

WORKING PAPER TWO

APRIL 2017

TERMINAL RENOVATION AND IMPROVEMENT PROJECT



Northwest Arkansas Regional Airport

Working Paper One

- ✈ Chapter A - Background Information and Inventory
- ✈ Chapter B - Forecasts of Aviation Activity
- ✈ Chapter C - Terminal Area Facility Requirements

Working Paper Two

- ✈ Chapter D – Terminal Development Concepts

Planning Activity Levels (PALs)

| PAL/Phase | Enplanement Levels | Selected Scenario Corresponding Year | FAA TAF Scenario Corresponding Year |
|-----------|--------------------|--------------------------------------|-------------------------------------|
| I | 700,000 | 2017 | 2017 |
| II | 900,000 | 2024 | 2028 |
| III | 1,100,000 | 2029 | >2035 |
| IV | 1,300,000 | 2034 | >2035 |

SOURCE: Mead & Hunt

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Terminal: Program Summary

| Area (Square Feet) ----- PAL/Phase | Public: Secure Area | Public: Checkpoint (Number of Lanes) | # LANES | Public: Bag Claim & Car Rental (Arrivals Lobby) | Public: Ticketing & Bag Screening (Departures Lobby) | Nonpublic: Back of House & Tenants | Building Support: Structure, Utilities & Chases | Totals |
|---|---------------------------|---|------------|--|---|--|---|----------------|
| Existing | 71,500 | 5,535 | 3 | 18,830 | 15,570 | 28,235 | 36,830 | 176,500 |
| I | 72,958 | 6,312 | 3 | 27,568 | 21,781 | 39,381 | 51,495 | 219,495 |
| II | 89,411 | 8,416 | 3 | 35,122 | 27,434 | 46,180 | 58,798 | 265,361 |
| III | 105,865 | 8,416 | 3 | 42,685 | 33,055 | 54,874 | 67,054 | 311,949 |
| IV | 123,351 | 10,520 | 5 | 50,259 | 38,649 | 62,008 | 79,950 | 364,737 |

SOURCE: Mead & Hunt

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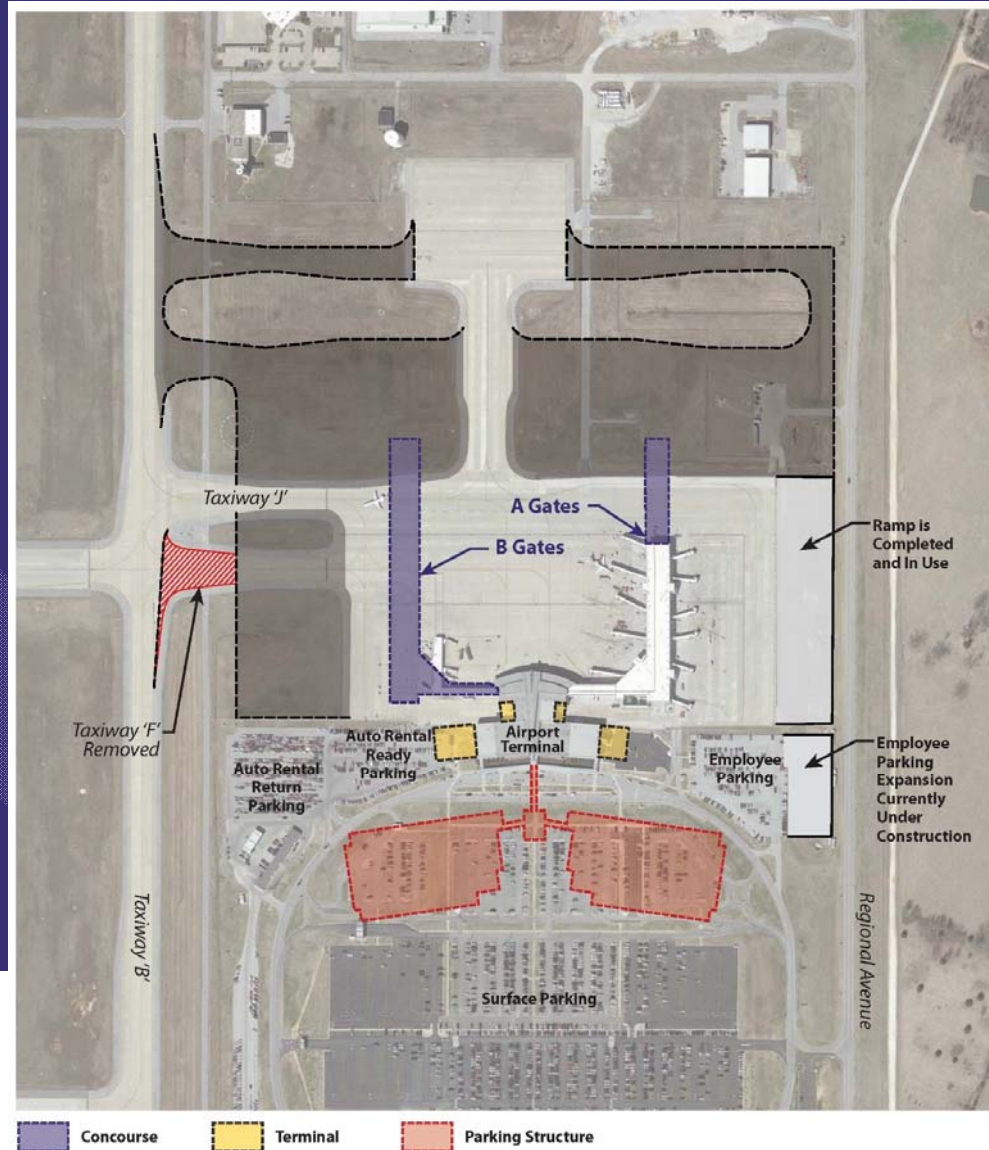
Working Paper Two, Chapter D

Terminal Development Concepts

- ✈ Existing Terminal
- ✈ Initial Terminal Building Concepts – Long Term
- ✈ Refined Concepts
- ✈ Additional Considerations
- ✈ Preliminary Project List and Phasing

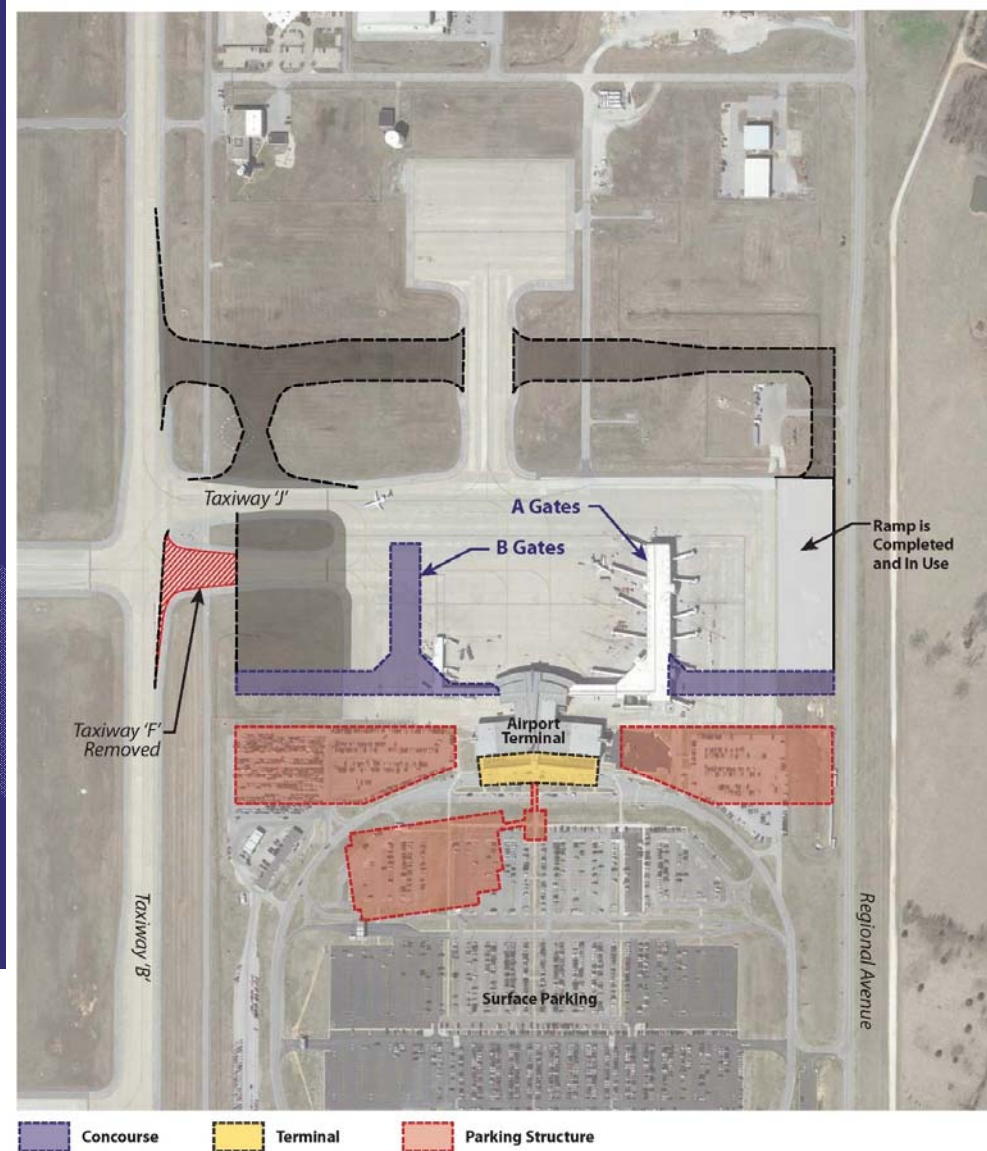
Initial Terminal Concept 1

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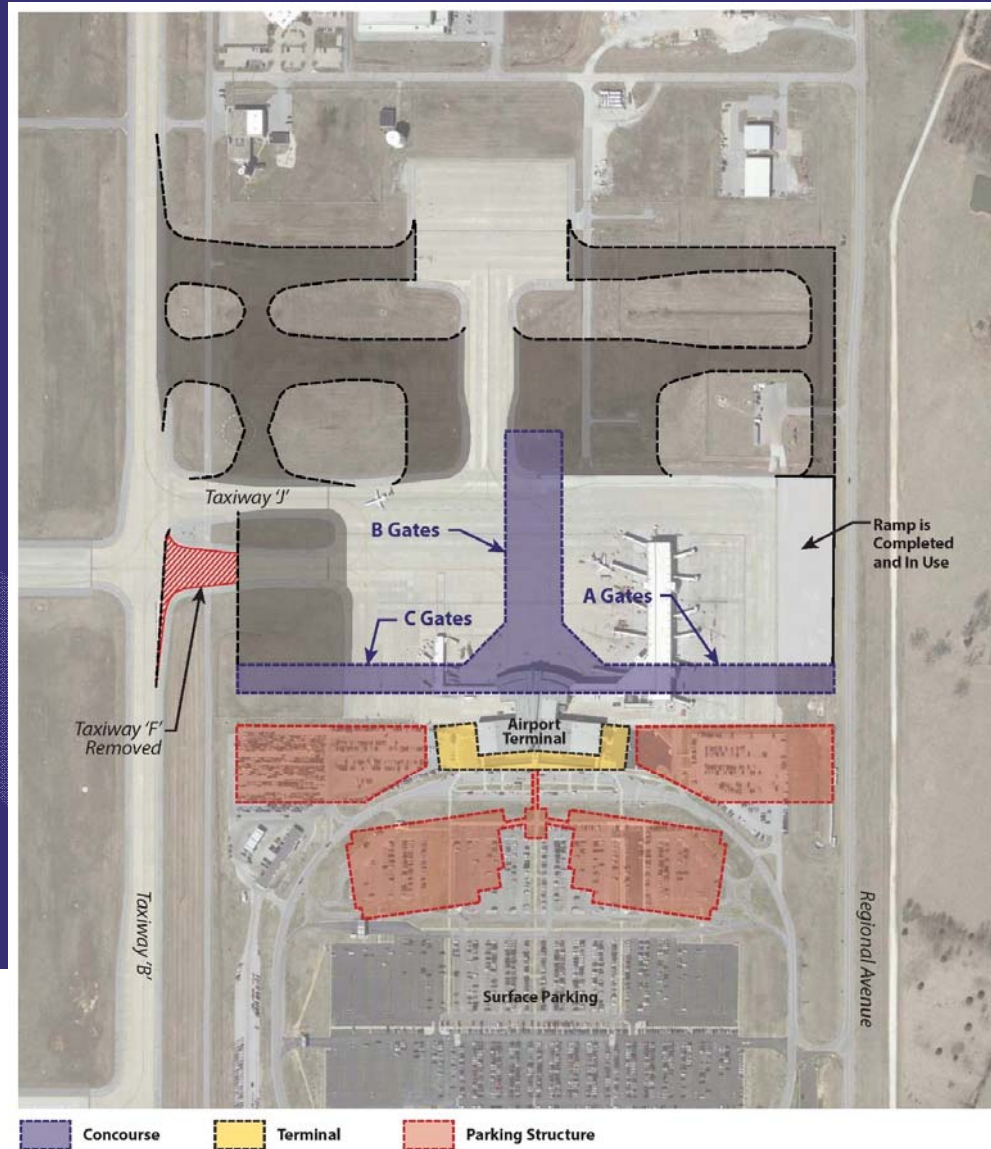
Initial Terminal Concept 2

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Initial Terminal Concept 3

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Initial Terminal Concepts

Screening Matrix

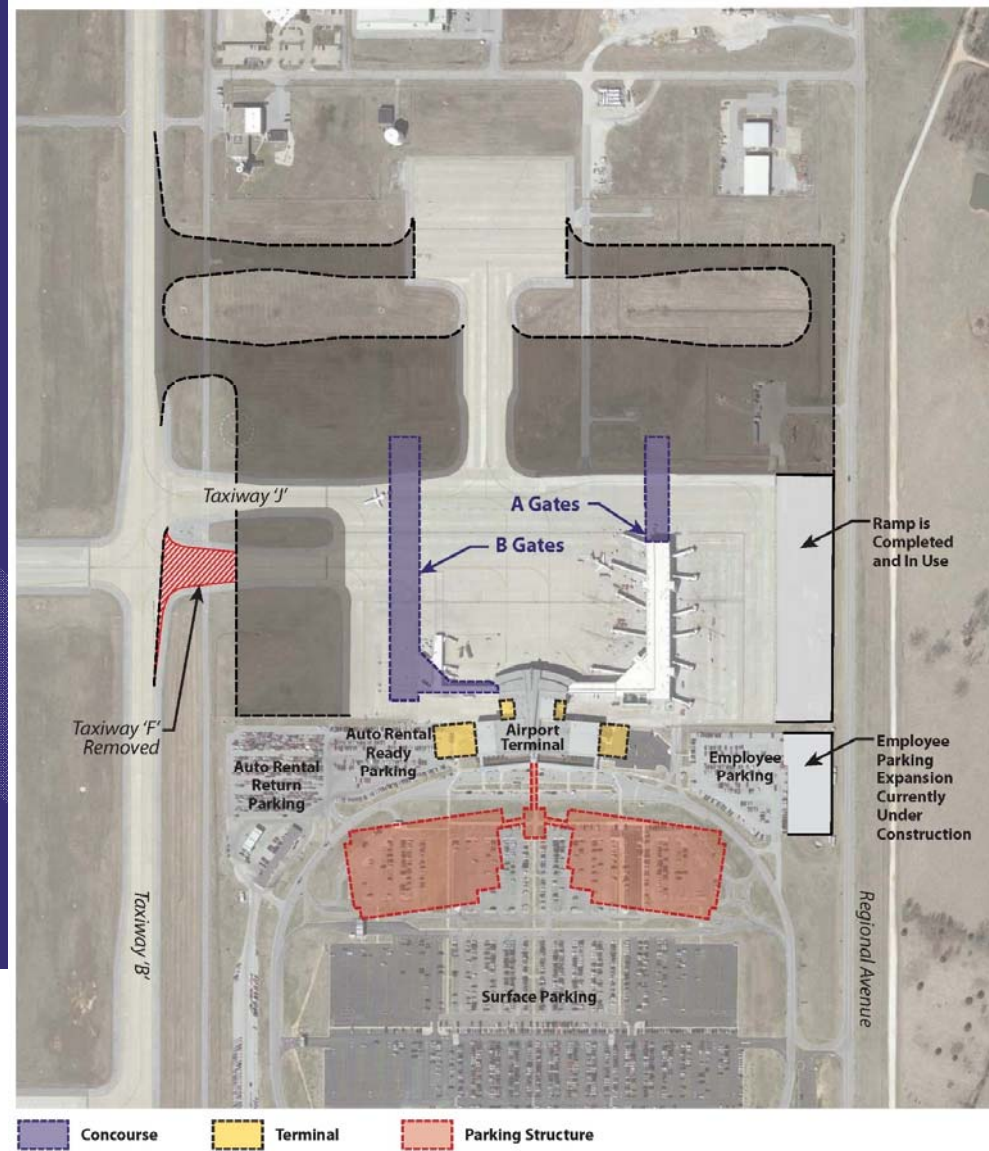
Preferred Concept:
Concept 1

Refined Concepts:
Conceptual Development Plan
(CDP)

| | Initial Concept 1 | Initial Concept 2 | Initial Concept 3 |
|--|----------------------|----------------------|----------------------|
| Passenger Experience | | | |
| Concessions not split between concourses | ■ | ■ | ✓ |
| Minimize Walking Distance | ■ | ✓ | ✓ |
| Intuitive wayfinding | ✓ | ✓ | ✓ |
| Enhanced level of service | ✓ | ✓ | ✓ |
| Operational Efficiency | | | |
| Enhances operations and maintenance | ✓ | ✓ | ■ |
| Minimizes Impact of Construction Phasing | ✓ | ✓ | ✗ |
| Improves airport and airline efficiency | ✓ | ✓ | ■ |
| Meets programmatic requirements and addresses deficiencies | ✓ | ✓ | ✓ |
| Takes full advantage of existing aircraft parking apron | ✓ | ■ | ✗ |
| Sustainability | | | |
| Reuses existing facilities to the extent practical | ✓ | ✓ | ✗ |
| Maintains existing infrastructure | ✓ | ✓ | ✗ |
| Potential to promote natural light and sense of space | ✓ | ■ | ■ |
| Promotes long term financial viability/economic growth | ✓ | ✓ | ✓ |
| Implementation/Phasing | | | |
| Minimizes impact to passengers | ■ | ■ | ✗ |
| Minimized impact to operations | ✓ | ✓ | ✗ |
| Allows for incremental construction to accommodate PALs | ✓ | ✓ | ✗ |
| Compatibility with other Airport Planning Documents | | | |
| Aligns with SMP goals and objectives | ✓ | ✗ | ✗ |
| Integrates with 2017/2018 Parking Structure | ✓ | ✓ | ✓ |

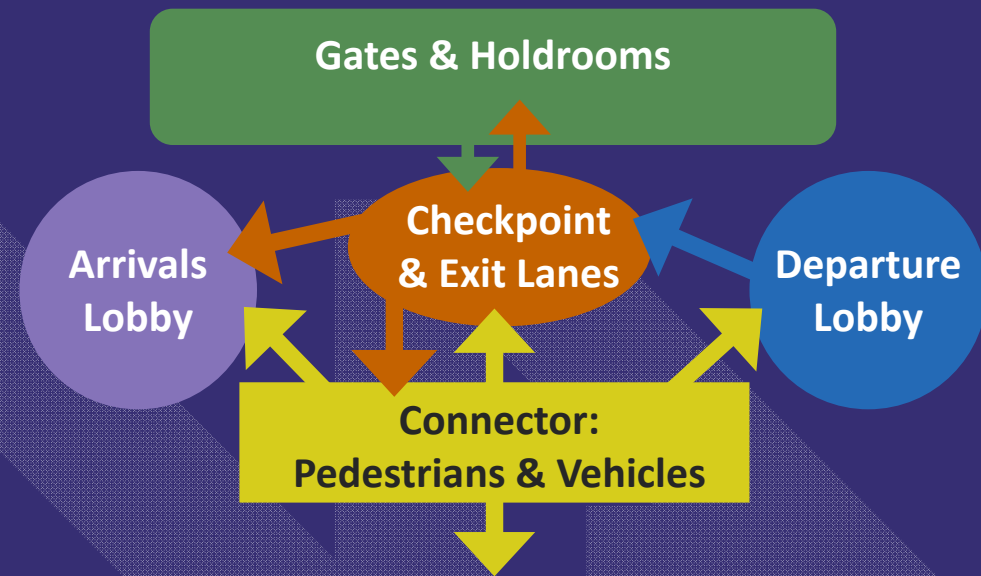
Preferred Concept

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Terminal: XNA Passenger Flow Diagram

- Gates & Concourse
- Checkpoint & Exit Lanes
- Pedestrian & Vehicle Circulation
- Arrivals Lobby
- Departure Lobby



Gates & Concourses

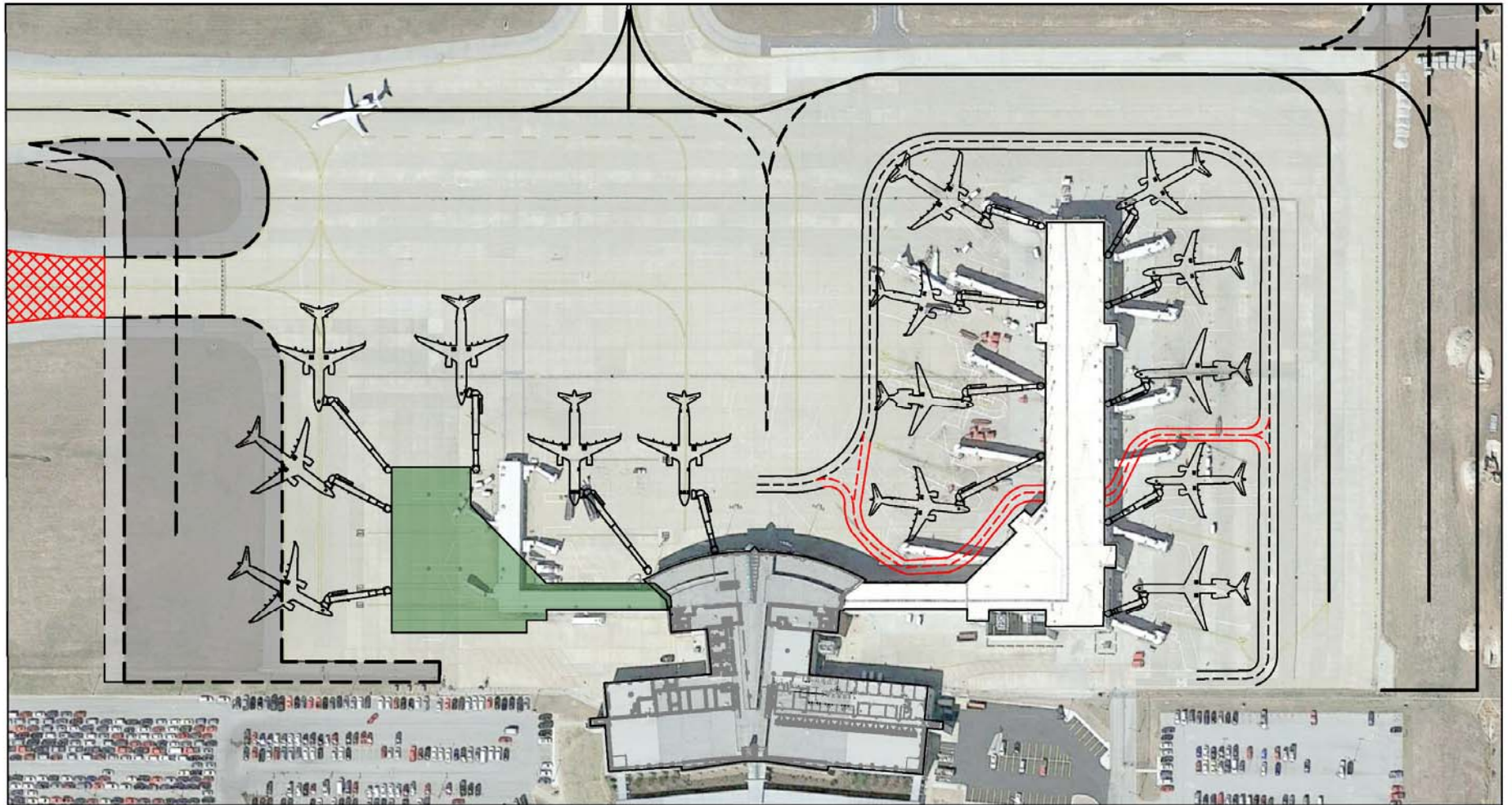


Interim Gates & Holdroom

Figure D5
Concourse Phase I

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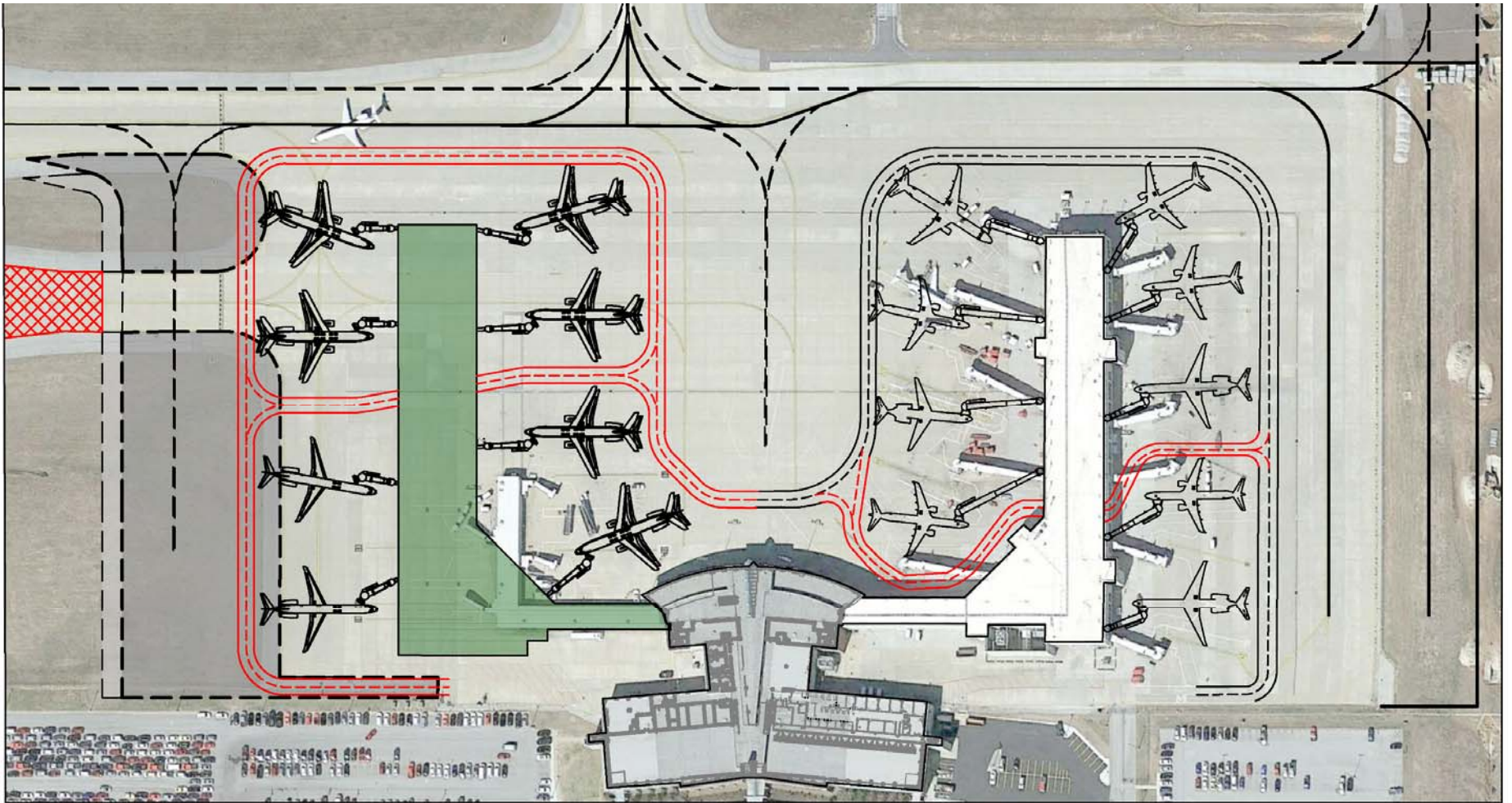
 **Future Concourse**

Figure D6
Concourse Phase II

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Gates & Concourses



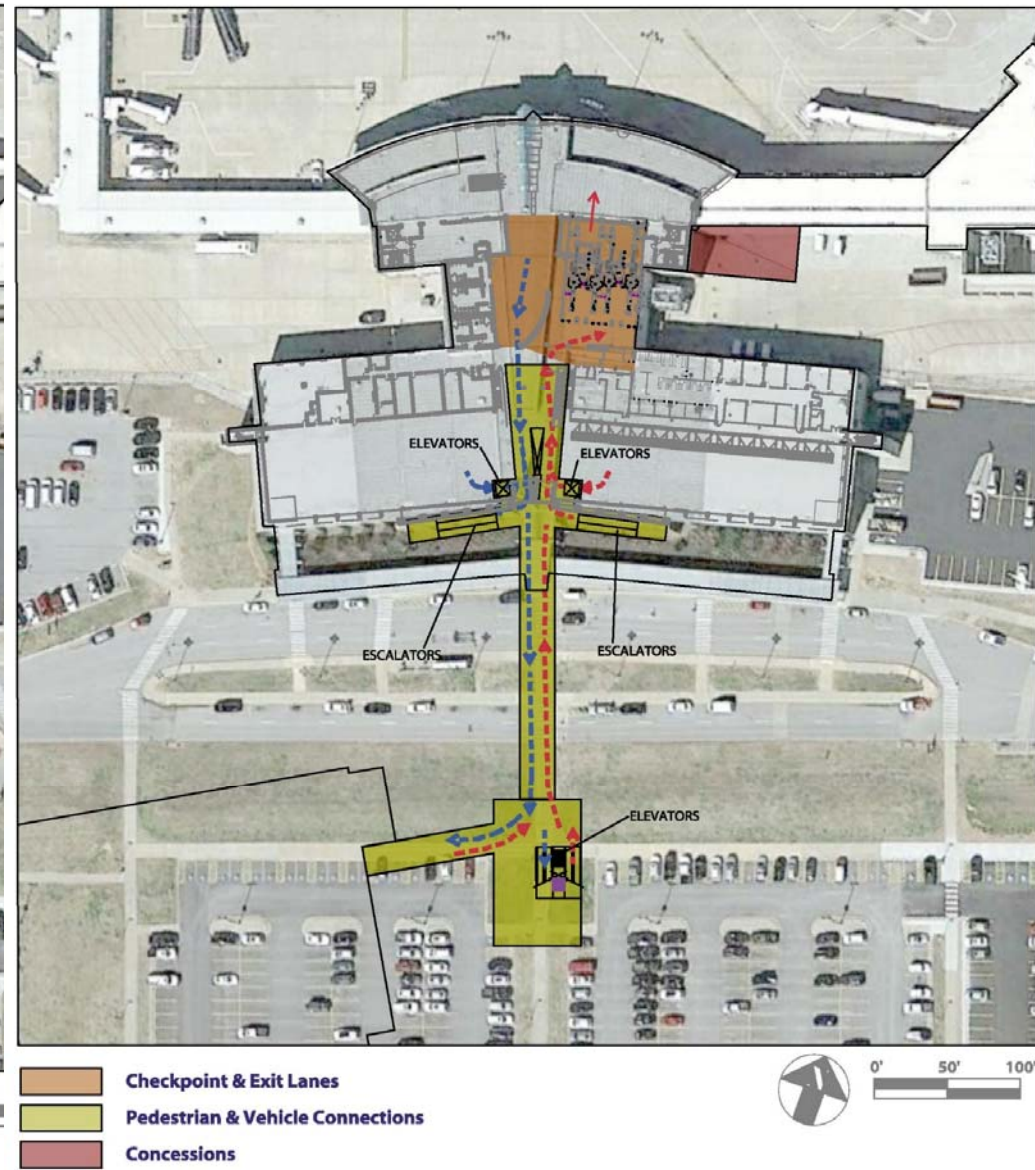
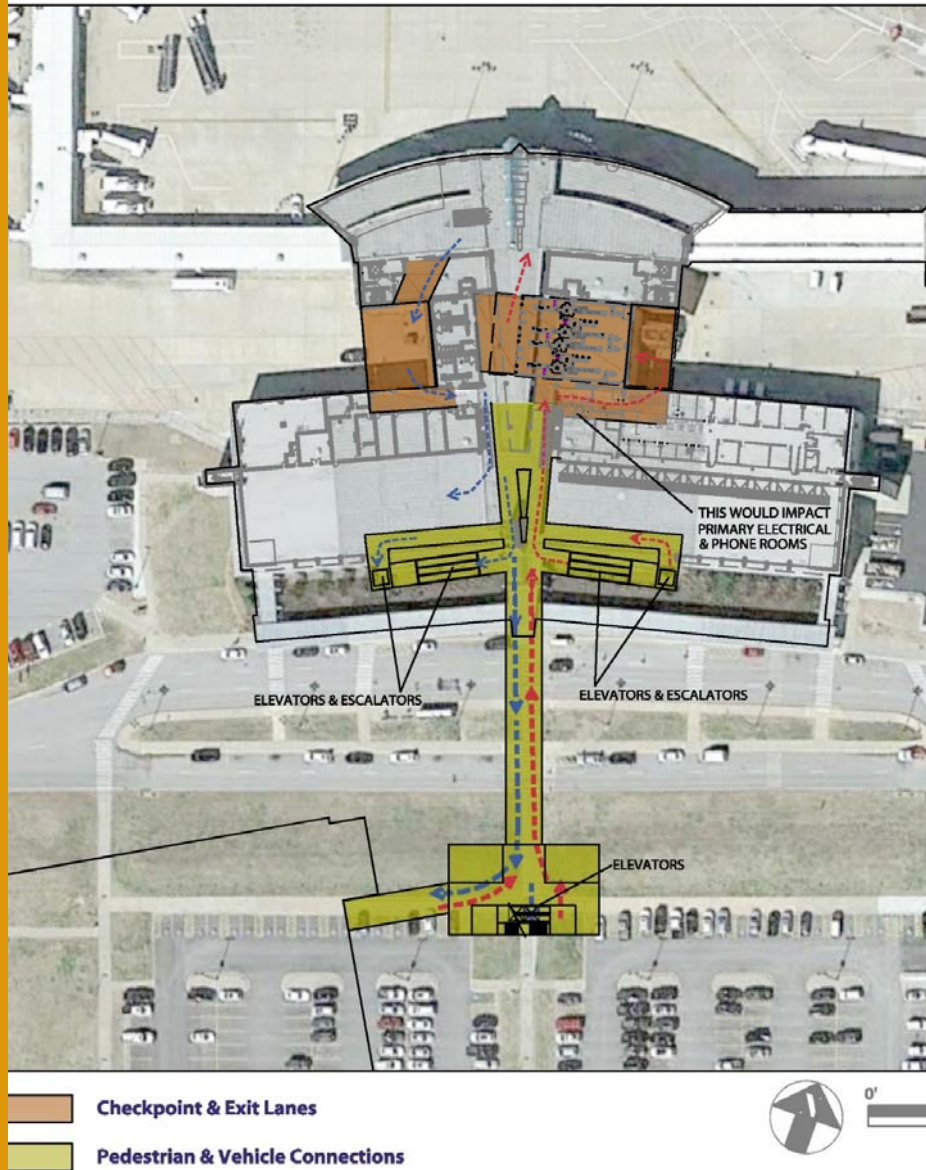
 Future Concourse

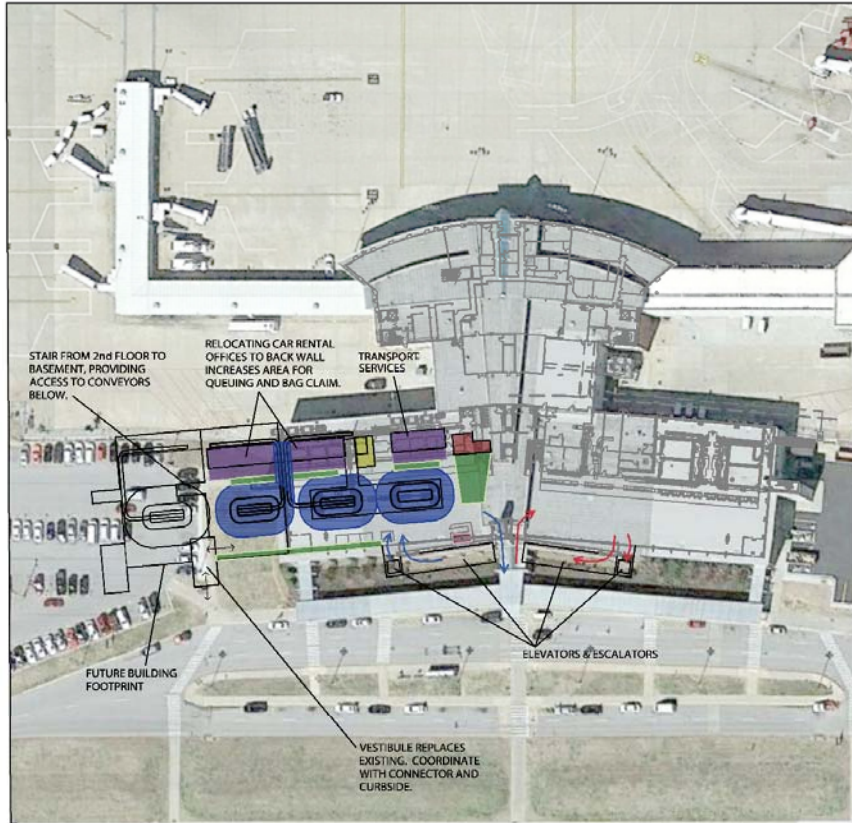
Figure D7
Concourse Phase III

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Checkpoint and Exit Lanes





- | | |
|--|---|
| Seating | Baggage Carousel Area |
| Concessions & Retail | Baggage Slide |
| Car Rental & Queuing | |



Figure D10
Arrivals Lobby Option 1

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D.25



- | |
|--|
| Seating |
| Concessions & Retail |
| Car Rental & Queuing |
| Baggage Carousel Area |

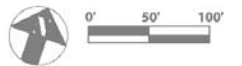


Figure D10
Arrivals Lobby Option 2

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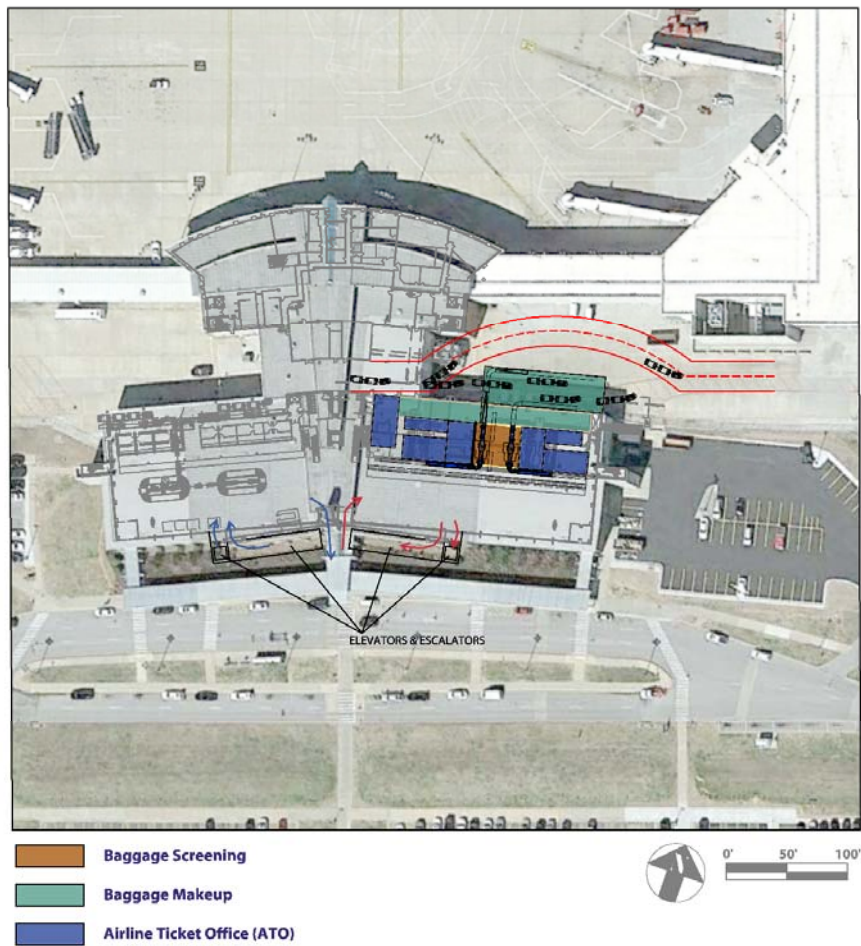


Figure D12
Departures Lobby Option 1

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D.28

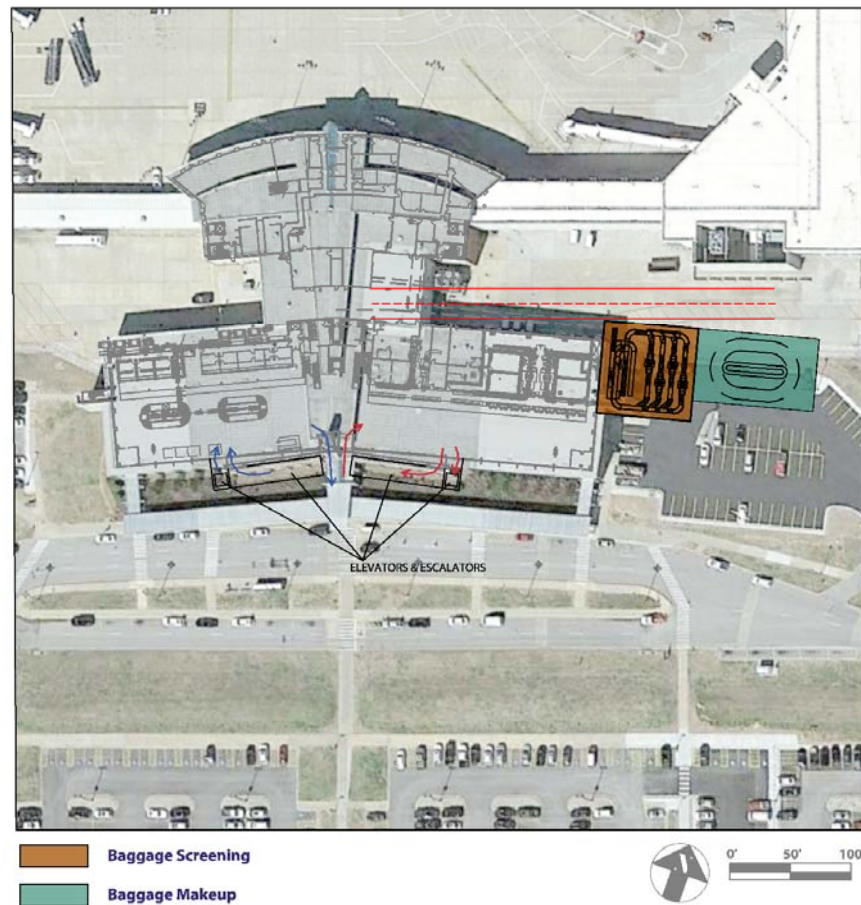


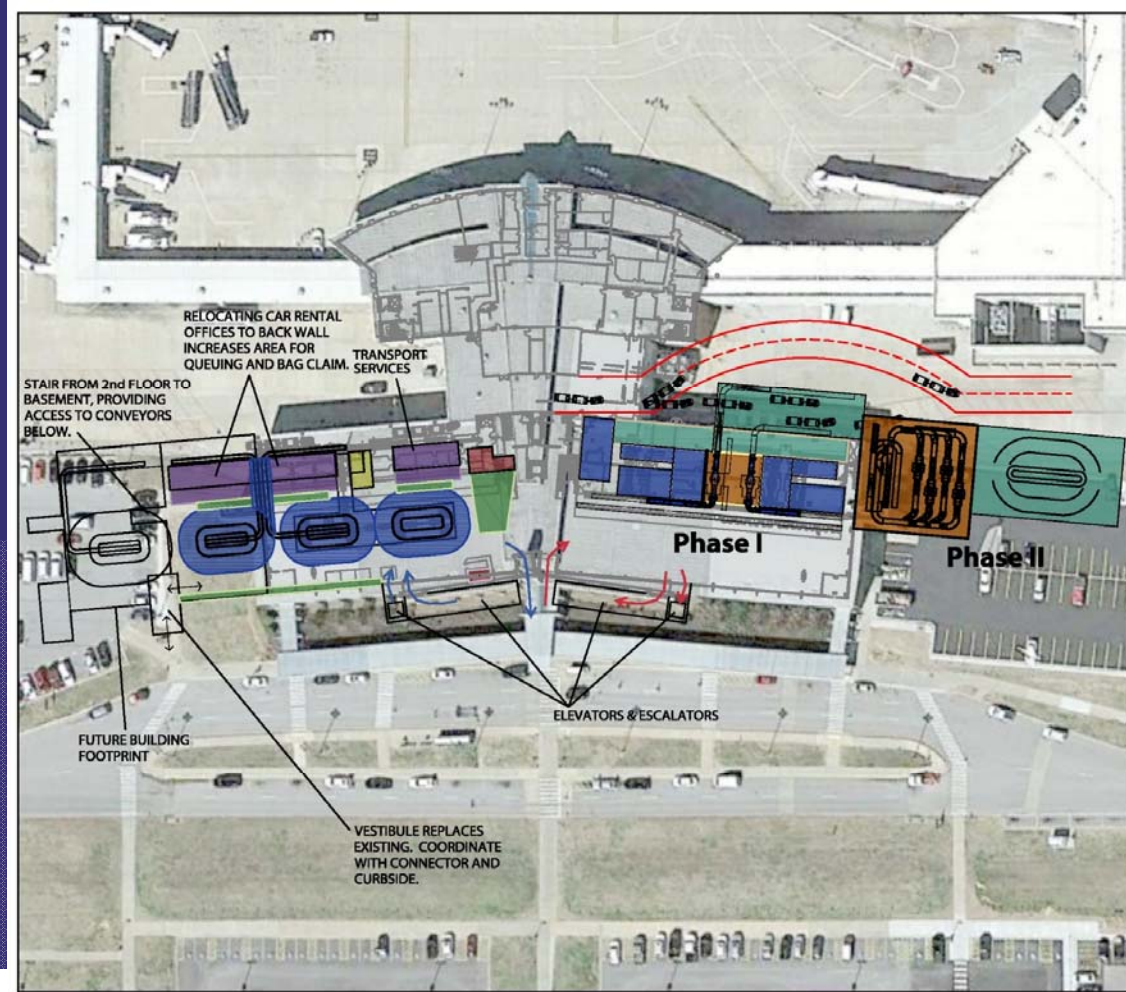
Figure D13
Departures Lobby Option 2

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D.29

Conceptual Development Plan 1st Floor



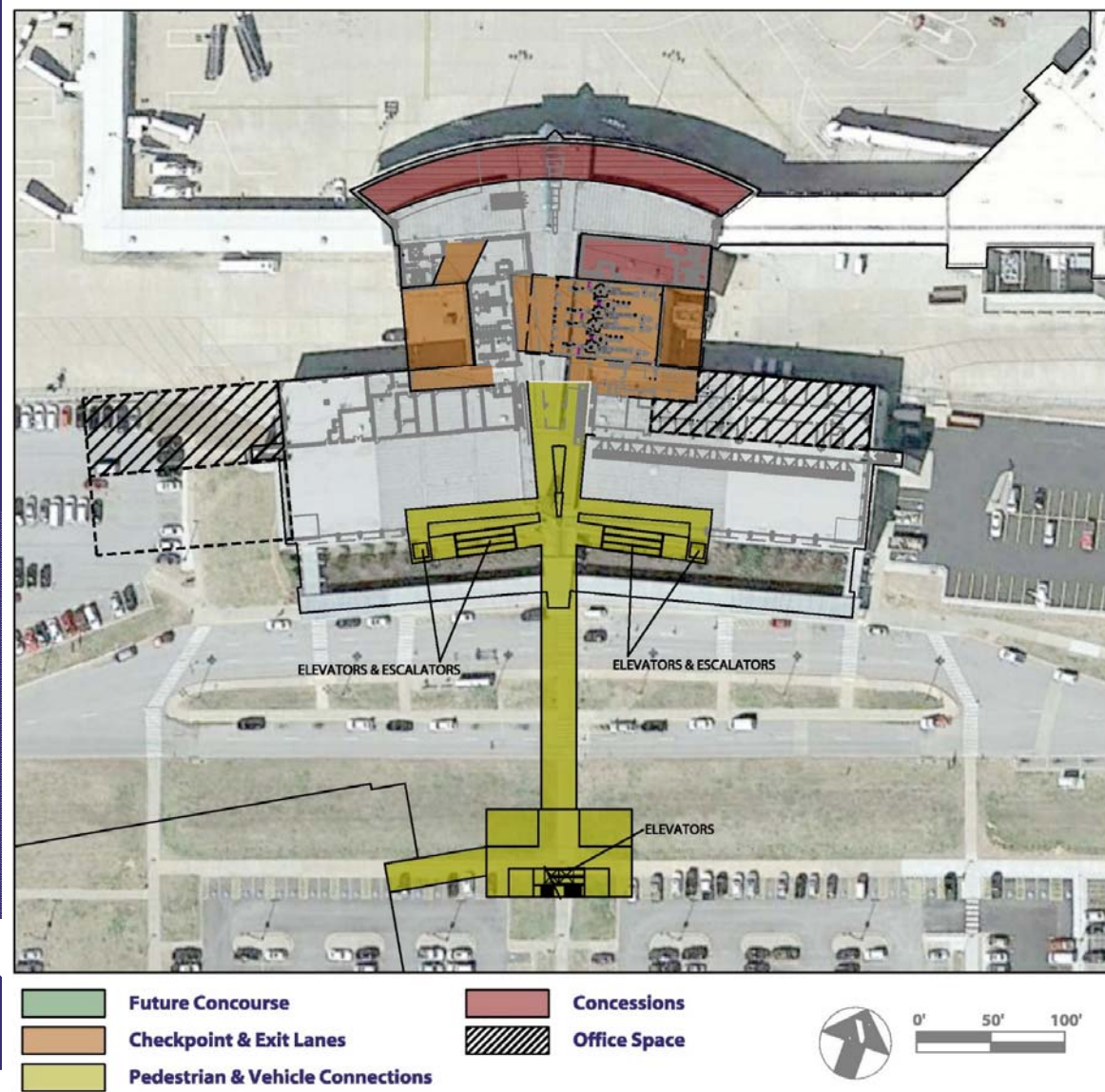
| | | | |
|--|-----------------------|---|----------------------|
|  | Baggage Screening |  | Seating |
|  | Baggage Makeup |  | Concessions & Retail |
|  | Baggage Carousel Area |  | Car Rental & Queuing |
|  | Baggage Slide | | |



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Conceptual Development Plan 2nd Floor



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