or relocation of the Porte Cochere structure.











### Preliminary Terminal Building Alternative Concept 2

Preliminary Terminal Building Alternative Concept 2 is illustrated in Figure 3-4 and described below.

#### Preliminary Terminal Building Alternative Concept 2 Features:

- Eastward expansion of outbound baggage makeup area and installation of two checked baggage inspection lanes, including explosive trace detection equipment (similar as Alternative 1).
- No west expansion of terminal and vehicle lanes/curb remain the same.
- Relocation of TSA offices (smaller space than Alternative 1).
- Eastward expansion of TSA security checkpoint to accommodate second screening lane (same as Alternative 1).
- Eastward expansion of departures lounge, creating recomposure area (same as Alternative 1).
- Addition of automated exit device doors to restrict movement between sterile and unsterile areas (same as Alternative 1).
- Expansion of departure lounge to address building code issues through conversion of existing pre-security lounge area to post-security space featuring three new restrooms and a new mothers' room (same as Alternative 1).
- Westward expansion of baggage claim area and installation of single flat plate device.
- Addition of restrooms in arrival hall/baggage claim area.

#### Potential Advantages of Preliminary Terminal Building Alternative Concept 2:

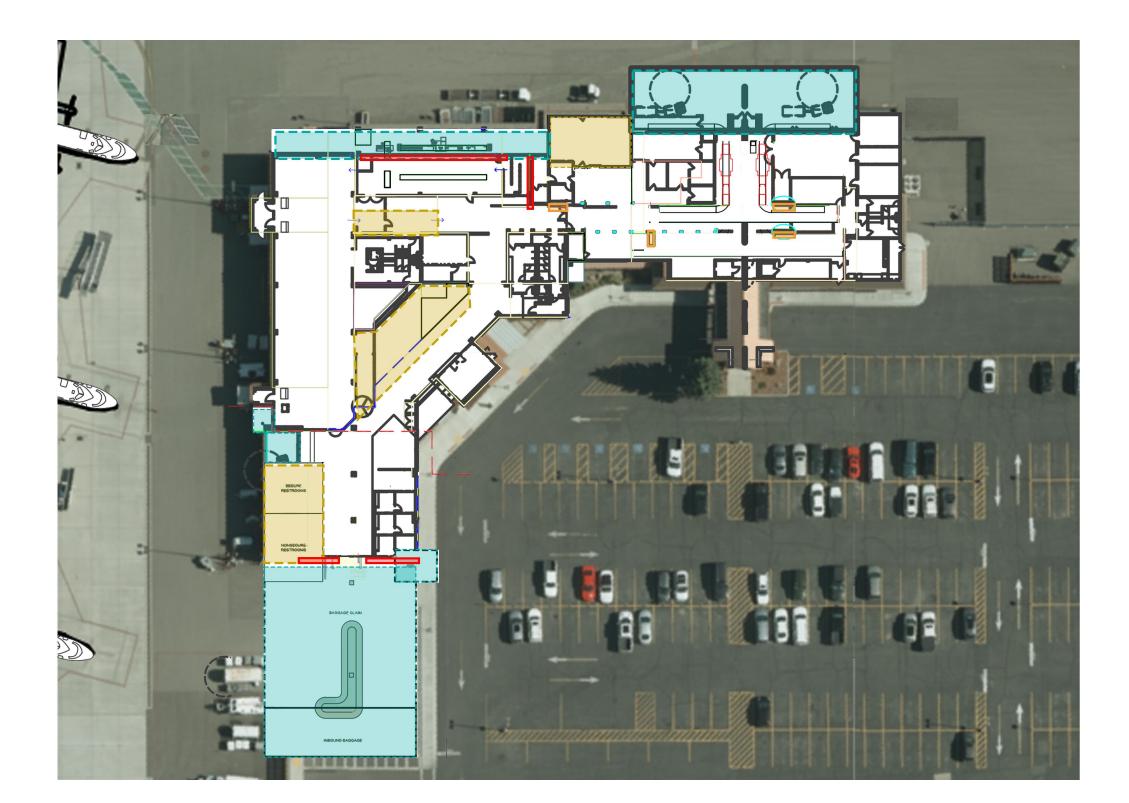
- Outbound baggage makeup area accommodates additional activity, including streamlining process for oversize bags.
- TSA offices are relocated to better placement adjacent to passenger screening while maintaining access to baggage screening.
- TSA security checkpoint accommodates additional passengers (same as Alternative 1).
- Departures lounge area gains recomposure area and is sized to accommodate additional passengers and flights and to address building code issues (no additional restrooms).
- Automated exit device doors protect sterile area and provide access to arrivals hall/baggage claim.
- Arrivals hall gains additional restrooms.
- Baggage claim area accommodates additional passengers and baggage.
- Allows for phased construction.
- Smaller total footprint expansion total than Alternative 1.

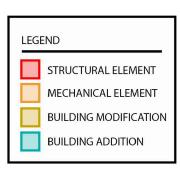
#### Potential Disadvantages of Preliminary Terminal Building Alternative Concept 2:

- The ticketing hall remain relatively the same and offers less space to ticketing hall/queuing, ticket counter, ATO, outbound baggage makeup, and checked bag inspection than Alternative 1.
- Smaller airlines office space than Alternative 1.
- Does not provide an additional entrance to ticketing hall.
- Smaller allocation of space for TSA offices.
- Less additional space overall in departures lounge.
- Arrivals hall and rental car area cannot accommodate additional passengers.











### **Preliminary Terminal Building Alternative Concept 3**

Preliminary Terminal Building Alternative Concept 3 is illustrated in Figure 3-5 and described below.

#### Preliminary Terminal Building Alternative Concept 3 Features:

- Eastward and southward expansion of outbound baggage makeup area, installation of integrated checked inspection system, including explosive trace detection equipment.
- Reconfiguration of entrance hall, ticketing, and airline areas (smaller spaces than Alternatives 1 and 2).
- Additional entrance to ticketing hall.
- Relocation of TSA offices (same as Alternative 1).
- Eastward expansion of TSA security checkpoint to accommodate second screening lane (same as Alternatives 1 and 2).
- Eastward expansion of departures lounge, creating recomposure area (same as Alternatives 1 and 2).
- Addition of automated exit device doors to restrict movement between sterile and unsterile areas (same as Alternatives 1 and 2).
- Expansion of departure lounge to address building code issues through conversion of existing pre-security lounge area to post-security space featuring three new restrooms and a new mothers' room (same as Alternatives 1 and 2).
- Northward expansion of arrivals hall and addition of restrooms in this area.
- Westward and northward expansion of baggage claim area and installation of dual flat plate devices.

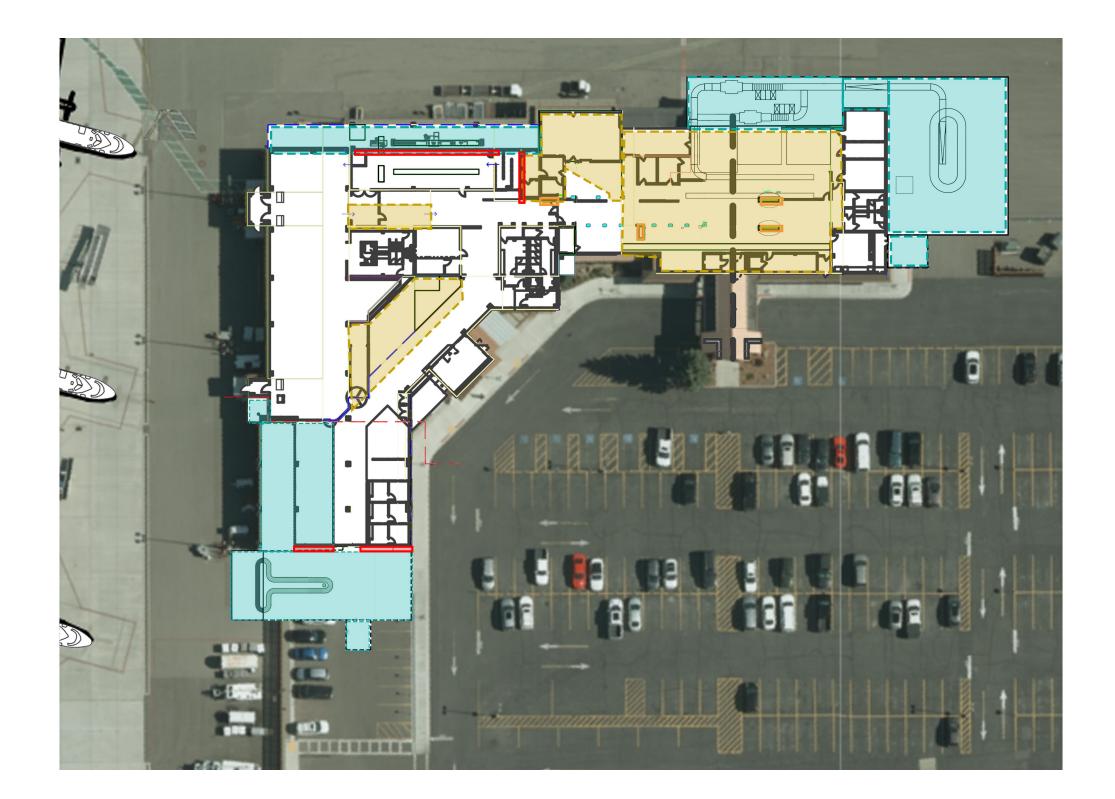
#### Potential Advantages of Preliminary Terminal Building Alternative Concept 3:

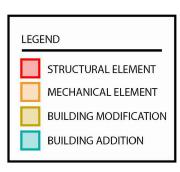
- Outbound baggage makeup accommodates additional activity.
- Ticketing hall renovations fulfill needs identified during 2015 Runway Safety Area Program efforts.
- Airline areas have adequate space.
- TSA offices are relocated to better placement adjacent to passenger screening while maintaining access to baggage screening.
- TSA security checkpoint accommodates additional passengers.
- Departures lounge area gains recomposure area, additional restrooms, and is sized to accommodate additional passengers and flights and to address building code issues.
- Automated exit device doors protect sterile area and provide access to arrivals hall/baggage claim.
- Baggage claim area accommodates additional passengers and baggage and has full redundancy due to two devices.

### Potential Disadvantages of Preliminary Terminal Building Alternative Concept 3:

- Ticketing hall cannot accommodate additional passengers.
- Rental car area cannot accommodate additional passengers.
- Smaller airlines office space than Alternative 1.
- Smaller allocation of space for TSA offices.
- Less additional space overall in departures lounge.









### Preliminary Terminal Building Alternative Concepts Evaluation and Summary

To evaluate the preliminary terminal building alternative concepts individually and against all concepts, a set of evaluation criteria was established based on three broad screening elements:

- Passenger Experience
- Safety and Operational Efficiency
- Sustainability and Environment

Specific screening criteria was developed for these elements and used to evaluate the alternative concepts in **Table 3-2**. This screening matrix illustrates a comparison of the strengths and weaknesses of each terminal building alternative concept previously described.

Table 3-2: Preliminary Terminal Building Alternative Concepts Screening Matrix

| Screening Criteria   | Preliminary<br>Concept 1 | Preliminary<br>Concept 2 | Preliminary<br>Concept 3 |
|--|--------------------------|--------------------------|--------------------------|
| Passenger Experience   |                          |                          |                          |
| Provides Additional SSCP Queuing Space                                     | $\overline{\checkmark}$  | $\overline{\checkmark}$  | $\overline{\checkmark}$  |
| Increases Departure Lounge Space   | $\checkmark$             |                          |                          |
| Improves Baggage Claim Facilities  | $\checkmark$             | $\checkmark$             |                          |
| Adds Adequate Concessions Space  |                          |                          |                          |
| Safety and Operational Efficiency  |                          |                          |                          |
| Enhances safety in TSA Baggage Screening                                   | $\checkmark$             |                          |                          |
| Supports Improved TSA Baggage Screening                                    | $\checkmark$             |                          |                          |
| Provides standard, three lane curb front roadway                           | $\checkmark$             | X                        | X                        |
| Sustainability and Environment   |                          |                          |                          |
| Reuses Existing Facilities to the Extent Practical                         |                          | $\overline{\checkmark}$  | $\checkmark$             |
| Minimizes Potential for Environmental Impacts                              | $\checkmark$             | $\overline{\checkmark}$  | $\checkmark$             |
| Substantial enough renovation to incorporate sustainable building features | $\overline{\checkmark}$  | $\overline{\mathbf{Q}}$  | V                        |
|  |                          |                          |                          |

Source: Mead & Hunt, 2021.

lote: Strength of the Concept.

Neither a Strength nor a Weakness of the Concept.

Weakness of the Concept.

Based on a review of the terminal building alternatives, and confirmation through the screening analysis for each concept, the Airport Authority Board selected Terminal Building Concept 1 as the most favorable medium-term development concept for the SUN terminal building. This concept best lends itself to the most improvements to passenger experience, safety and operational efficiency, and sustainability and environment considerations. Additionally, the Airport Authority Board strongly favored the reconfiguration of the terminal loop roadway and curb to better meet industry standards and reduce congestion as approximately 75 percent of the vehicles who pass through the ticket machines at SUN do not park and are accessing the curb in some way. Based on this feedback, Terminal Building Alternative Concept 1 is incorporated into the conceptual development plan that illustrates the overall terminal area concept at the end of this chapter.

### 3.6. Refined Terminal Building Concept and Phasing

Following selection by the Airport Authority Board of Terminal Alternative Concept 1, the concept was refined and additional detail added. To address both the highest needs (baggage makeup, ATO and SSCP reconfirmation) the refined concept was separated into two distinct phases, Phases 1 and 2.

The proposed two phase terminal and additional refined detail are illustrated in **Figure 3-6** and **Figure 3-7** with the red dashed line delineating the differences between the two alternatives.

**Refined Terminal Concept Phase 1.** In Phase 1, the terminal is expanded both east and west to accommodate reconfigured outbound baggage, airline ticket offices and counters and ticket counter queuing. The TSA offices are also reconfigured and additional space is provided between TSA offices and the checkpoint to accommodate passenger queuing.

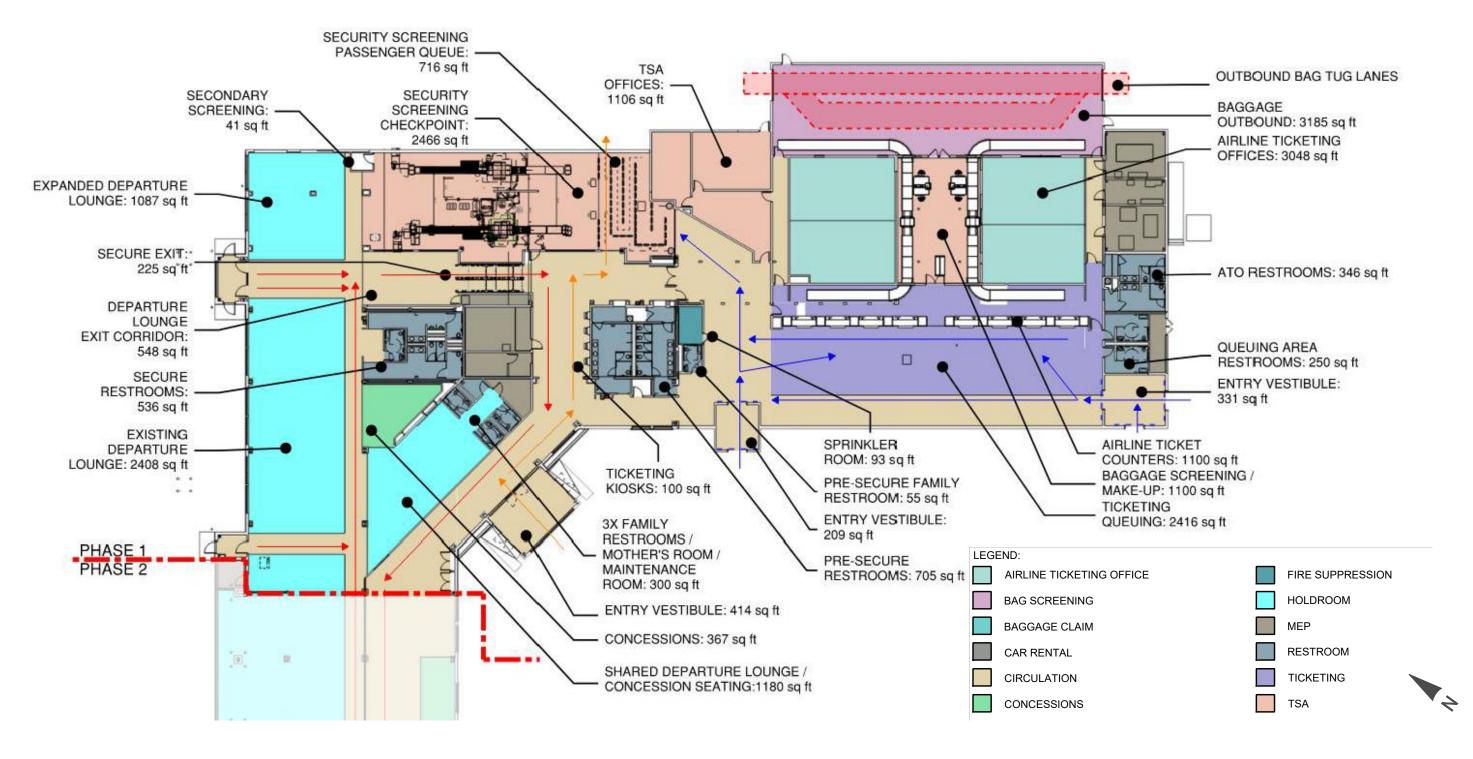
A second securing screening lane is added and adequate passenger recomposure space is provided. In the departures lounge area, additional space is added by converting existing space in the center of the terminal. Family restrooms, a mother's room and a maintenance room are also added in this area. The reconfigured and expanded Phase 1 terminal plan would significantly increase space, passenger comfort and convenience.

**Refined Terminal Concept Phase 2.** In Phase 2 the terminal is primarily expanded to the west and the existing baggage claim area is relocated west and this space is converted into new departure lounge. The primary refinements were the relocation of the rental car offices and counters and a conversion of existing rental car space into future concessions.

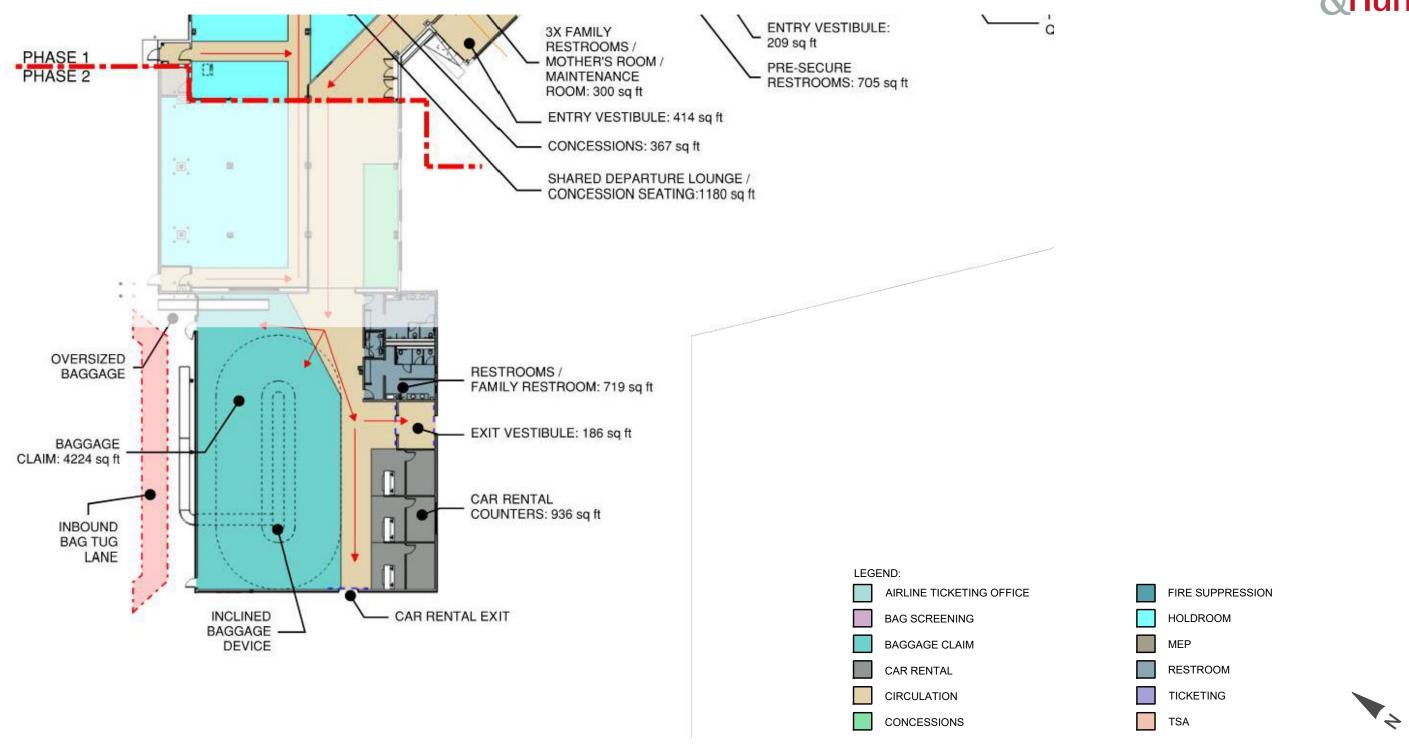
Phase 2 recommends a large, sloped plate or inclined baggage devise with an overhead feed from the inbound best to the center of the device. This allows for passenger to surround the entire baggage carousel and increases capacity and passenger convenience. Restrooms are also provided in between the car rental area and the concessions area.













#### 3.7. Terminal Area Alternatives

Following the decisions on the preferred terminal building concept (Concept 1), additional airport and terminal support facilities within the terminal area were assessed and concepts developed for expansion or replacement of facilities including a new Snow Removal Equipment (SRE) facility, expanded vehicle parking, an Airport Traffic Control Tower (ATCT), and a rental car quick turn area (QTA). Two concepts were developed and are presented int eh following sections.

#### **Terminal Area Alternative 1**

Terminal Area Concept 1 is illustrated in Figure 3-8 on the following page and described below.

#### Terminal Area Alternative Concept 1 Features:

- A three-lane vehicle curbside roadway is provided and the upper parking lot is reconfigured.
- A Proposed South Parking Lot is included south of the existing lower lot resulting in 394 total vehicle parking spaces.
- A cell phone/short term parking lot is provided south of the upper lot.
- A 150' x 100' SRE building is recommended with space for SRE equipment to pull through and make a 180 degree turn as illustrated.
- Space is reserved for a future ATCT south of the future SRE building. Grading and fill are required, and the fuel farm is relocated to create space for the ATCT and parking.
- Space for a future rental car QCT facility is provided just off airport property to the west of the terminal area. Land acquisition would be required for this QTA facility.

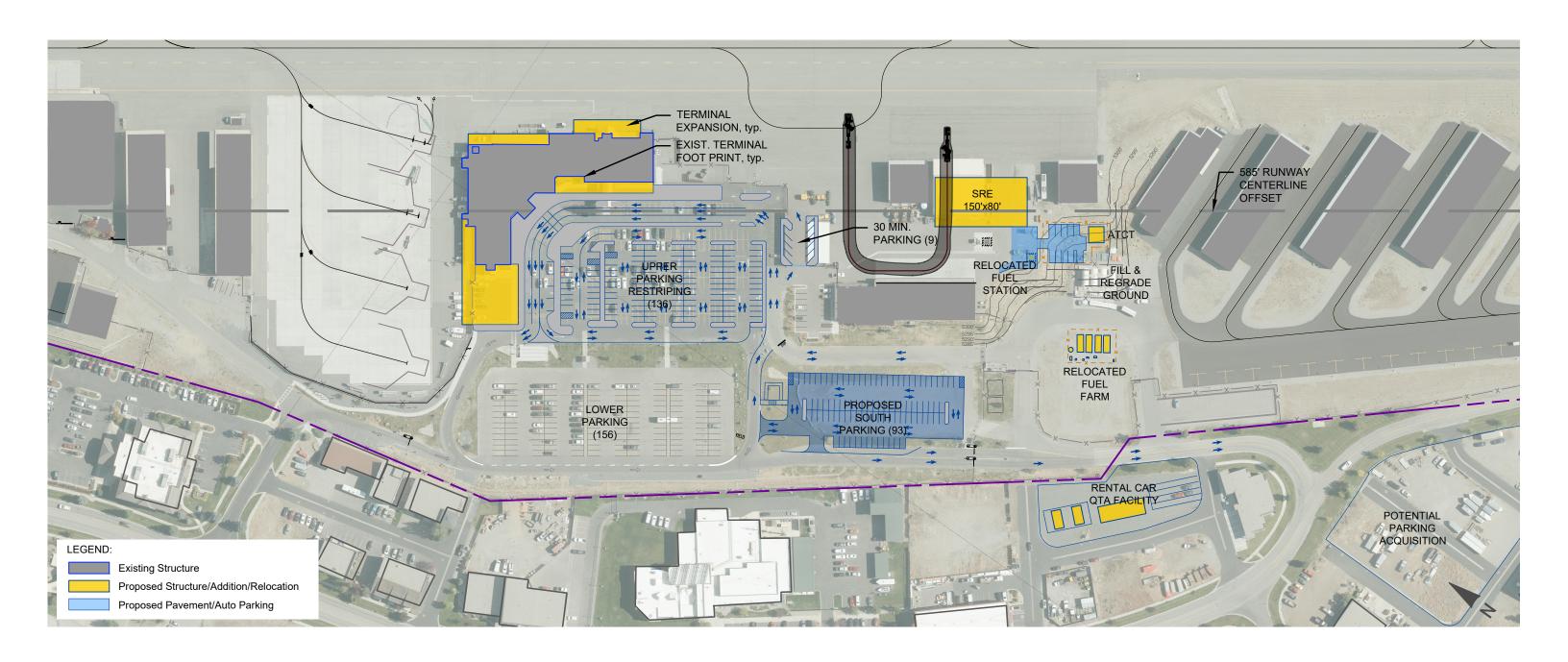
### Potential Advantages of Terminal Building Alternative Concept 1:

- Accommodates proposed terminal expansion footprint.
- Provides for an industry standard, three-lane curbside road that will reduce curbside congestion.
- Adds additional south parking to replace parking lost by reconfiguration of the upper lot.
- Provides adequate SRE building to accommodate future SRE equipment.
- Provides for short terminal parking lot for terminal passengers being picked up.
- Sites future ATCT away from the terminal building.
- Provides space for future rental car QTA facility.

#### Potential Disadvantages of Terminal Building Alternative Concept 1:

- The proposed reconfiguration of the terminal curb roadway and upper parking lot results in a loss of parking spaces.
- The proposed south parking lot only provides spaces for replacement of the spaces lost on the upper lot meaning the alternative DOES NOT provide additional vehicle parking.
- Th ATCT site would require relocation of the fuel farm.
- The ATCT site would require significant grading work to level the site.
- The rental car QTA facility would require land acquisition.
- The SRE building would require relocation of existing fuel pumps.







#### **Terminal Area Alternative 2**

Preliminary Terminal Area Concept 2 is illustrated in Figure 3-8 on the following page and described below.

#### Terminal Area Alternative Concept 2 Features:

- A three-lane vehicle curbside roadway is provided, and the upper parking lot is reconfigured.
- A Proposed South Parking Lot is included with approximately 27 additional spaces over that provided in Alternative Concept 1 (421 total vehicle parking spaces). These additional spaces do require reconfiguration of the primary vehicle exit.
- A cell phone/short term parking lot is provided south of the upper lot.
- A 150' x 80' SRE building is recommended with space for SRE equipment to pull through and make a 180 degree turn as illustrated.
- Space is reserved for a future ATCT south of the upper parking lot with additional space for ATCT vehicle parking.
- Space for a future rental car QCT facility on airport property to the south of the south lower lot.

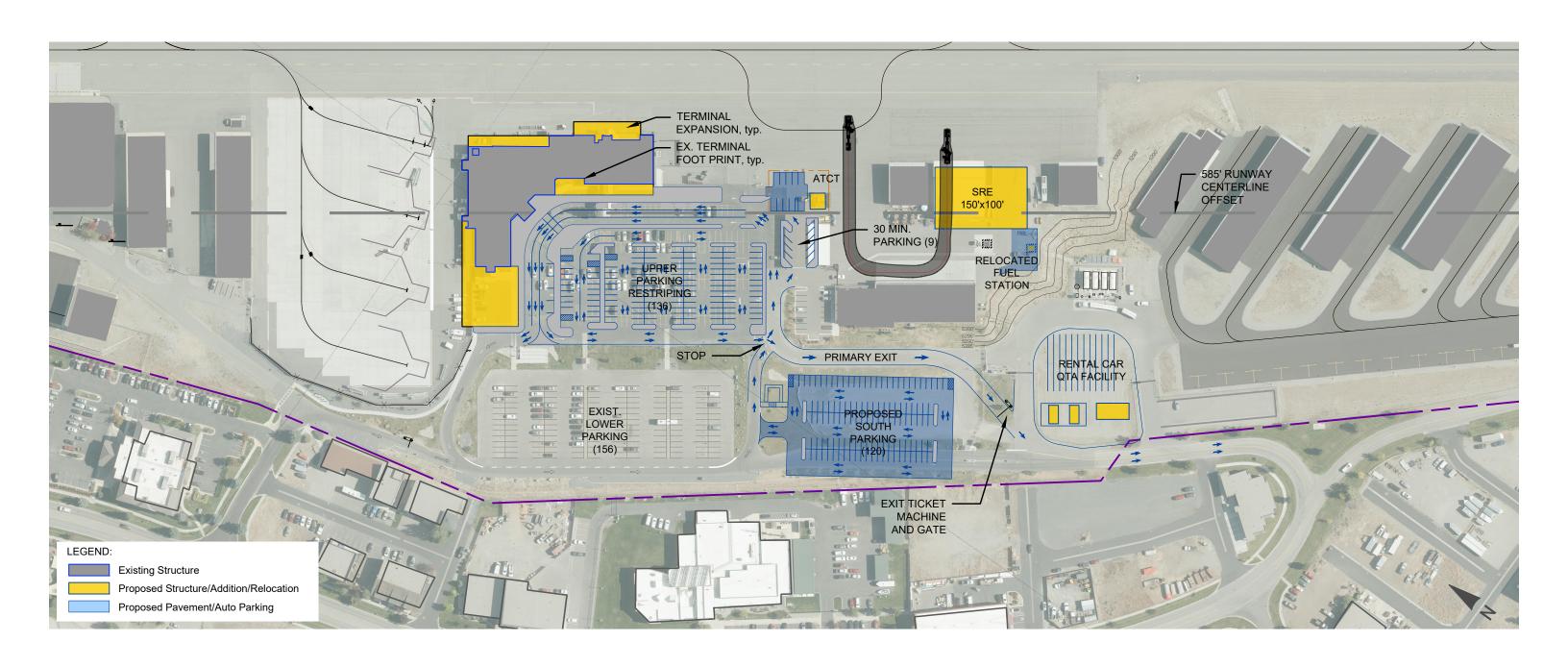
#### Potential Advantages of Terminal Building Alternative Concept 2:

- Accommodates proposed terminal expansion footprint.
- Provides for an industry standard, three-land curbside road that will reduce curbside congestion.
- Adds additional south parking to replace parking lost by reconfiguration of the upper lot and adds approximately 27 spaces over Alternative 1.
- Provides for short terminal parking lot for terminal passengers being picked up.
- Provides space for future rental car QTA facility.

### Potential Disadvantages of Terminal Building Alternative Concept 2:

- DOES NOT provide adequate SRE equipment storage space.
- Th ATCT site is in close proximity to the terminal building, further constraining the terminal area.
- The SRE building would require relocation of existing fuel pumps.







# Preliminary Terminal Area Alternative Concepts Evaluation and Summary

To evaluate the preliminary terminal area alternative concepts individually and against each other, a set of evaluation criteria was established based on four broad screening elements:

- Passenger Experience
- Safety and Operational Efficiency
- Sustainability and Environment
- Implementation, Phasing, and Feasibility

Specific screening criteria was developed for these elements and used to evaluate the alternative concepts in **Table 3-3**. This screening matrix illustrates a comparison of the strengths and weaknesses of each terminal building alternative concept previously described.

Table 3-3: Terminal Area Aternative Concepts Screening Matrix

| Screening Criteria  | Alternative             | Alternative             |
|---|-------------------------|-------------------------|
|   | 1                       | 2                       |
| Passenger Experience  |                         |                         |
| Maximizes Vehicle Parking   | ×                       | $\overline{\checkmark}$ |
| Accommodates and Improves Vehicle Access  |                         | -                       |
| Improves Passenger Level-of-Service   | $\overline{\checkmark}$ | $\overline{\checkmark}$ |
| Safety and Operational Efficiency   |                         |                         |
| Optimal ATCT Location   | ×                       | $\overline{\checkmark}$ |
| Accommodates SRE/Maintenance and Other Airport Support Facilities                 | ×                       | $\overline{\checkmark}$ |
| Sustainability and Environment  |                         |                         |
| Reuses Existing Facilities to the Extent Practical                                | $\overline{\checkmark}$ |                         |
| Minimizes Potential for Environmental Impacts                                     | $\overline{\checkmark}$ | $\checkmark$            |
| Implementation, Phasing, and Feasibility  |                         |                         |
| Allows for Phased Development   | $\overline{\checkmark}$ | $\overline{\checkmark}$ |
| Provides for Future Facilities that are Flexible, Cost Effective, and Financially | $\overline{\checkmark}$ | $\overline{\checkmark}$ |
| Feasible  |                         |                         |
|   |                         |                         |

Source: Mead & Hunt.

Note: Strength of the Concept.

Neither a Strength nor a Weakness of the Concept.

Weakness of the Concept.

Based on this analysis, the Airport identified Concept 1 Alternative 2 as the Preferred Concept to be incorporated into the Conceptual Development Plan.

### 3.8. Conceptual Development Plan

Based on a review of the terminal building and terminal area alternative concepts, confirmation through the screening analysis for each, and the refinement process described in this chapter, a Conceptual Development Plan (CDP) was developed and is illustrated in **Figure 3-10**. The CDP primarily reflects the refined versions of Terminal Building Alternative Concept 1 and Terminal Area Alternative 2. This combination was determined to provide the most favorable short- and medium-term development concept for the Airport.



