WSDOT Airport and Compatible Land Use Program

Washington State Department of Transportation

Airport and Compatible Land Use Program

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Presentation outline:

- Aviation and requirements of Washington state law
- Definitions: Compatible and incompatible land uses
- How to plan for compatibility
- Question-and-answer period

What benefits can aviation bring to Washington communities?

Airports and state law

- Airports are Essential Public Facilities
(RCW 36.70A.200)

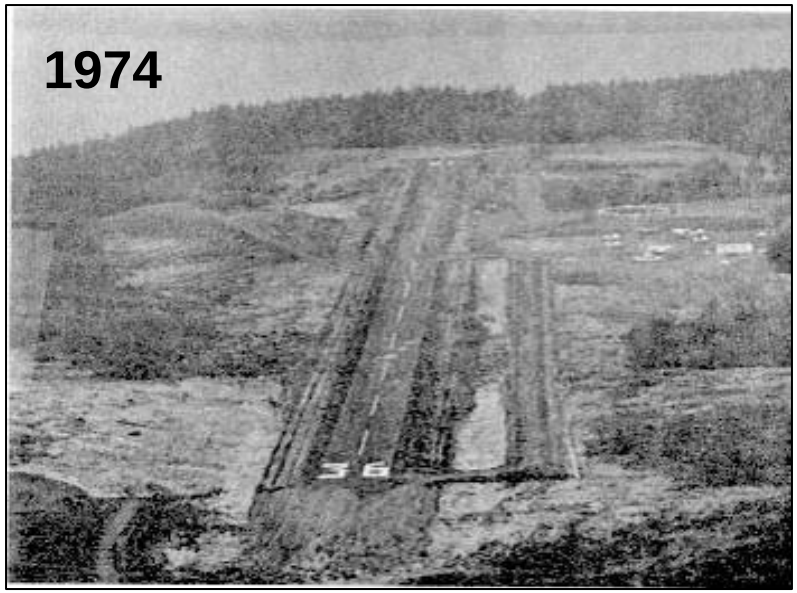
- Airports are part of the multi-modal transportation system
(RCW 36.70A.070)

- Towns, cities and counties must discourage incompatible land uses
(RCW 36.70.547, 36.70A.510; 35A.63.270; 35.60.250)

- Towns, cities and counties must consult with aviation interests
(RCW 36.70.547, 36.70A.510; 35A.63.270; 35.60.250)

- WSDOT Aviation must provide technical assistance
(RCW 36.70.547, 36.70A.510; 35A.63.270; 35.60.250)

Encroachment and Anacortes Airport



Anacortes Airport today

Consequences of conflict

- Degraded airport operations
- Impeded airport expansion
- Hampered economic development
- Reduced neighborhood quality of life

What is compatible land use?

Aviation-related

Industrial / commercial

Agriculture

What is incompatible land use?

Wildlife attractants

Height hazards

Residential development

Incompatible land uses

Daycares

Places of worship, temples, mosques, etc

Smoke or steam

Schools

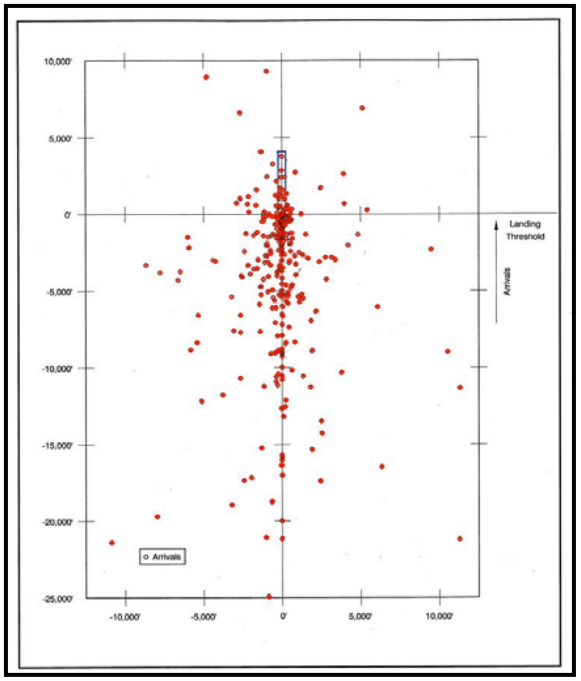
Hospitals and adult-care facilities

Flammable liquids, etc

Safety

Historic accident data

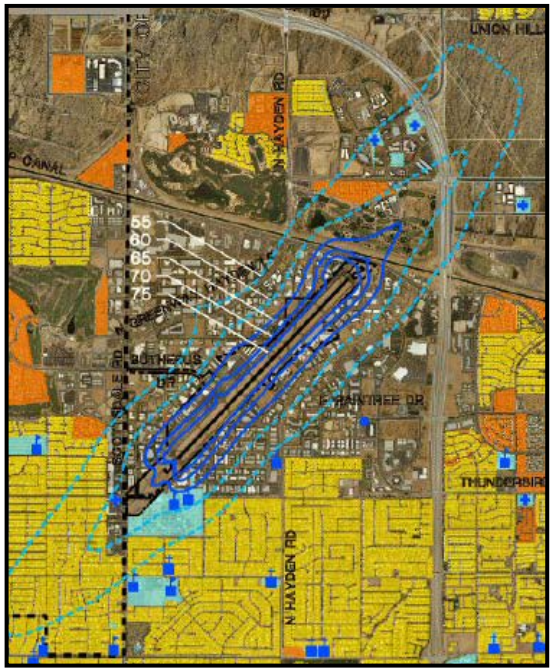
● *Denotes aircraft accidents*



Noise

Noise-sensitive uses

Noise Sensitivity



Height hazards

Naturally occurring and manmade objects

Let’s examine some very general airport environments

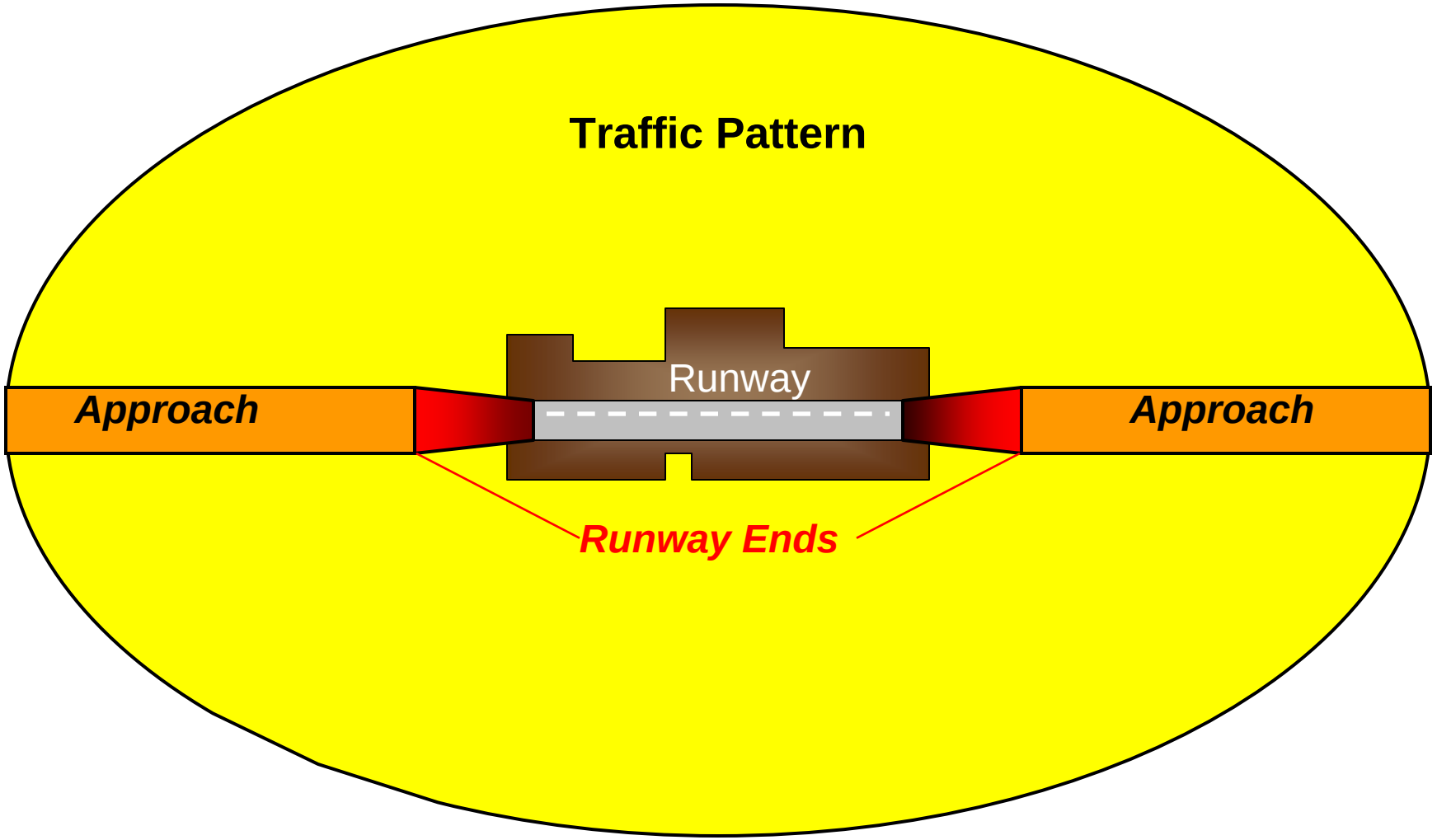


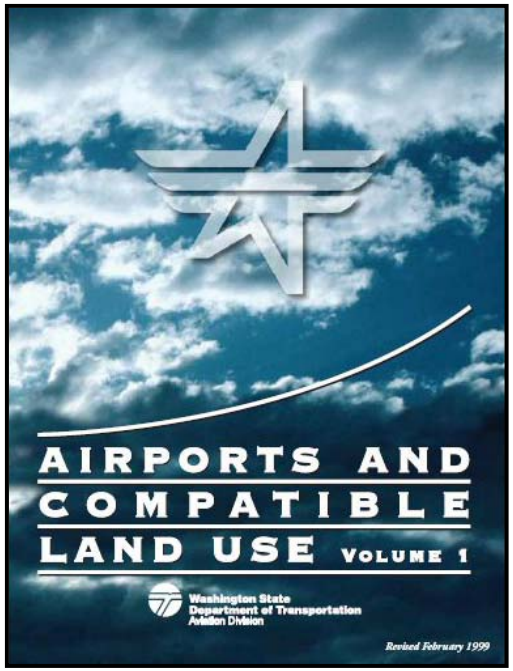
Table: General land-use acceptability

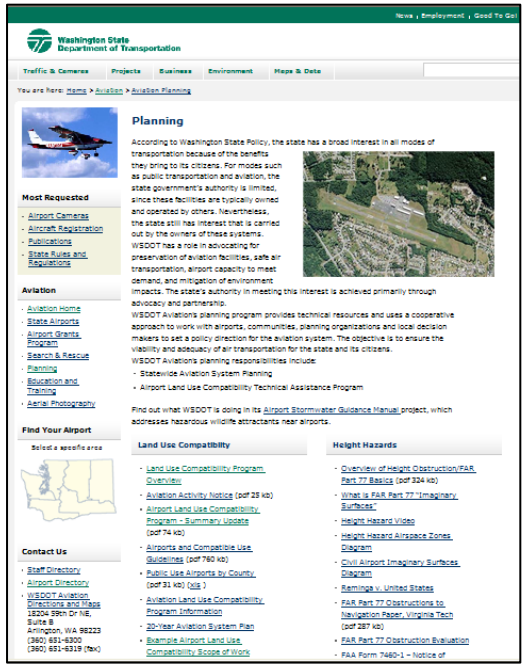
Typical land-use types	*Airport proximity*	*Near runway ends*	*Within runway approaches*	*Beneath traffic patterns*
	Agricultural	Compatible if not wildlife attractant	Compatible if not bird attractant	Compatible if not wildlife attractant
	Utilities/ transportation	Avoid	Compatible	Compatible
	Parks / recreation	Incompatible	Compatible if low intensity	Compatible
	Industrial	Compatible at low density	Compatible if does not produce airspace obstructions or have bulk amounts of hazardous materials	Compatible if does not produce airspace obstructions
	Retail / service uses	Incompatible	Compatible if low intensity	Compatible
	Offices	Incompatible	Compatible if low intensity	Compatible
	Light Industrial	Compatible at low intensity	Compatible if low intensity	Compatible
	Places of worship	Incompatible	Incompatible	Avoid
	Residential	Incompatible	Incompatible	Incompatible
	Children's schools	Incompatible	Incompatible	Incompatible
	Hospitals / nursing homes	Incompatible	Incompatible	Incompatible

Washington's Airport Land Use Compatibility Program

1999 guidelines and Web site resources:

- Historic perspective
- Process
- Tools
- Strategies
- Worksheets
- Consultation process
- Flexibility





WSDOT's land use compatibility process

Step 1: Getting started and gathering data

Historic accident data

FAR Part 77 Airspace Surfaces

Traffic pattern

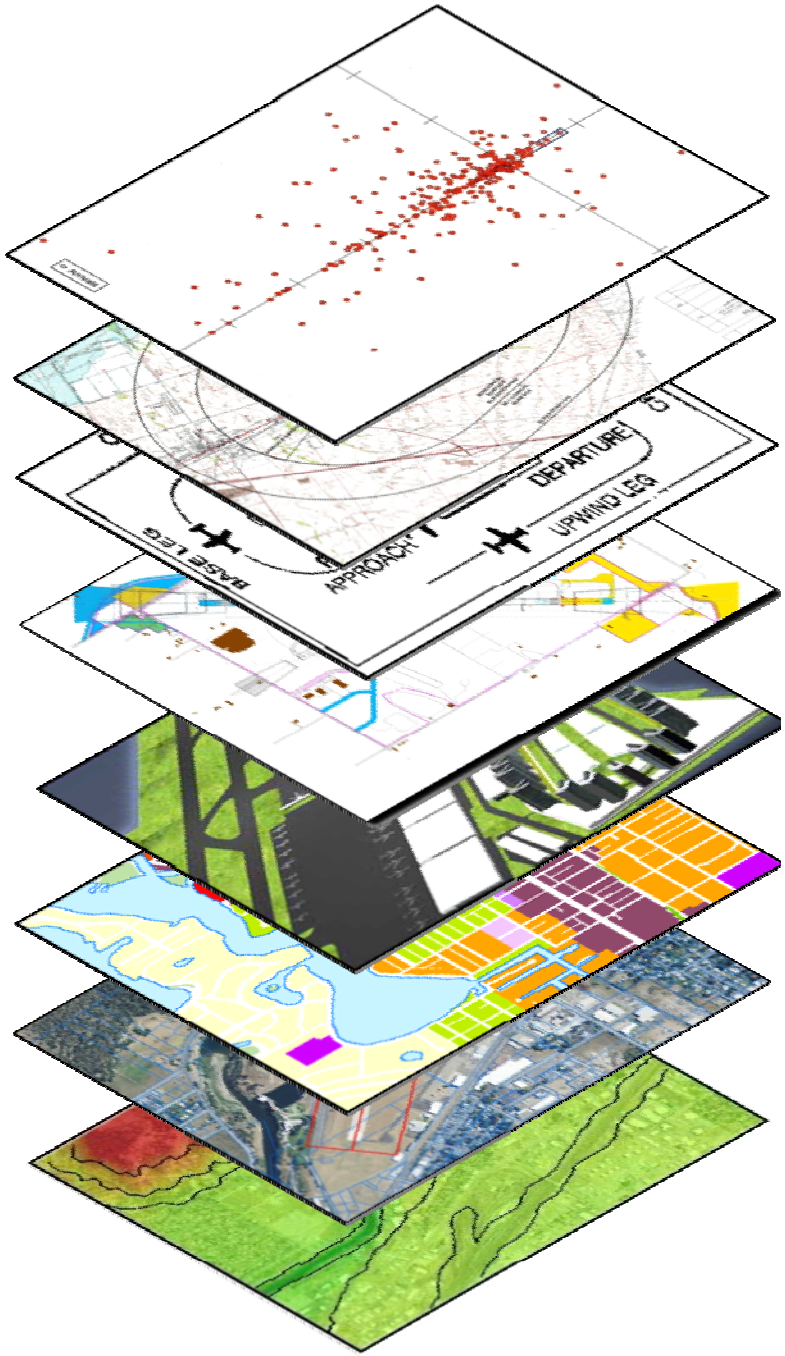
Airport master plan and airport layout plan

Community comprehensive plan

Existing land uses

Parcel layer

Topography



WSDOT's land use compatibility process

Step 1: Getting Started and Gathering Data

Step 2: Delineate the Airport Influence Area

Step 3: Identify Compatibility Concerns

Step 4: Adopt and Implement the Policies

Step 5: Identify Tools and Adopt Regulations

Step 1: Getting started and gathering data

Description - *Conduct preliminary work needed to initiate the compatibility planning process*

- Contact WSDOT Aviation for a preliminary consultation .
- Identify your jurisdiction's responsibilities.
- Identify stakeholders.
- Prepare public participation plan.
- Gather airport information and community data
  - Airport Master Plan and Layout Plan
  - Airport facilities, services and activities
  - Interviews with airport managers and pilots
- Gather existing land use constraint maps and parcel information.
- Gather comprehensive plans and implementation regulations.

Step 2: Delineate the airport influence area

Description - *Define the area you need to consider for land use planning*

- Airport influence area
- Aircraft operations and use
- Aircraft traffic pattern
- Overflight impacts
- Airspace impacts
- Safety impacts
- Existing land use impacts on the airport
- Airport’s impacts on surrounding land uses

Definition of airport influence area

- "Airport influence area" means the area adjacent to a public use airport that can affect or be affected by airports and aircraft operations."
- This sphere of influence is contained within airport traffic patterns, aircraft over flight and safety areas, and airspace surfaces critical for air navigation addressed under chapter 14.12 RCW and Federal Aviation Regulations (FAR) Part 77.
- The airport influence area is used to identify the geographic area that should be considered during the airport land use compatibility planning process.
- "Airport influence area" includes terrestrial land uses and the navigable airspace necessary to address land use compatibility adjacent to airports.

Step 3: Identify compatibility concerns

Description - *Examine the level of compatibility in your community.*

- Evaluate the land use character of the airport influence area.
- Evaluate land use compatibility features.
- What potential compatibility conflicts are on the horizon?
- Determine compatibility concerns need to be addressed.

Step 4: Develop compatibility policies

Definition - *Examine the various policy and regulatory strategies available to pursue airport land use compatibility and amend comprehensive plans*

- Identify compatible land use adjacent to airports.
- What does it mean to discourage incompatible land uses?
- What compatibility policies are already in place?
- Identify airport facilities and support facilities in the comprehensive plan.
- What new comprehensive plan policies are needed?

What should a comprehensive plan include?

Ideally:

- A map identifying the airport influence area
- Narrative report regarding the airport
  - Description of the airport facilities and operations, existing and future
  - Identify the role of airport/s in local and regional economic development
  - Its role in the Washington State System Plan
- Policies:
  - Discourage incompatible development
  - Recognize the airport as an Essential Public Facility
  - Identify and protect Part 77 Imaginary Airspace Surfaces
  - Promote compatible uses: aviation-related, light industrial, commercial or agriculture
  - References in transportation and capital facilities elements
  - Levels of service

Step 5: Implement the strategies

Description - *What Implementation measures and strategies are needed?*

- Identify and adopt strategies that can be used to respond to compatibility planning challenges.
- Identify zoning measures to implement the comprehensive plan.
- Designate compatible land uses on the zoning map.
- What actions are necessary to ensure continued implementation of the policies?
- Review policies and development regulations on a regular base to monitor progress.

Land use strategies and implementation tools

Direct zoning
Airport overlay ordinance
Direct zoning and airport overlay
Mixed use zoning
Infill development
Transfer of development rights

Airport stormwater design manual
Control airspace obstructions
Limit high-intensity uses
Fly-friendly procedures
Wireless communication ordinance
Wind energy systems ordinance

In review:

✓Aviation and requirements of Washington state law

✓Definitions: Compatible and incompatible land uses

✓Compatibility exercise

✓WSDOT’s 5 step process

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