Embrace What's Next

# Master Plan 2050
# Public Open House #1

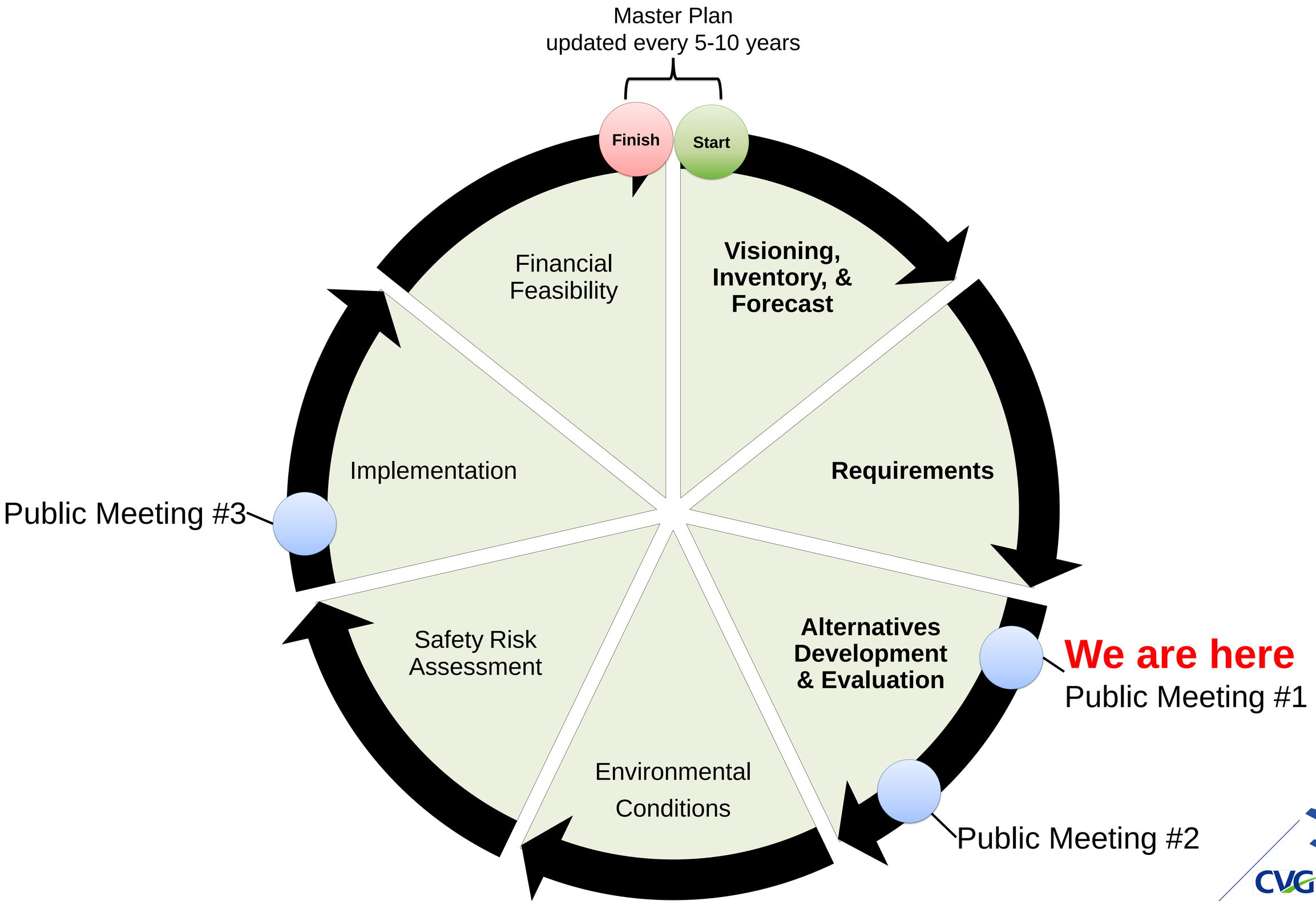
August 7, 2018

# What is a Master Plan?

- A comprehensive study of an airport, describing the short-, mid-, and long-term development plans to meet future aviation demand at an airport
- Can be thought of as a tool which provides the framework necessary to guide potential airport development, while considering both internal and external impacts
- Guidelines should be consistent with local, state, and national goals

- Each Master Plan is unique, the focus of work will vary from airport to airport.  A few goals of a Master Plan are:
  - To determine future aviation demand at an airport
  - To thoroughly explore concepts and alternatives on technical, economical, and environmental bases
  - To provide a graphical representation of future airport development and land use
  - To establish a schedule for implementation of proposed development
  - To identify a realistic financial plan to support development
  - To prepare and present a plan to the public that thoroughly addresses any relevant issues and adheres to local, state and federal regulations
  - To establish a framework for a continuous planning process

# Master Plan Process



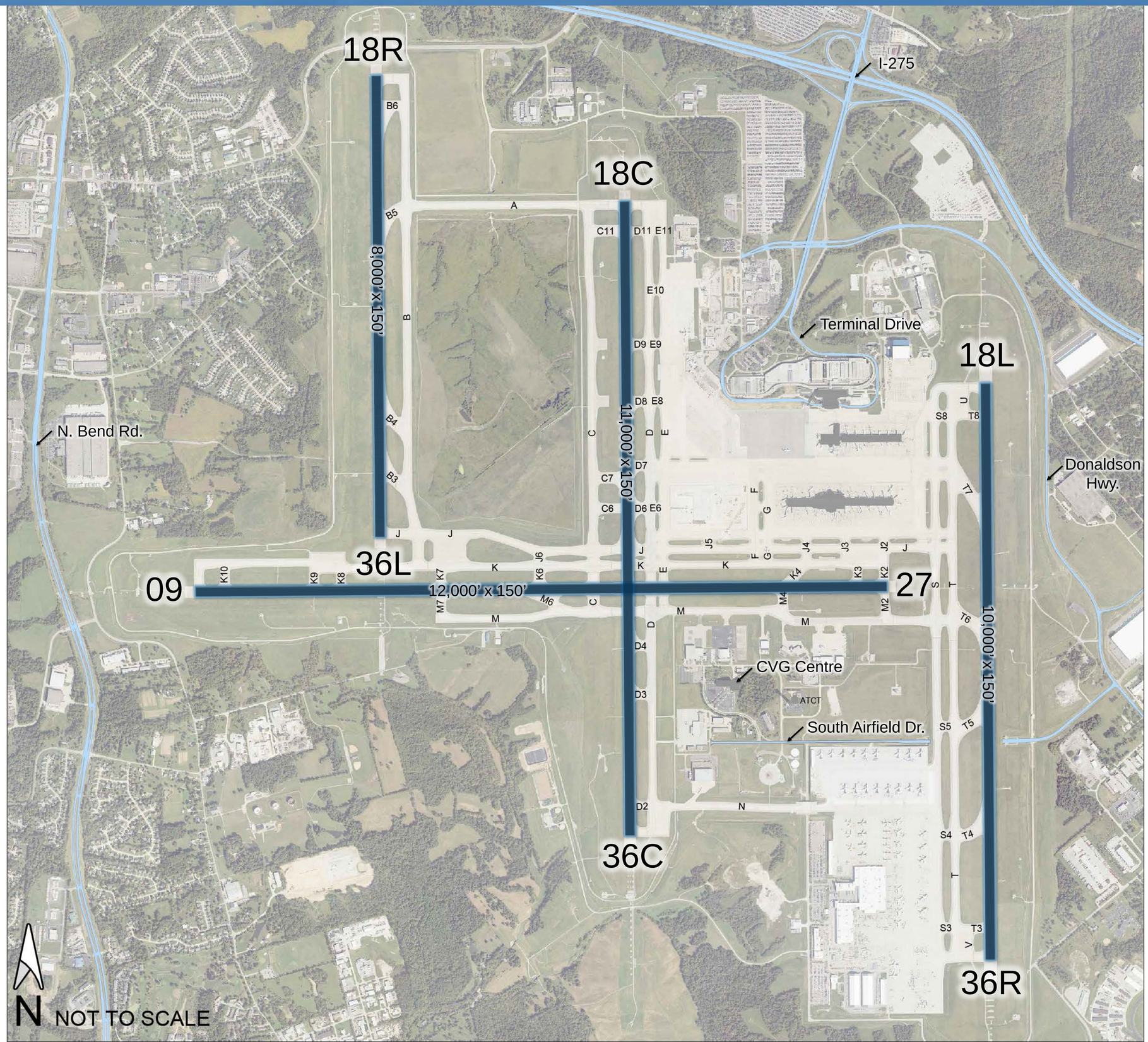
# Why Update the Master Plan?

- Previous Master Plan - 2013
- Operational changes at CVG since completion of previous study
  - Continued shift from hub-based activity to 85%+ local traffic
  - Return and growth of air cargo operations
  - Demand for aeronautical and non-aeronautical development
- Need to review age, condition, availability and sustainability of existing passenger terminal facilities

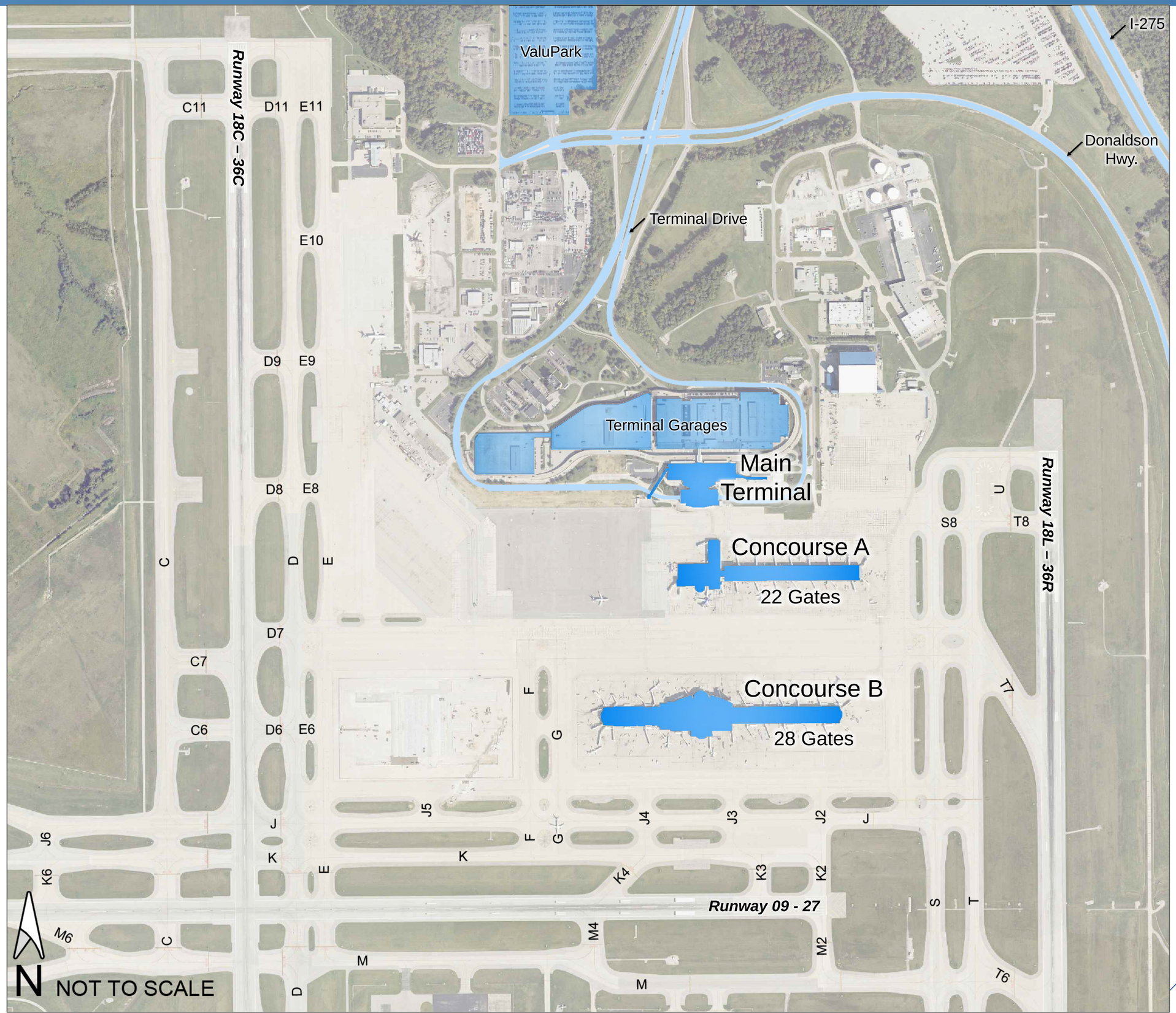
# Key Areas of Focus

- Developing concourse redevelopment plan
- Ensuring airfield compliance
- Supporting passenger and cargo development
- Identify landside improvements to support CONRAC and cargo developments

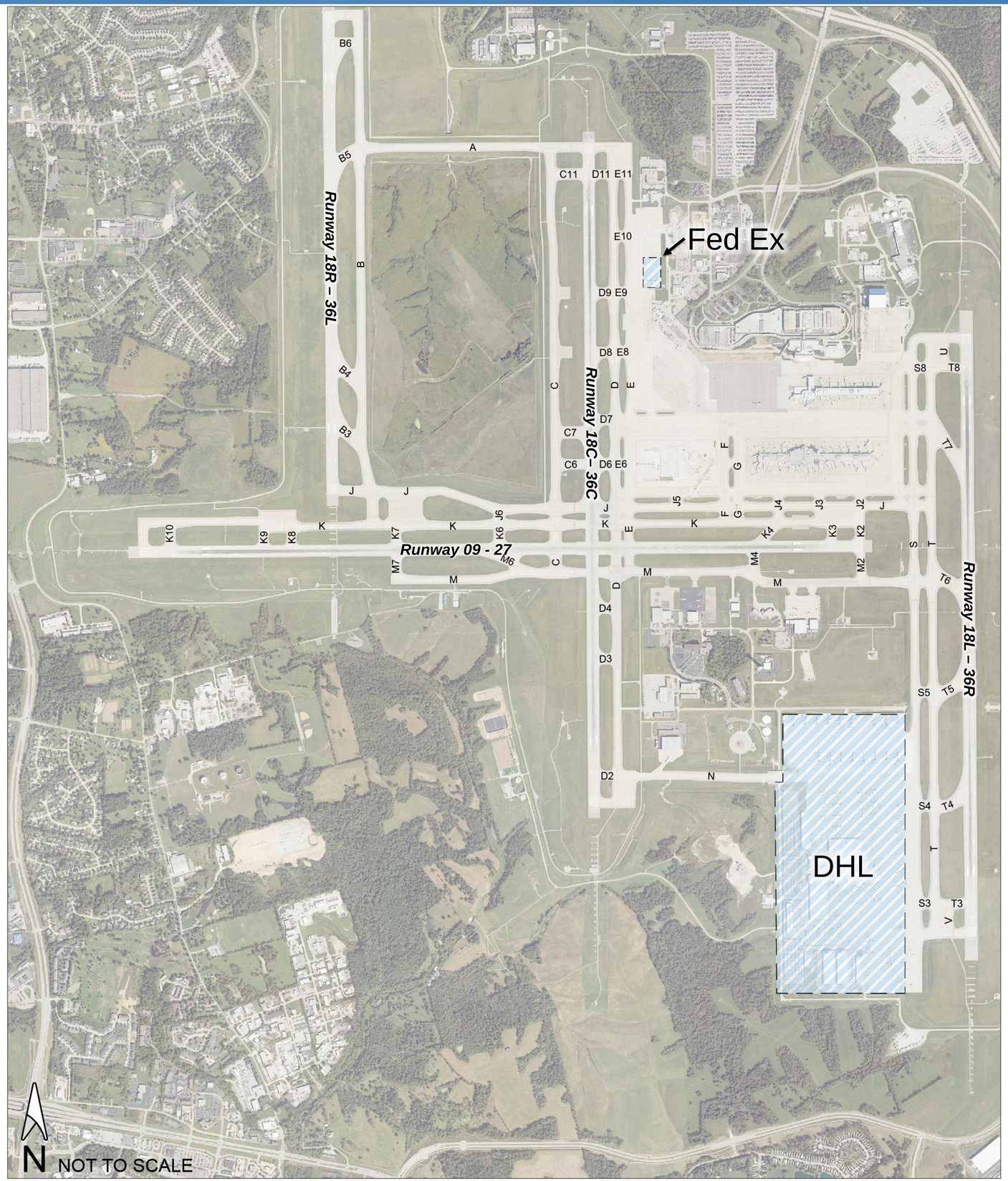
# CVG Today - Airfield



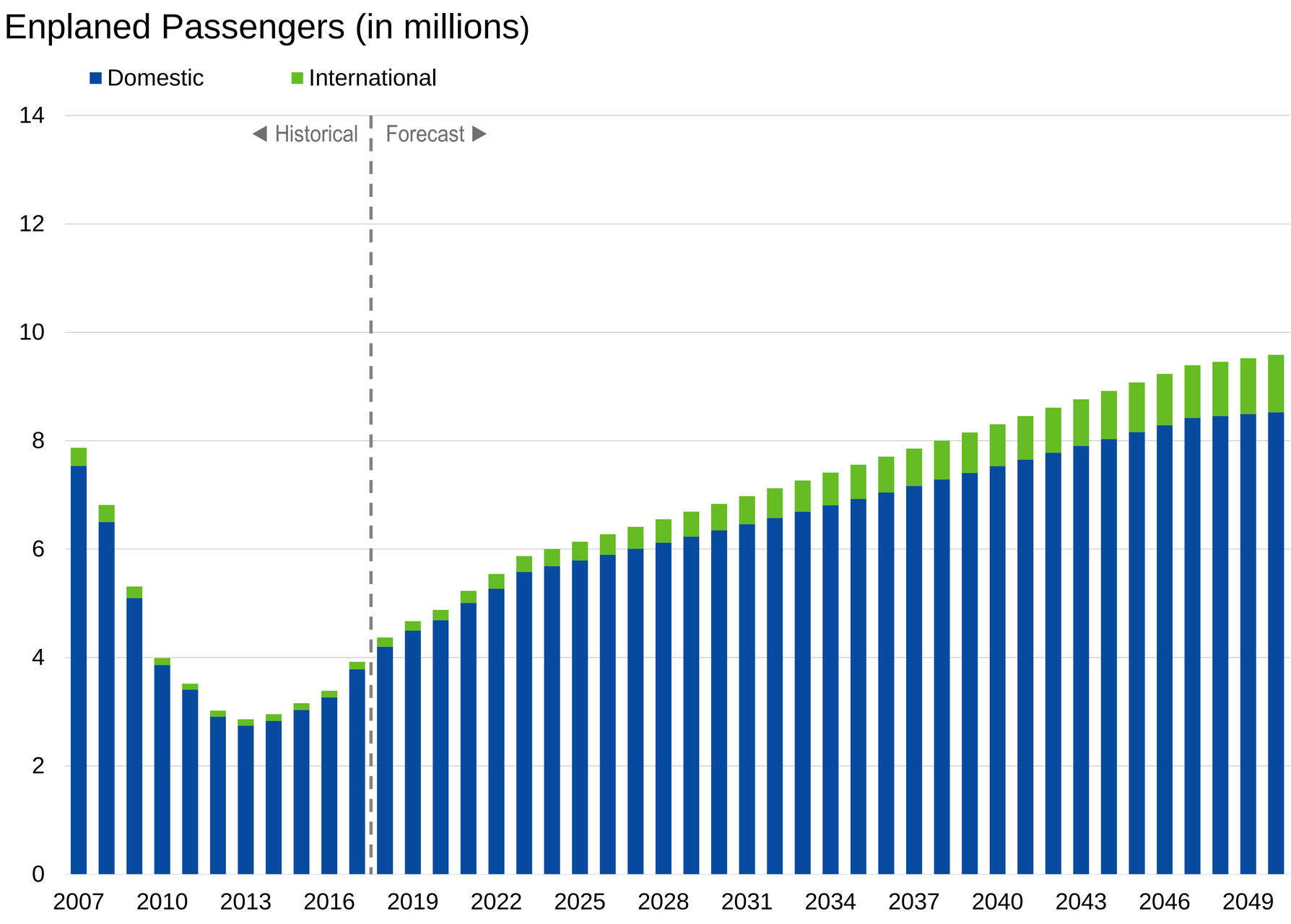
# CVG Today - Terminal



# CVG Today - Cargo



# Passenger Forecast Summary




Domestic Enplaned Passengers

**8.5 million**

in 2050

International Enplaned Passengers

**1.1 million**

in 2050

Total Enplaned Passengers

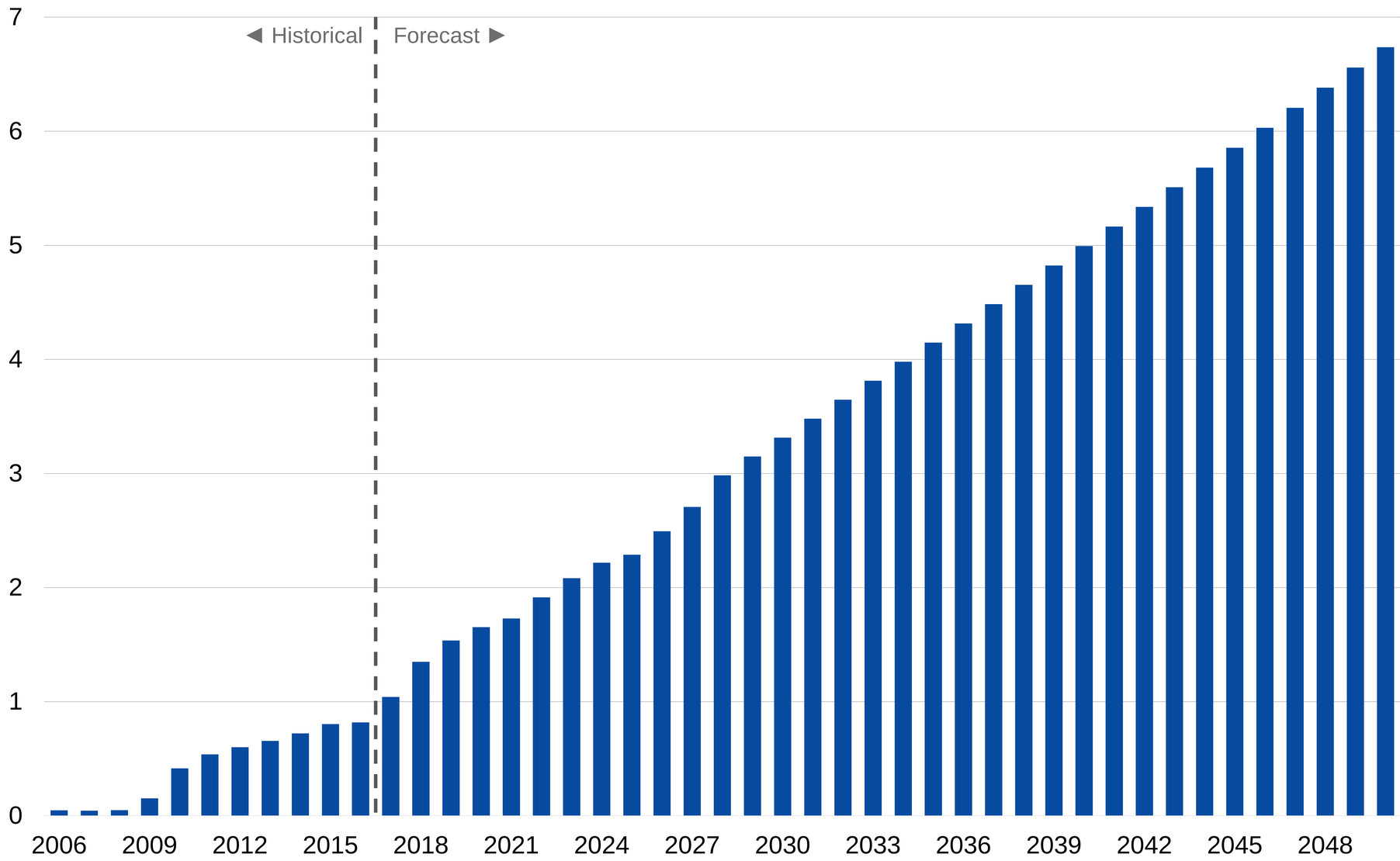
**9.6 million**

in 2050

Note: Draft Forecast subject to FAA review and approval.

# Cargo Throughput Forecast Summary

Cargo Throughput (in millions of tons)




**1.1 Million**

tons in 2017

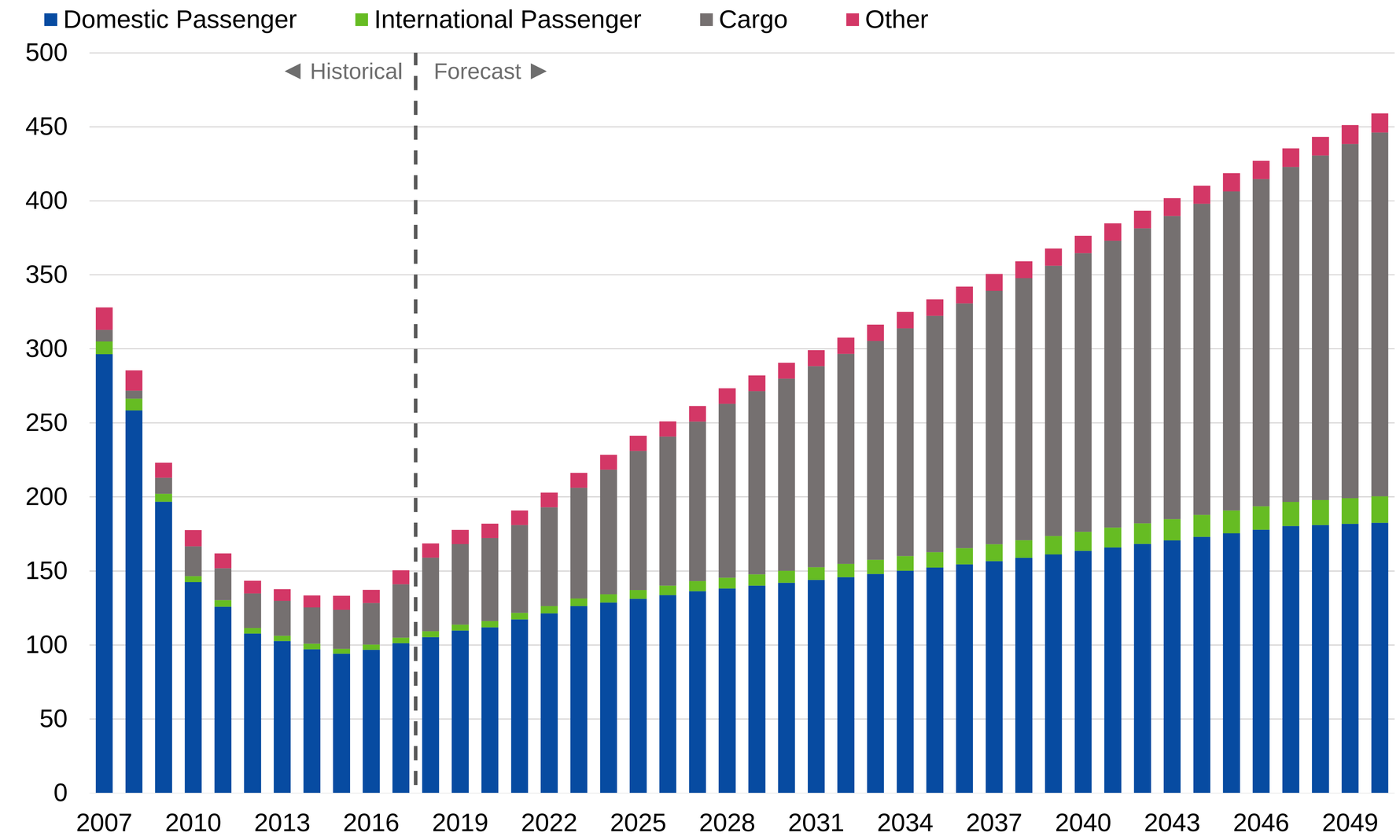
**6.7 Million**

tons in 2050

Note: Draft Forecast subject to FAA review and approval.

# Aircraft Operations Forecast Summary

Aircraft Operations (in thousands)




Passenger Aircraft Operations

**200,380**

in 2050

Cargo Aircraft Operations

**245,840**

in 2050

Other Aircraft Operations

**12,850**

in 2050

Total Aircraft Operations

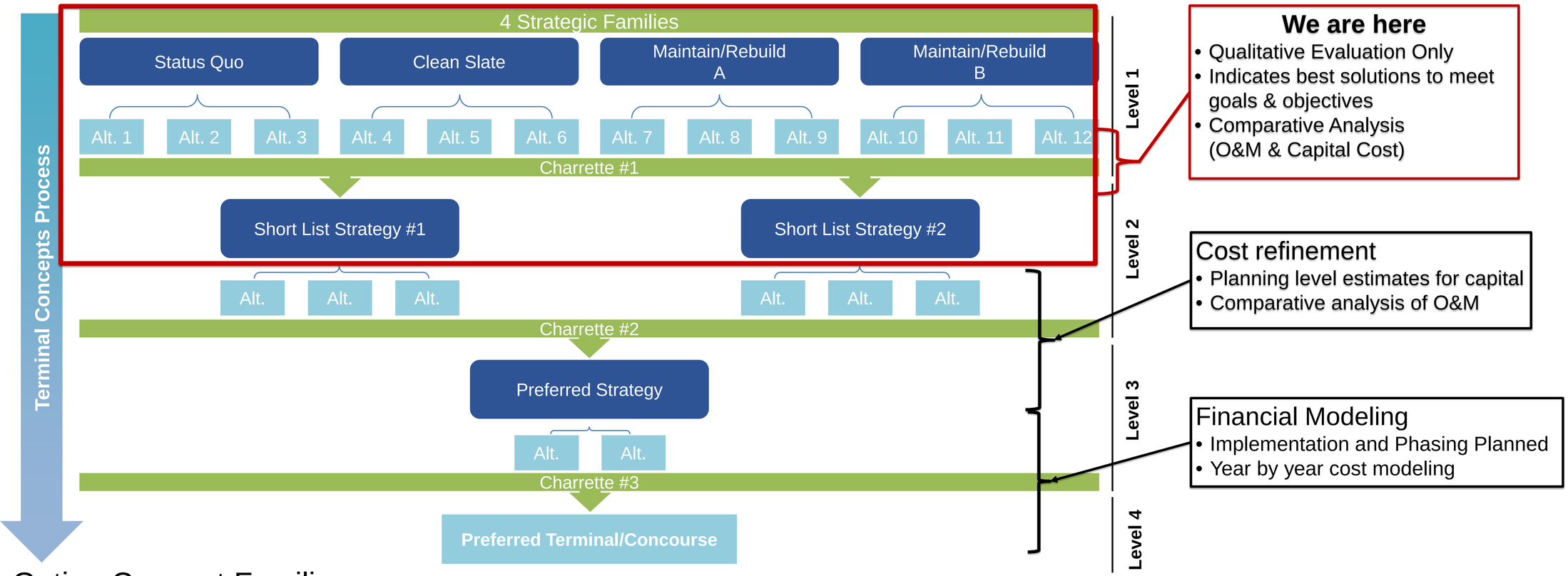
**459,070**

in 2050

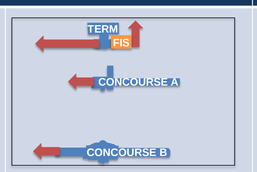
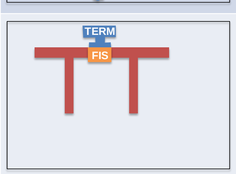
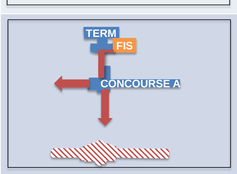
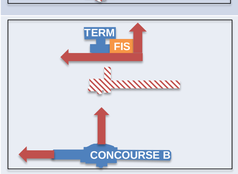
Note: Draft Forecast subject to FAA review and approval.

# Concourse Development

## Concourse Development Process




## Gating Concept Families

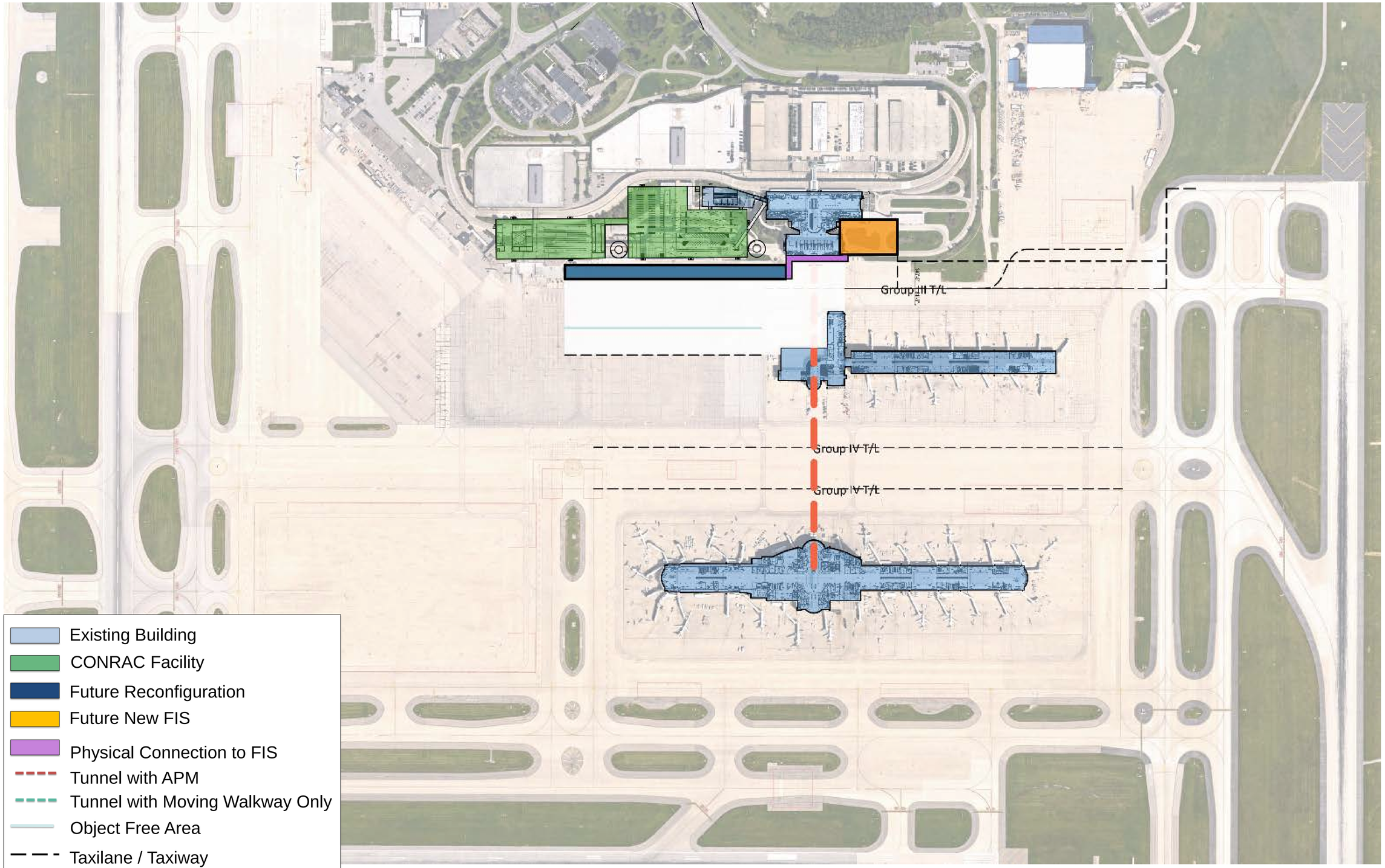
| Families | | APM Connection | FIS Relocation |
|---|---|---|---|
| Family 1: Status Quo – Keep A & B |   | Requires APM | Limited Area at Main Terminal to Relocate Int'l Gates |
| Family 2: Clean Slate – Close A & B |   | APM Not Required | Enables New FIS Facility |
| Family 3: Maintain/Rebuild A – Close B |   | APM Not Required | Requires New FIS Facility |
| Family 4: Maintain/Rebuild B – Close A |   | Requires APM | Enables New FIS Facility |

## Gate Requirements

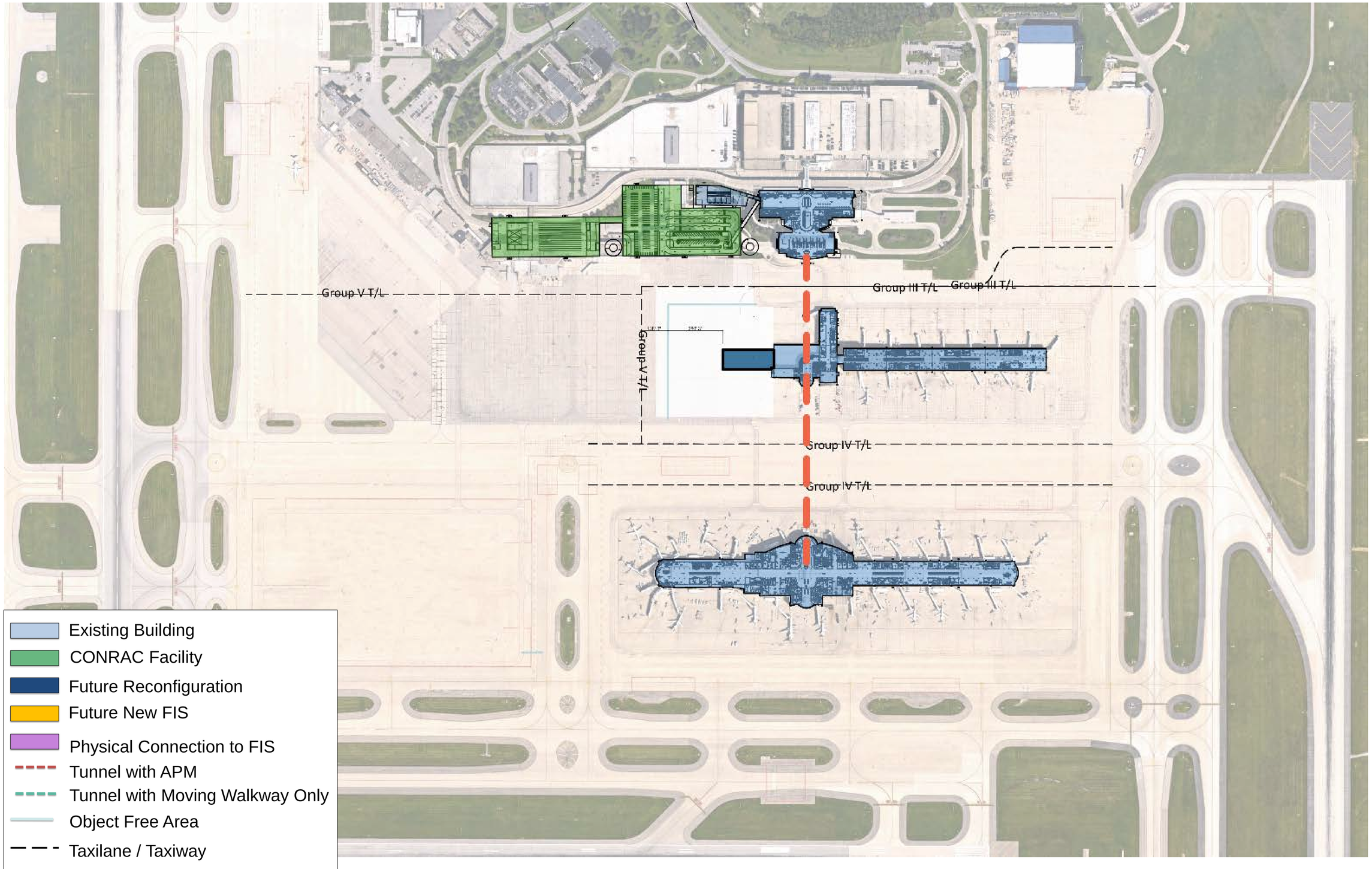
| | Existing Gates | Gate Requirements | | | | |
|---|---|---|---|---|---|---|
| | | 2017 Gates | PAL 1 (2022) Gates | PAL 2 (2027) Gates | PAL 3 (2037) Gates | PAL 4 (2050) Gates |
| **Minimum** | **51** | **32** | **38** | **42** | **48** | **57** |
| **Maximum** | | **38** | **48** | **51** | **58** | **69** |

- Minimum gate requirements based on 100% common use
- Maximum gate requirements based on preferential use (min 3 turns/day)
- Exclusive and preferential gates will increase the requirement
- Gating analysis will refine requirement

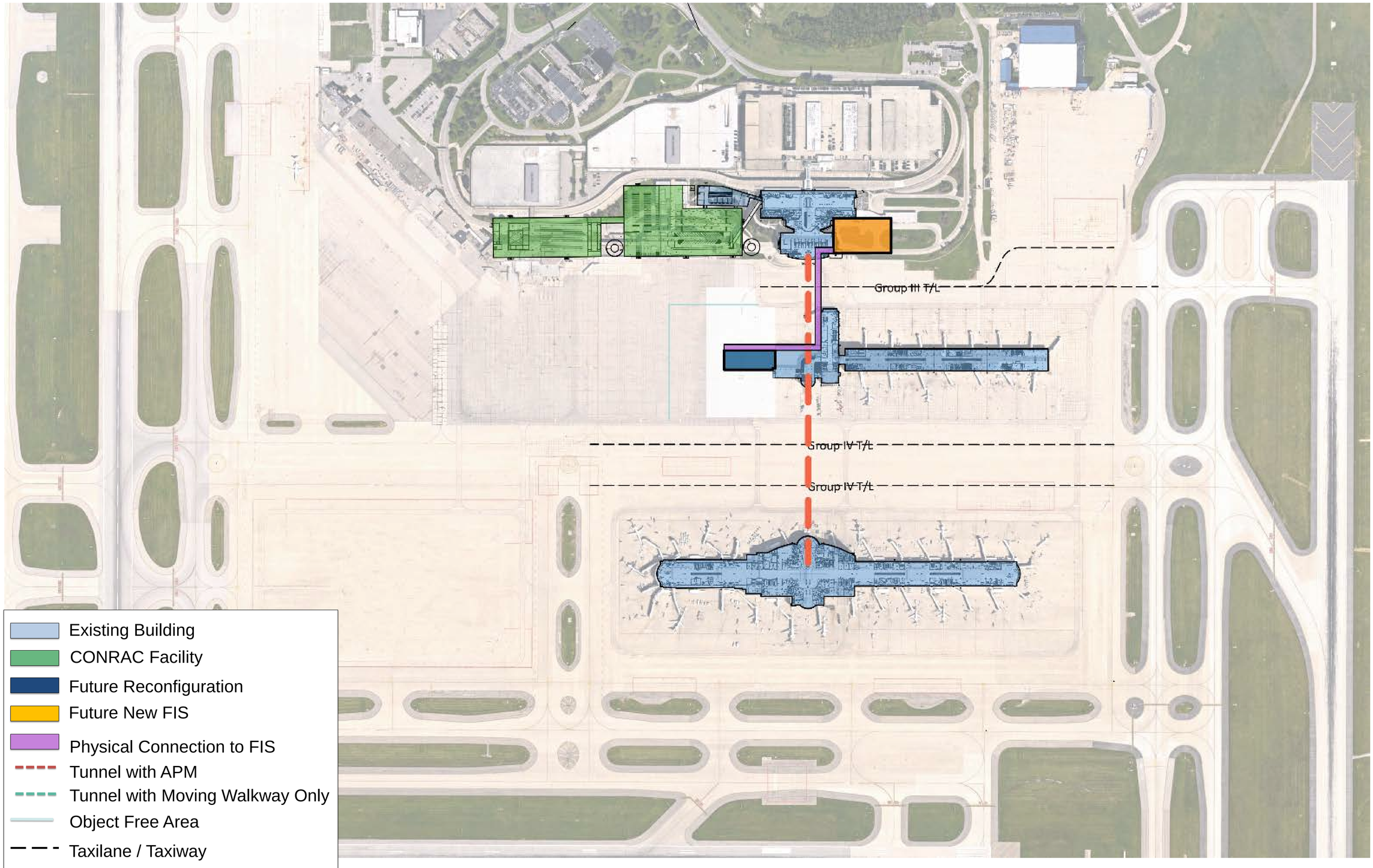
# Family 1 - Concept 1



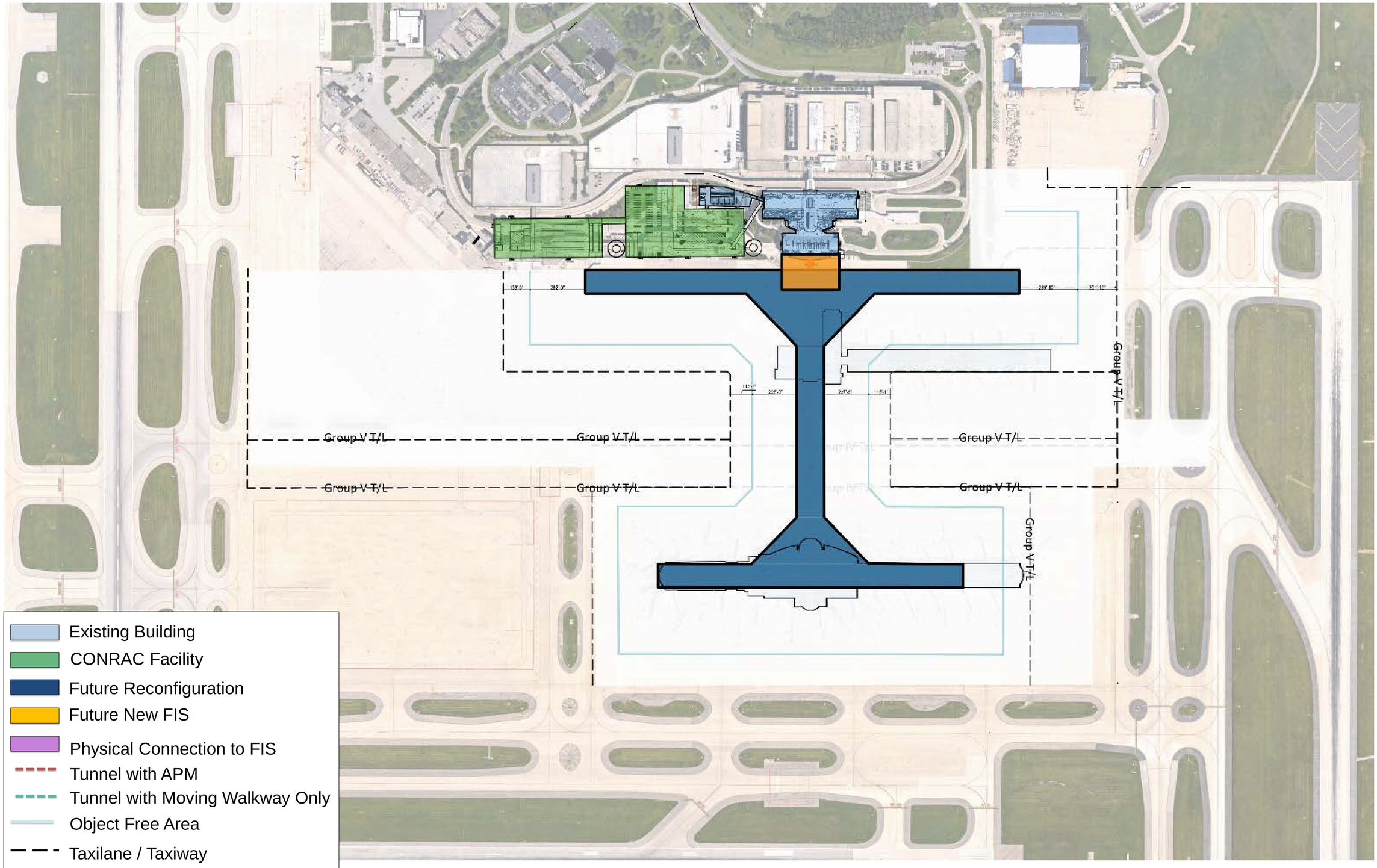
# Family 1 - Concept 2



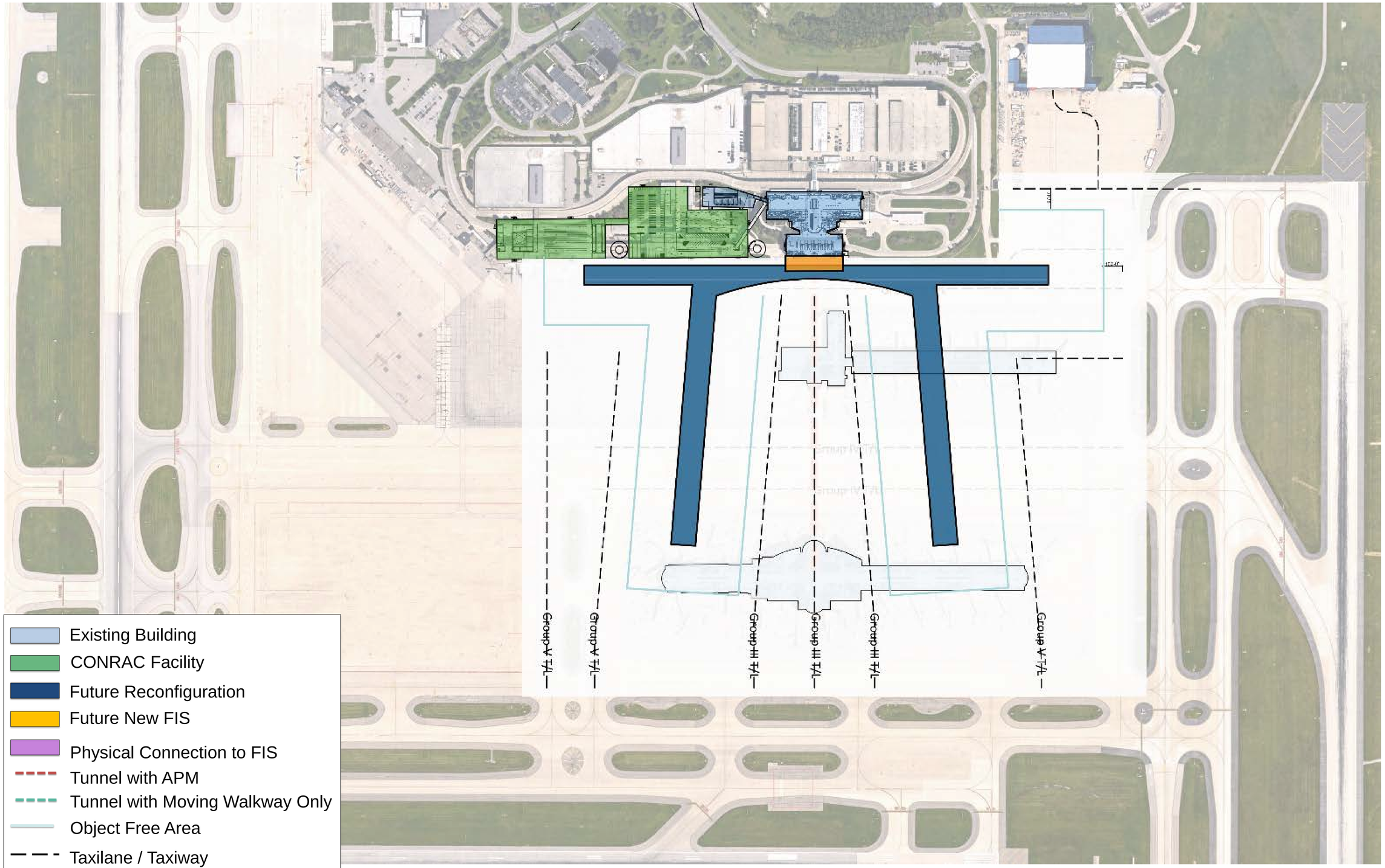
# Family 1 - Concept 3



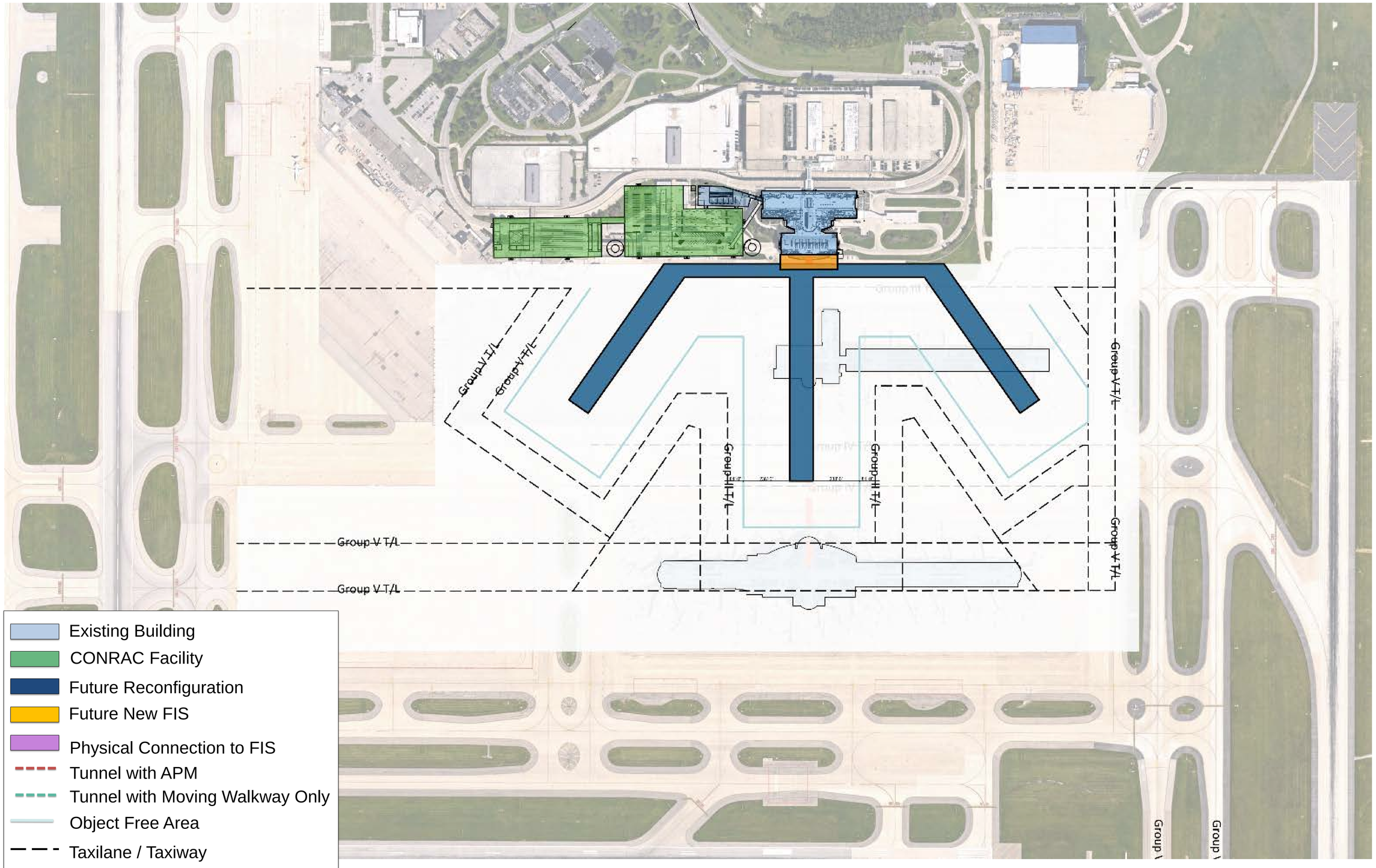
# Family 2 - Concept 1



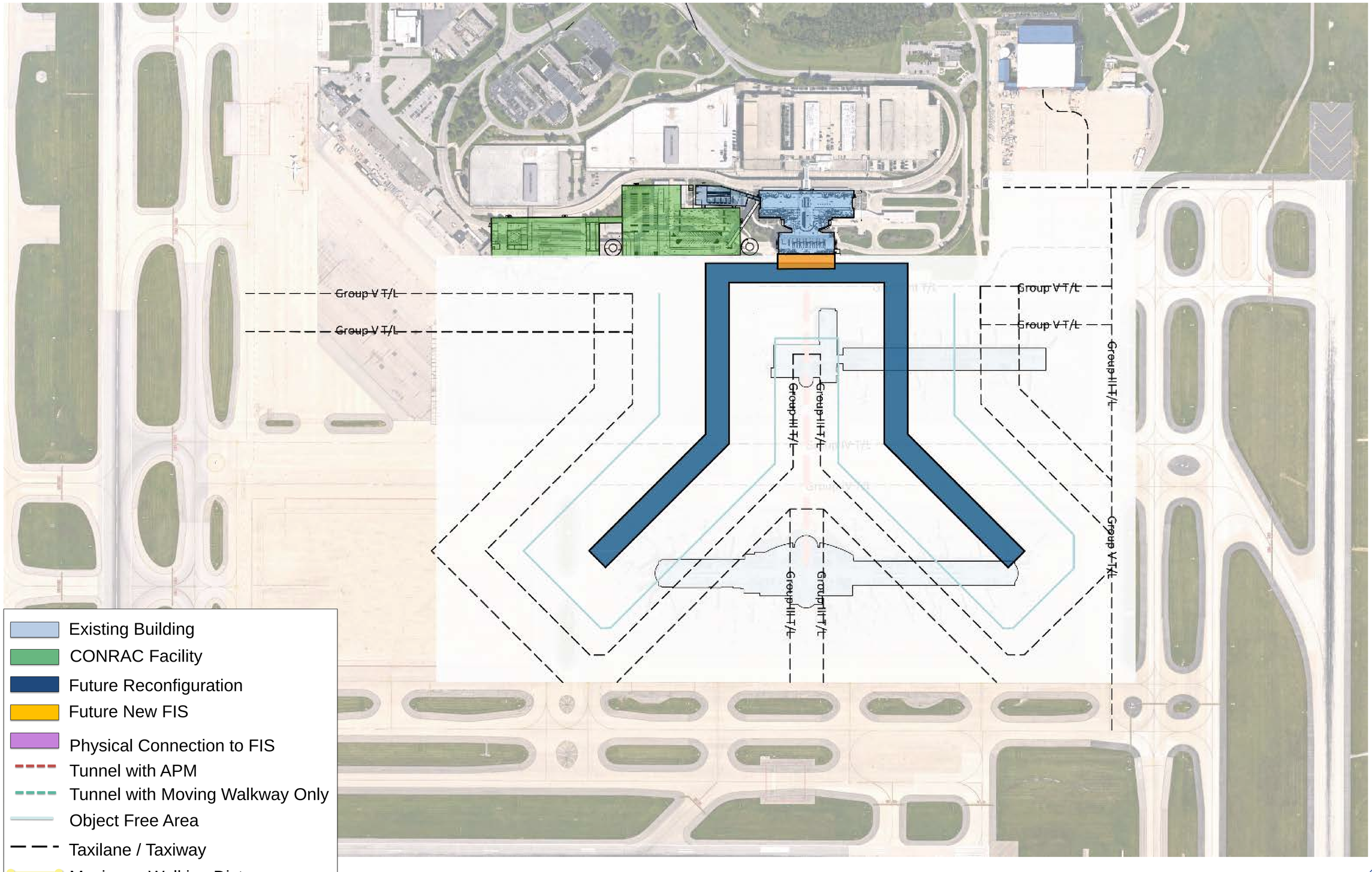
# Family 2 - Concept 2



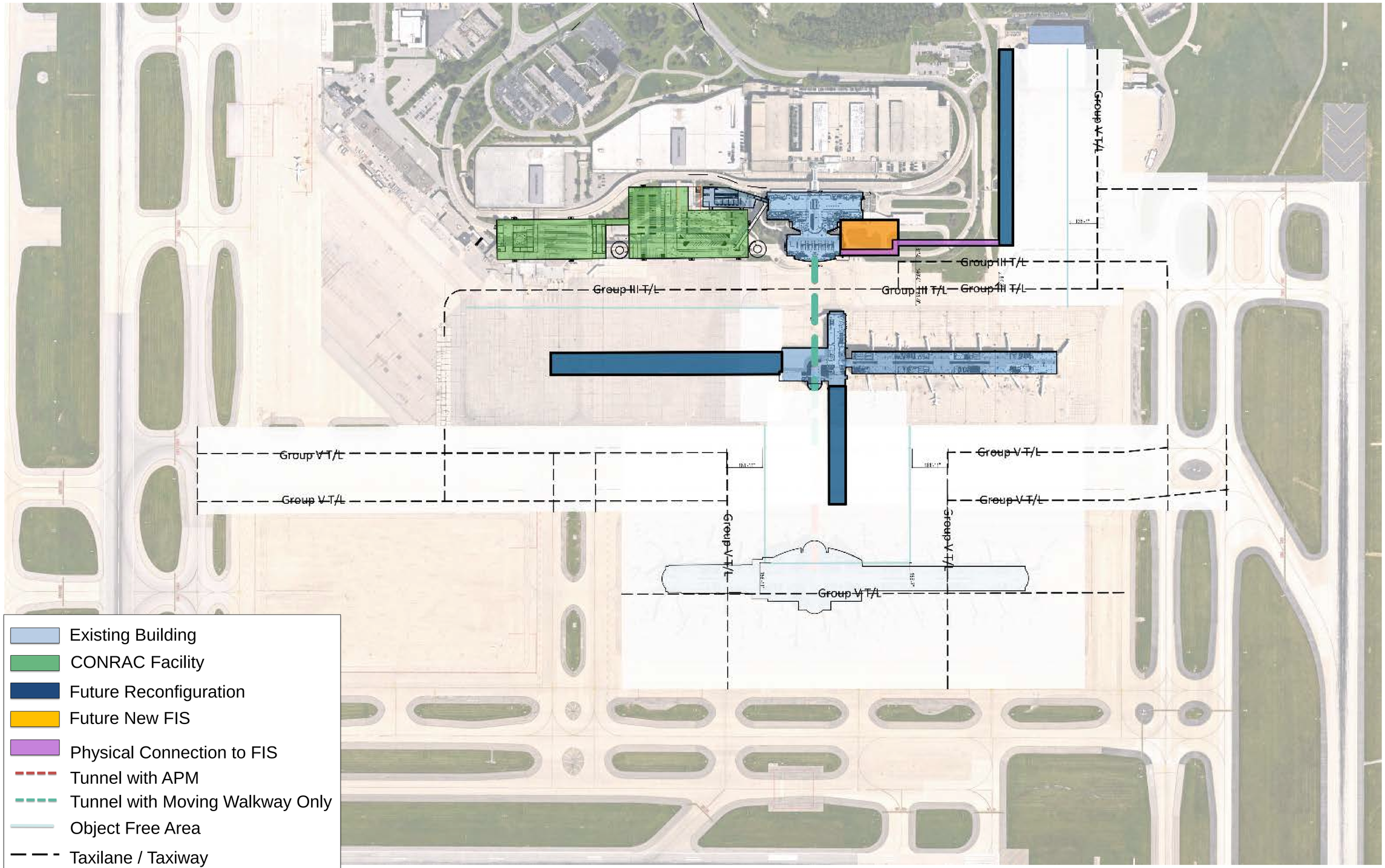
# Family 2 - Concept 3



# Family 2 - Concept 4



# Family 3 - Concept 1



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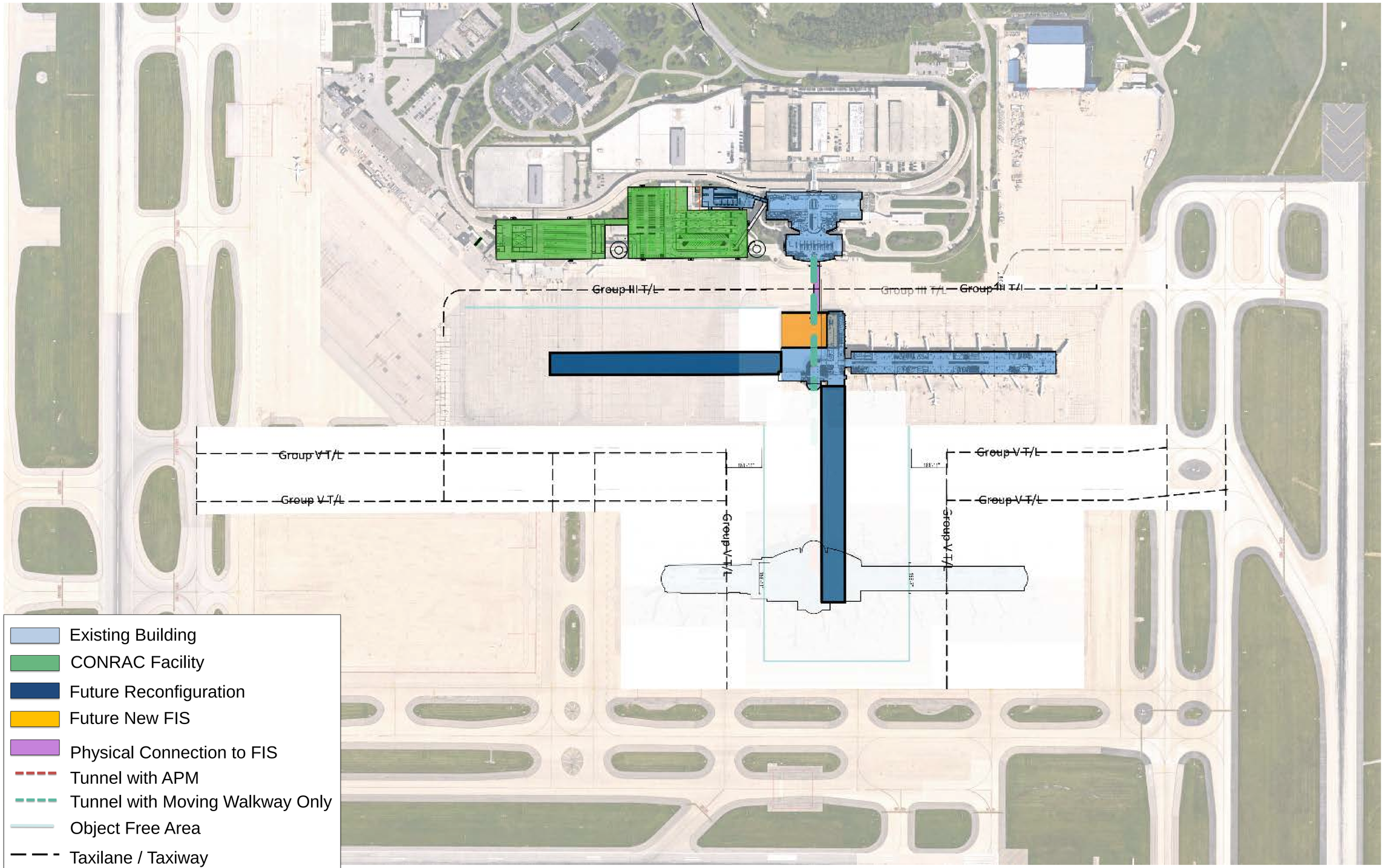
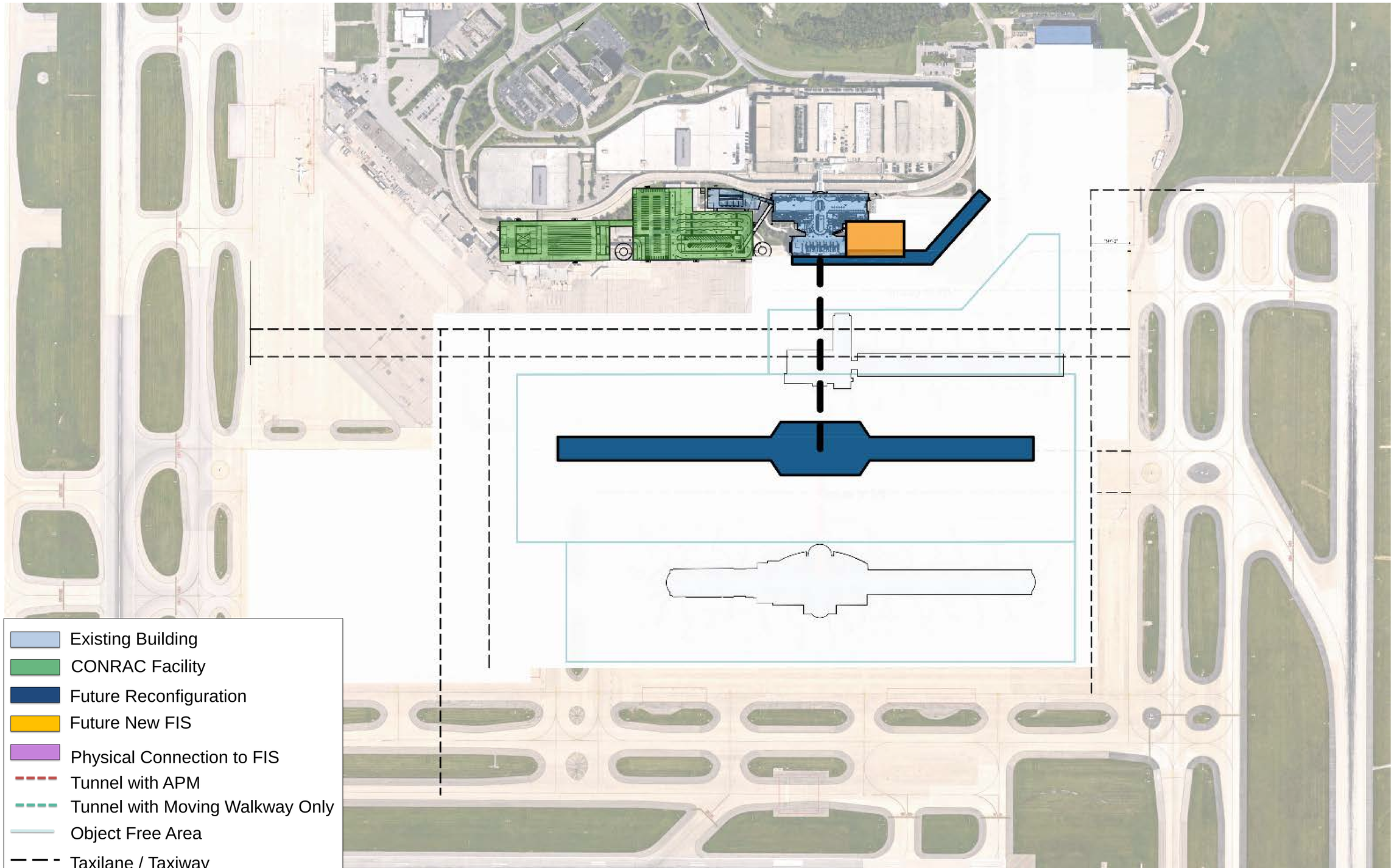
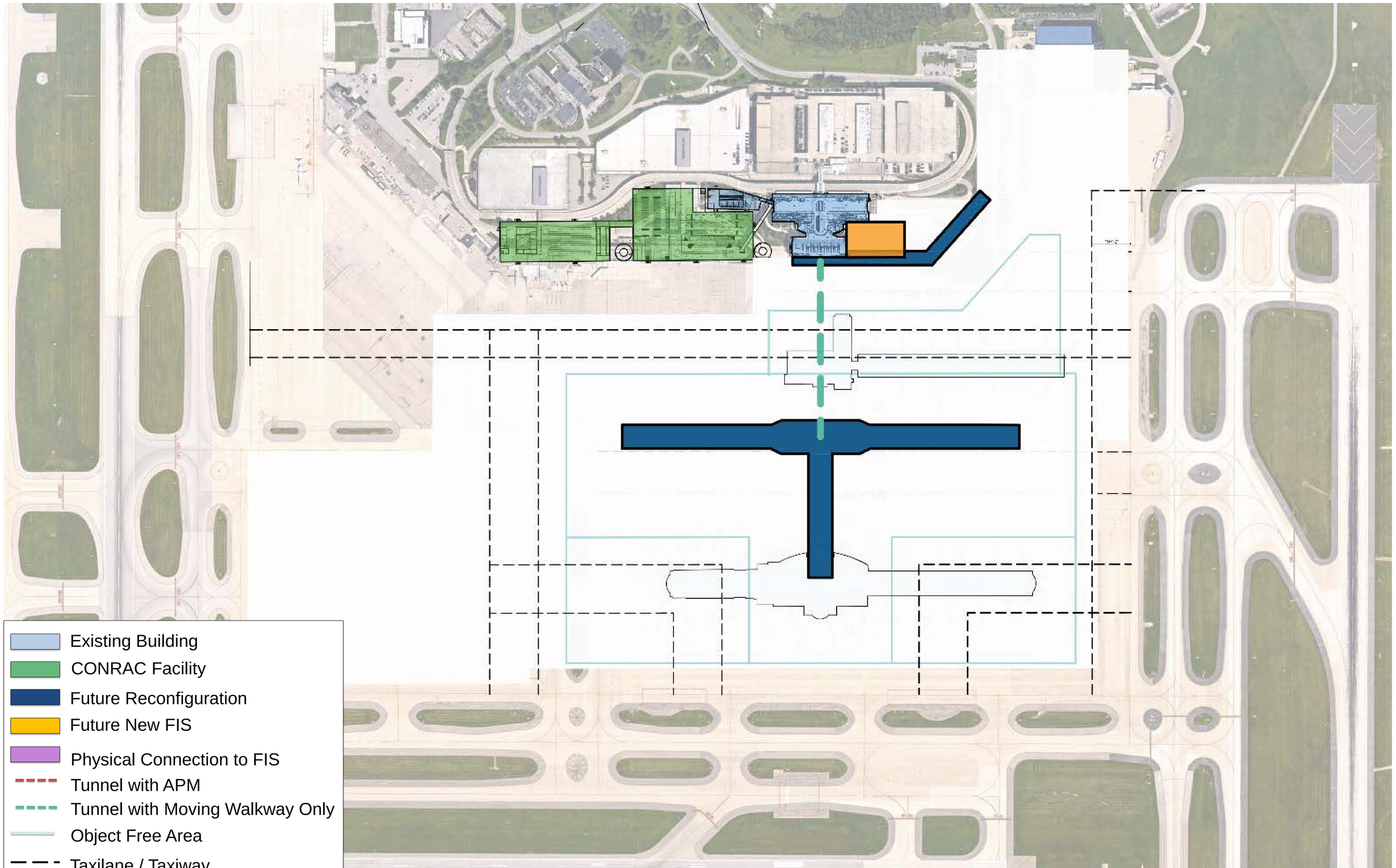


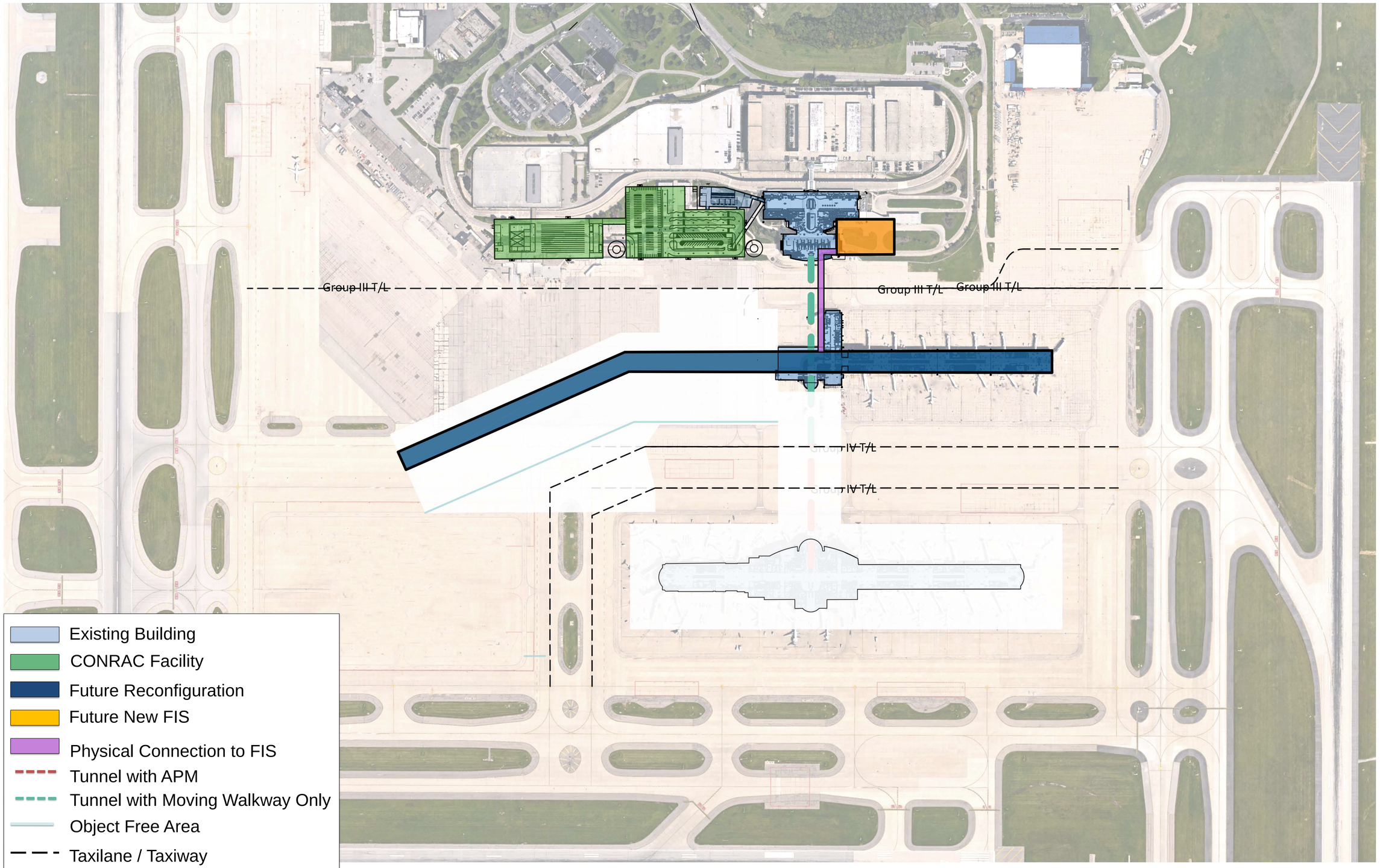
# Family 3 - Concept 3



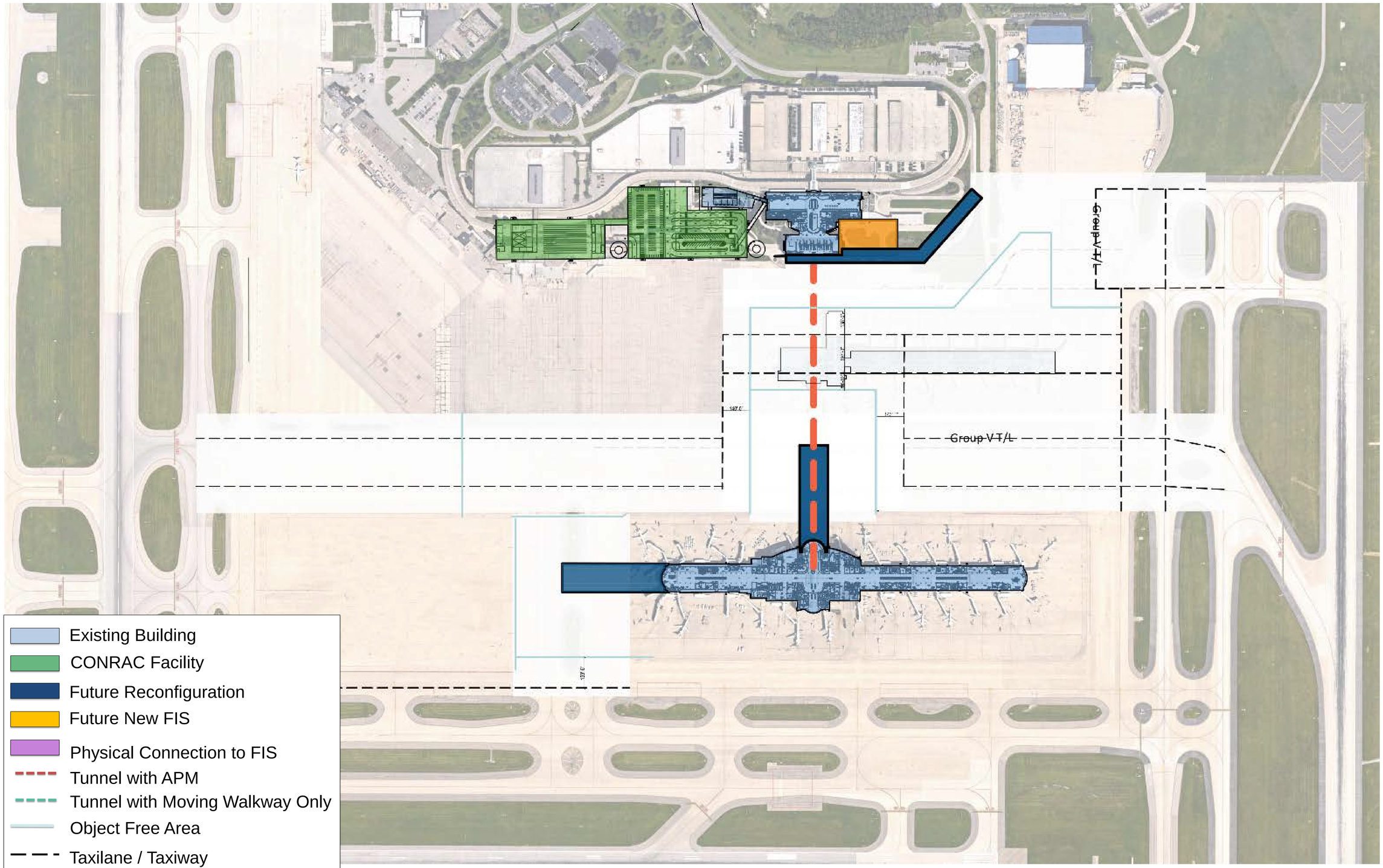
# Family 3 - Concept 4



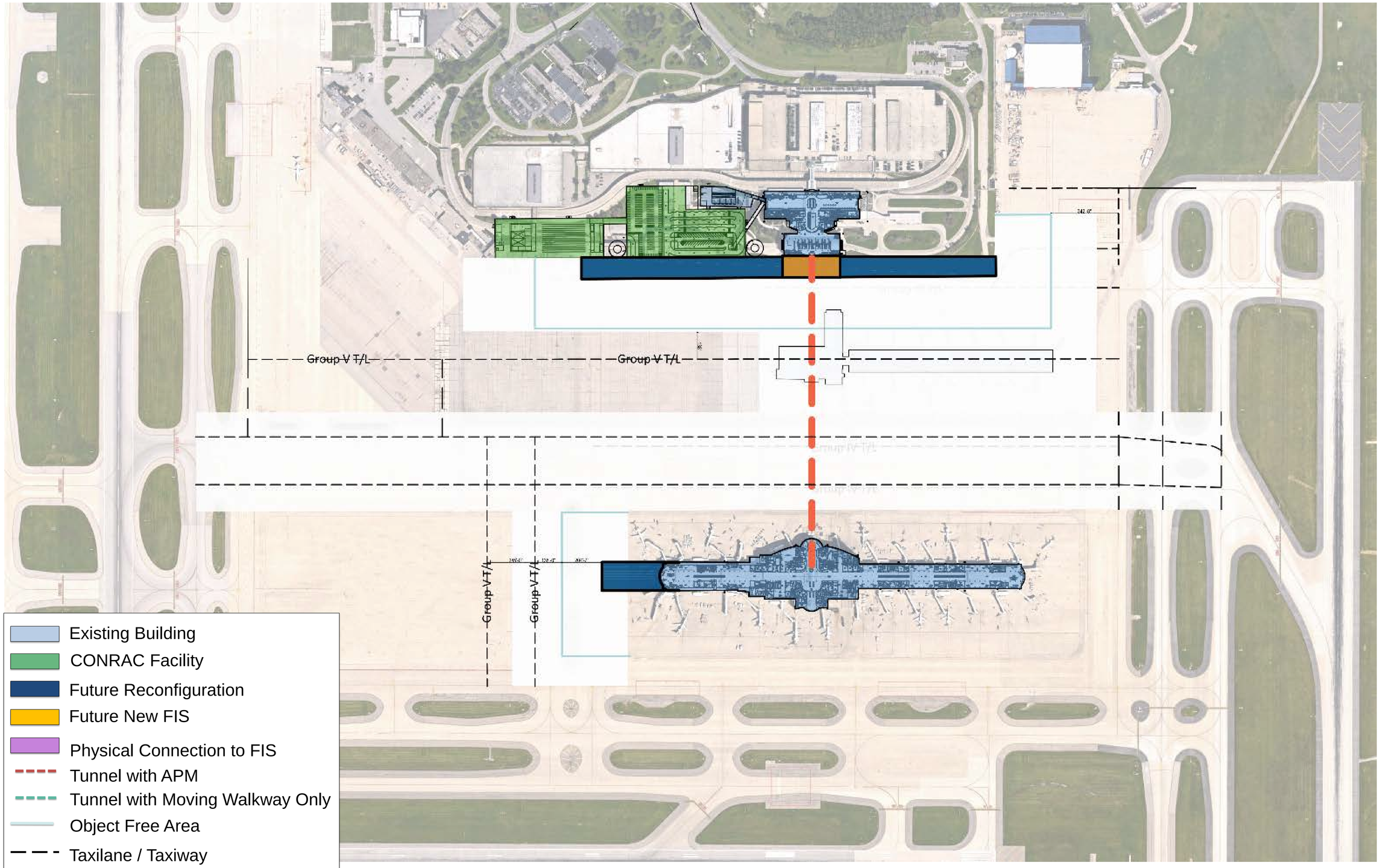
# Family 3 - Concept 5



# Family 4 - Concept 1



# Family 4 - Concept 2



# Evaluation Criteria

Evaluation Criteria Descriptions

| | | |
|---|---|---|
| **AIRSIDE** | | |
| **A** | Airside Circulation / Operations | Does the configuration of the concourse(s) maintain or improve the taxiing of aircraft from east to west without creating significant numbers of gates that have independent pushback operations? |
| **TERMINAL** | | |
| **B** | Passenger Journey | The configuration of the concourse(s) minimizes the number of level changes and the potential unassisted walking distance required for passengers to flow from the main terminal to their gate and from their gate to the main terminal. |
| **C** | APM Needed | Does the concourse configuration eliminate the need for an APM (train/people-mover)? |
| **D** | Baggage Operations | Does the concourse configuration allow for the implementation of a simplified baggage handling system with consolidated baggage screening? |
| **E** | International Passenger Arrivals | Does the concourse configuration allow for international arriving passengers to exit the Customs and Border Protection facility directly to the landside without having to be rescreened? |
| **F** | Future Flexibility | Does the concourse configuration support both future hubbing operations and flexibility O&D operations and airline gate allocations? |
| **IMPLEMENTATION** | | |
| **G** | Impact to Existing Facilities | Does the concourse configuration limit the impact to existing non-passenger related structures. |
| **H** | Infrastructure Re-Use | Does the concourse configuration reduce the need to construct new facilities by providing the ability to re-use existing concourse/gate infrastructure? |
| **I** | Phasing | Is it feasible to phase the construction of the concourse configuration in a way that limits the impacts to existing gate operations and does not require the construction of temporary gates? |
| **J** | Project "Off-Ramps" | Allows for incremental facility expansion that provides for flexibility in modifying the plan at project milestones. The ultimate configuration is able to be modified over time to adjust to changing conditions at the airport. |

# Initial Concepts Carried Forward