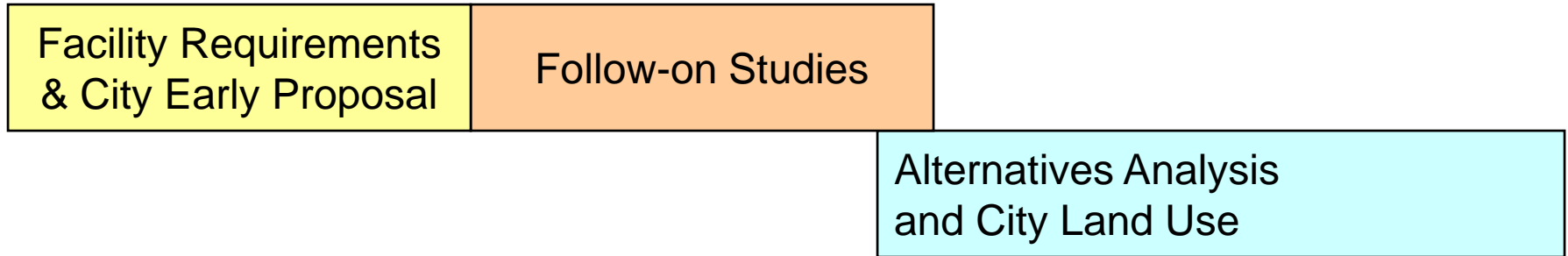


Recalibration of Work Tasks
2000 Master Plan Evolution
Follow-on Studies
2000 Master Plan - Alternatives

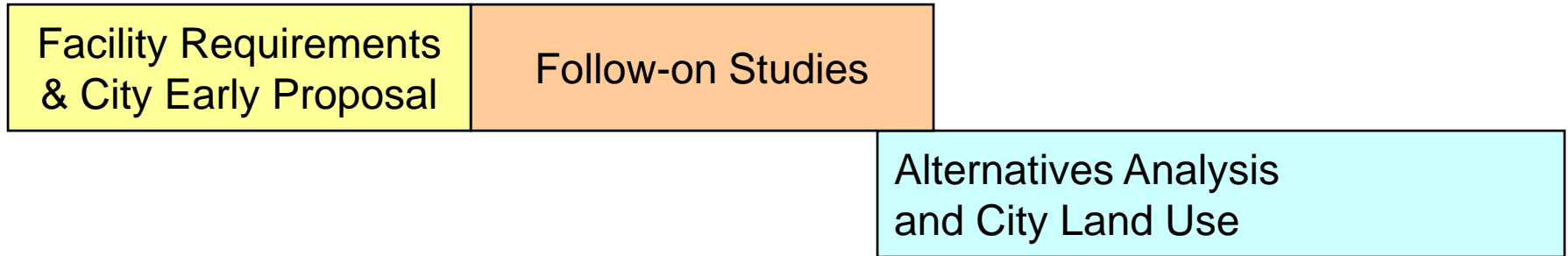
For Information
No action required

Recalibration of Work Tasks

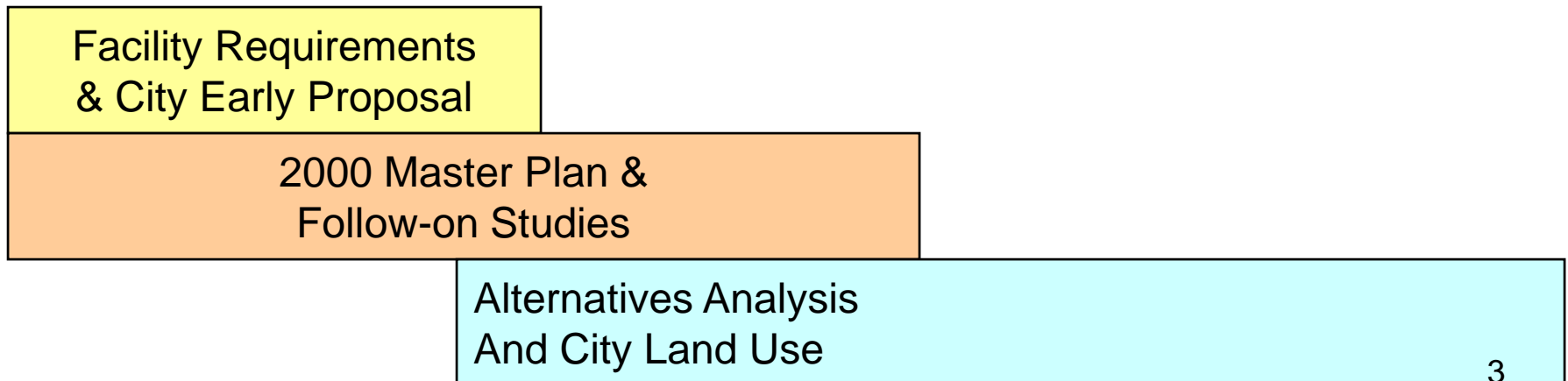
Original Approach - Sequential



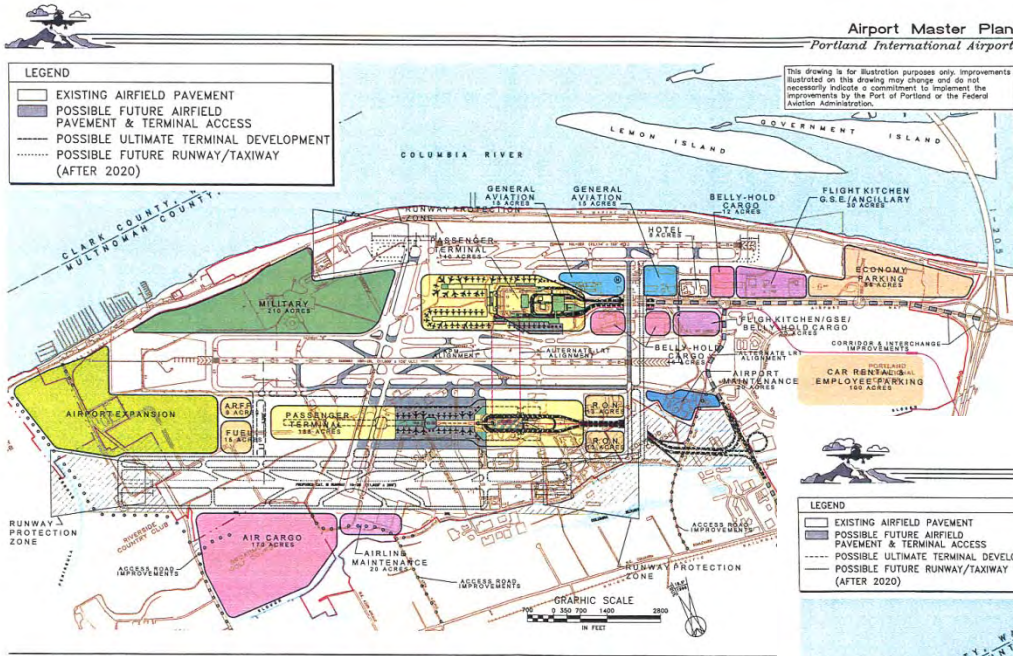
Recalibration of Work Tasks



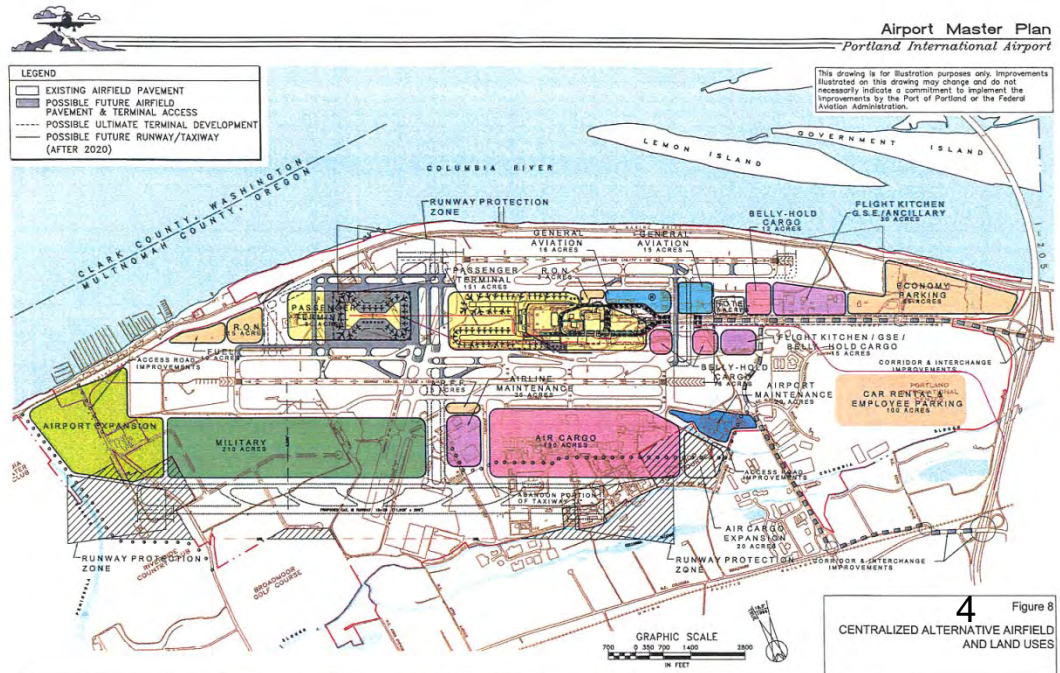
Revised Approach - Overlapping



2000 Master Plan - Evolution



Two Alternatives:
Decentralized
Centralized



Centralized Alternative



- LEGEND**
- EXISTING AIRFIELD PAVEMENT
 - POSSIBLE FUTURE AIRFIELD PAVEMENT & TERMINAL ACCESS
 - POSSIBLE ULTIMATE TERMINAL DEVELOPMENT
 - POSSIBLE FUTURE RUNWAY/TAXIWAY (AFTER 2020)

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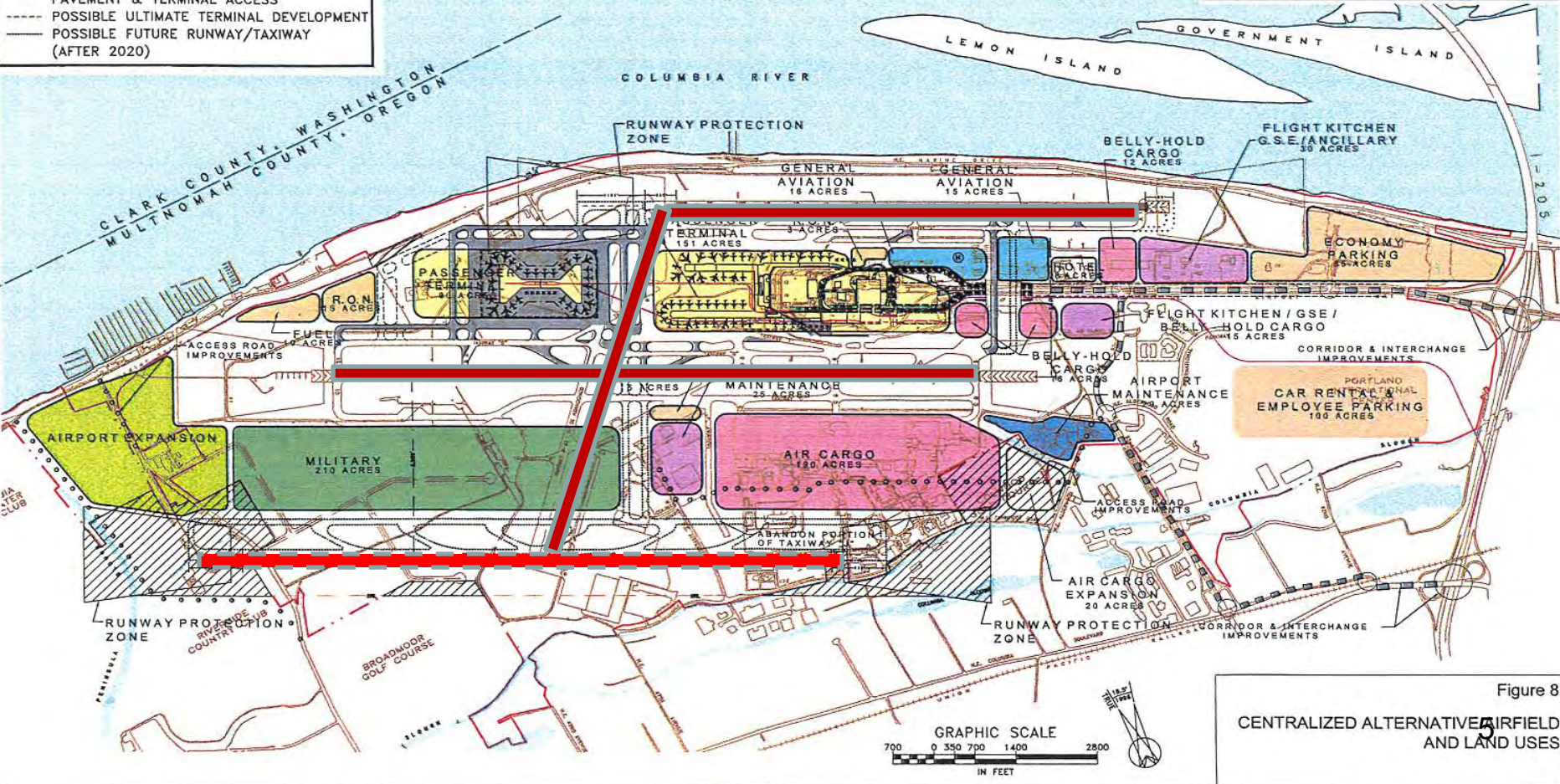


Figure 8
CENTRALIZED ALTERNATIVE AIRFIELD AND LAND USES

Decentralized Alternative



LEGEND

- EXISTING AIRFIELD PAVEMENT
- POSSIBLE FUTURE AIRFIELD PAVEMENT & TERMINAL ACCESS
- POSSIBLE ULTIMATE TERMINAL DEVELOPMENT
- POSSIBLE FUTURE RUNWAY/TAXIWAY (AFTER 2020)

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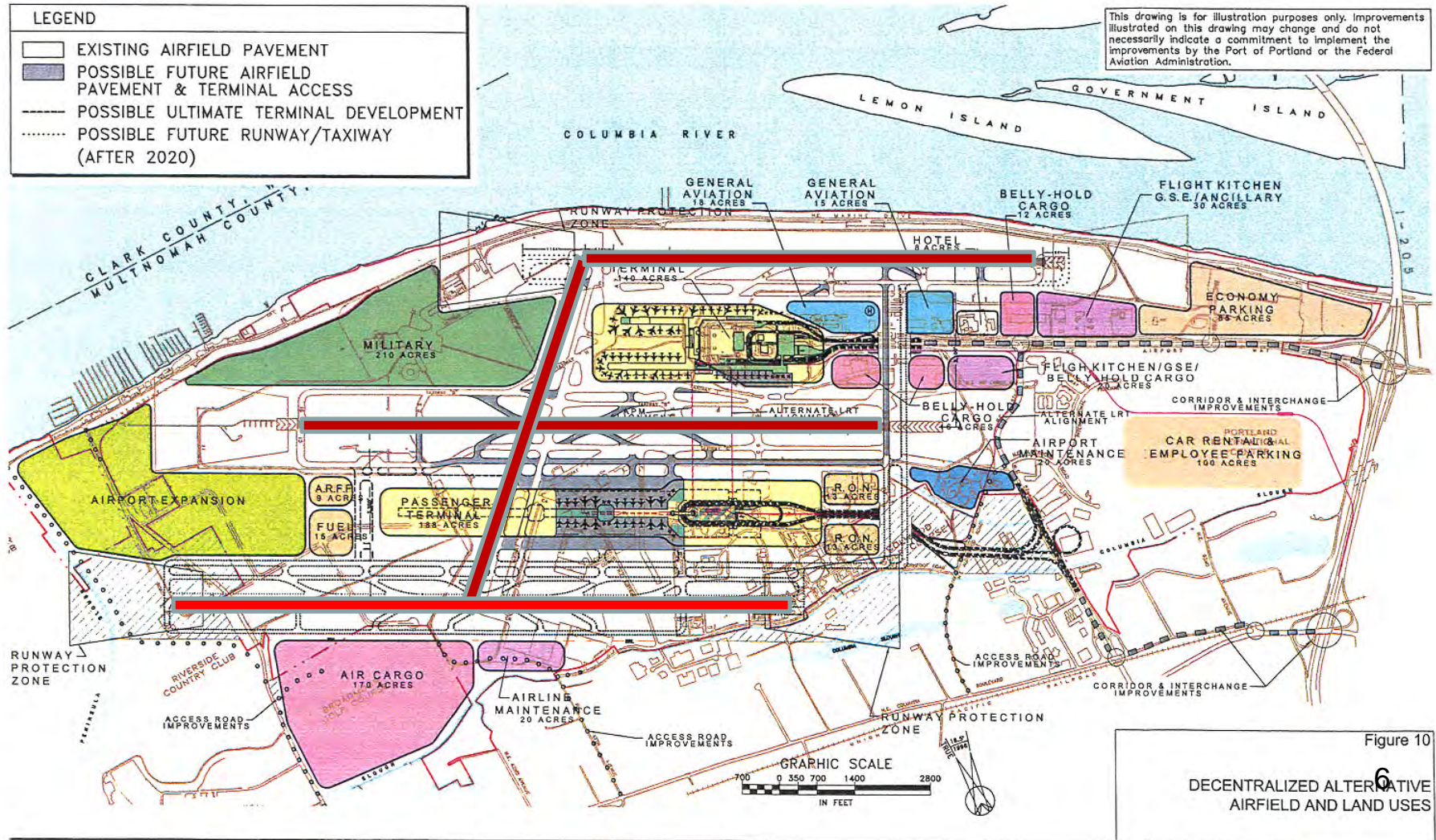


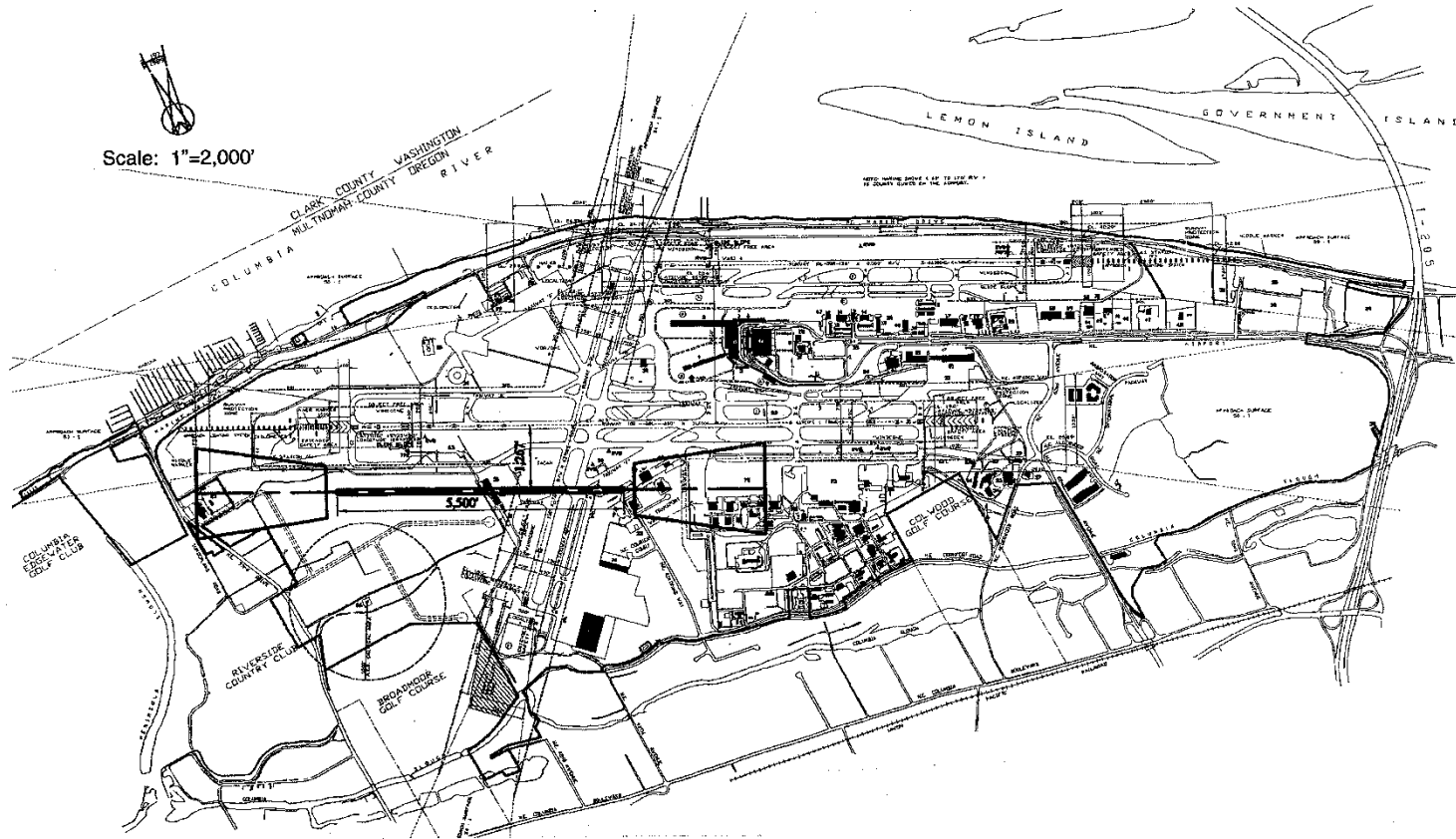
Figure 10

DECENTRALIZED ALTERNATIVE
AIRFIELD AND LAND USES

Evolution - 9 Airfield Concepts



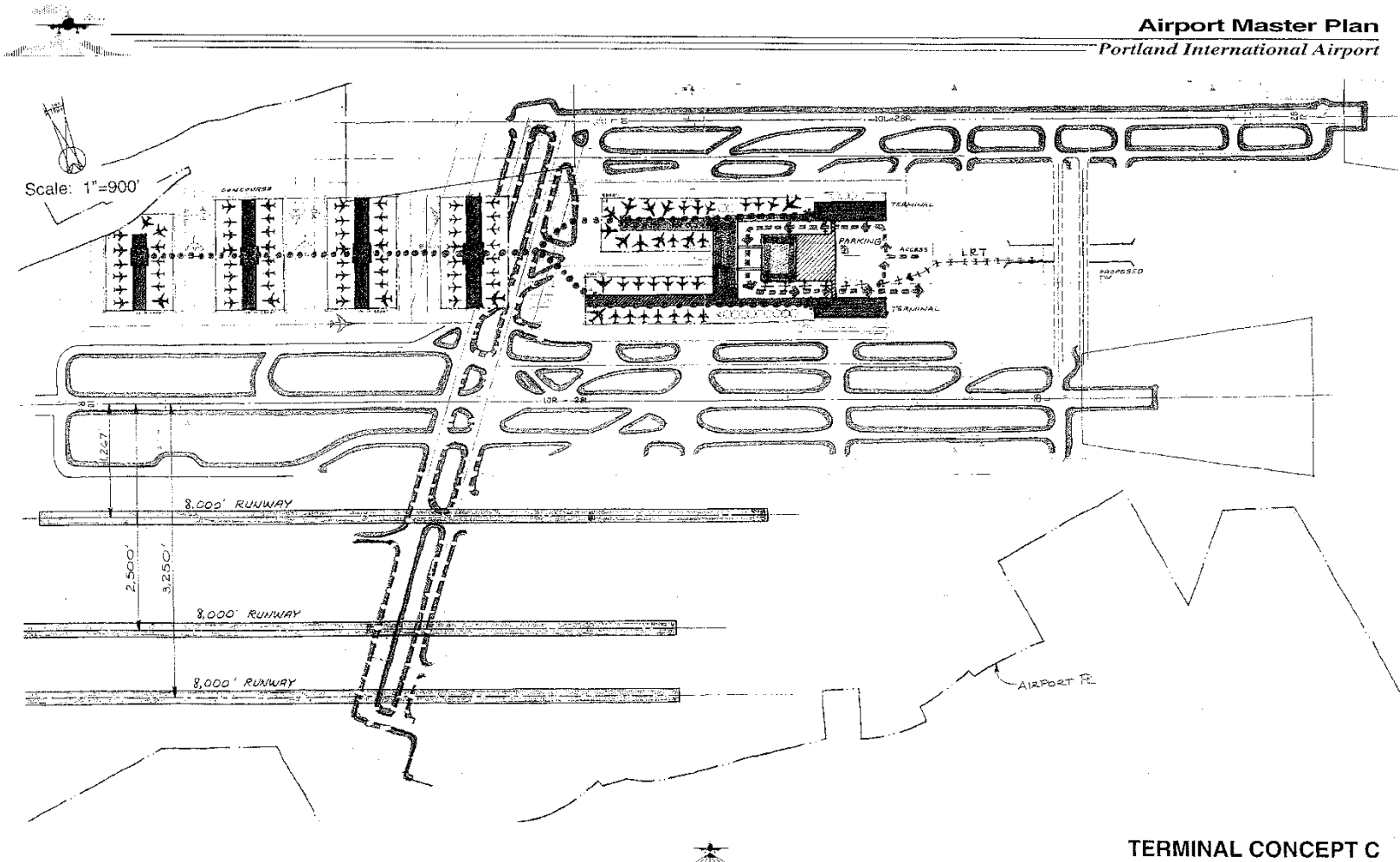
Airport Master Plan
Portland International Airport



Scale: 1"=2,000'

**AIRFIELD ALTERNATIVE 1A -
NEW CLOSE COMMUTER RUNWAY**

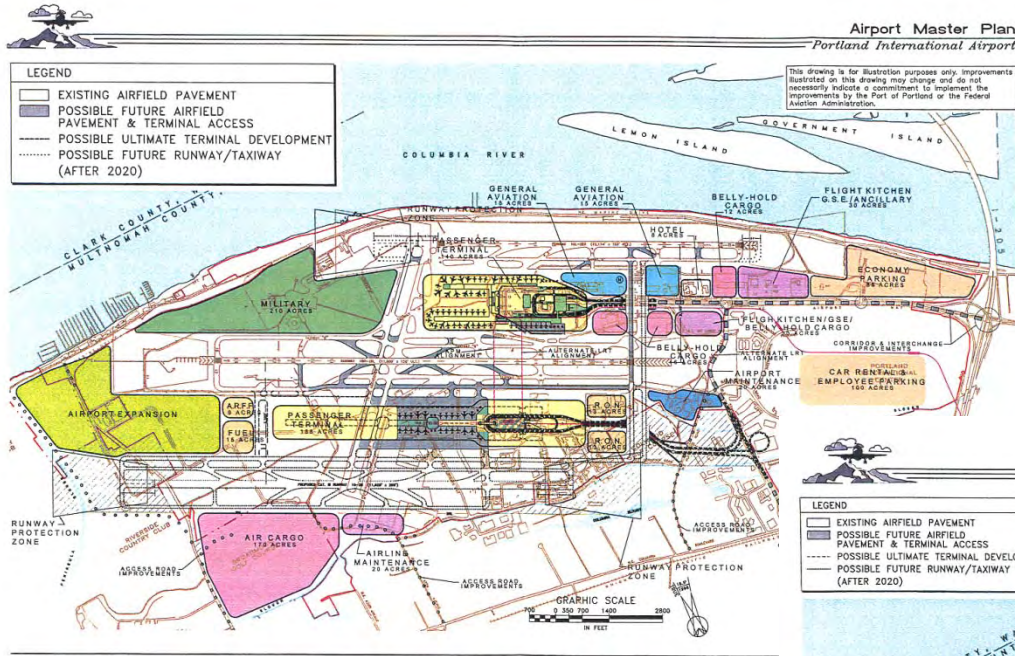
Evolution - 6 Terminal Concepts



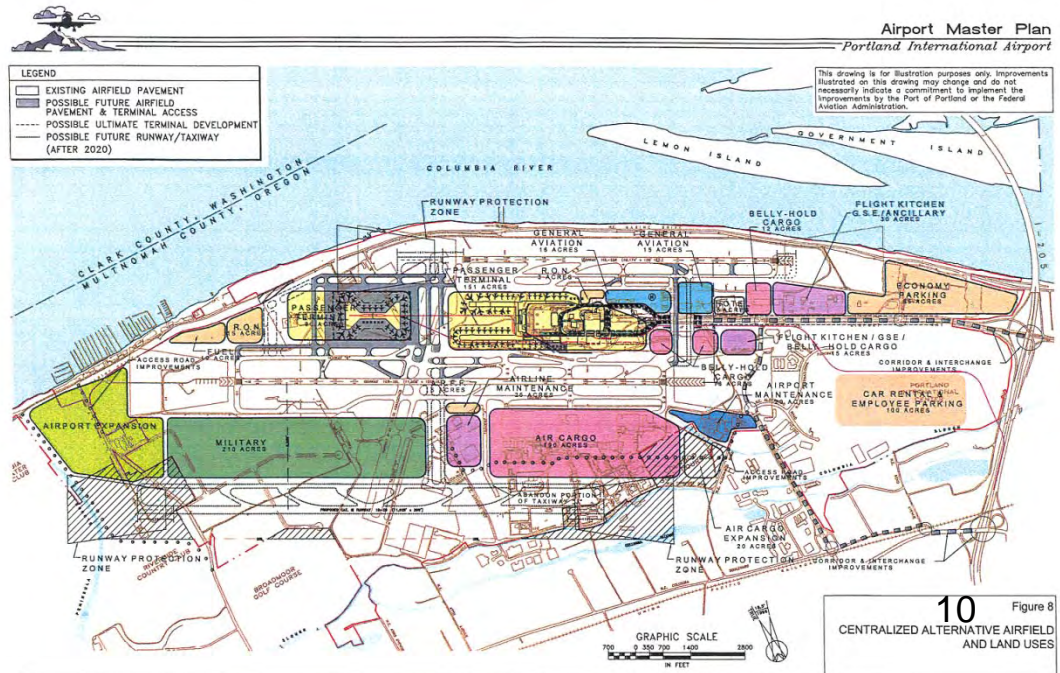
Airport Master Plan
Portland International Airport

TERMINAL CONCEPT C

2000 Master Plan



Two Alternatives: Decentralized Centralized



Follow-on *Studies*

- Seven listed in Intergovernmental Agreement
- Not all were “Studies”
 - Programs
 - Projects
 - Policies
- Purpose: Use info in legislative land use and Airport Futures Master Plan process

1. Strategic Environmental Evaluation – Study - SEE

- Environmental Evaluation of 2000 Plan Centralized and Decentralized compared to Existing Airport
- Looked at:
 - Air quality impacts
 - Water quality impacts
 - Natural resources
- Data is mapped and quantified in GIS

1. Strategic Environmental Evaluation Study - SEE

Significance in Airport Futures:

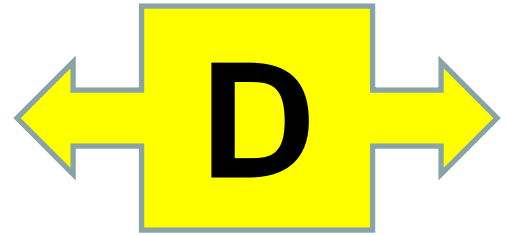
Use data in Alternatives Analysis

Provides a comparison of:

- *Air quality*
- *Water quality (impervious surface)*
- *Natural Resources*

1. Strategic Environmental Evaluation Study - SEE

Significance in Airport Futures:



Use data in Alternatives Analysis

Provides a comparison of:

- ***Air quality***
- ***Water quality (impervious surface)***
- ***Natural Resources***

2. On-Going Environmental Programs

- a) Port Environmental Policy
- b) Citizens Noise Advisory Committee
- c) Local, Regional, State, Federal Regulations
- d) National Environmental Policy Act - NEPA

a) Port Environmental Policy

- You have a copy
 - The Port will apply the Environmental Policies to developments and operations at PDX.

b) Citizens Noise Advisory Committee

– 4 current and former CNAC'ers on the PAG

“The Port will continue to participate in and support the CNAC program in finding reasonable ways to reduce the impact of noise on the community.”

Significance for Airport Futures: The Port provides a high degree of support to our bi-state multi jurisdictional + adhoc citizen advisory committee on noise.

c) Local, Regional, State, and Federal Regulations and Agreements

Previously briefed at PAG meeting #2:

Long list of Federal, State, and City regulations, permits, agreements.

Significance for Airport Futures: The airport is highly regulated. All development and operations subject to regulations.

d) National Environmental Policy Act (NEPA)

- Required for all projects with federal funding
- Currently under way:
 - North runway extension / South runway rehab
 - Environmental Assessment (EA)
 - Deicing system – Environmental Assessment (EA)
 - Hillsboro Light GA Parallel Runway – Environmental Assessment (EA)

d) National Environmental Policy Act (NEPA)

- Recently Completed :
 - Parking structure/office building – Documented Categorical Exclusion (CATEX)
 - Portland International Center – Environmental Assessment (EA)

d) National Environmental Policy Act (NEPA)

- Sample of Future NEPA work:
 - If they happen: Decentralized or Centralized Terminals – likely Environmental Impact Statements (EIS) (Lead agency = FAA)
 - If it happens – Relocation of ORANG or new aircraft (ORANG lead agency)
 - If it happens – 3rd Parallel Runway – Environmental Impact Statement (EIS) (Lead agency = FAA)

d) National Environmental Policy Act (NEPA)

Significance for Airport Futures: We do NEPA often.

Typically FAA is the lead agency.

Environmental Impact Statement (EIS)

Environmental Assessment (EA)

Categorical Exclusion (CATEX)

3. Capacity Preservation Projects

“Steps taken to ensure that existing facilities are used to their fullest to help delay the need for costly and sometimes disruptive improvements.”

- a). Hillsboro Airport Master Plan
- b). Military Siting Analysis Study

a) Hillsboro Airport Master Plan

- Completed in 2005
- Plan looked at role of airport
- Continue as general aviation reliever
- Serves high end business jets
- Also basic flight training

a) Hillsboro Airport Master Plan

- Commercial service market driven
- Currently no demand for commercial service
- Intel Shuttle – carries estimated 100,000 Intel employees in an airline like operation

Significance for Airport Futures:

Hillsboro is a major GA Reliever – existing role

Intel employees served at PHA

Commercial service not likely in short term (or long?)

b). Military Siting Study

- Could the military be relocated off PDX?
- Conclusion - not a viable alternative without major investment

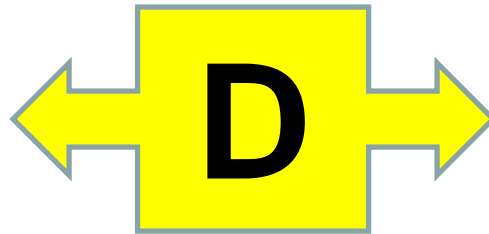
Significance for Airport Futures:



**Need to plan for continued military at PDX
(or not)**

b). Military Siting Study

Four + alternatives to be considered in the alternatives analysis tasks:



- Centralized Alternative— Military in SW Quad Area
- Decentralized Alternative – Military in NW Quad Area
- No build - military stays where they are
- No military – if they were no military at PDX

4. Ongoing Capacity Preservation Programs

- Northwest Airports/State Aviation Agencies Coordination
- I-5 Rail Improvements
- Cargo Handling at Other Airports
- Terminal Demand Management Strategies
- Runways & Airspace Demand Management Strategies
- Technology Changes

Northwest Airports/State Aviation Agencies Coordination

- Encouraging commercial air service in Oregon to bypass PDX
- Investments through Connect Oregon
 - Passenger and cargo development

Significance for Airport Futures: Future development will allow more passengers to bypass Portland to go direct to their destinations. Market driven. Used in sensitivity analysis.

I-5 Rail Corridor Improvements

- Focus has been on freight movement
- Emphasis on bottle neck areas
- Will improve movement of passengers

Significance for Airport Futures: Rail system improvements will improve speeds for passenger rail service.

Used in forecast process sensitivity analysis.

Cargo Handling at Other Airports

- Facility investments through Connect Oregon
 - Eugene, Medford, Redmond
- Offer to operators to use other airports – no takers yet

Significance to Airport Futures: Cargo operators participate in noise program

- Cargo feeder study – major effort
- Large jet cargo operators fly jet routes

Terminal Demand Management Strategies

- Maximize use of existing facilities
 - Currently limited common use gates/tic counter
 - Existing airline agreement expiring
 - New airline agreement will provide opportunities for common use facilities
 - Airlines motivated by economics – lower costs

Significance for Airport Futures: potential capacity improvements through technology. Considered in facility requirements

Runways & Airspace Demand Management Strategies

- Congestion pricing – being discussed by FAA for congested East Coast airports
- Reregulation of airlines

Runways & Airspace Demand Management Strategies

Significance for Airport Futures

- Congestion pricing may be a tool in the future to manage demand rather than to build new facilities
- Re-regulation – might “solve” congestion

Technology Changes

- E-ticketing, Internet check-in, off-airport check-in,
- quick pay parking, parking guidance,
- satellite aircraft navigation, internet flight tracking for noise, precision runway monitoring (PRM)
- BOD meters for water quality monitoring

Significance for Airport Futures – potential capacity improvements through technology

5. PDX Capacity Enhancement Plan

FAA technical study of airfield and airspace capacity

- Phase I – Look at runway capacity as relates to future growth
- Phase II – look at Centralized and Decentralized

5. PDX Capacity Enhancement Plan

Significance for Airport Futures:



Will be used in alternatives analysis:

- **Good data on airfield capacity**
- **Good data on how decentralized and centralized operate with 2 or 3 parallel runways**

6. PDX Transportation Planning Program

- CUMP analysis
- Portland International Center NEPA Analysis
- Terminal Access Study
- Ultimate Terminal Capacity Study

Significance for Airport Futures:



A lot of traffic impact information to consider + traffic modeling to come.

7. PDX Noise Plan Update

- Called Part 150 Update
- 1983 (#7) – 3 updates
- Multi year process - \$1.2 Million
- Left no stone un-turned
- Extensive use of noise measurements other than annual average DNL measure

7. PDX Noise Plan Update

- Jets generally fly over the unpopulated river
- New satellite technology for navigation

Significance for Airport Futures:

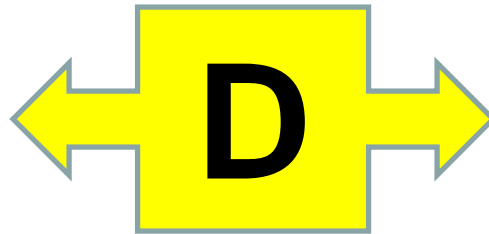
PDX has mature noise program



**Noise contours + other
noise metrics coming**

7. PDX Noise Plan Update

- Noise briefing available
 - Scalable - could be 1 to 8 hours



- **Noise contours + metrics for alternatives:**
 - **Current operations level – two runways (have)**
 - **2035 operations level – no 3rd runway**
 - **“500,000” operations level – 3rd runway scenario**

Alternatives Analysis

Start with three base alternatives:

- Centralized Alternative with 3rd Runway
- Decentralized Alternative with 3rd Runway
- No Build

Centralized Alternative



LEGEND

- EXISTING AIRFIELD PAVEMENT
- POSSIBLE FUTURE AIRFIELD PAVEMENT & TERMINAL ACCESS
- POSSIBLE ULTIMATE TERMINAL DEVELOPMENT
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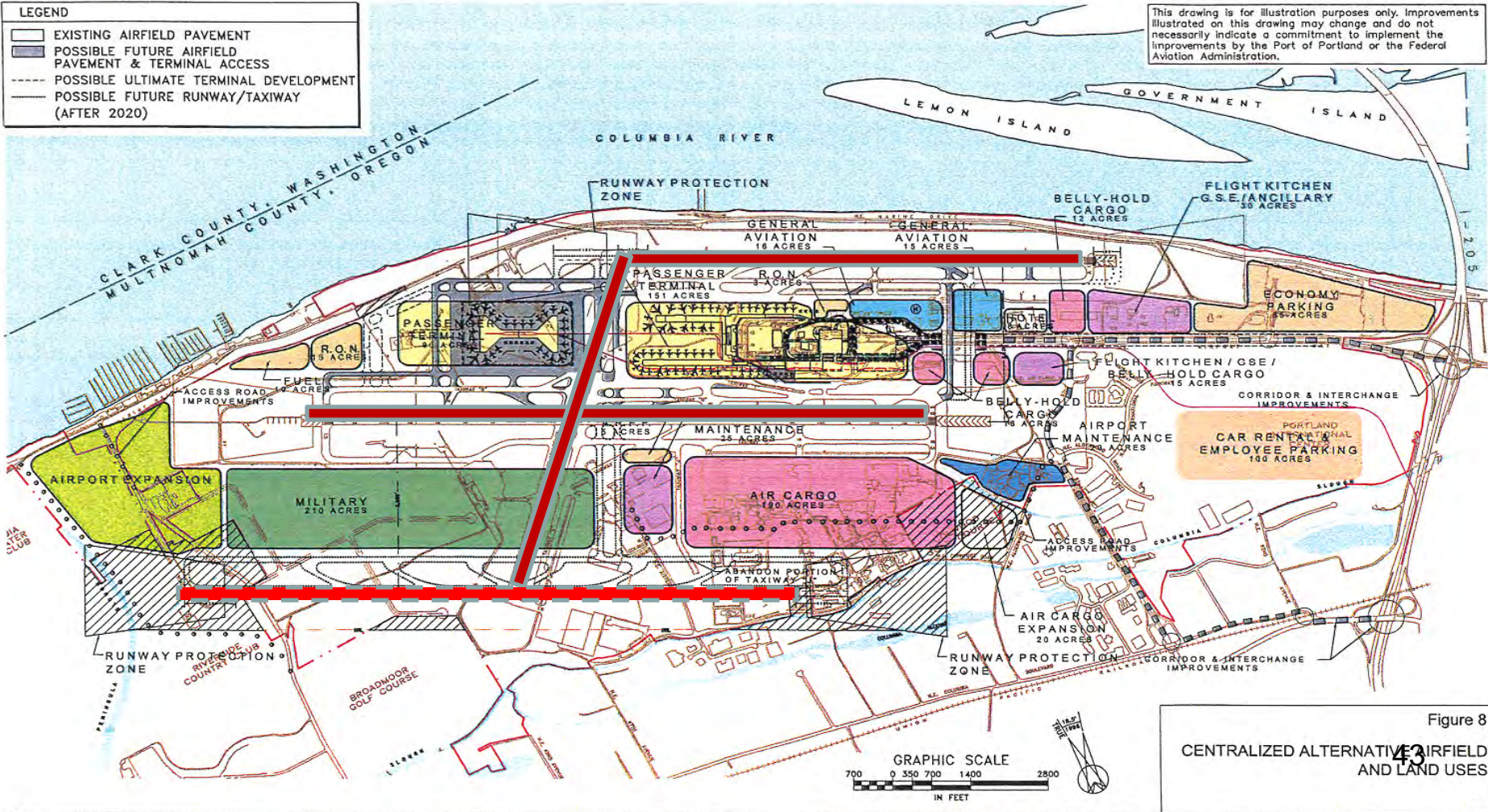


Figure 8
CENTRALIZED ALTERNATIVE AIRFIELD AND LAND USES

Alternatives Analysis

Variations on a Centralized Alternative:

- Centralized Alternative with 3rd Runway
 - Could be built with no 3rd runway planned
 - Could be built and military stays where they are
 - Could be built with no military at PDX

Decentralized Alternative



LEGEND

- EXISTING AIRFIELD PAVEMENT
- POSSIBLE FUTURE AIRFIELD PAVEMENT & TERMINAL ACCESS
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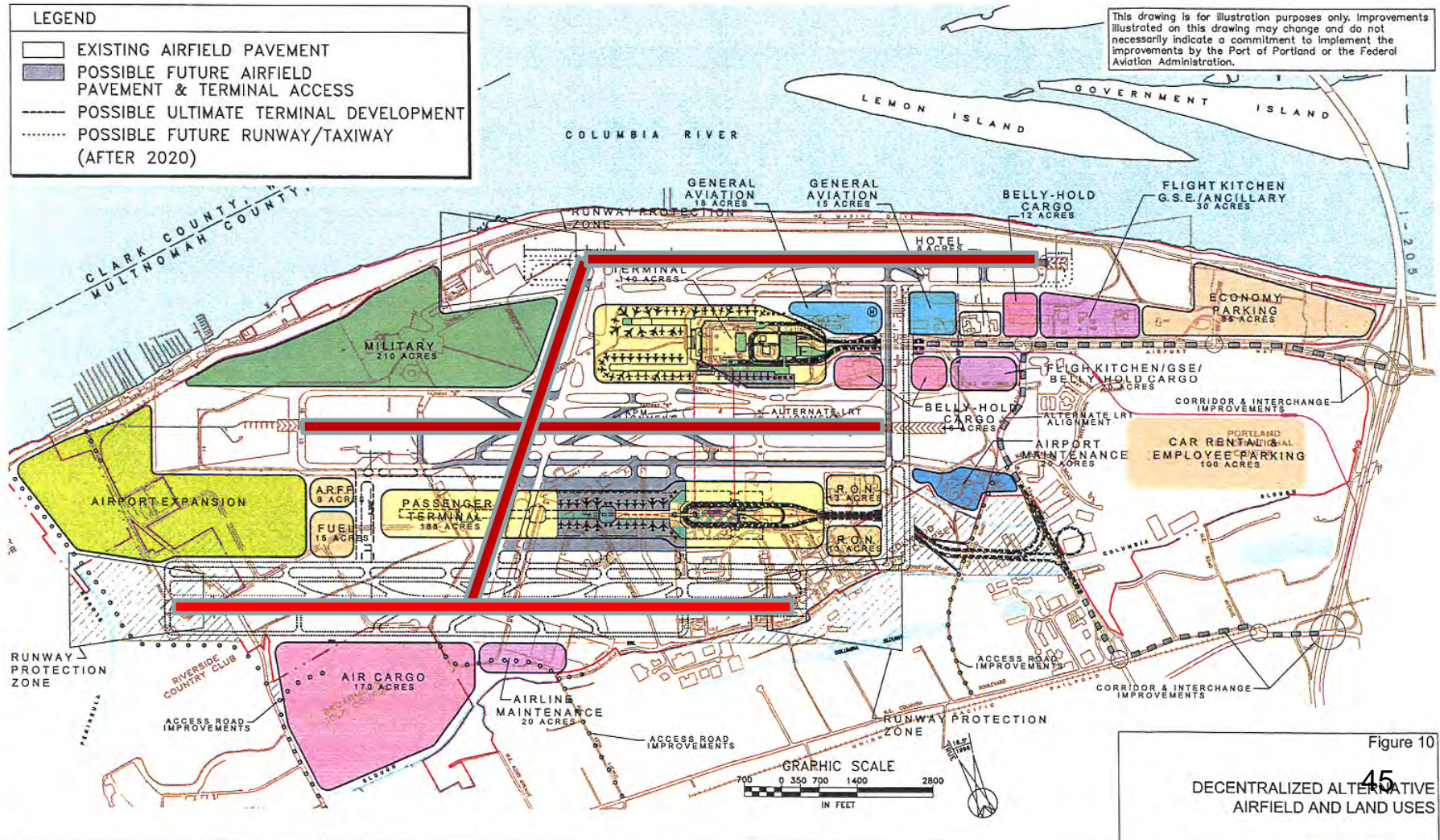


Figure 10
45
DECENTRALIZED ALTERNATIVE
AIRFIELD AND LAND USES

Alternatives Analysis

- Variations on a Decentralized core theme:
- Decentralized Alternative with 3rd Runway
 - Could be built with no 3rd runway planned
 - Could be built with no military at PDX

Major Alternatives

Centralized Terminal with 3rd Runway

- Could be built with no 3rd runway planned
- Could be built and military stays where they are
- Could be built with no military at PDX

Decentralized Terminal with 3rd Runway

- Could be built with no 3rd runway planned
- Could be built with no military at PDX