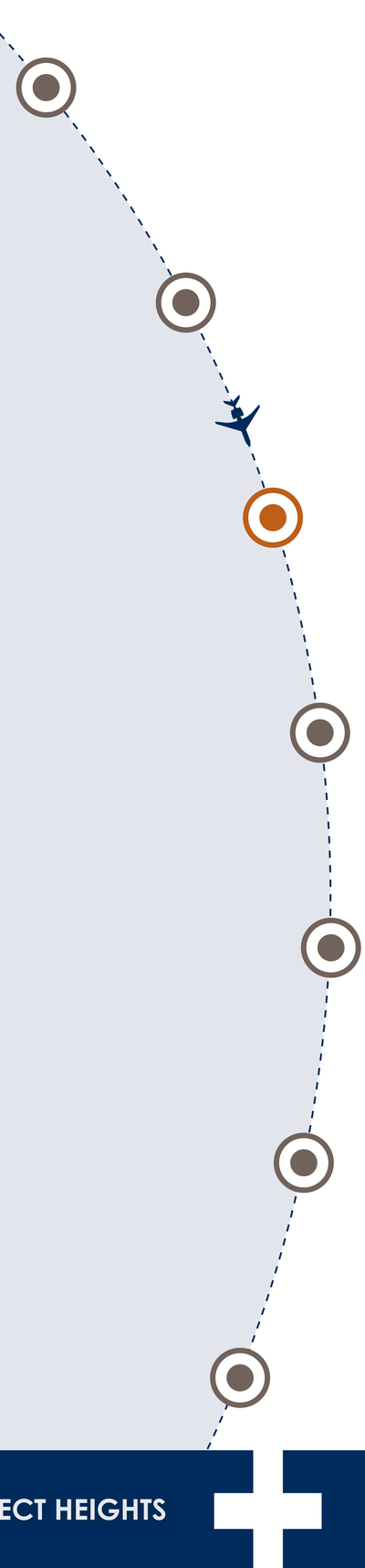
STATION 4

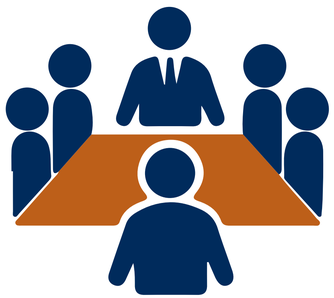
MASTER PLAN

FORECAST



CHICAGO EXECUTIVE AIRPORT

Approach



THE BOARD OF DIRECTORS OF CEA HAS CHOSEN TO ACCOMPLISH THE PLANNING EFFORT IN PHASES

- The level of detail and complexity within the planning effort will increase as the process progresses
- CEA has chosen to move deliberately
- Such an approach will ensure the transparency and community involvement

CHICAGO EXECUTIVE AIRPORT

Phases

PHASE I SUMMARY

KEY FINDINGS

- Airport development at CEA is economic development for the Village of Wheeling and City of Prospect Heights

CONCERNS

- Safety
- Aircraft Noise
  - CEA Took Action - NEM and Noise Compatibility Program Projects
  - Separate Study by Others
- Impacts to the Environment

PHASE II SUMMARY

KEY FINDINGS

- Primary Constraint: Runway Length
- Secondary Constraints Identified
- FAA Approved Aviation Forecast

SECONDARY CONSTRAINTS

- Airspace Delays
- Need for Additional Instrument Approaches with Lower Minimums
- Additional Hangar Space
- Additional Corporate Offices
- Additional Ramp Space

PHASE III

COMPONENTS

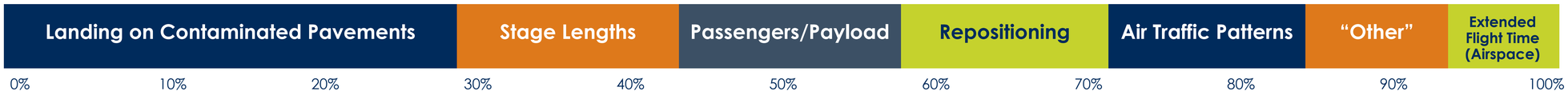
- Alternatives Development and Evaluation
- Implementation Plan
- Environmental Overview
- Airspace Analysis
- Public Involvement and Outreach
- Aerial Mapping
- Airport Layout Plan

Phase I Results

RANK OVERALL NEEDS FOR IMPROVED FACILITIES AT CEA:

1) RUNWAY LENGTH 2) RUNWAY INSTRUMENTATION 3) SECONDARY RUNWAY LENGTH

CURRENT RESTRICTIONS IN OPERATING EXISTING AIRCRAFT AT CEA



REASONS FOR CURRENTLY BASING/OPERATING AT CEA

OPERATIONAL CHANGE IF LONGER STAGE LENGTH IS ACHIEVABLE

USER-SURVEY

IMPACTS OF CONSTRAINTS AT CEA:

Primary constraint identified by users is the runway length. 300+ participants provided insight on CEA's constraints that impact users and prevent potential users from operating at CEA.

City of Prospect Heights Village of Wheeling

CHICAGO EXECUTIVE AIRPORT

Facility Requirements

EXISTING VS. FUTURE SPACE REQ'S COMPARISON

	EXISTING (SQ. FT.)	FUTURE (SQ. FT.)
HANGAR DEVELOPMENT	900,000	1,500,000
OVERALL DEVELOPMENT	2,200,000	5,600,000

The Airport Master Planning process has identified a total development area of approximately 5.6-million sq. ft. Existing development is approximately 2.2-million. Overall development above includes hangar development as well as required apron, taxiway, vehicle parking and roadway/circulation access areas. An additional 3.4-million sq. ft. will be required.

REQUIRED DEVELOPMENT SPACE ALLOCATION - FORECAST PLANNING PERIOD

HANGAR SPACE	PAVEMENT SPACE	PARKING/ CIRCULATION SPACE	TOTAL
AIRCRAFT STORAGE & NON-AIRCRAFT STORAGE (SQ. FT.)	APRON & ACCESS DEVELOPMENT (SQ. FT.)	VEHICLE PARKING & CIRCULATION (SQ. FT.)	TOTAL DEVELOPMENT (SQ. FT.)
1,840,298	3,067,163	692,709	5,600,170

The required 5.6-million sq. ft. is broken down in the above table. Throughout the planning period, approximately 1.8-million sq. ft. of hangar space will be required, 3.0-million sq. ft. of apron area will be required, and nearly 700,000 sq. ft. of parking, access, and circulation space will be required. Total development required is 5.6-million sq. ft.

RUNWAY LENGTH REQUIREMENT

	FAA ADVISORY CIRCULAR 150/5325-4B	BUSINESS JET OPERATIONS ANALYSIS
TAKE OFF MINIMUM	MIN. 5,858'	MIN. 5,700'
TAKE OFF MAXIMUM	MAX. 8,000'	MAX. 6,700'

Using FAA advisory circular, CEA runway length is justified up to 8,000'. A more realistic approach (representation of actual CEA operators) has identified a runway length between 5,700' and 6,700'.

CHICAGO EXECUTIVE AIRPORT

Primary Constraint

CURRENT RUNWAY LENGTH 5,000’

- When runway surface is compromised, the full complement of planes can not operate
- Many planes depart with little fuel and fill-up at Midway to continue on
- Do not have full access that is desired to operate

FORECAST INDICATES A 5,700’- 6,700’ RUNWAY WOULD ADDRESS THE IDENTIFIED NEED

LONGER RUNWAY DOES NOT MEAN COMMERCIAL SERVICE

City of Prospect Heights | Village of Wheeling

CHICAGO EXECUTIVE AIRPORT

Future Forecast

BASED ON 6,200' RUNWAY

TOTAL OPERATIONS

- ***2016*** – 76,860
- ***2036*** – 101,559
- ***COMBINED ANNUAL GROWTH RATE (CAGR)*** – 1.2%
- ***OVERALL*** – 32% Growth

BASED AIRCRAFT

- ***2016*** – 235 aircraft
- ***2036*** – 338 aircraft
- ***COMBINED ANNUAL GROWTH RATE (CAGR)*** – 1.8%
- ***OVERALL*** – 44% Growth

City of Prospect Heights + Village of Wheeling

CHICAGO EXECUTIVE AIRPORT

Property Tax Revenue

EXISTING CONDITIONS

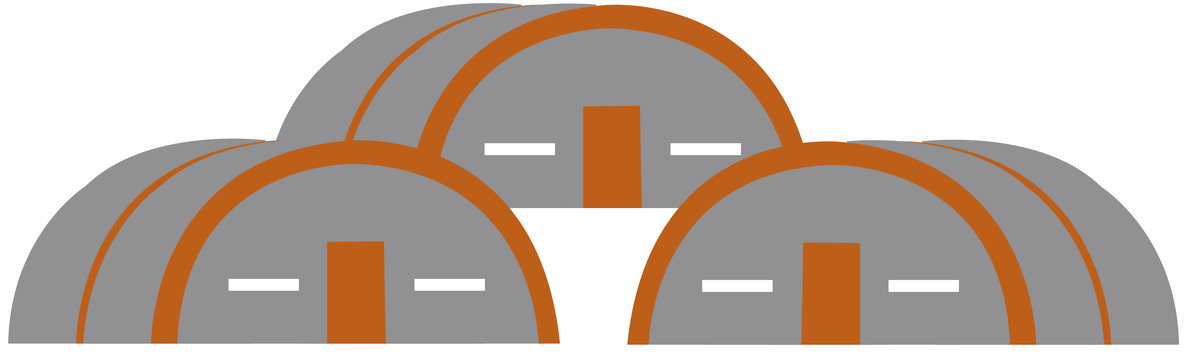
800,000 - 1.0 M SF

Existing Hangar Building Space at CEA

TAX REVENUE

APPROX **$1.3M**

FUTURE CONDITIONS



1.3 M - 1.7 M SF

Future Hangar Building Space at CEA

TAX REVENUE [APPROX $1M]

ESTIMATED **$2.3M**

City of Prospect Heights + Village of Wheeling