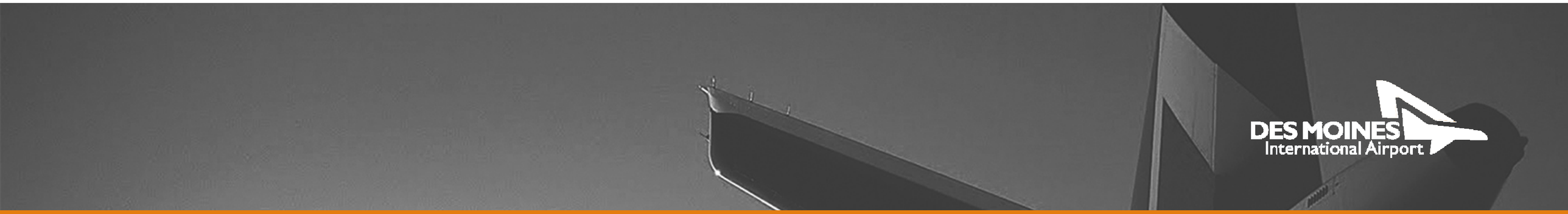


DES MOINES
International Airport

New Airport Improvements Study

March 28, 2018

Public Meeting

Agenda

- Who We Are
- Why We Need a New Airport
- Our Solution
- Discussion

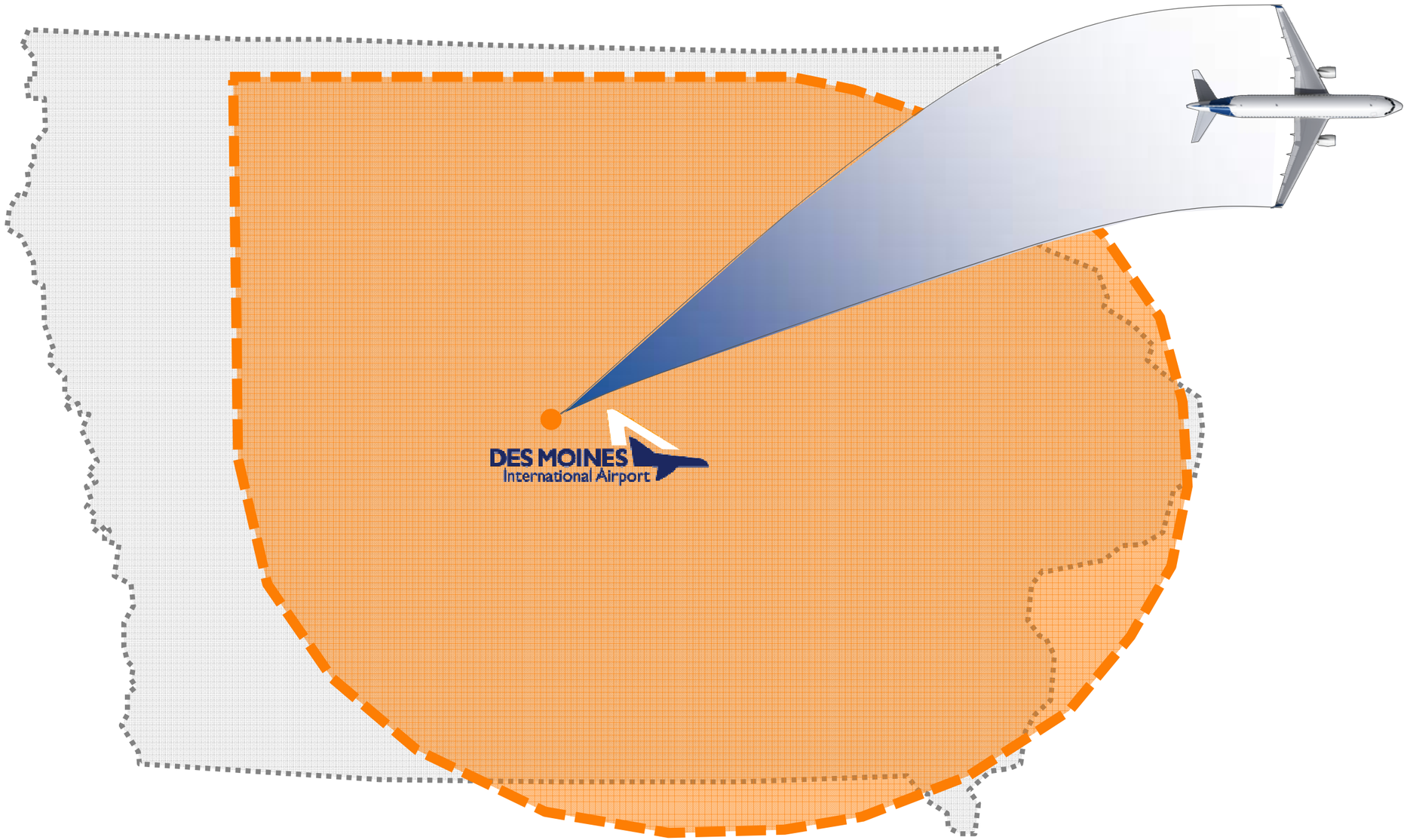
Who We Are

Who We Are

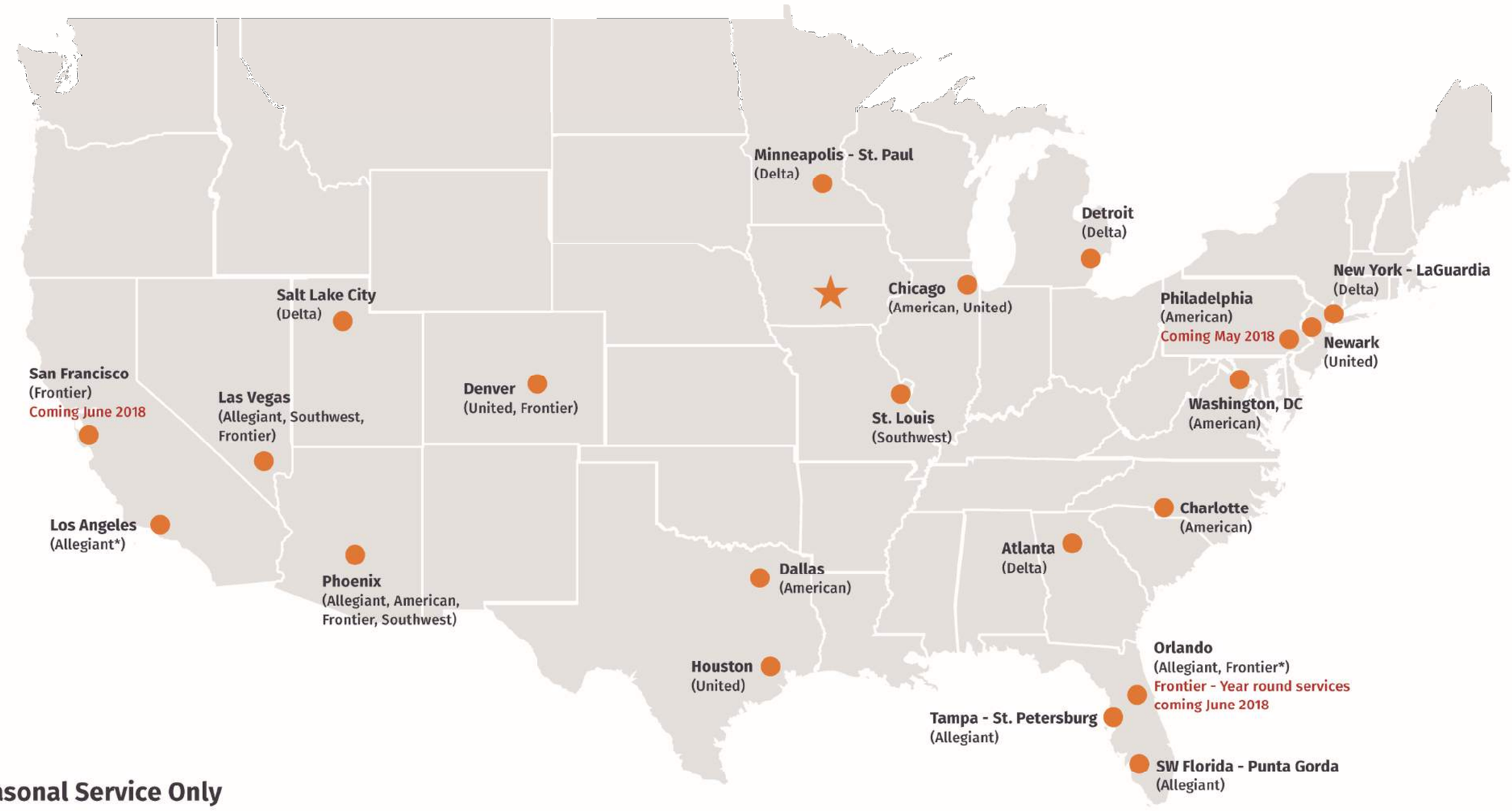
The Des Moines Airport Authority is an independent entity overseeing the operations and maintenance of the Des Moines International Airport

We work to improve the quality of air service and make air travel to and from Iowa more convenient and pleasurable

Where Do Our Passengers Come From?



21 Nonstop Destinations

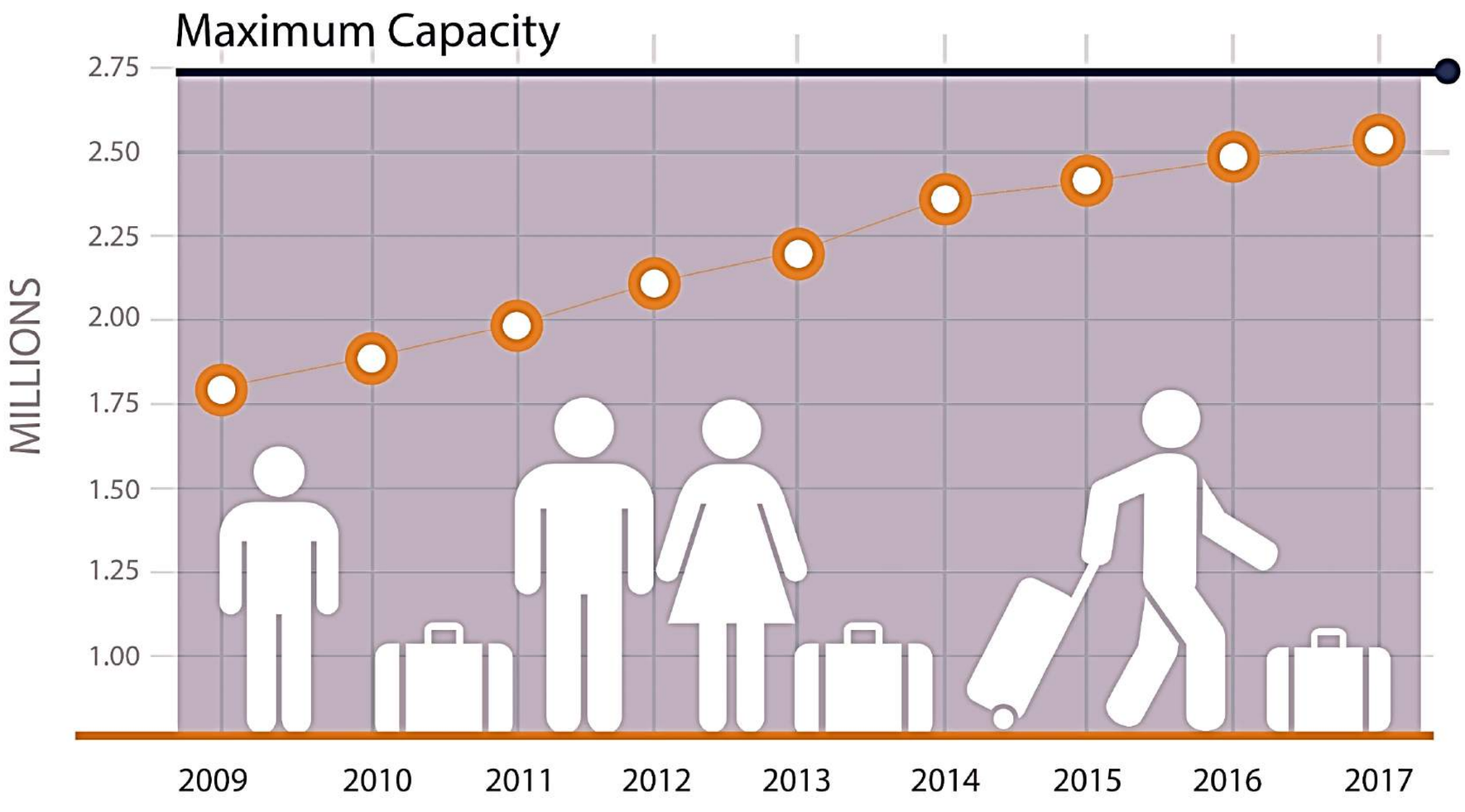


*** Seasonal Service Only**

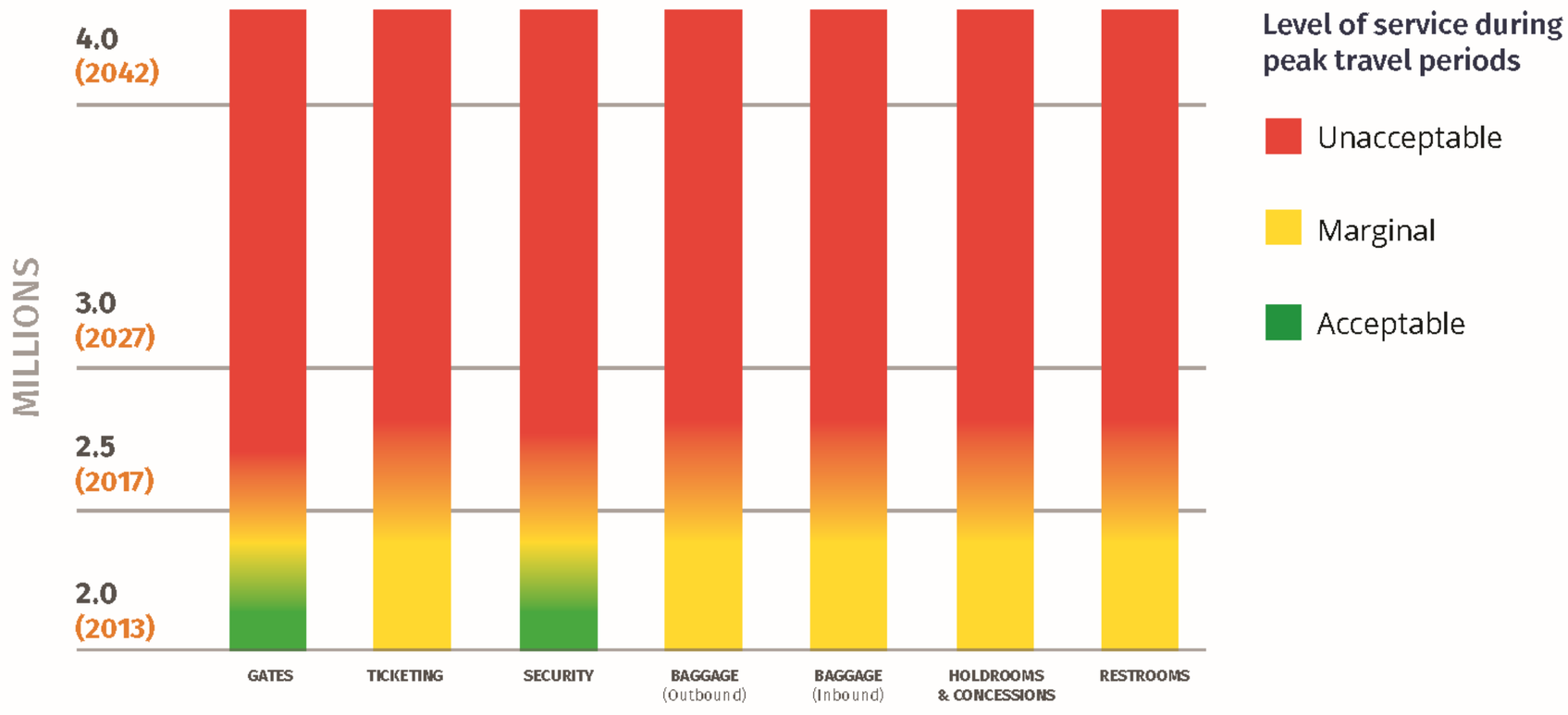
Why We Need a New Airport

Passenger Growth

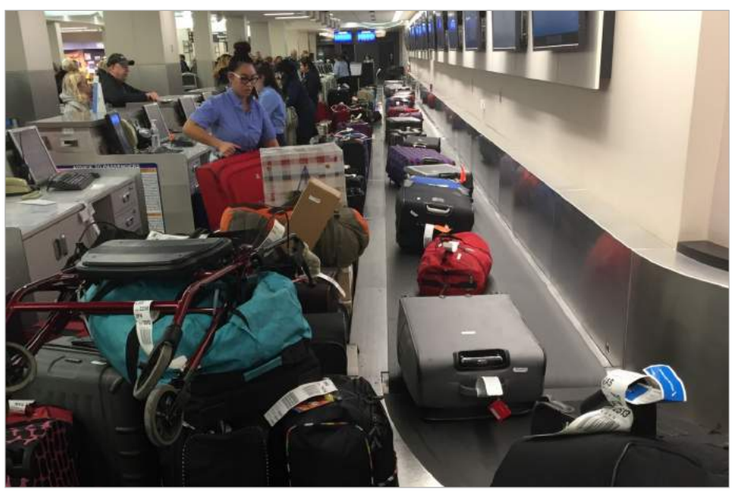
DSM Total Passengers | 2009 - 2017



Adequacy of Existing Facilities for Number of Passengers



Existing Conditions



Our Solution

Our Solution

1948 building = Outdated facilities

Fiscally responsible solution = New airport improvements

Planning ahead = Tripling our cash reserves in 6 years

Preparing For Iowa's Future Growth

Source: Des Moines International Airport Economic Impact Study, 2014

Our Vision: Positive Passenger Experience

Future Airport Campus

East:

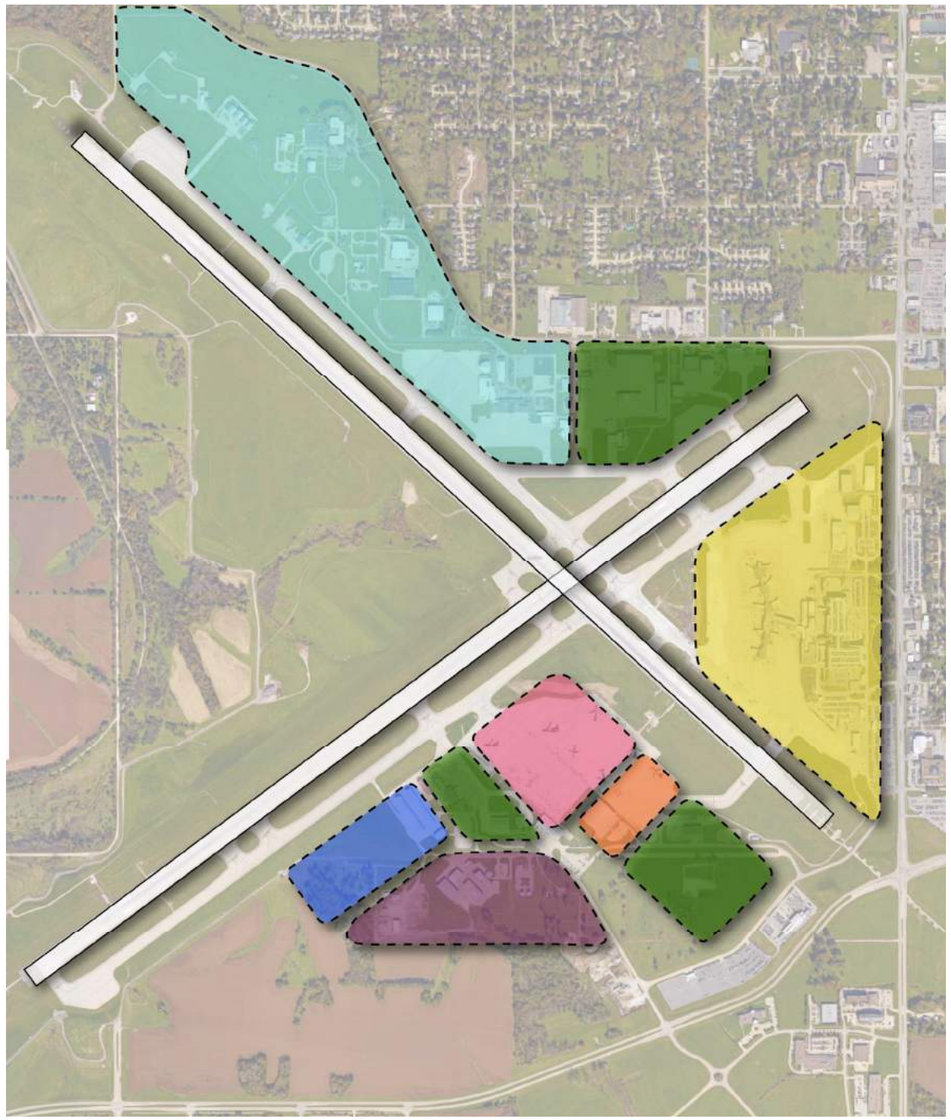
- Terminal Functions Only

South:

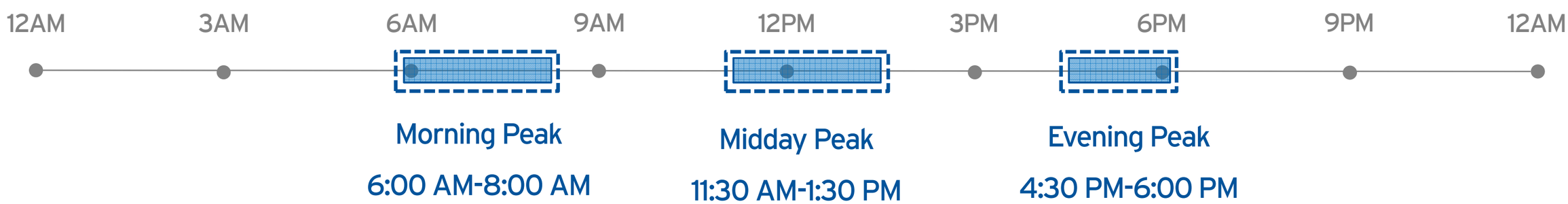
- Relocated General Aviation
- Cargo
- Airline Maintenance

Key:

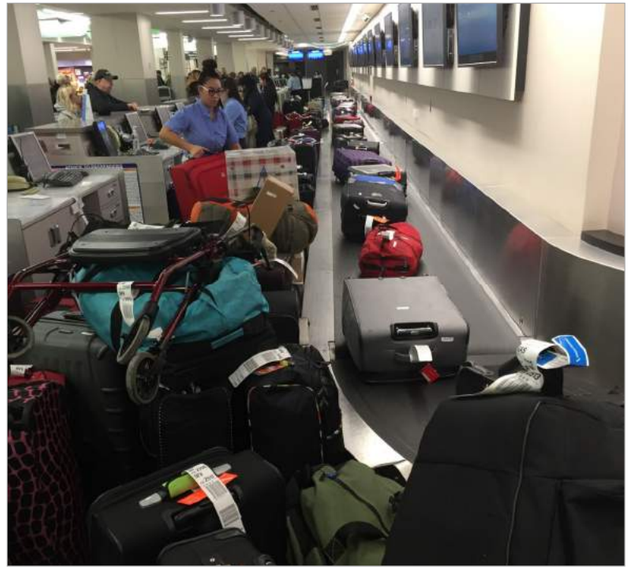
- Separation of Terminal functions



Typical Day

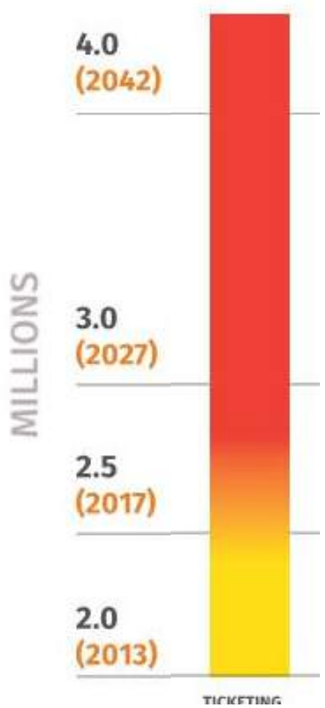

12AM
3AM
6AM
9AM
12PM
3PM
6PM
9PM
12AM
Morning Peak
6:00 AM-8:00 AM
Midday Peak
11:30 AM-1:30 PM
Evening Peak
4:30 PM-6:00 PM


A1
A2




TSA Pre
at selected time
now available
Des Moines
TOP 8
LIST

Existing Conditions – Ticketing



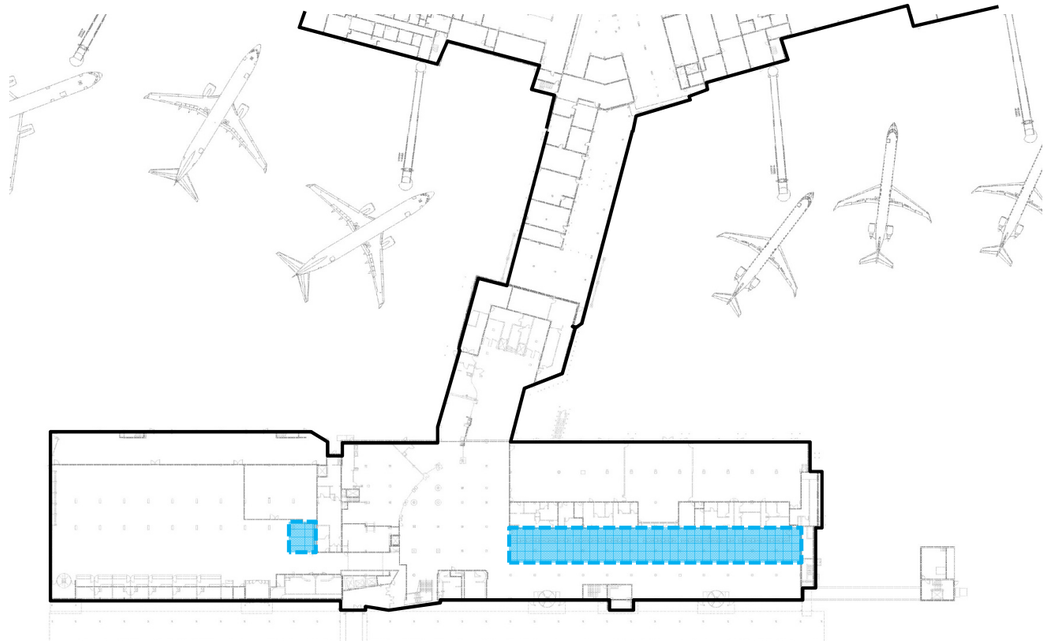
Level of service during peak travel periods

- Unacceptable
- Marginal
- Acceptable

Existing Conditions – Ticketing

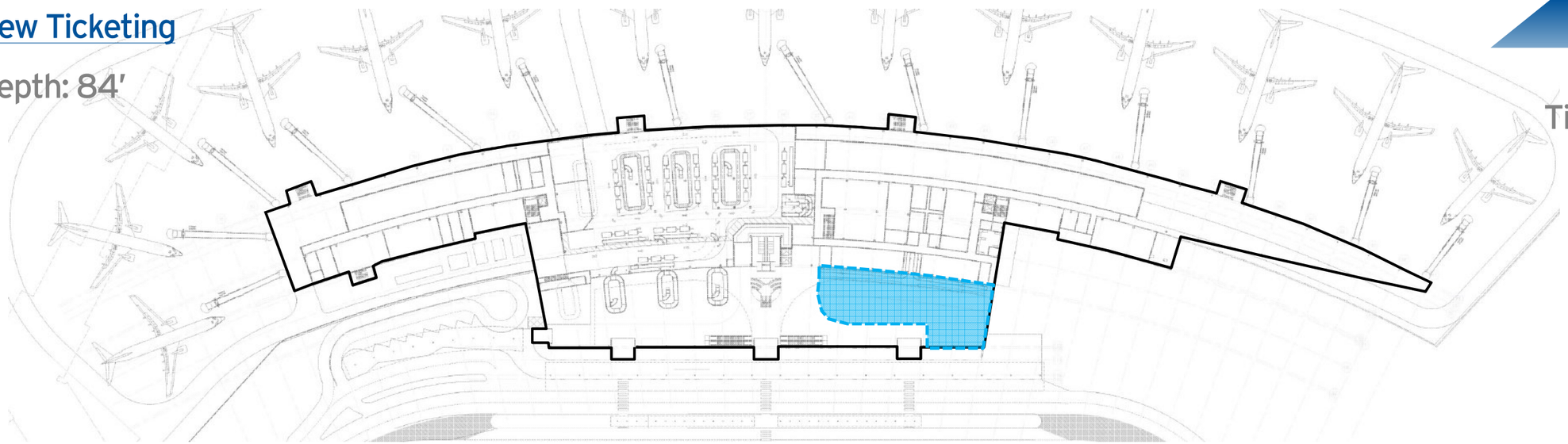
Existing Ticketing

Depth: 58'



New Ticketing

Depth: 84'



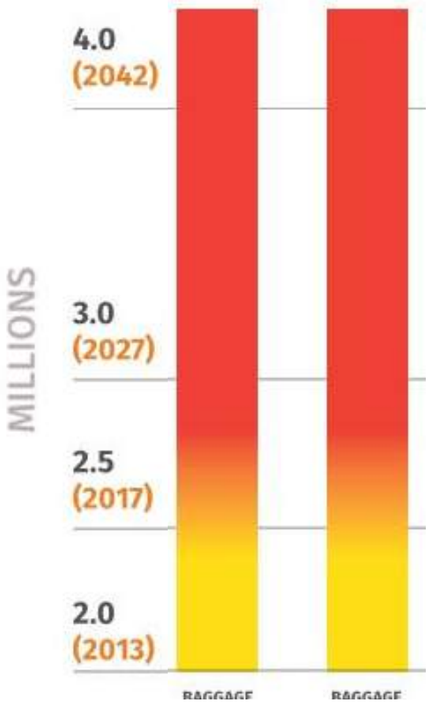
33%

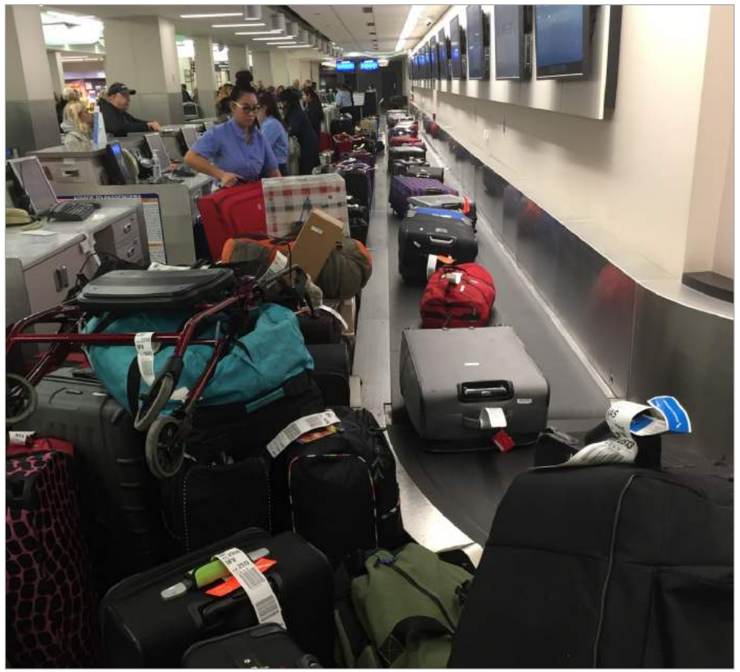
Larger Ticketing Area

2X

Ticketing Depth

Existing Conditions – Baggage





Level of service during peak travel periods

- Unacceptable
- Marginal
- Acceptable

Existing Conditions – Baggage Systems

Existing Baggage Systems

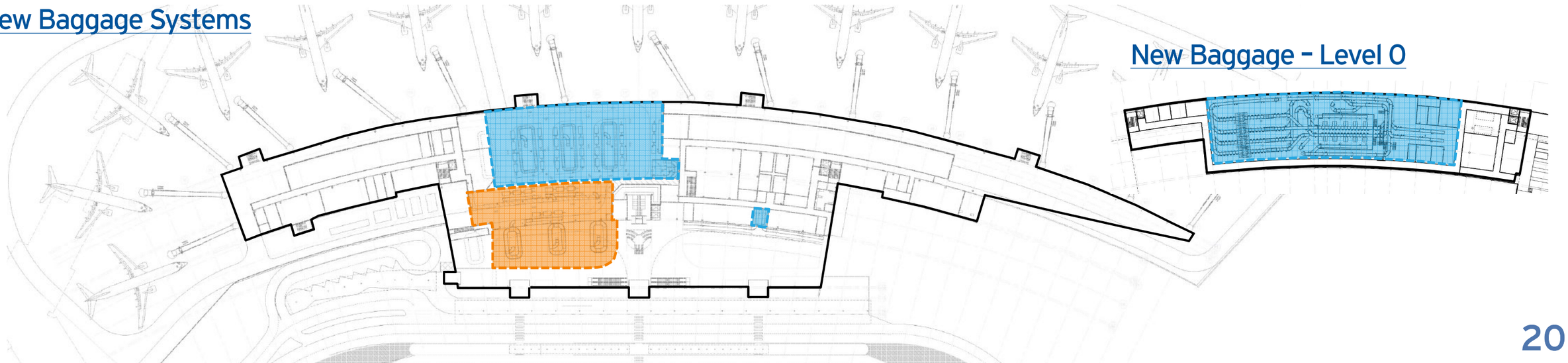
63%

Larger & Consolidated Outbound Baggage Systems

42%

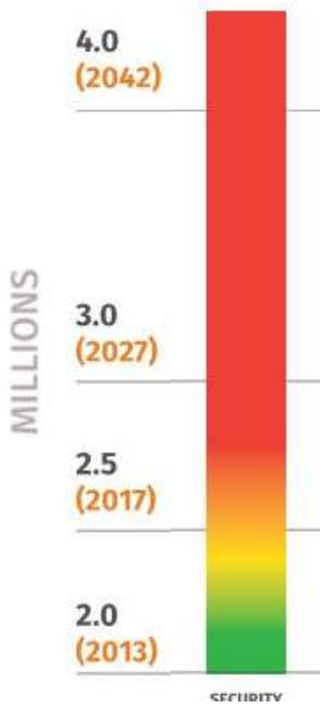
Larger Inbound Baggage Systems

New Baggage Systems



New Baggage – Level 0

Existing Conditions – Security

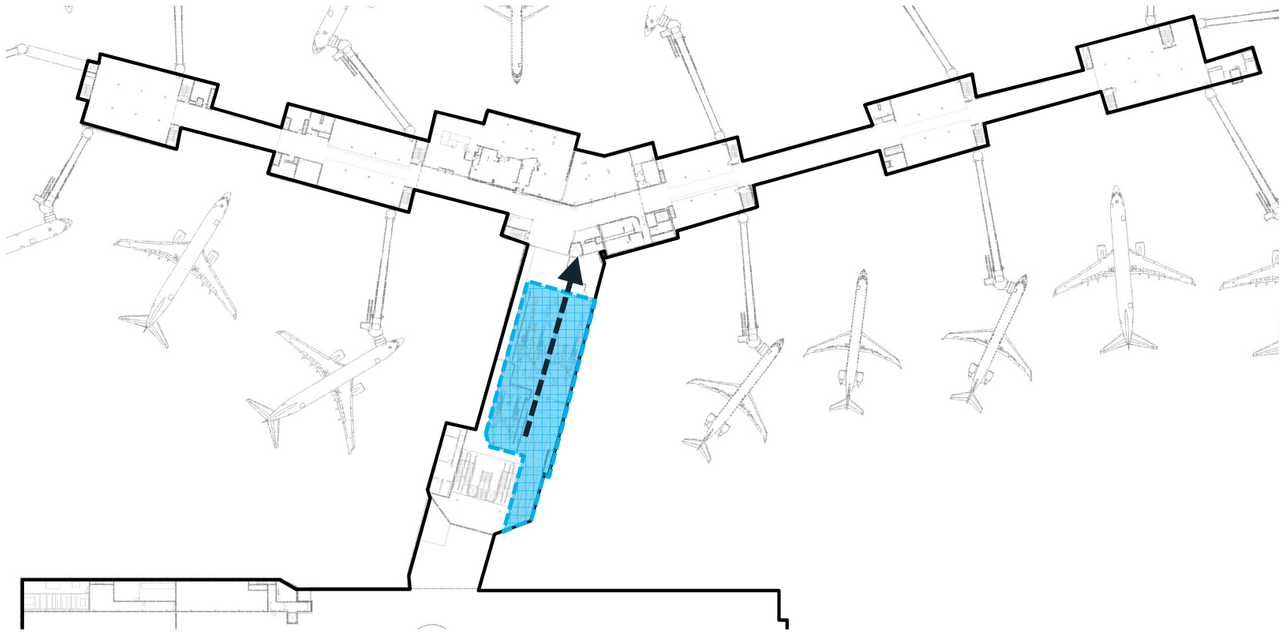


Level of service during peak travel periods

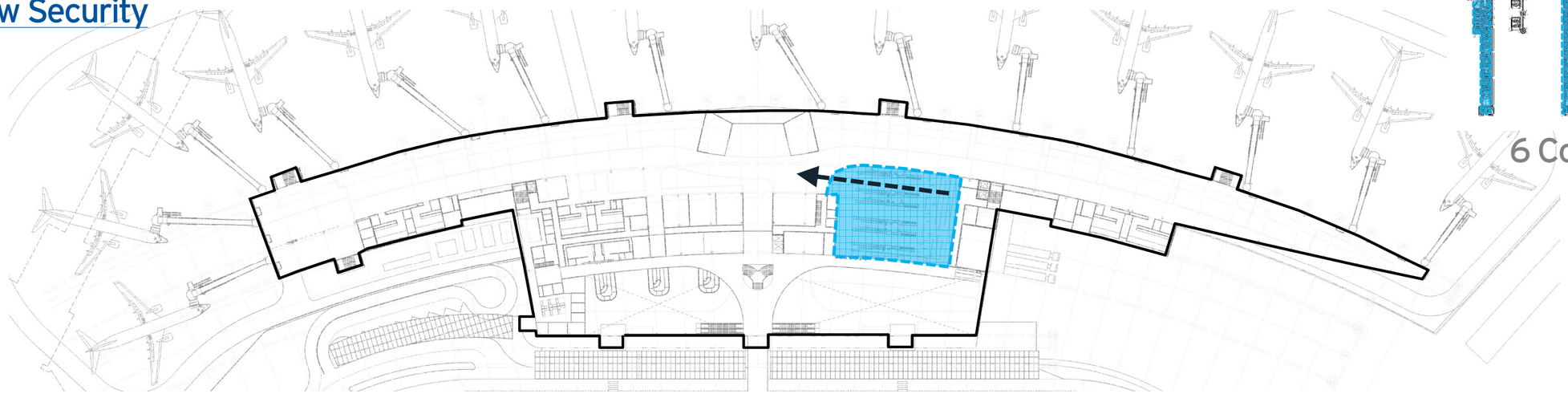
- Unacceptable
- Marginal
- Acceptable

Existing Conditions – Security

Existing Security



New Security

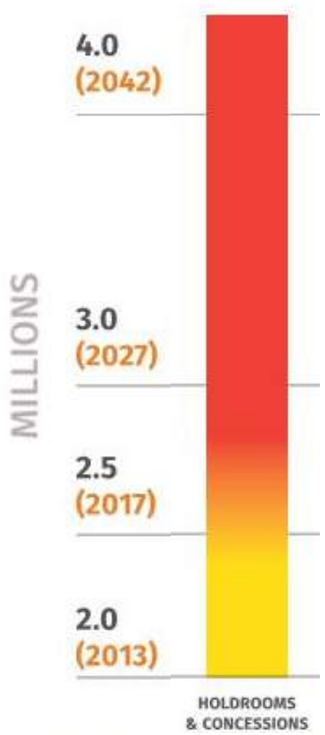


27%

Larger Security Screening

6 Conforming Lanes

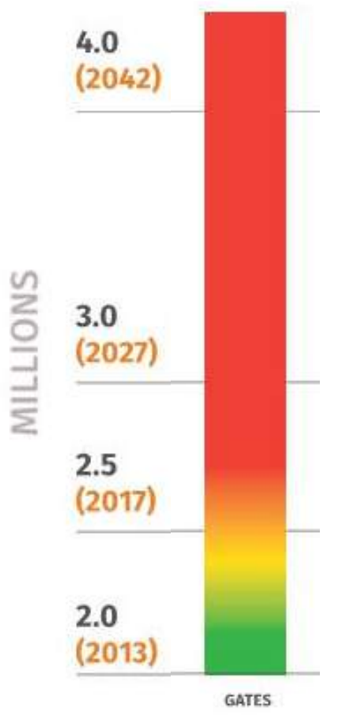
Existing Conditions – Holdrooms



Level of service during peak travel periods

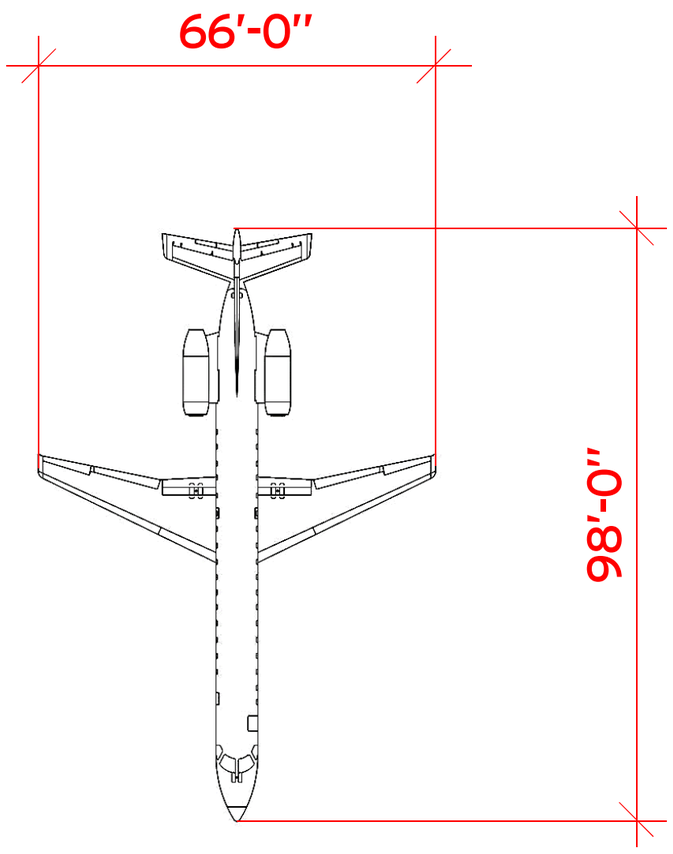
- Unacceptable
- Marginal
- Acceptable

Existing Conditions – Holdrooms/Gates

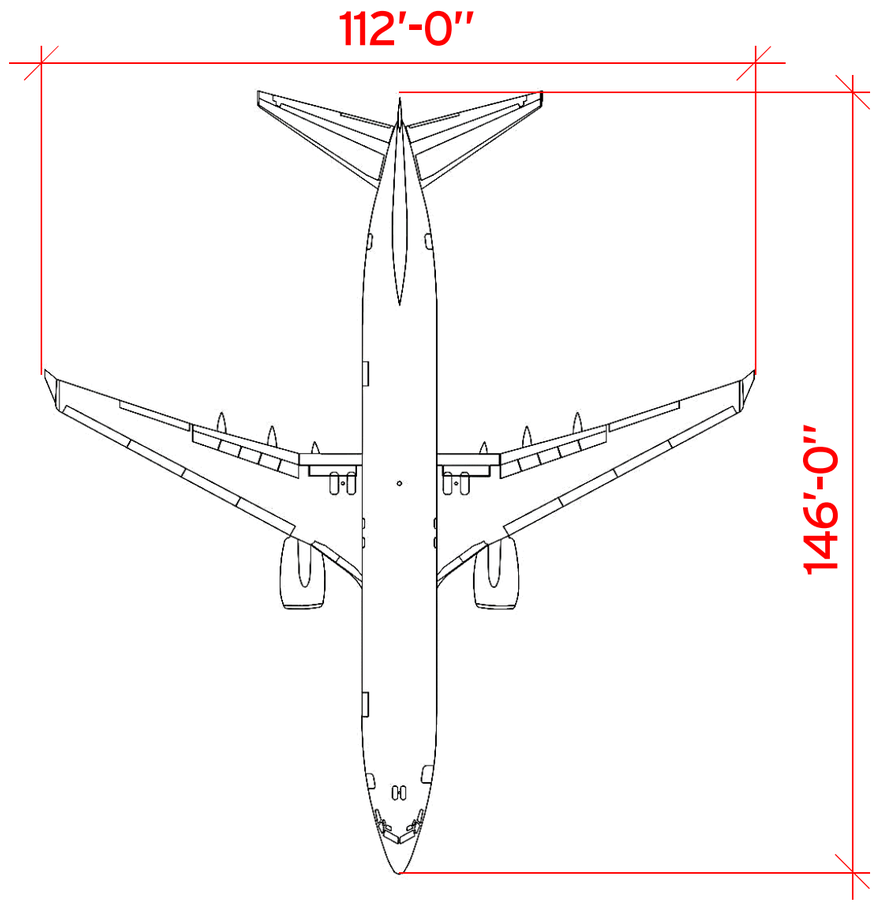


Level of service during peak travel periods

- Unacceptable
- Marginal
- Acceptable



Regional Aircraft = 50 seats

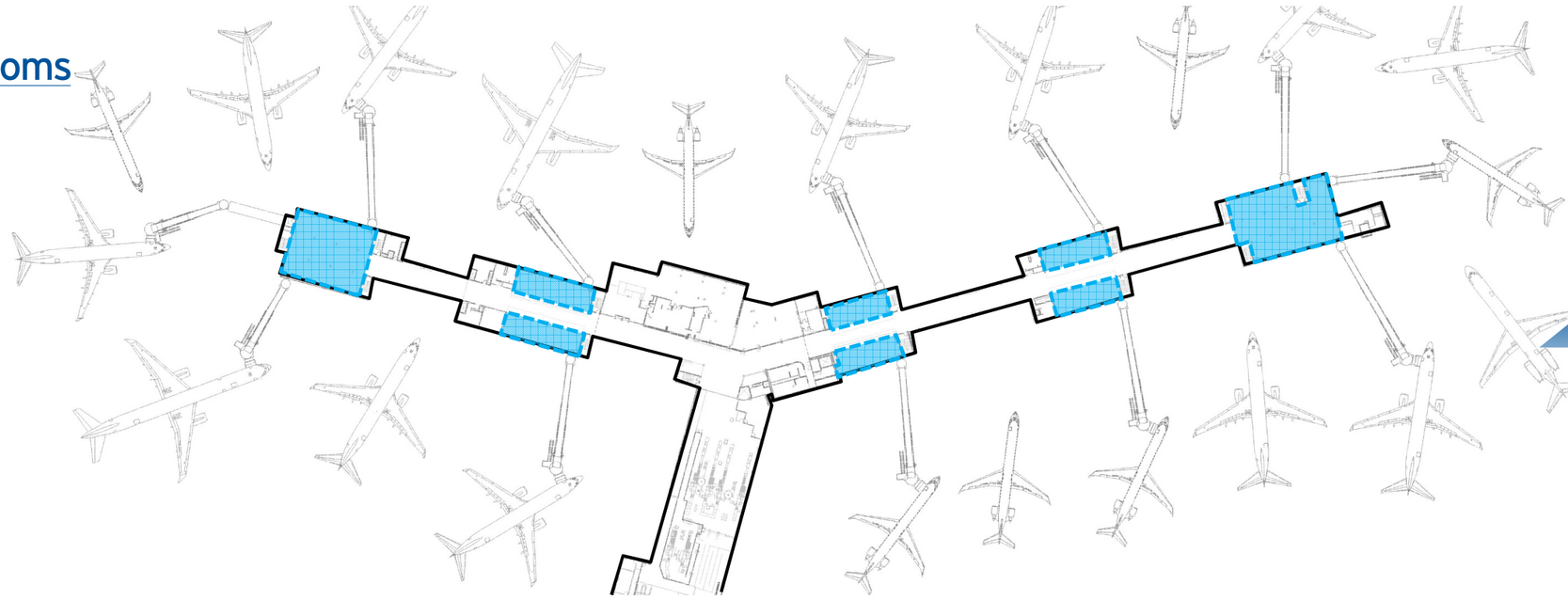


737-800 = 154 seats

A321 = 180 seats

Existing Conditions – Holdrooms

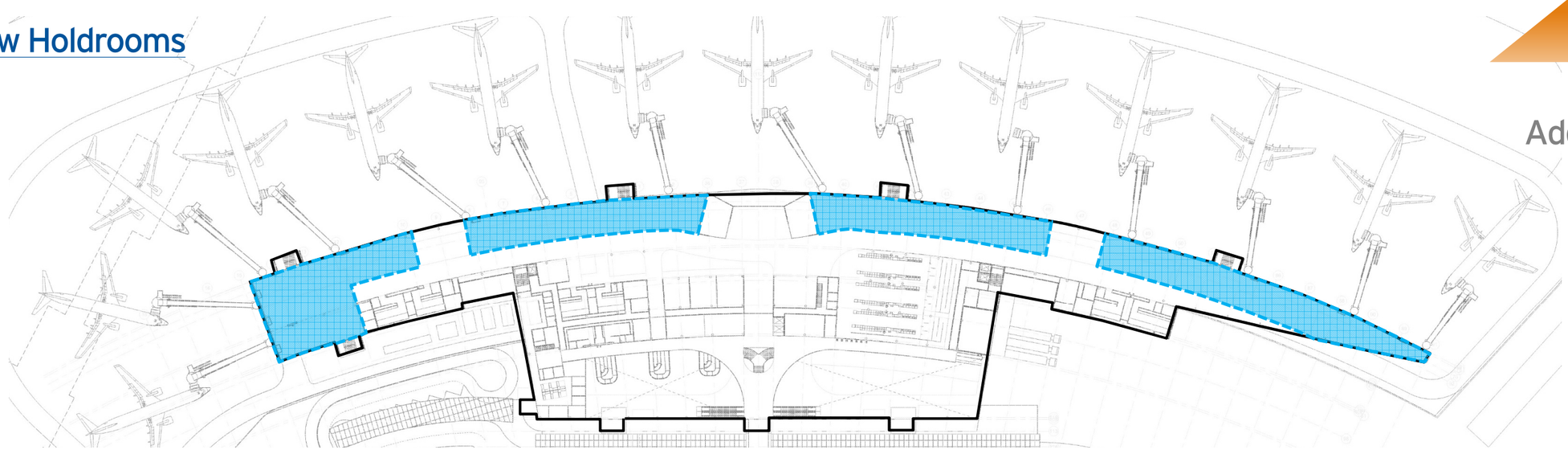
Existing Holdrooms



44%

Larger Holdrooms

New Holdrooms



44%

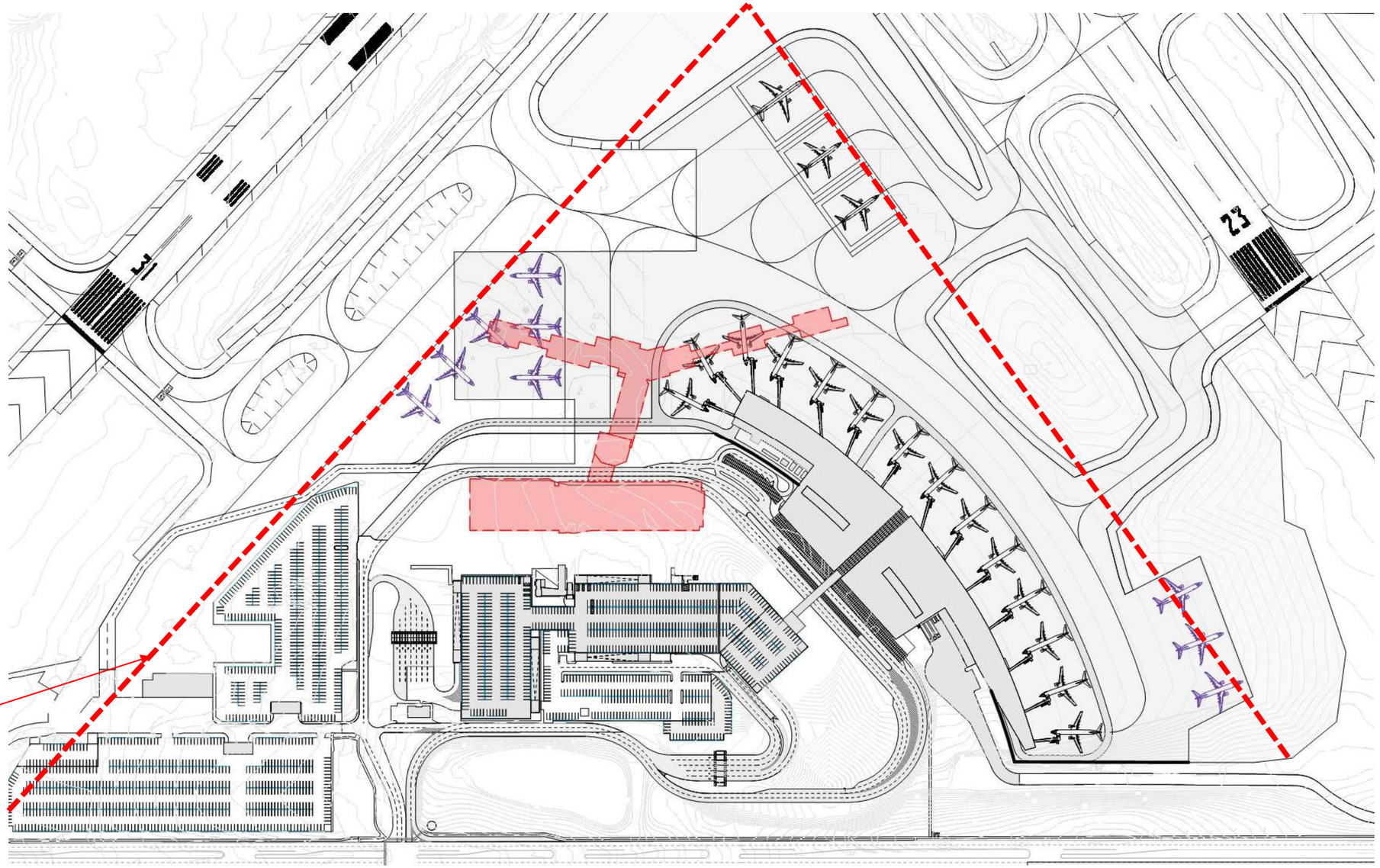
Additional Seating Capacity

Existing Conditions – Site Constraints

Boundaries

Difficult to expand the existing concourses due to airside constraints:

- Necessary Setbacks from Runways
- Larger Aircraft need larger airside maneuver space than the current layout can provide



Program Concept

Summary

1 NEW TERMINAL
2 NEW PARKING GARAGE
3 EXISTING PARKING GARAGE
4 NEW EXIT PLAZA
5 EXISTING TERMINAL
6 NEW AIRPORT ENTRANCE
7 EXISTING DUCK POND
8 RECONFIGURED LONG TERM PARKING
9 NEW ENTRY PLAZA
10 NEW DE-ICING PAD
11 FUTURE LONGTERM PARKING LOT
12 FUTURE PEDESTRIAN BRIDGE

New Terminal

New Terminal Highlights

- 301,285 SF
- 14 Gates (Phase 1)
- 18 Gates (Phase 2)
- Easy connection from terminal to parking
- Daylight
- Future Technologies

Key Benefits

- Flexibility
- Gateway to Iowa

New Terminal Overview

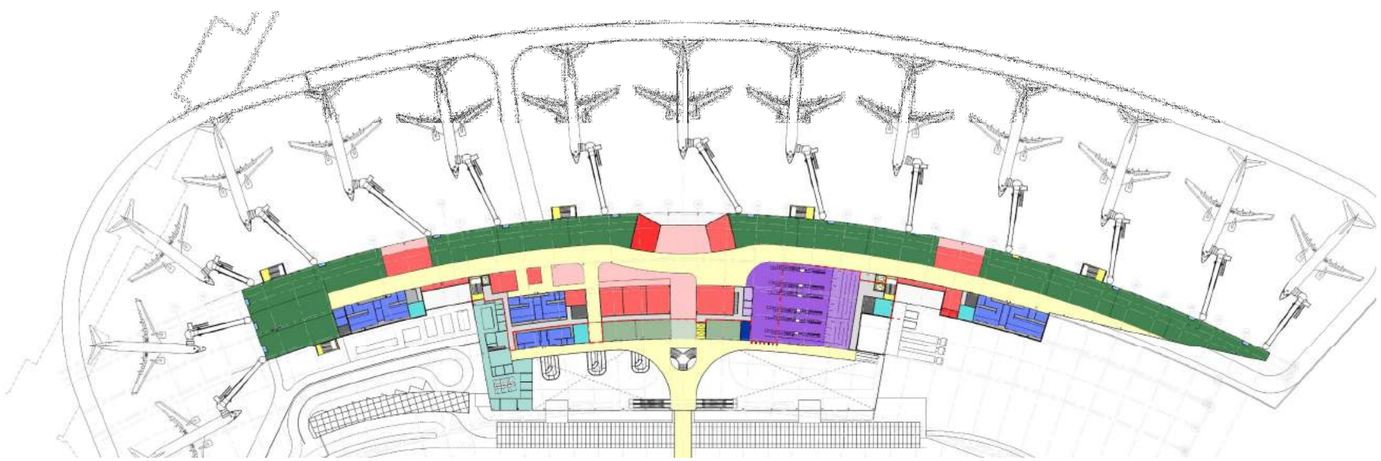
Level 2

Meeter/Greeter

Security

Gates

Concessions

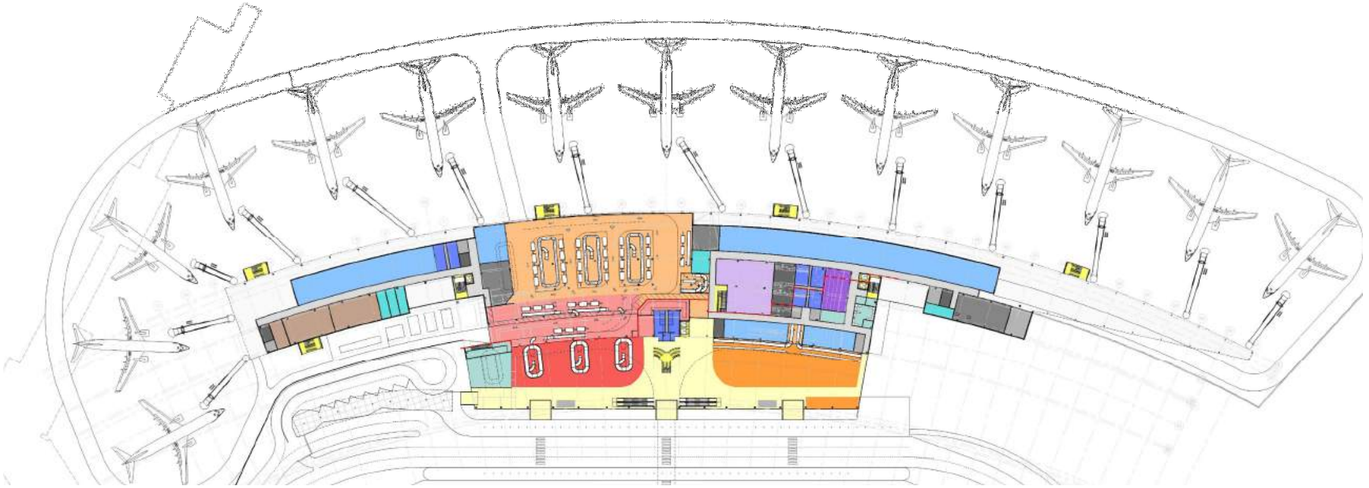


Level 1

Ticketing / Check-in

Baggage Claim

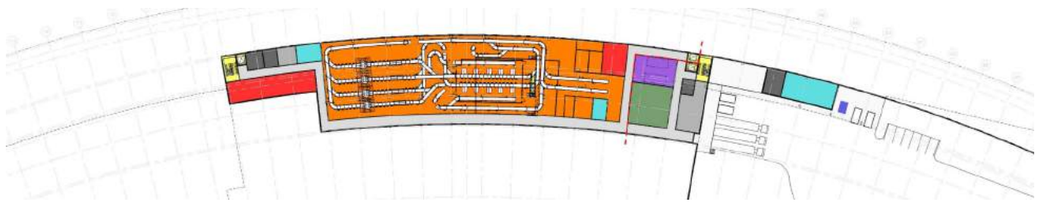
Airport/Airline Ops



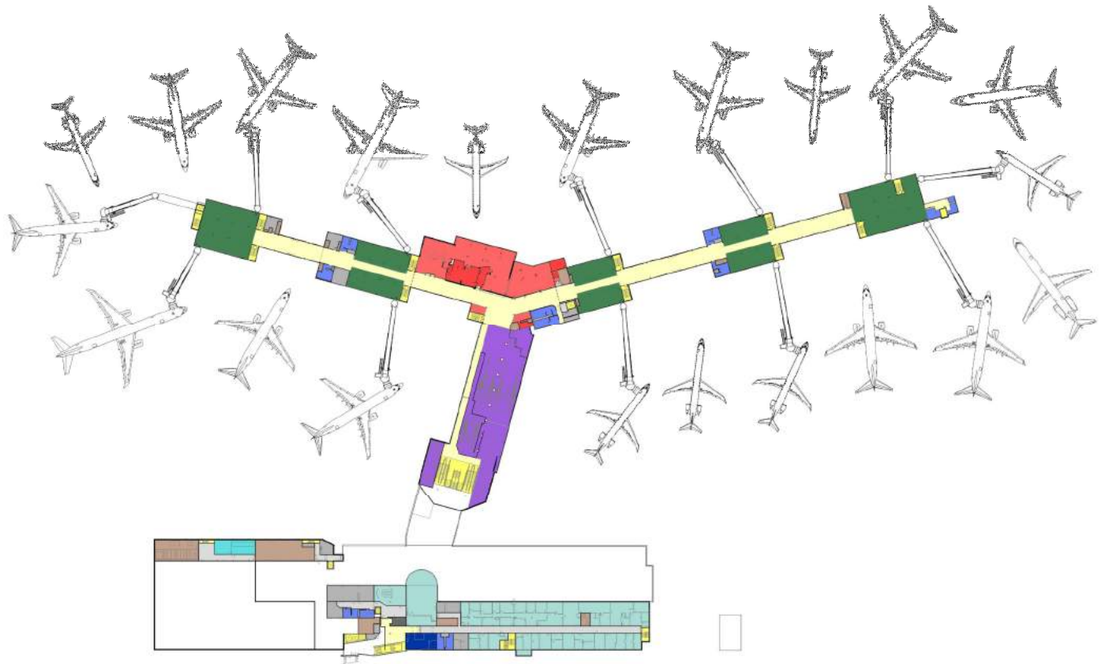
Level 0

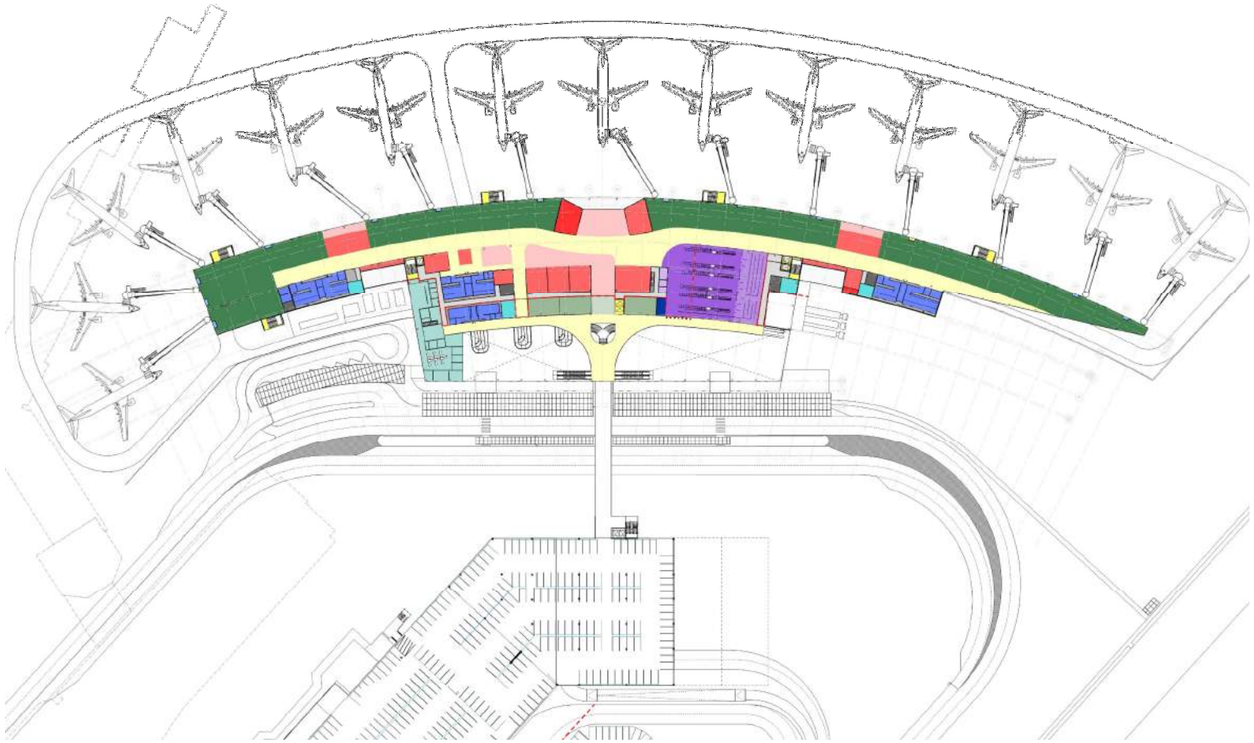
Airport Ops / Receiving

Baggage Systems



Terminal Comparison





Existing Terminal

265,000 SF

12 Gates

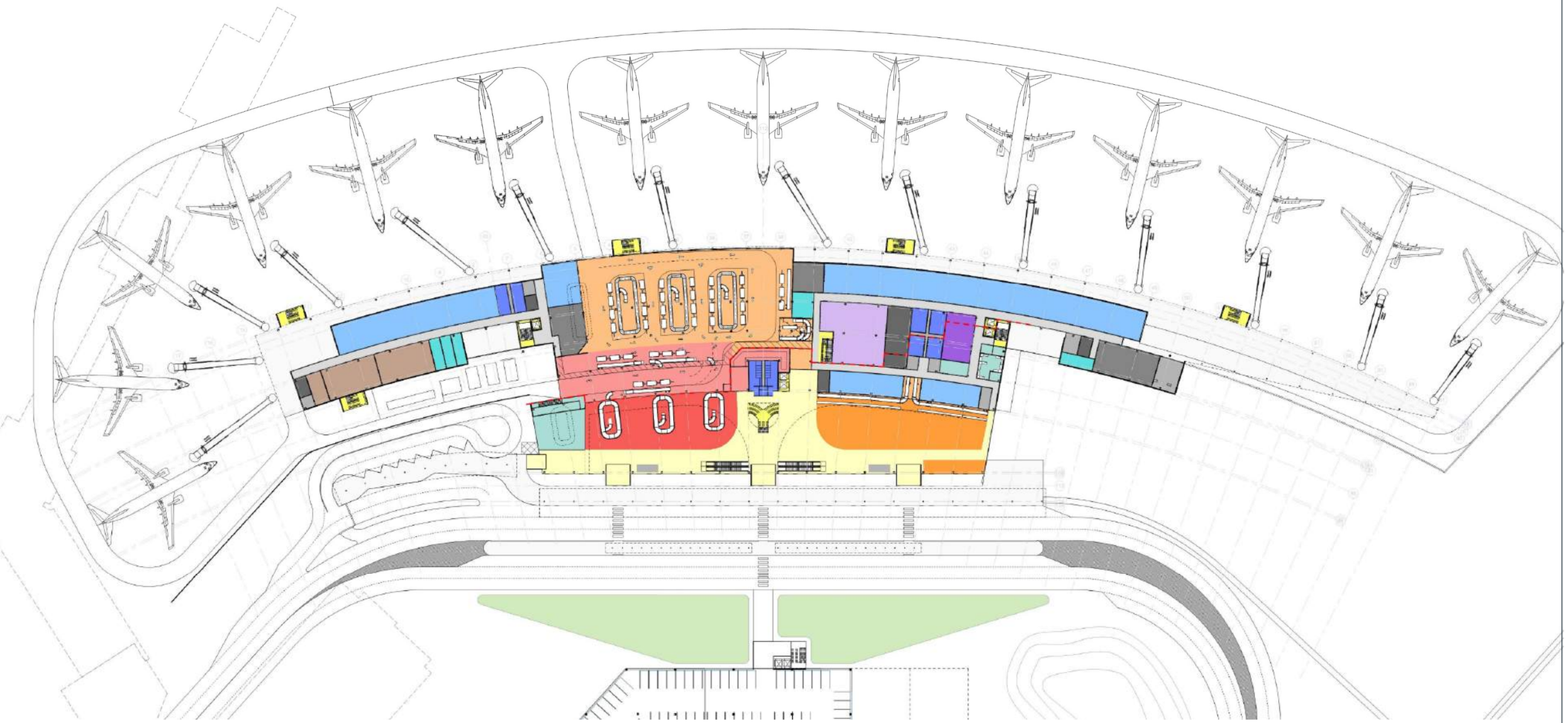
New Terminal

301,285 SF

14 Gates

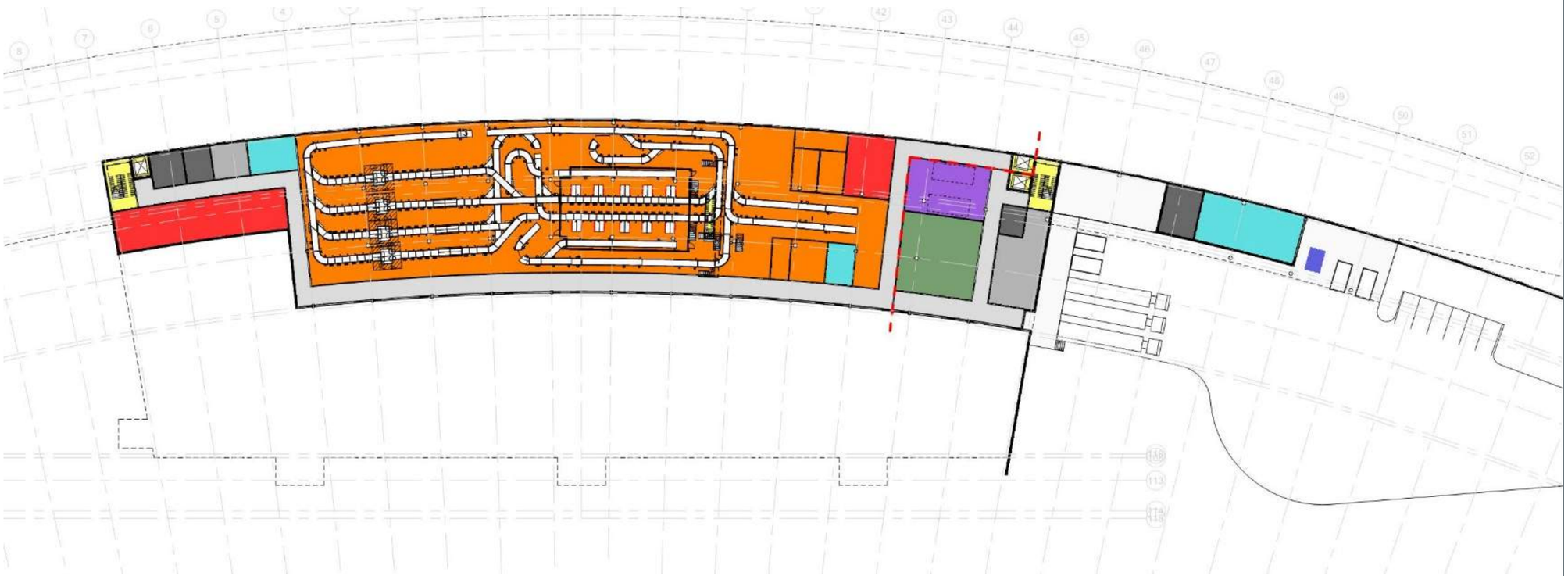
Shorter walking distances, flexibility, "space in the right place"

Terminal - Overall Plan – Level 1



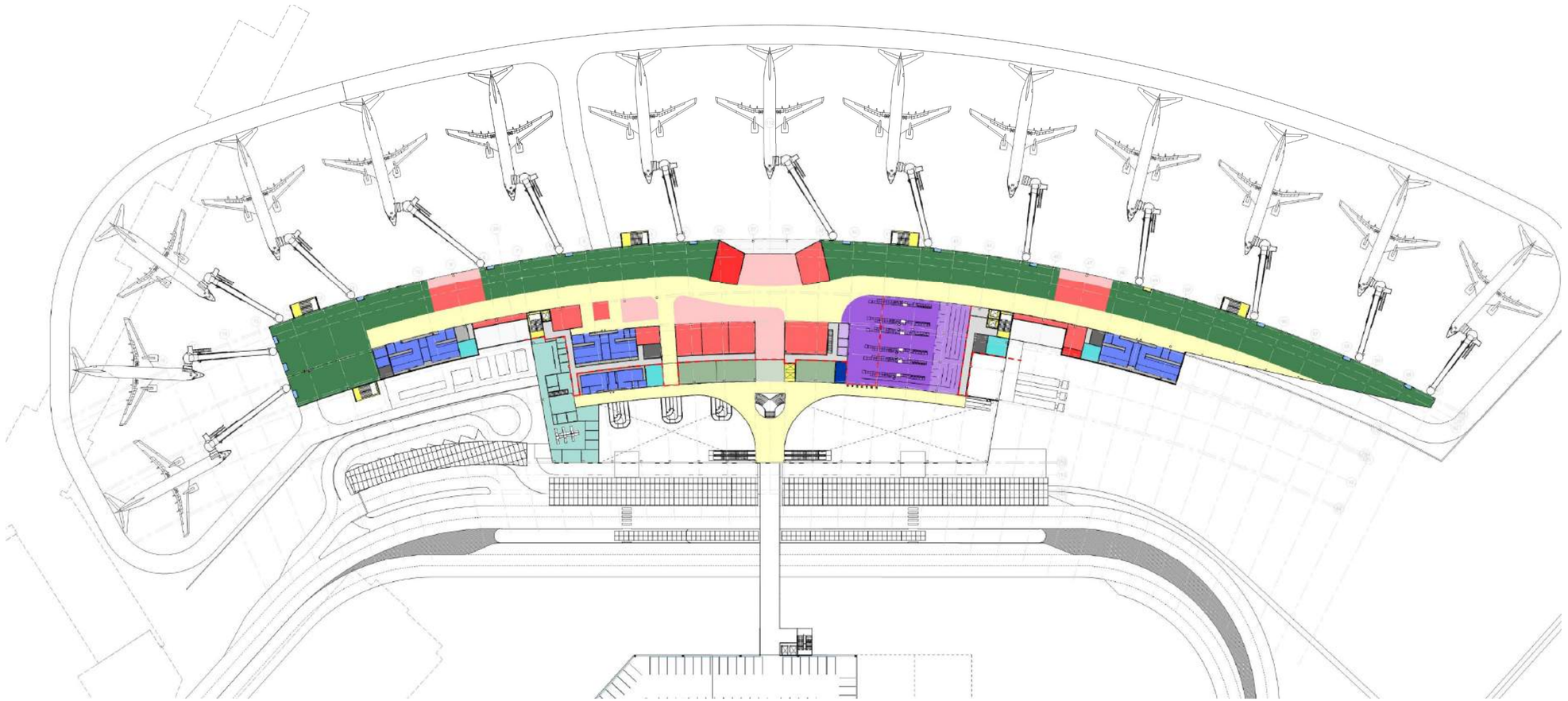
- Circulation
- Check-in / Ticketing
- Baggage Claim
- Restrooms
- Outbound Baggage
- Inbound Baggage
- Airline Support
- TSA Support
- DSM Admin
- Vertical Circulation
- Mechanical
- Electrical
- Communications

Terminal - Level 0



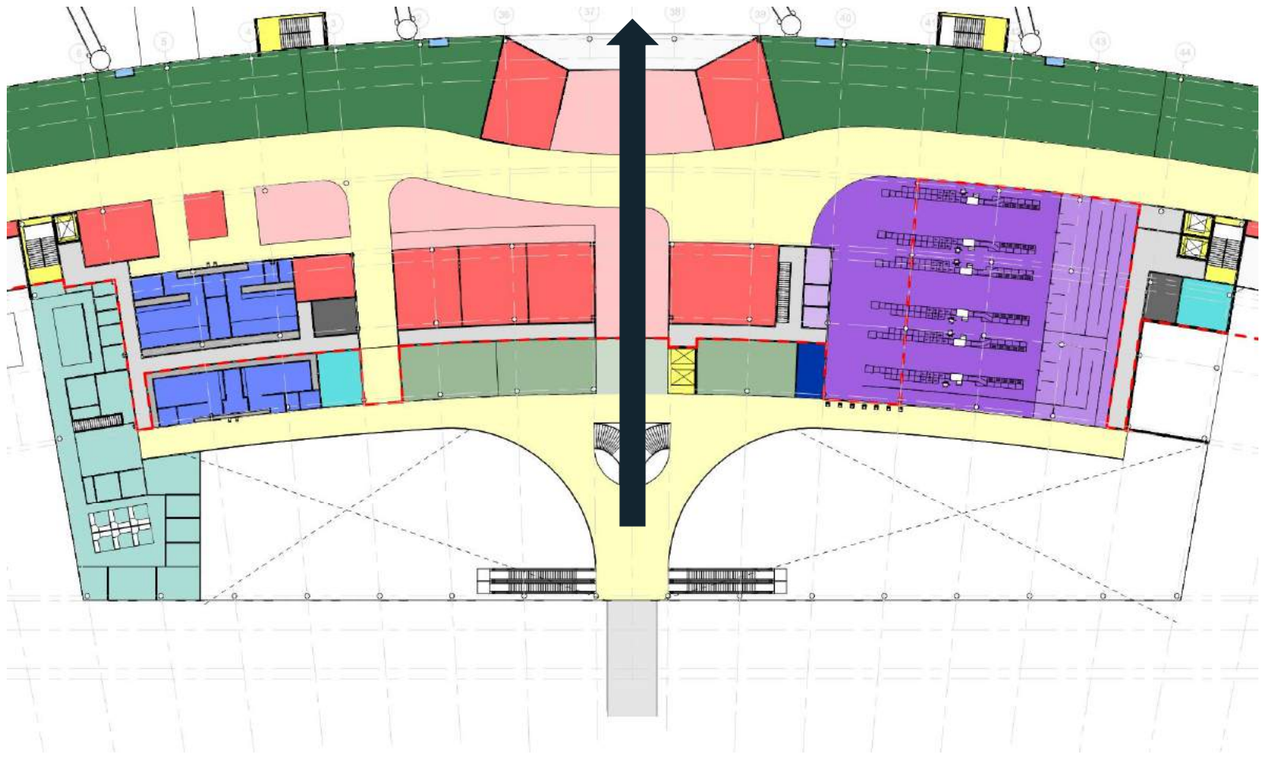
- Circulation
- Baggage Systems
- Concession Storage
- Concession Storage
- Screening
- Receiving Storage
- Vertical Circulation
- Electrical
- Communications

Terminal - Overall Plan – Level 2



- Circulation
- Concession (A)
- Concession Seating
- Concession (L)
- Concession Seating
- Restrooms
- Security
- Security Queue
- Holdrooms
- Airport Police
- DSM Admin
- Vertical Circulation
- Electrical
- Communications

Terminal – Landside Concessions / Meeter-Greeter



Key Benefits

- Visual connection from Landside to Airside

Terminal – Concourse

Concourse

- 14 Gates
- Concessions Variety
- Daylight & Inviting Experience
- Connection to Community

  (view of downtown Des Moines)

Key Benefits:

- Flexibility
  - Holdrooms
  - Aircraft
- More Capacity

Landside - Overview

Landside

- New Rental Car Facility
- Increased Parking
- New Parking Structure
- Ability to Grow
- New Entry/Exit Plaza
- Increased Curbfront Length

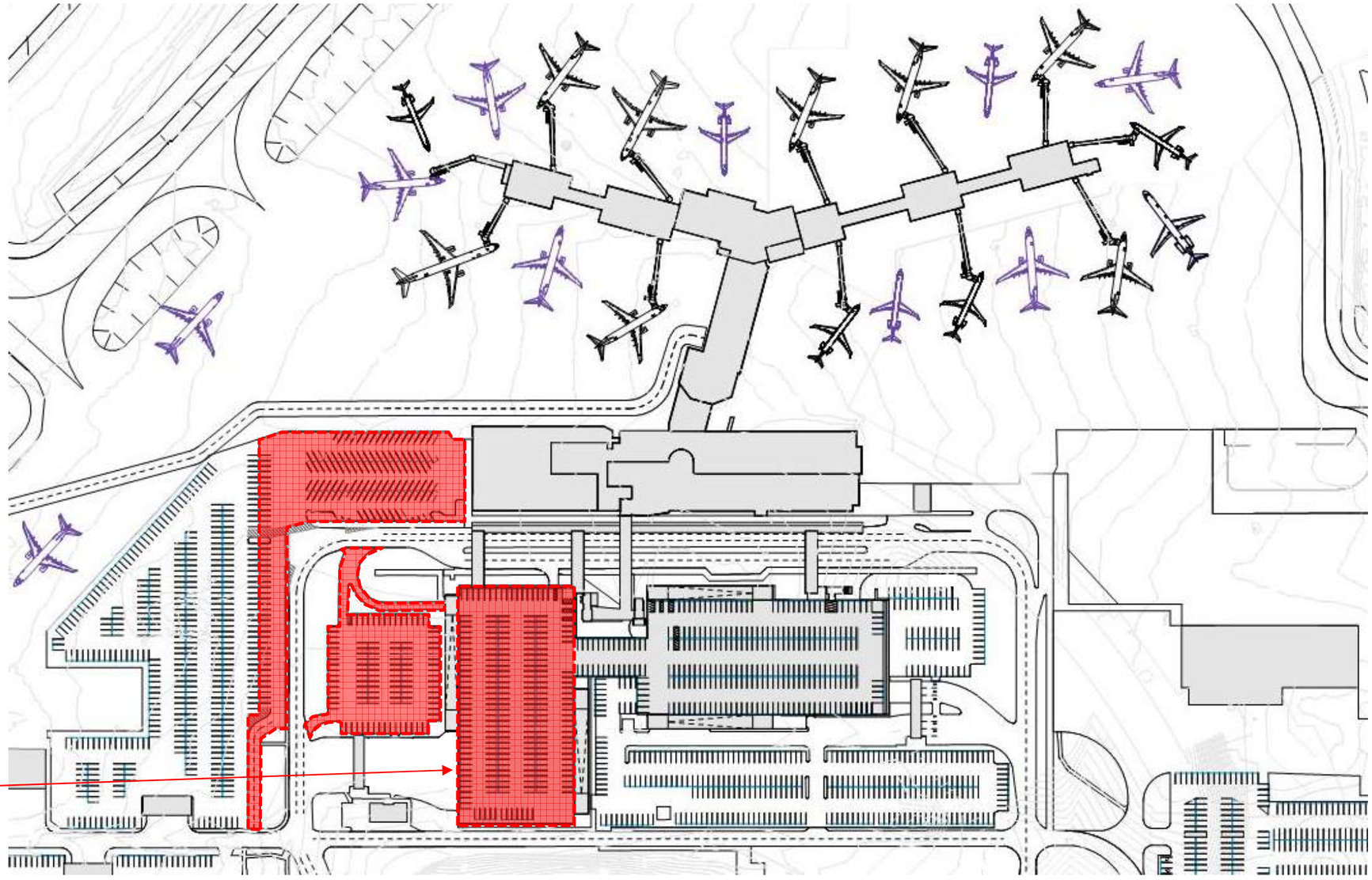
Key Benefits:

- Safety
- Flexibility
- More Capacity

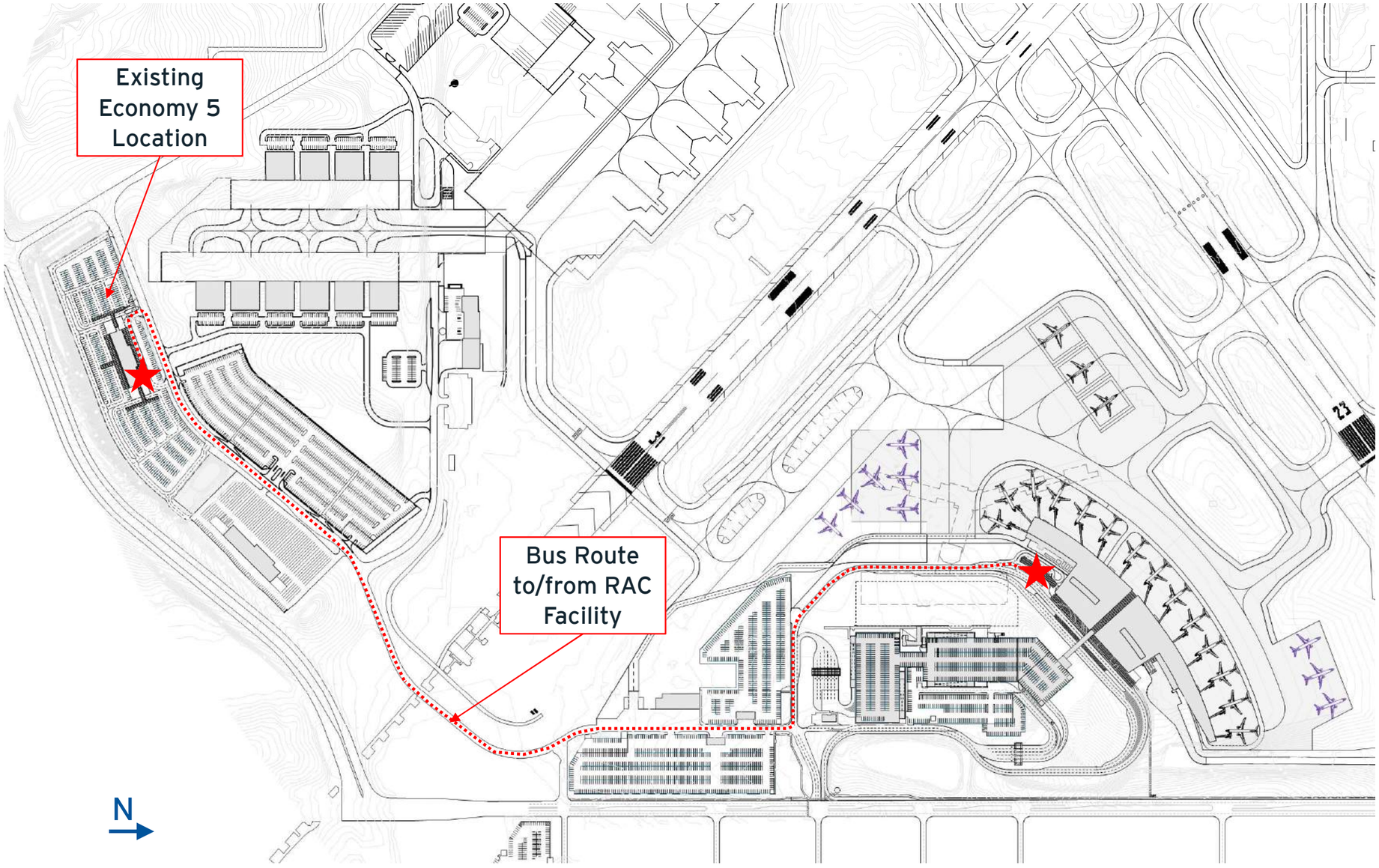
Landside – Rental Car (Current)

Current Operations

- 3 separate locations
- Prime location for potential additional parking
- Wayfinding confusion
- Rental operational issues
- 436 parking spaces total
  - Covered – 176 spaces
  - Surface – 260 spaces



Landside – Rental Car (Future)



Remote Rental Car Facility

- Located in South Quadrant
- Busing Operation
- Distance: 1.1 miles
- Drivetime: Approx. 3 minute

Key Benefits-

- Flexibility *(expansion & rental operations)*
- Capacity *(recovered parking spaces at terminal)*
- Reduced vehicle congestion *(no rental traffic on terminal loop)*
- Safety *(no car jockeying)*

Landside - Parking

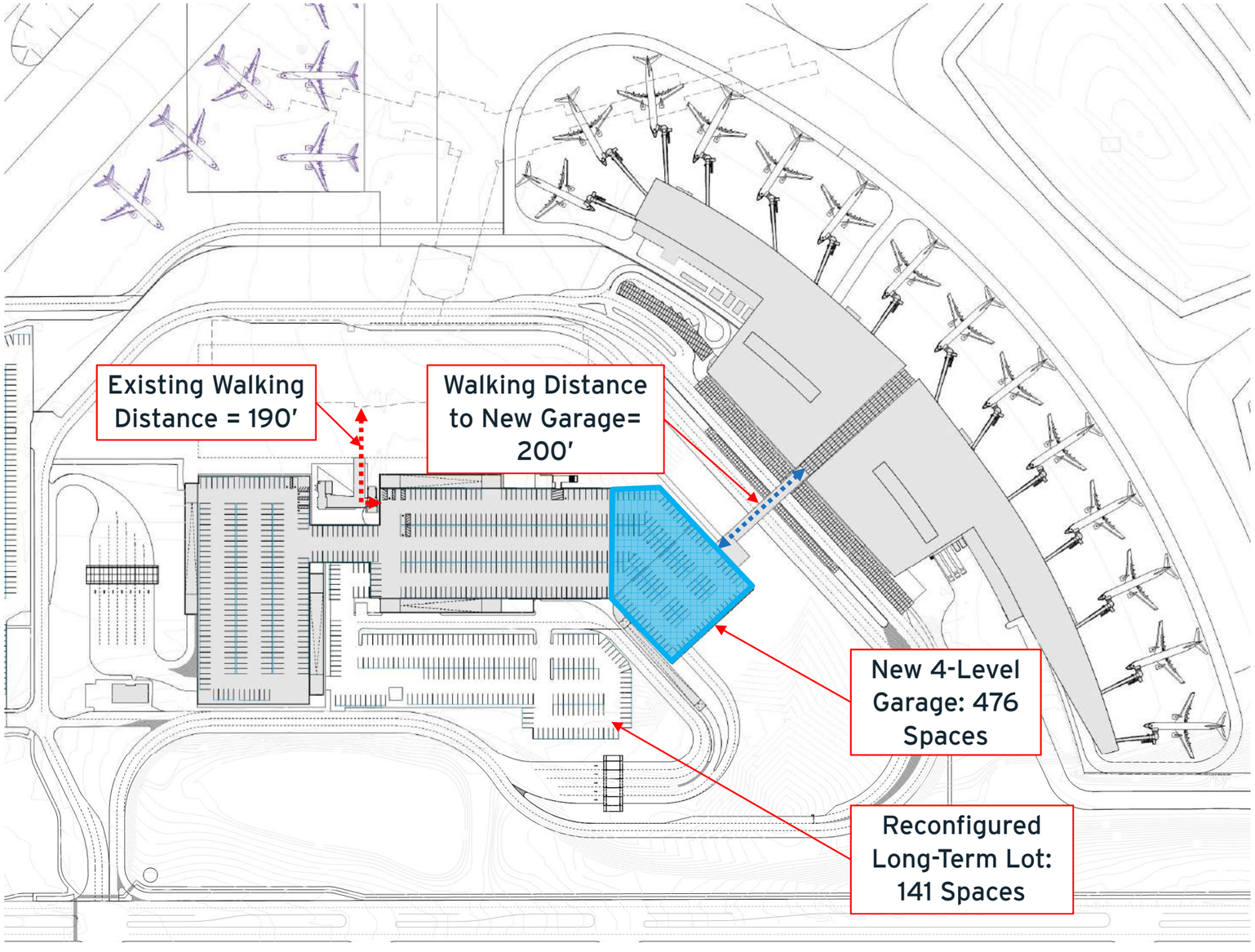
New Parking:

- New Parking Structure
- Additional covered parking
- Reconfigured Long Term

Keys Benefits:

- Capacity Increase
- Future Growth Potential
- Flexibility
- Revenue Generation

Landside – Parking Garage

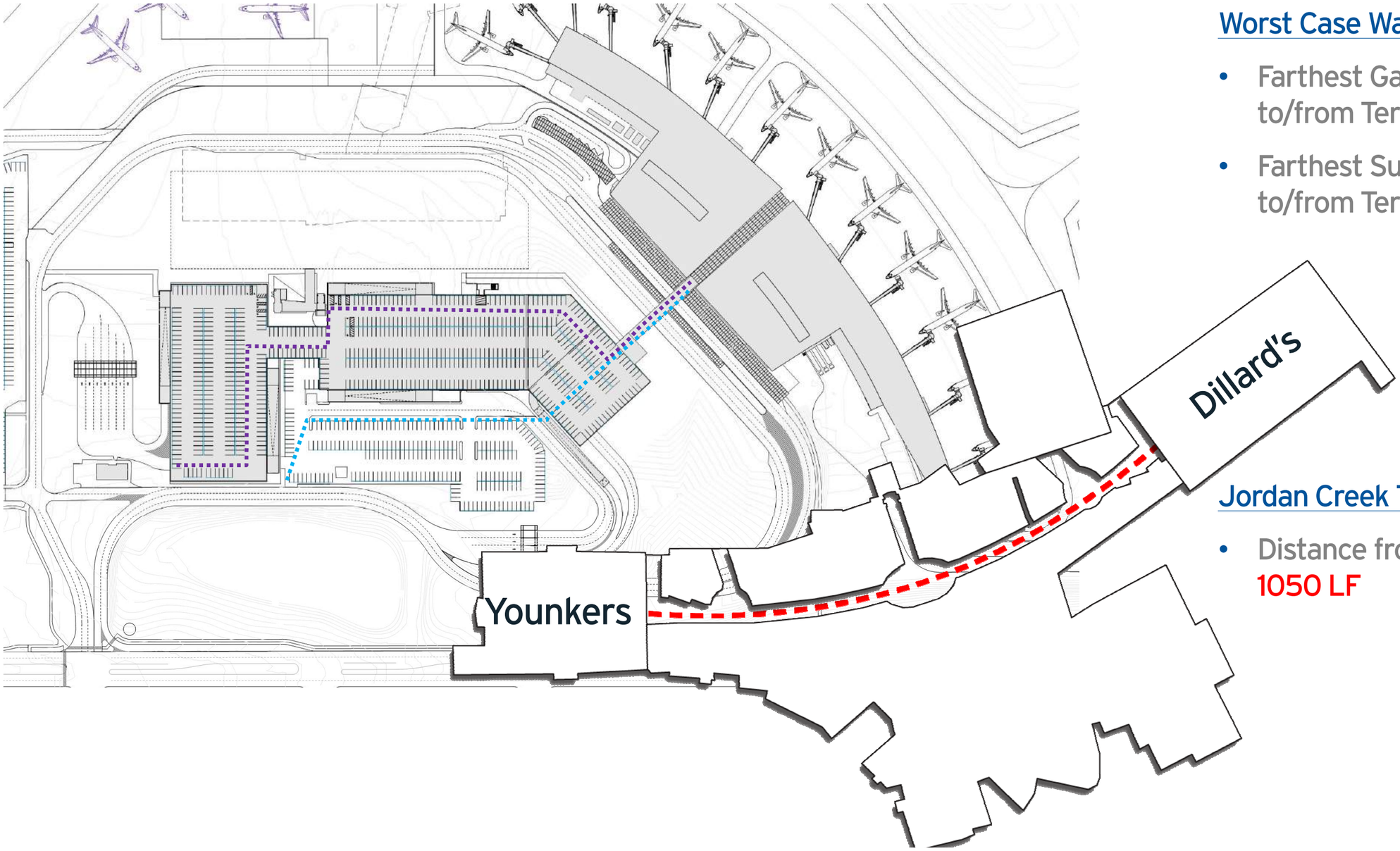


- New 4 Level Garage
- Allows for future expansion
- Meets parking requirements.
- Short walking distances
- Safe connection for pedestrians

Parking Requirements (Phase 1)

	Required	Proposed
Garage	2,575	2,367
Surface		308
Total		2,675

Landside – Parking - Walking Distances



Worst Case Walking Distances

- Farthest Garage Space: 1300 LF to/from Terminal
- Farthest Surface Space: 1070 LF to/from Terminal

Jordan Creek Town Center

- Distance from Younkers to Dillard's: 1050 LF

Airside

Airside

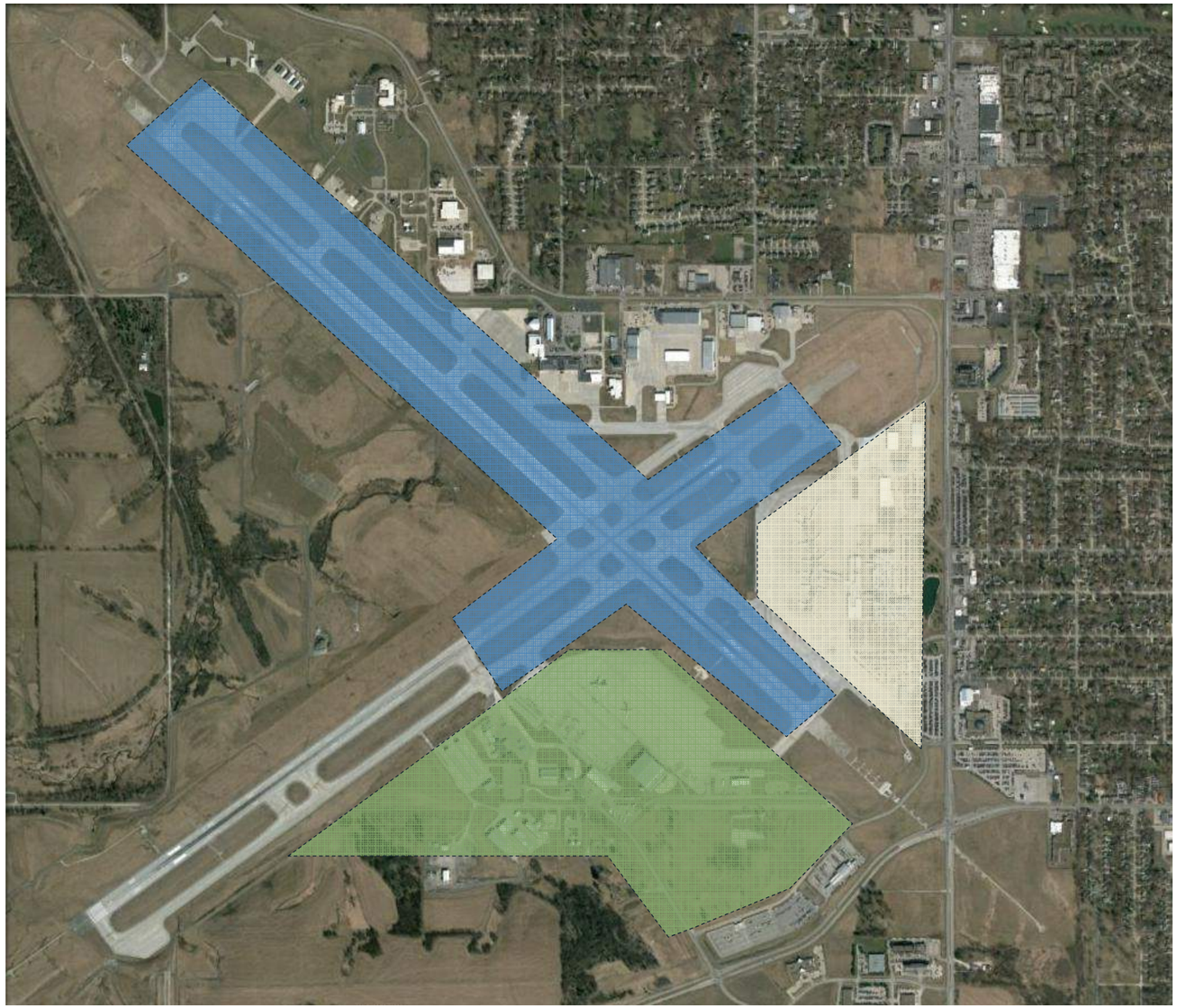
- 14 Gates
- Group III Fleet Mix
- A321 or 737-800
- New Apron Pavement
- Connection to Community
- View from Fleur Drive creates connection to community + allows views of downtown Des Moines from the concourse

Key Benefits:

- Flexibility
- More Capacity

Timeline & Cost

Overall Program



New Terminal

South Quadrant

Airfield Improvements

Phasing - Landside

Landside

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029+
South Rental Car Facility										
New Fleur Intersection										
New Exit Plaza										
Roadway Loop & Utilities										
New Entry Plaza										
Long Term Parking Exp.										
New Parking Structure										

Terminal Construction Begins

Phasing – Terminal & Airside

Terminal

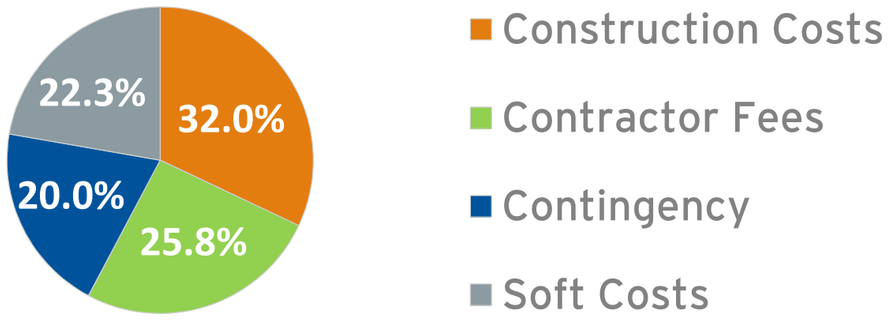
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029+
New Terminal					Design					
Existing Concourse Demo										
Existing Terminal Demo										

Airside

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029+
Runway, Taxiway, Apron	Multiple Packages ongoing									
Deice Pad						Pad 1		Pad 2,3		

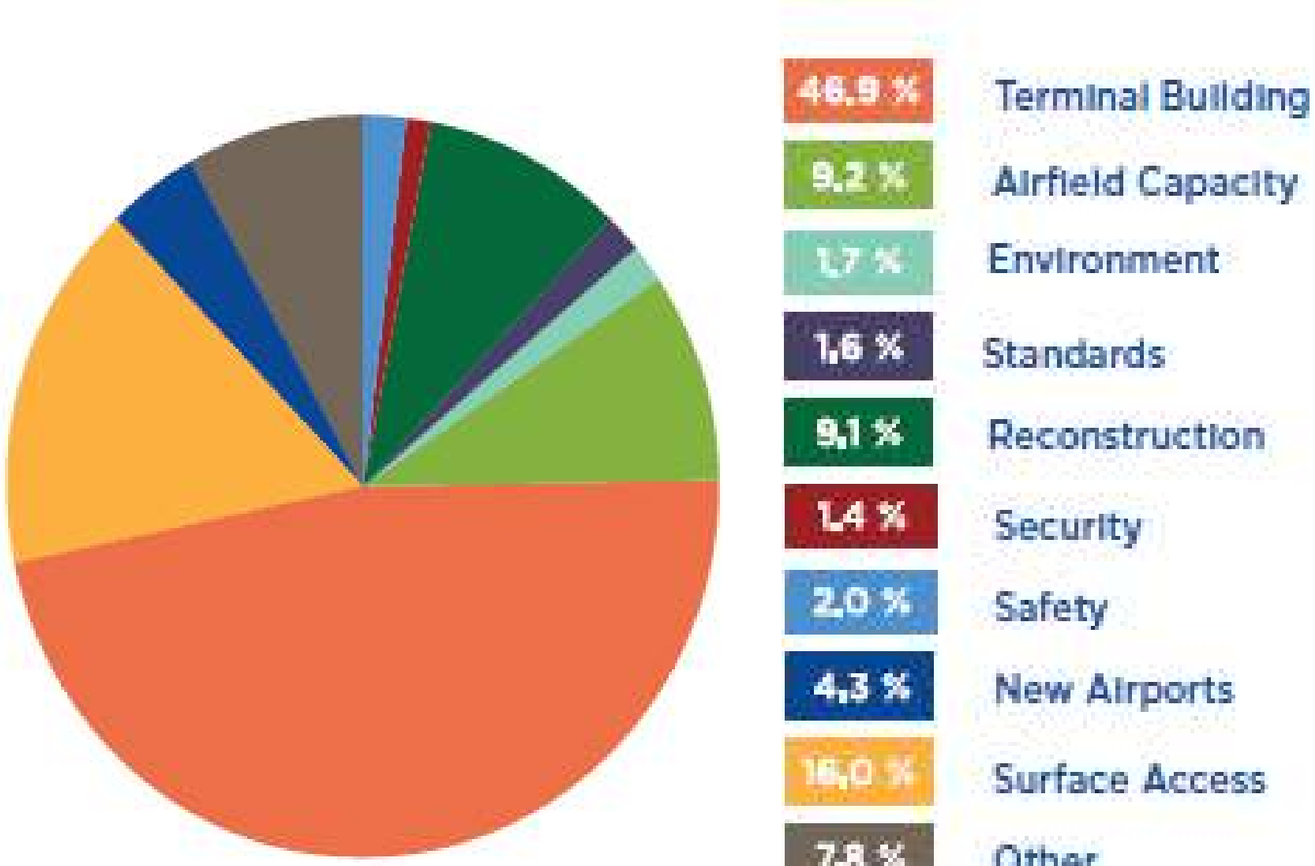
Total Cost Summary

	Terminal	Airside	Landside	Demolition	Total
Total Program Cost	$ 246,928,080	$ 68,609,684	$ 91,394,920	$ 27,003,876	$ 433,936,560
	TERMINAL BOARDING BRIDGES	APRON	RENTAL CAR GARAGE ROADWAYS ENTRY/EXIT	EXISTING TERMINAL & CONCOURSES	



US Airport Infrastructure Needs

Airport Infrastructure Needs by Type of Development

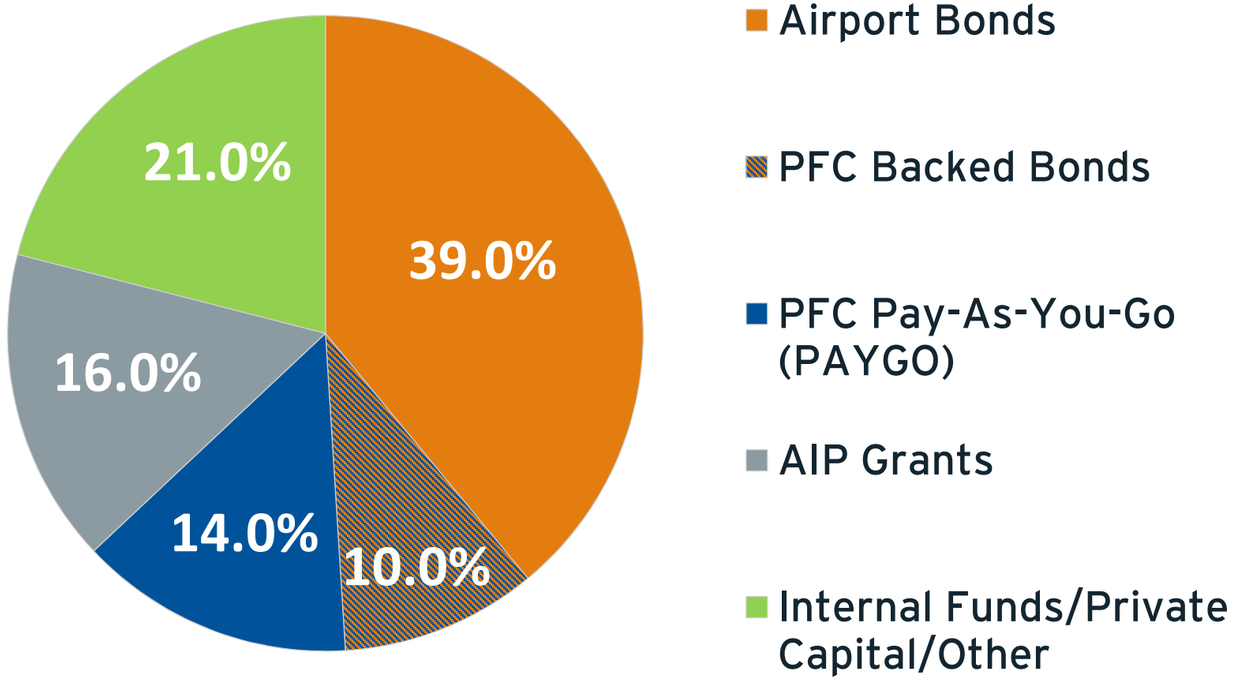


- Airport Council International-NA estimates that airports nationwide have nearly **$20 billion a year** in capital needs
- Terminal projects make up nearly half of this amount

Typical US Airport Funding Sources

- Almost half of projects are funded through Airport debt
    - Debt is repaid using Airport Revenues generated from tenants and airport users
- Passenger Facility Charges fund about a quarter of airport projects
- Airport Improvement Program (AIP) Grants awarded by the Federal Aviation Administration (FAA)

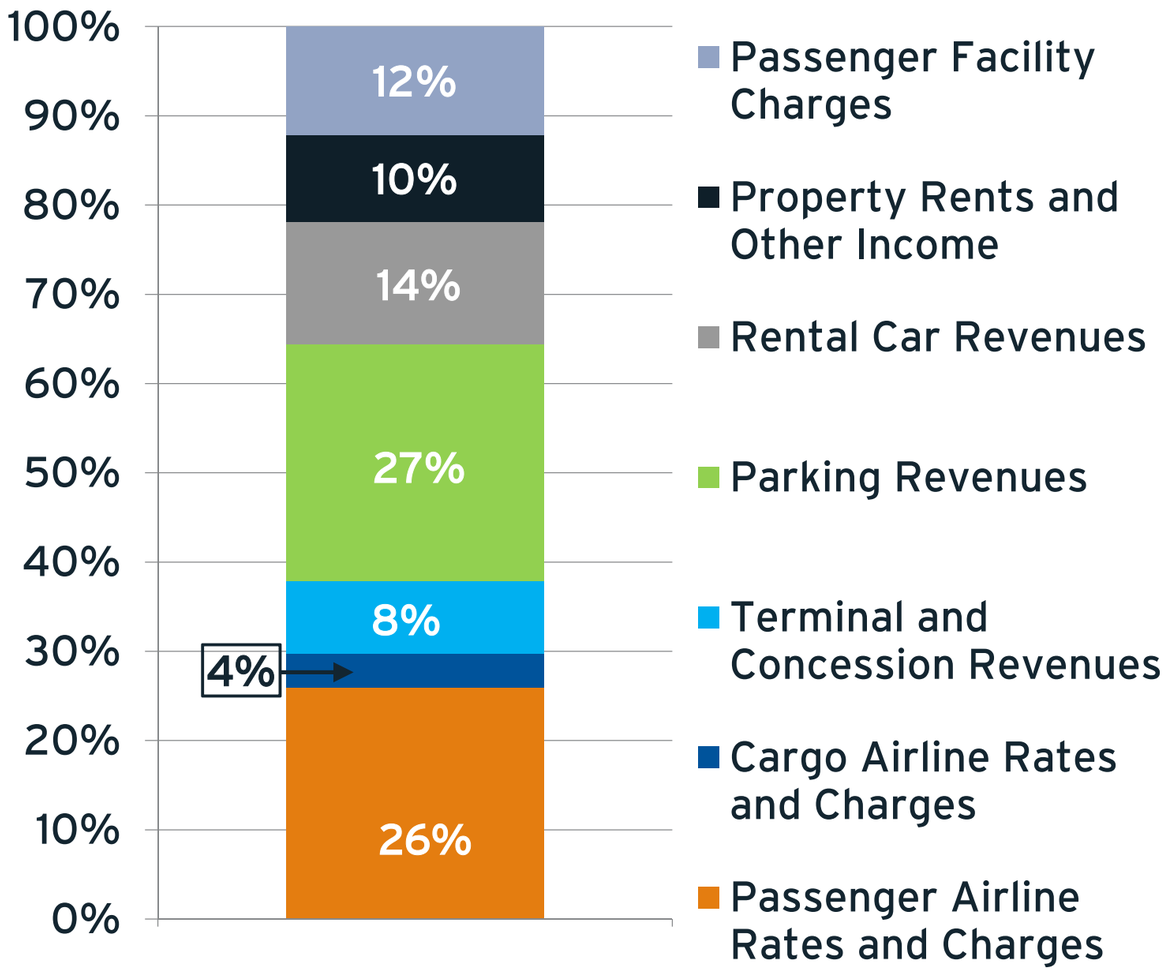
Typical US Airport Funding Sources



Source: ACI Capital Needs Survey, 2015. PFC-backed bonds estimated by LeighFisher.

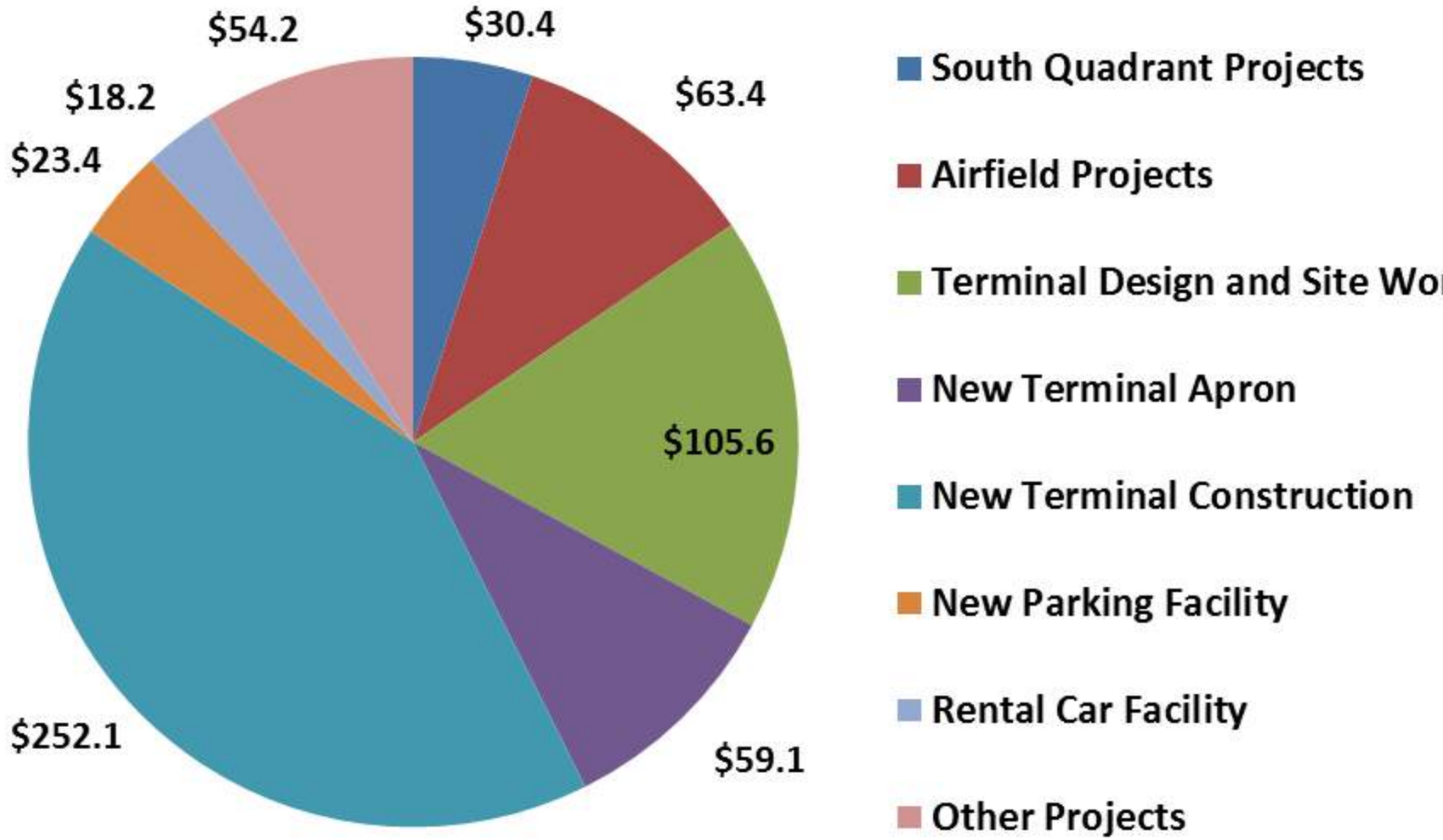
Airport Revenues

Des Moines Airport Revenues



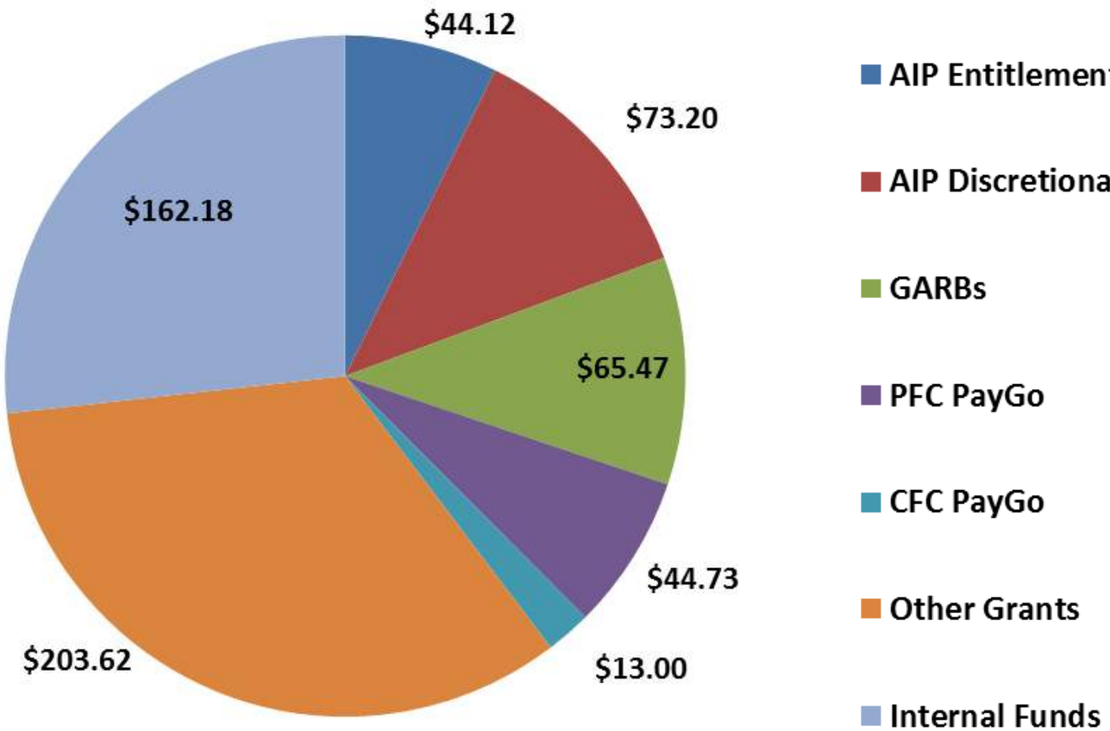
- Capital projects paid for through Airport bonds or retained surpluses are funded by Airport Revenues
- The FAA requires that Airports operate on a self sustaining basis, setting fees for Airport users at appropriate levels to cover operating and capital costs
- DSM Airport does not receive local tax revenue, nor are they allowed to spend funds on non-aviation purposes.

Summary of Capital Requirements by Project Type ($M)



Values stated in 2018 dollars

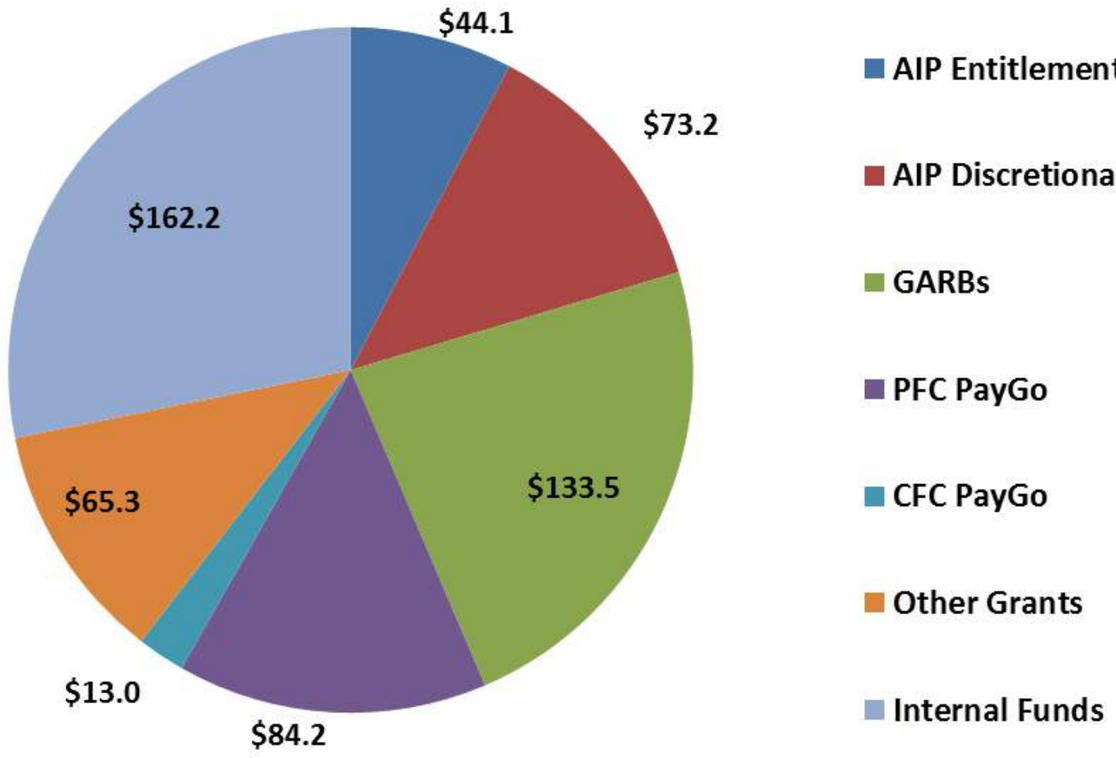
Summary of Capital Requirements by Funding Source ($M)



- Through efficient operations, the airport has strengthened its cash reserves to pay a larger share of this construction to reduce the reliance on public funds
- To maintain reasonable levels of fees for airport users, manageable debt levels and adequate cash reserves, the airport may still need a further $200m from grants or other sources towards the capital plan

Values stated in 2018 dollars

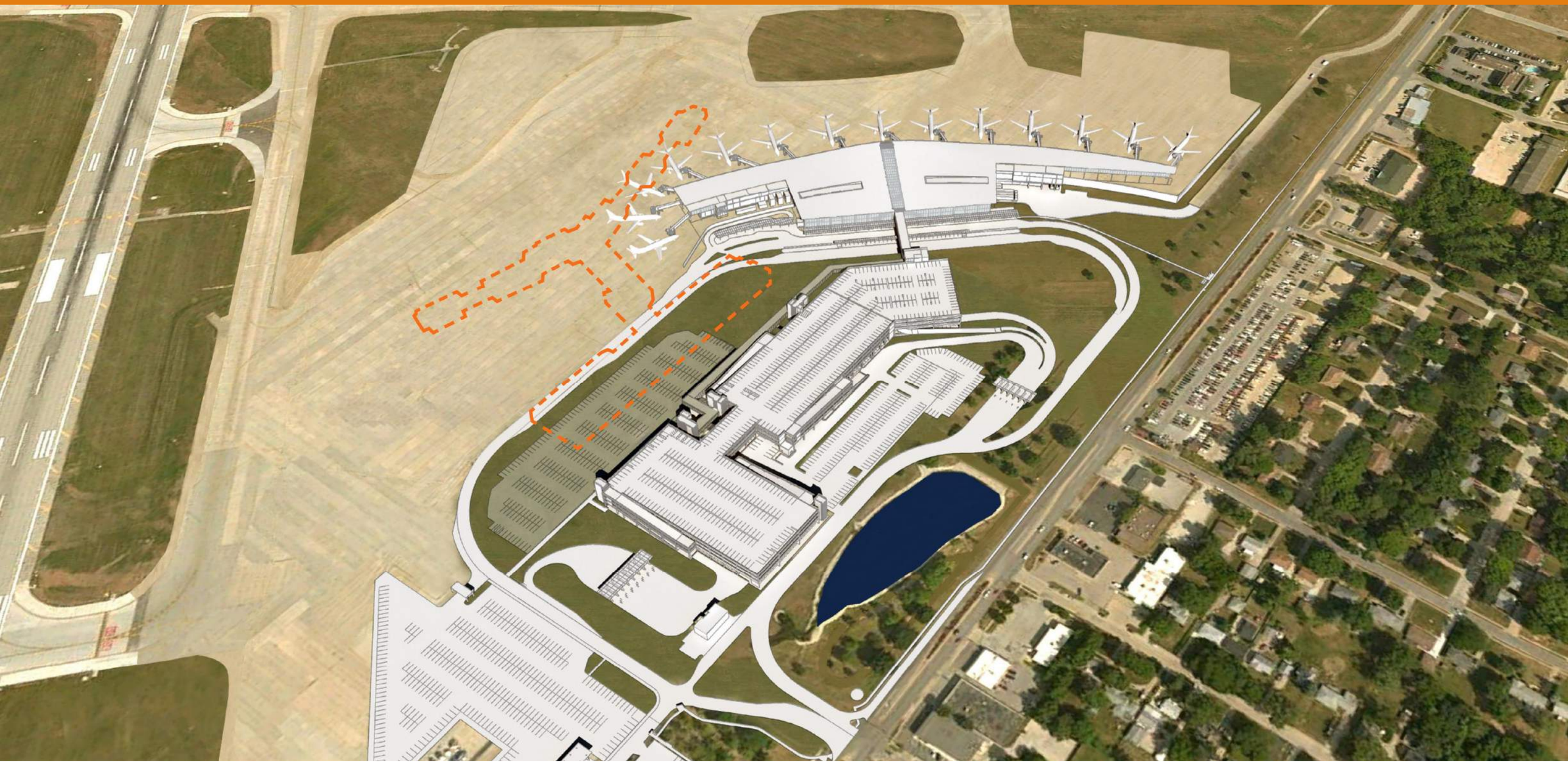
Funding Scenarios to Complete this Project

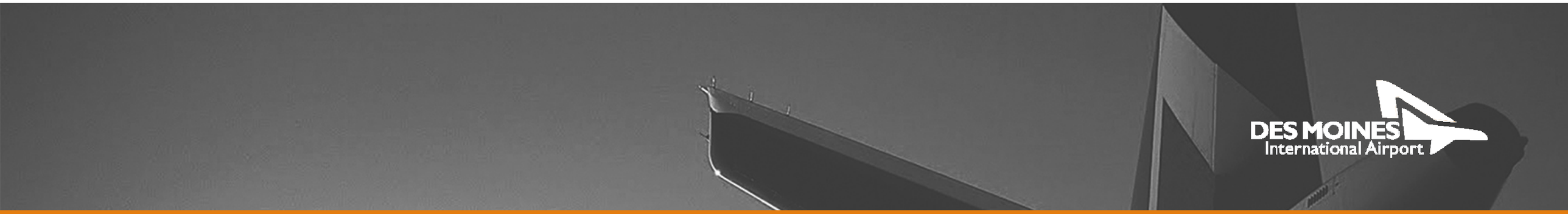


- The Authority continues to evaluate options for the terminal project and how to implement it at a reasonable cost
- Through a combination of
  - An increase in the PFC to $8.50, and
  - Refinements and evaluation of terminal alternatives that could save a further 12.5%

The gap could be reduced to around $65m

Next Steps & Questions





DES MOINES
International Airport
New Airport Improvements Study
March 28, 2018