

Airport Master Plan Update Transportation, Public Works and Transit Committee

Milwaukee County's Mitchell International Airport

March 11, 2020



MASTER PLAN 2040



Master Plan Process

- FAA-guided process

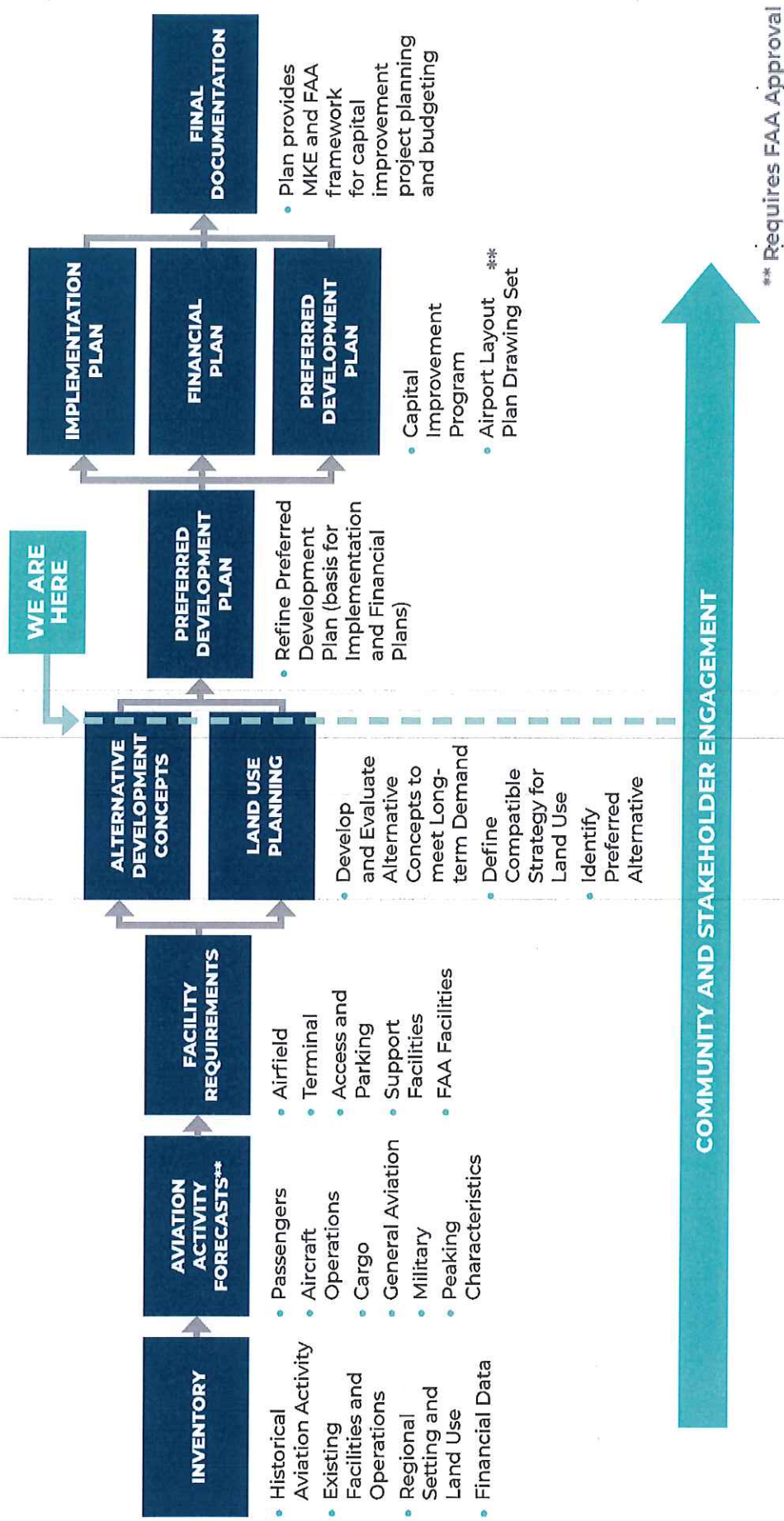


The goal of a master plan is to provide the framework needed to guide future airport development that will cost effectively satisfy aviation demand, while considering potential environmental and socioeconomic impacts.

FAA AC 150/5070-6B, Airport Master Plans

- Unique to the issues and challenges faced by MKE
- Objectives
 - Forecast activity
 - Define and justify proposed development
 - Provide effective graphic representation of development (ALP Drawing)
 - Establish realistic implementation schedule
 - Propose an achievable financial plan
 - Establish a flexible framework for continued planning and decision-making
- Serves as a guide to MKE's future

Master Plan Process



The FAA will approve two specific elements of the Master Plan Update: Baseline Forecast and Airport Layout Plan drawing set.

Draft Master Plan Goals

- Affirm a **future-focused airport** that supports aviation growth in a safe, efficient, and cost-effective manner through an organized and synergistic long-range development plan.
- Recognize opportunities to **enhance the sustainability, resiliency, and environmental sensitivity** with continued growth of MKE.
- Seek opportunities for **enhanced customer and passenger experience**.
- **Optimize infrastructure and resources** in an operationally, financially, and sustainable manner.
- Adopt **scalable development plans** that flexibly accommodate variations in demand and technology over the planning horizon.
- Protect **long range utility** of the Airport (post-2040).
- Recognize opportunities for enhanced **non-aeronautical revenue generation** in the utilization of MKE property and amplify the revenue-generating potential of Airport property.
- Define a long-range development plan that **reflects MKE's role in the community** and recognizes diversity in community stakeholder priorities.

Master Plan Challenges

- Compliance with current FAA airfield safety and geometry standards
- Align airfield capacity with forecast of activity → right size airfield (long term need and per FAA funding guidance)
- Additional gates: +4 to +10 gates, depending on operational assumptions (portion of gate need will be met by Concourse E)
- Terminal space needs: holdrooms, passenger amenities, ticketing/check-in, security screening, baggage handling/make-up
- Security Checkpoint (SSCP) Consolidation potential
- Landside needs: additional terminal roadway capacity, public parking, rental car relocation/consolidation
- Cargo needs: facility and aircraft apron
- General aviation: hangar and aircraft apron (particularly corporate aircraft)
- **Long-term balance of airfield, terminal and landside capacity (system performance)**

Master Plan Opportunities

- Balance airfield, terminal, and landside capacity
- Conform to current FAA standards
- Consolidate similar facilities and operations
 - Enhance safety
 - Maximize efficiency
- Right-size facilities to match demand
 - Reduce O&M cost exposure
- Accommodate technological change
- Define highest and best use of developable airport land
- Provide opportunities for enhanced revenue generation (reduce airline cost exposure)
- Ultimately define Capital Improvement Plan (CIP) to support project budgeting and planning
- Preserve ultimate (post-2040) growth potential

Runway	Runway 15, Denver, Table		Disposal Threshold
	Runway Length	Future	
15	10,000'	10,000'	Same
16	10,000'	10,000'	750'
17	10,000'	10,000'	Same
18	10,000'	10,000'	Same
19	10,000'	10,000'	Same
20	10,000'	10,000'	Same
21	10,000'	10,000'	Same
22	10,000'	10,000'	Same
23	10,000'	10,000'	Same
24	10,000'	10,000'	Same
25	10,000'	10,000'	Same
26	10,000'	10,000'	Same
27	10,000'	10,000'	Same
28	10,000'	10,000'	Same
29	10,000'	10,000'	Same
30	10,000'	10,000'	Same
31	10,000'	10,000'	Same
32	10,000'	10,000'	Same
33	10,000'	10,000'	Same
34	10,000'	10,000'	Same
35	10,000'	10,000'	Same
36	10,000'	10,000'	Same
37	10,000'	10,000'	Same
38	10,000'	10,000'	Same
39	10,000'	10,000'	Same
40	10,000'	10,000'	Same
41	10,000'	10,000'	Same
42	10,000'	10,000'	Same
43	10,000'	10,000'	Same
44	10,000'	10,000'	Same
45	10,000'	10,000'	Same
46	10,000'	10,000'	Same
47	10,000'	10,000'	Same
48	10,000'	10,000'	Same
49	10,000'	10,000'	Same
50	10,000'	10,000'	Same
51	10,000'	10,000'	Same
52	10,000'	10,000'	Same
53	10,000'	10,000'	Same
54	10,000'	10,000'	Same
55	10,000'	10,000'	Same
56	10,000'	10,000'	Same
57	10,000'	10,000'	Same
58	10,000'	10,000'	Same
59	10,000'	10,000'	Same
60	10,000'	10,000'	Same
61	10,000'	10,000'	Same
62	10,000'	10,000'	Same
63	10,000'	10,000'	Same
64	10,000'	10,000'	Same
65	10,000'	10,000'	Same
66	10,000'	10,000'	Same
67	10,000'	10,000'	Same
68	10,000'	10,000'	Same
69	10,000'	10,000'	Same
70	10,000'	10,000'	Same
71	10,000'	10,000'	Same
72	10,000'	10,000'	Same
73	10,000'	10,000'	Same
74	10,000'	10,000'	Same
75	10,000'	10,000'	Same
76	10,000'	10,000'	Same
77	10,000'	10,000'	Same
78	10,000'	10,000'	Same
79	10,000'	10,000'	Same
80	10,000'	10,000'	Same
81	10,000'	10,000'	Same
82	10,000'	10,000'	Same
83	10,000'	10,000'	Same
84	10,000'	10,000'	Same
85	10,000'	10,000'	Same
86	10,000'	10,000'	Same
87	10,000'	10,000'	Same
88	10,000'	10,000'	Same
89	10,000'	10,000'	Same
90	10,000'	10,000'	Same
91	10,000'	10,000'	Same
92	10,000'	10,000'	Same
93	10,000'	10,000'	Same
94	10,000'	10,000'	Same
95	10,000'	10,000'	Same
96	10,000'	10,000'	Same

Running R status table					
Runway	Runway length		Displaced threshold		
	Old (m)	Future	Cr/ft/yr	Future	Future
11	9,905'	10,000'	330"	Same	Same
11B	9,905'	10,000'	796"	793"	793"
2A	4,247'	Decommission	N/A	Decommission	Decommission
2B	4,247'	Decommission	N/A	Decommission	Decommission
2C	4,202'	Decommission	N/A	Decommission	Decommission
25B	4,005'	Decommission	N/A	Decommission	Decommission
7A	8,905'	Same	N/A	Same	Same
22L	8,305'	Same	433"	Same	Same
13	5,513'	Same	737"	810"	810"
3L	5,513'	Same	236"	Same	Same

Potential Solar Project

Lake Parkway

UNION PACIFIC RAIL LINE

COLLEGE AVE.

6TH STREET

HOWELL AVE.

LATON AVE.

West PAD

Public Parking

Joint-Use Rental Car and Parking Facility/QTA

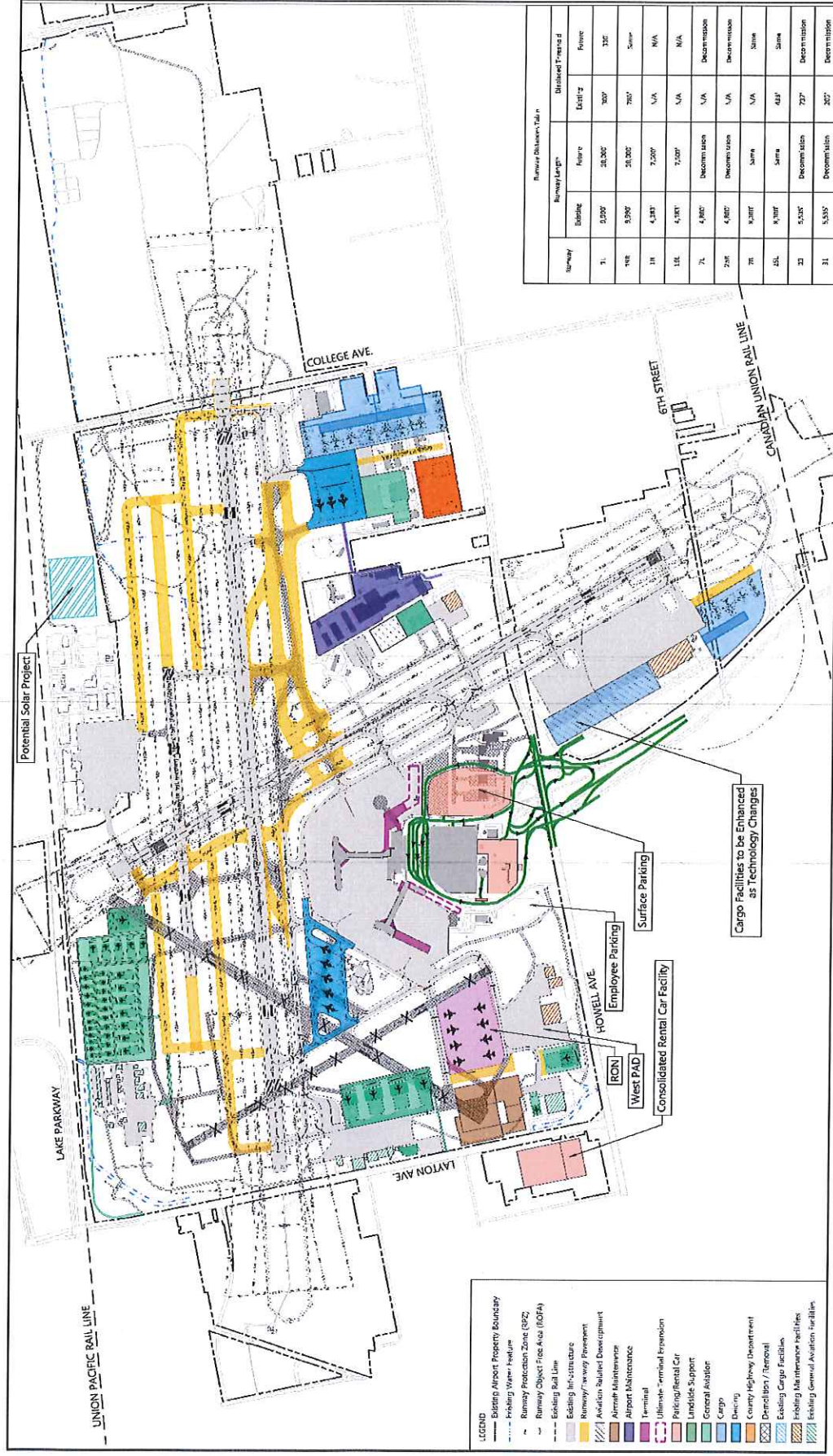
CANADIAN UNION RAIL LINE

Runway	Runway Dimensions, Feet or Meters		Discontinued Traffic, d
	Existing	Future	
7L	3,000	3,000	300'
7R	3,000	3,000	300'
8L	4,300	4,300	N/A
8R	4,300	4,300	N/A
9L	4,800	5,200	N/A
9R	4,800	5,200	N/A
10L	8,200	8,200	N/A
10R	8,200	8,200	N/A
11L	10,000	10,000	737'
11R	10,000	10,000	737'

LEGEND

- Building Footprint
- Existing Water Feature
- Runway Protection Zone (RPZ)
- Runway Object Free Area (ROFA)
- Building Full Line
- Building Infrastructure
- Runway Taxiway Pavement
- Airfield Sealed Development
- Airport Maintenance
- Airport Structures
- Terminal
- Ultimate Vertical Expansion
- Parking/Rental Car
- Landside Support
- General Aviation
- Cargo
- Dicing
- County Highway Department
- Demolition / Renovation
- Existing Cargo Facilities
- Existing Maintenance Facilities
- Building General Aviation Air Bases

Alternative C



Stakeholder and Public Engagement

- 4 Public Open Houses
 - Engage planning team
 - Submit comments
- Two advisory committees
 - Technical Advisory Committee

Role: Provide input and feedback on technical aspects of the master planning analyses and conclusions.

- Stakeholder Advisory Committee

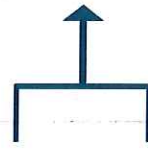
SAG Role: Provide input and feedback on factors that influence the role of the Airport in the region, the relationship of the Airport to the community, and serve as a conduit for Master Plan information throughout the community.

- 5 meetings of each advisory committee
- Project webpage with comment/input portal



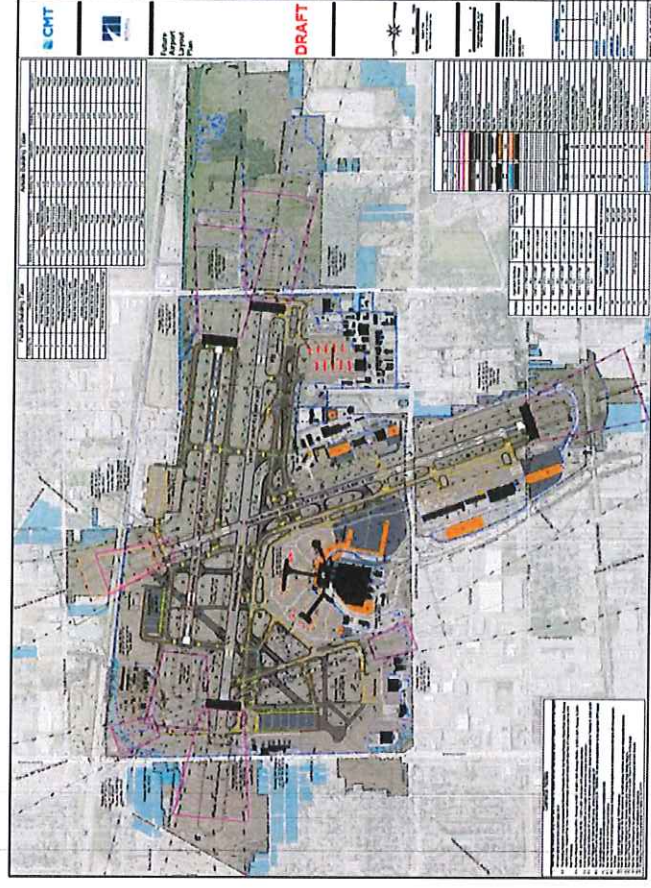
Next Steps

- Detailed evaluation of alternatives
- Selection and refinement of preferred alternative
 - Environmental Overview
 - Implementation Plan
 - Financial Feasibility Analysis
- Stakeholder and public engagement
- FAA Review
 - Airport Layout Plan (ALP) drawing set and supporting narrative
 - FAA review period: up to 180 days
 - FAA-approved ALP supports federal funding requests



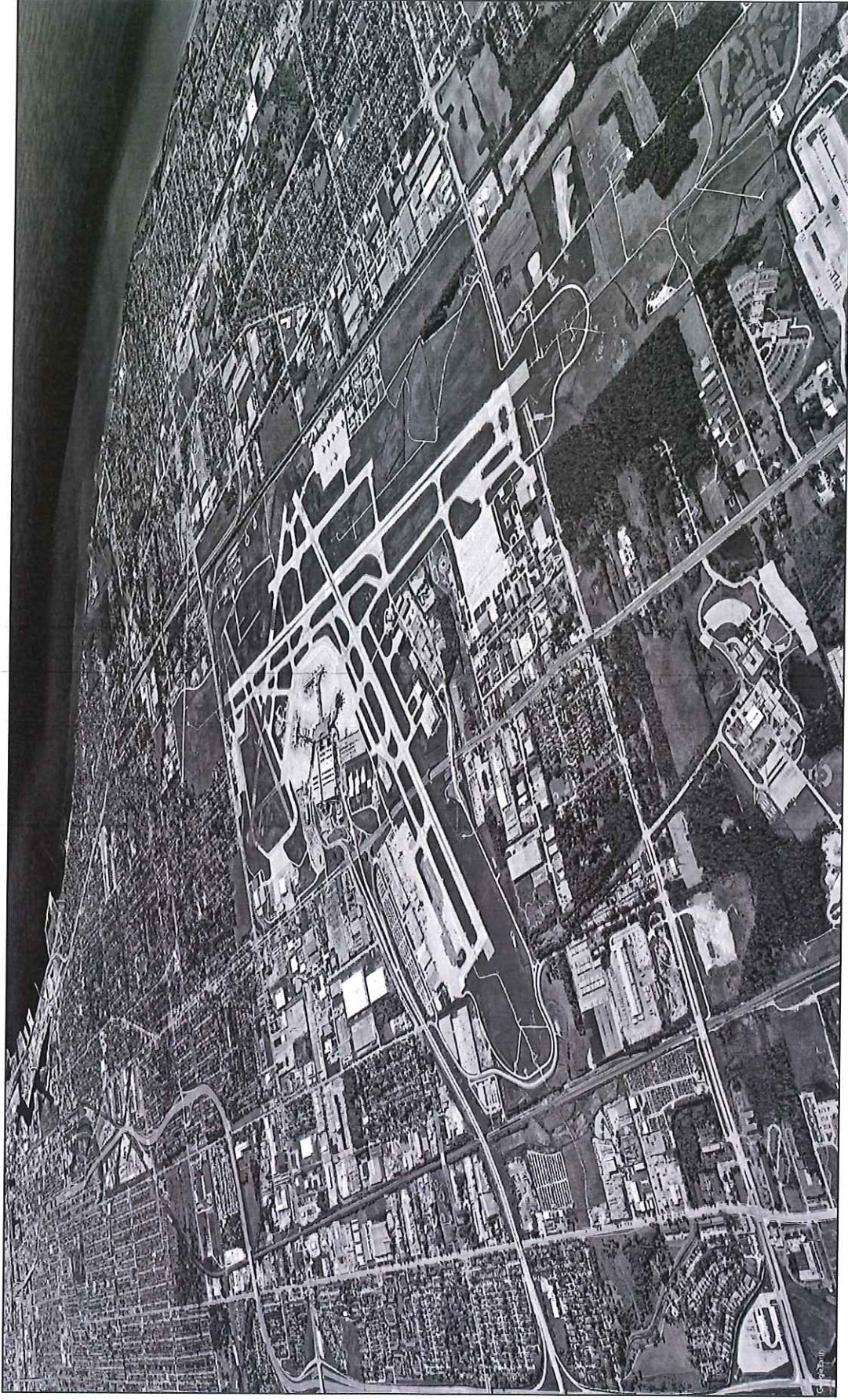
Capital Improvement Plan

***Anticipated submittal to FAA:
mid to late 2020***



Current ALP drawing set comprises 44 sheets

Questions



Google Earth Pro, 2017; Landsat/Copernicus, 2017; TerraMetrics, 2017 (aerial photography - for visual reference only, may not be to scale).