

Wisconsin Aviation Conference 67

AIP Funding Criteria for Multiple Runways

September 21, 2023



Number of Runways	Airports	Percentage
1	15	17%
2	61	70%
3	8	9%
4	2	2%
5	1	1%





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1	15	17%
2	61	70%
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5	1	1%

87 Airports 174 Runways







Number of Runways	Runway Mix	Airports	Percentage
4	1 Paved	14	16%
1	1 Turf	1	1%
	2 Paved	37	43%
2	2 Turf	1	1%
	1 Paved, 1 Turf	23	26%
	3 Paved	3	3%
0	2 Paved, 1 Turf	3	3%
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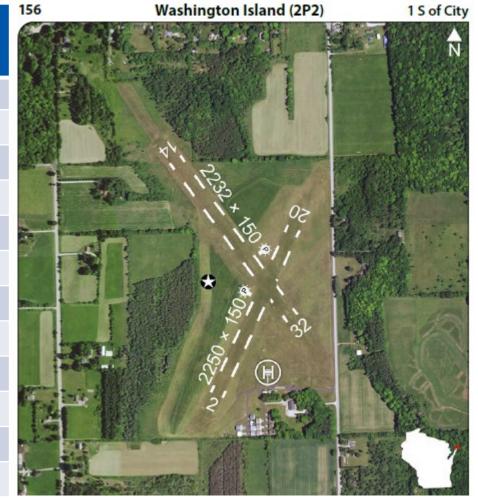
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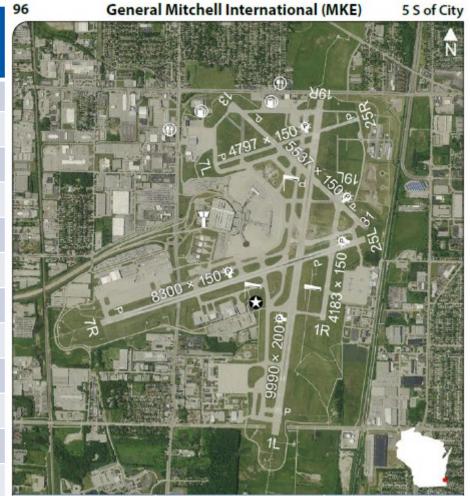
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 - Published September 2014
 - Revised February 2019
 - Appendix G, Runway Projects
 - Establishes runway project eligibility



U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

ORDER 5100.38D, Change 1

National Policy

Effective date: February 26, 2019

SUBJ: Airport Improvement Program Handbook

1. PURPOSE.

This Handbook provides guidance and sets forth policy and procedures used in the administration of the Airport Improvement Program.







AIP Funding Justification for Runway Projects

- FAA Order 5100.38D, Airport Improvement Program Handbook
 - Published September 2014
 - Revised February 2019
 - Appendix G, Runway Projects
 - Establishes runway project "eligibility"
- FAA Advisory Circular 150/5000-17, Critical Aircraft and Regular Use Determination
 - Published June 2017
 - Establishes key considerations for runway project justification



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Advisory Circular

Subject: Critical Aircraft and Regular Use Determination Date: 6/20/2017 Initiated By: APP-400 AC No: 150/5000-17

1 Purpose.

• This advisory circular (AC) defines the term Critical Aircraft and provides guidance on the use of Critical Aircraft in facility planning and design studies, and related FAA decision making, for federally obligated airports. Specifically, this AC establishes a common, uniform definition of Critical Aircraft for all deliberations of the FAA Office of Airports, inclusive of planning and environmental, design and engineering, and financial decision making regarding airport development. The Critical Aircraft determination is a key consideration in FAA decision making on project justification. However, this AC does not establish project justification for Federal Airport Improvement Program (AIP) funding. Refer to FAA Order 5100.38, Airport Improvement Program Handbook, for specifics on justifying a project for AIP funding.



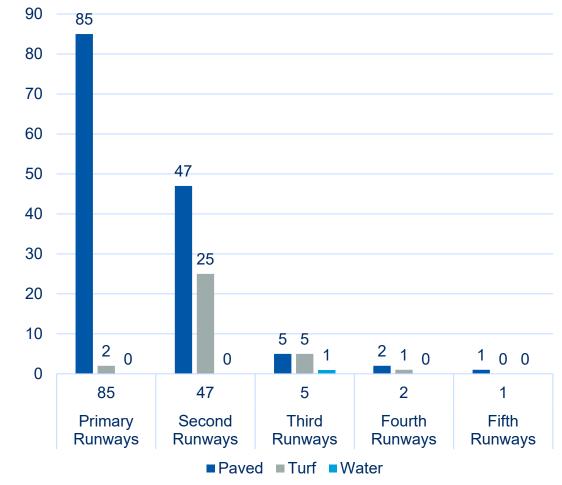






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 - Appendix G, Runway Projects
 - A single runway (the "primary runway") is generally eligible for AIP funding.

Wisconsin NPIAS Runways





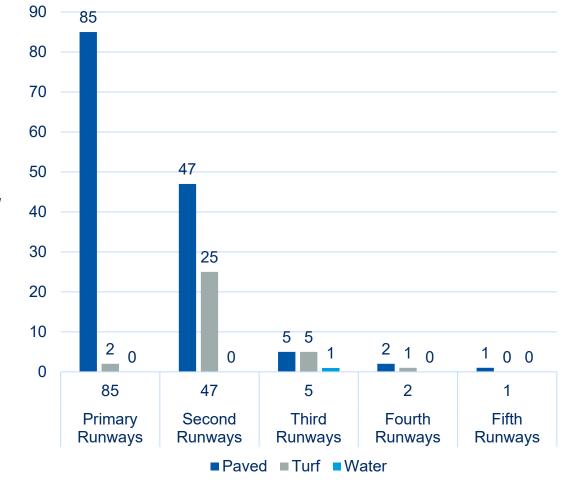






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 - A single runway (the "primary runway") is generally eligible for AIP funding.
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Wisconsin NPIAS Runways





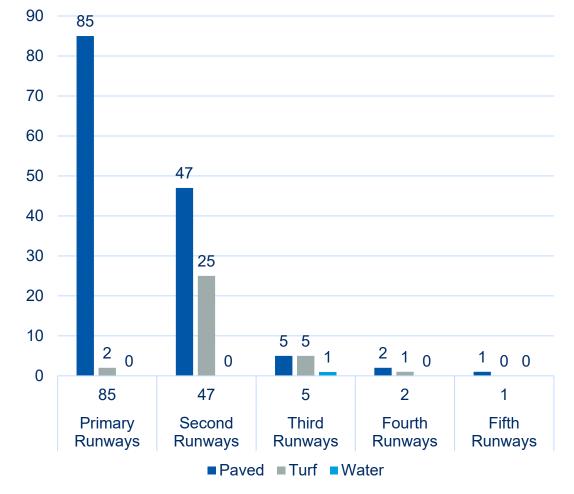






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 - A single runway (the "primary runway") is generally eligible for AIP funding.
 - The ADO cannot fund projects for a second runway <u>unless</u> it has made a specific determination that one or more "crosswind" or "secondary" runways are justified.
 - A runway that is not a primary runway, a secondary runway, or a crosswind runway is considered an "additional runway".

Wisconsin NPIAS Runways



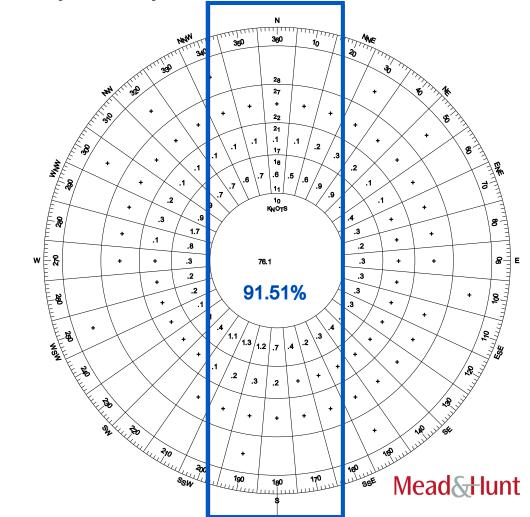








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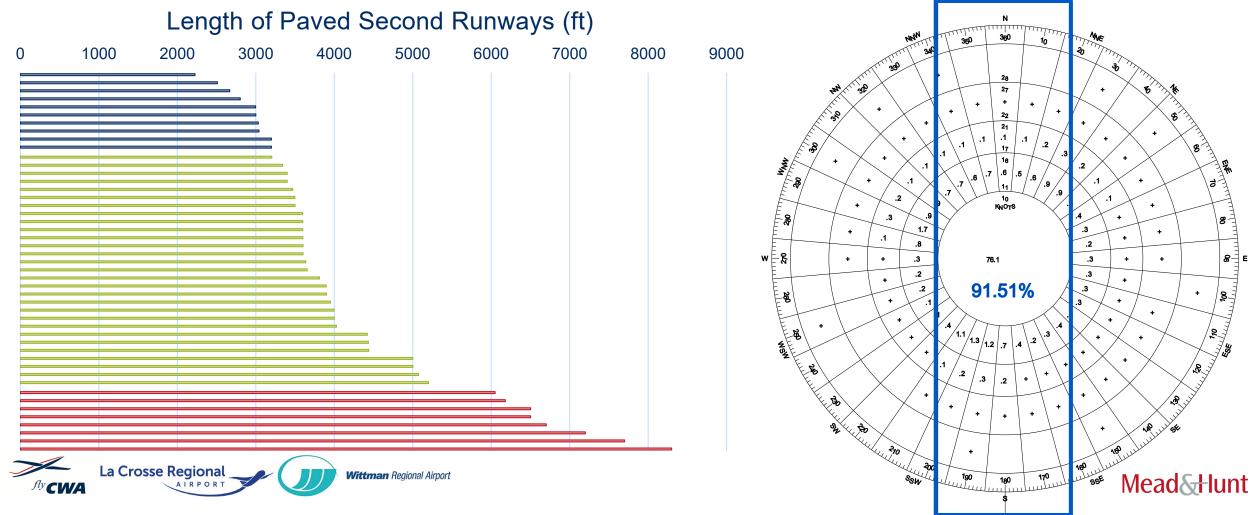




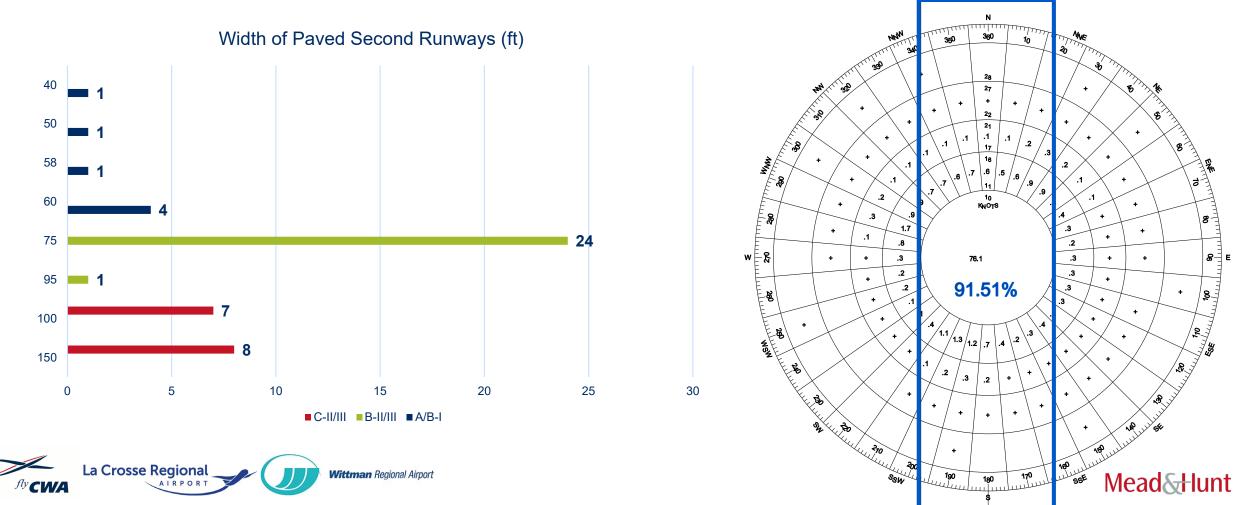




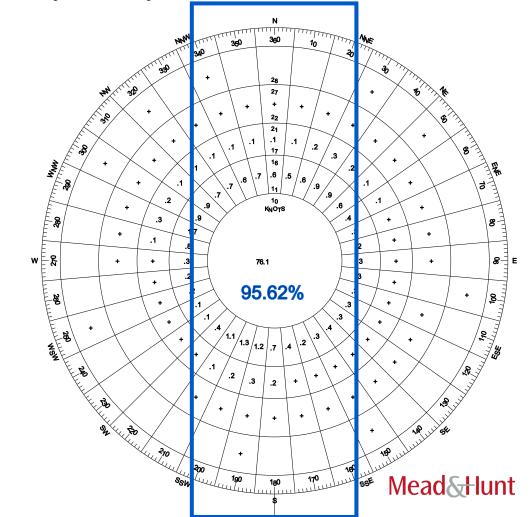
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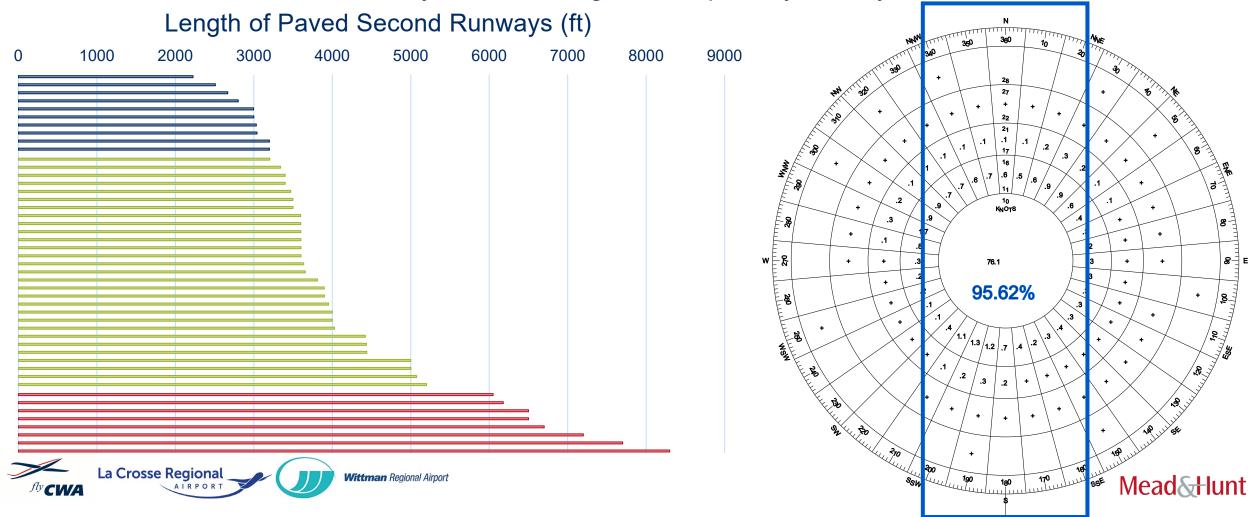




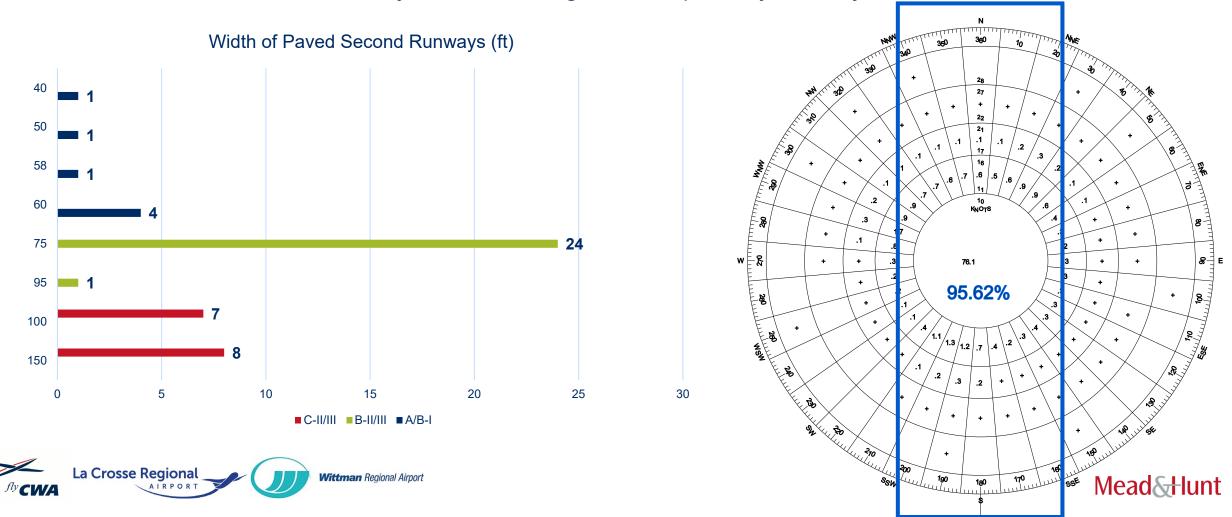




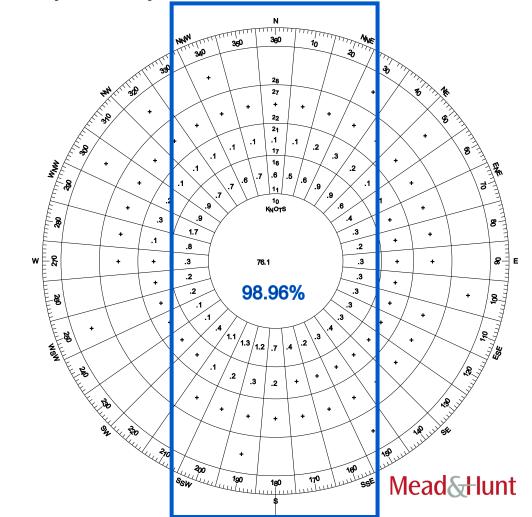
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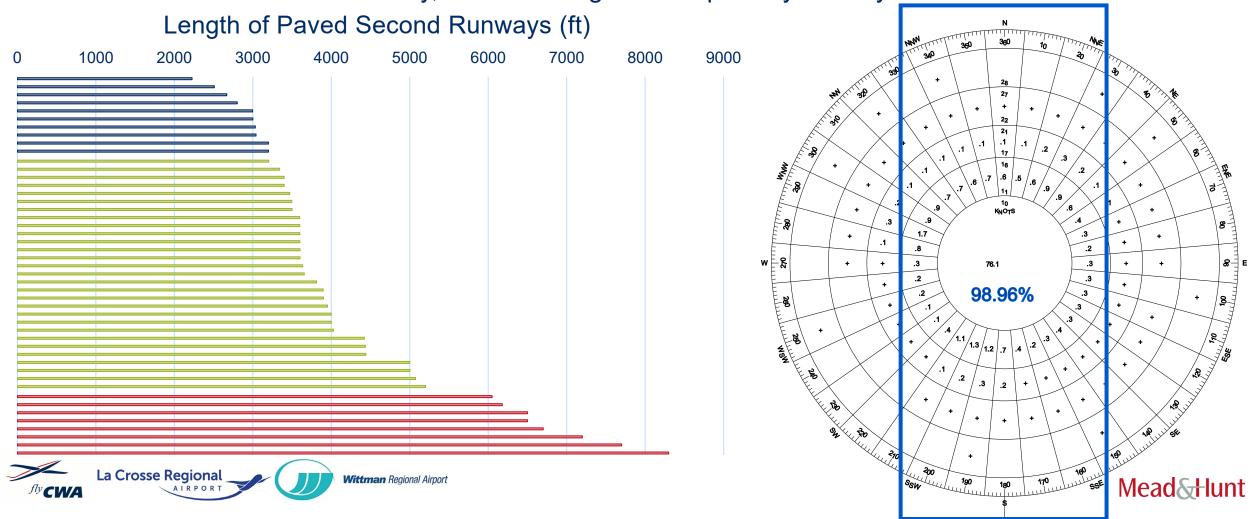






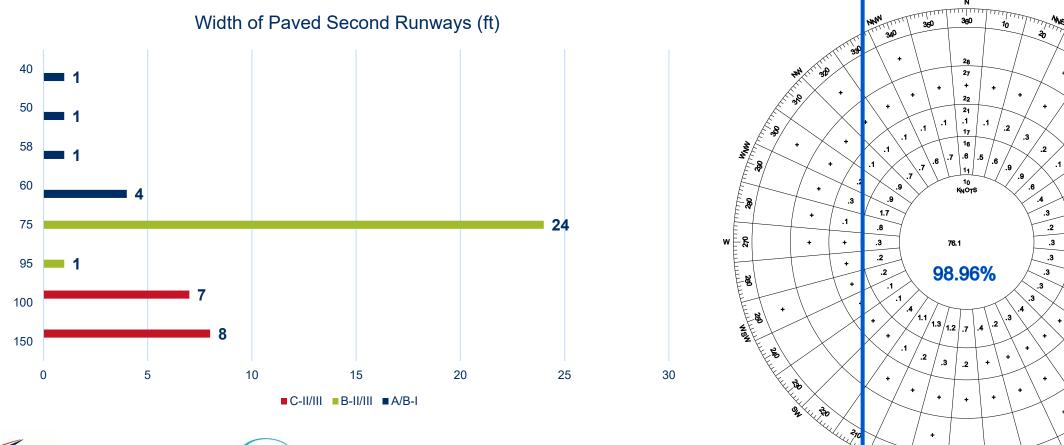


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- For first crosswind runway, wind coverage on the primary runway < 95%.

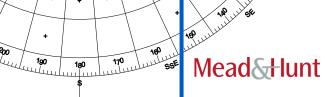












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- FAA Order 5100.38D, Airport Improvement Program Handbook
 - For first crosswind runway, wind coverage on the primary runway < 95%.
 - For second crosswind runway:
 - Wind coverage on the primary runway < 95%, and
 - First crosswind runway operates at 60% or more annual capacity.





- FAA Order 5100.38D, Airport Improvement Program Handbook
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 - For second crosswind runway:
 - Wind coverage on the primary runway < 95%, and
 - First crosswind runway operates at 60% or more annual capacity.





What is a "Crosswind Runway"?

- FAA Order 5100.38D, Airport Improvement Program Handbook
 - For first crosswind runway, wind coverage on the primary runway < 95%.
 - For second crosswind runway:
 - Wind coverage on the primary runway < 95%, and
 - First crosswind runway operates at 60% or more annual capacity.
- FAA Advisory Circular 150/5000-17, Critical Aircraft and Regular Use Determination
 - Both of the following two criteria are met:
 - Wind coverage on the primary runway < 95%, and
 - "Regular use" requirements are met for the aircraft that would use the crosswind runway.

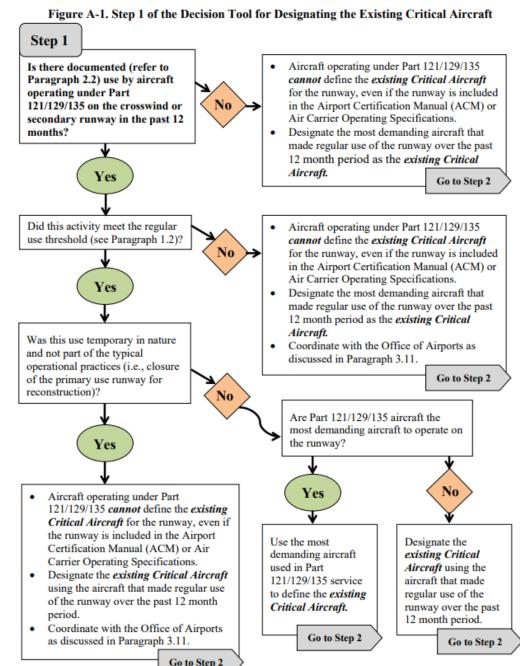




What is "Regular Use"?

- FAA Advisory Circular 150/5000-17, Critical Aircraft and Regular Use Determination
 - Regular use generally means 500 operations
 - It is much easier to establish regular use for a primary runway than a second runway
 - Appendix A, Decision Tool for Designating the Critical Aircraft on a Crosswind or Secondary Runway

APPENDIX A. DECISION TOOL FOR DESIGNATING THE CRITICAL AIRCRAFT ON A CROSSWIND OR SECONDARY RUNWAY







What is a "Secondary Runway"?

- FAA Order 5100.38D, Airport Improvement Program Handbook
 - It is not a crosswind runway.
 - One of the following two criteria are met:
 - The primary runway is operating at 60% or more of its annual capacity, or
 - The FAA has made a specific determination that the runway is required for operation of the airfield.
- FAA Advisory Circular 150/5000-17, Critical Aircraft Regular Use Determination
 - Does not define this term.





• Figure out your best case for why your runway is "required for operation of the airfield."





- Figure out your best case for why your runway is "required for operation of the airfield."
- Meet with FAA early/often.



- Figure out your best case for why your runway is "required for operation of the airfield."
- Meet with FAA early/often.
- Marshal information supporting project need.
 - Operations on the runway.
 - Users of the runway.
 - Unique characteristics of typical activity on the runway.
 - Importance of the runway to the local community and regional/national airport system.





- Figure out your best case for why your runway is "required for operation of the airfield."
- Meet with FAA early/often.
- Marshal information supporting project need.
 - Operations on the runway.
 - Users of the runway.
 - Unique characteristics of typical activity on the runway.
 - Importance of the runway to the local community and regional/national airport system.
- Document, document, document.





- Craft an argument that is:
 - Unique.
 - Logical.
 - Creative.
 - Clear.
 - Concise.
 - Persuasive.



- Craft an argument that is:
 - Unique.
 - Logical.
 - Creative.
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- Avoid making assumptions about FAA expectations.





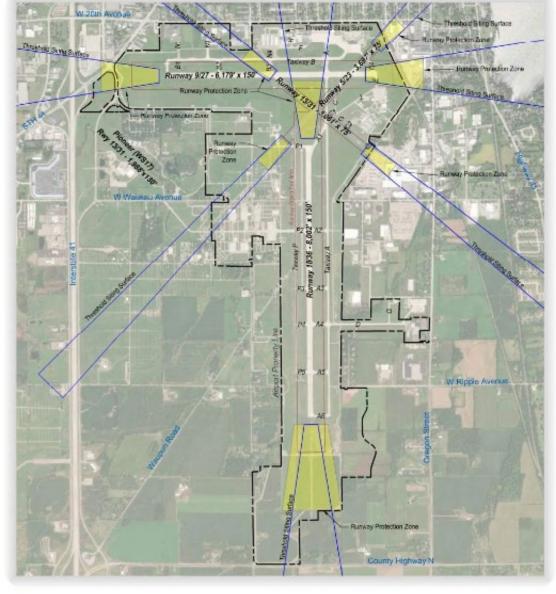
- Craft an argument that is:
 - Unique.
 - Logical.
 - Creative.
 - Clear.
 - Concise.
 - Persuasive.
- Avoid making assumptions about FAA expectations.
- Make FAA's decision easy.





Wittman Regional Airport (OSH)

- Four runways
 - 18/36 is the primary runway
 - 8,002' x 150' with ILS to RW 36
 - Regular use by C-III aircraft
 - < 95% wind coverage for A/B-I (small piston) aircraft
 - > 95% wind coverage for all larger aircraft
 - 9/27 is the crosswind/secondary runway
 - 6,179'x 150' with only GPS approaches
 - Currently built to same C-III standards as 18/36
 - Regular use by B-II aircraft
 - Secondary runway status necessary to maintain C-III standards
 - 5/23 and 13/31 are additional runways













Wittman Regional Airport (OSH)

- The case for 9/27: AirVenture.
 - Safety
 - Capacity
 - Simultaneous operations on both runways
 - IFR departures on 27
 - Diverse fleet mix
- Key supporting information
 - FAA Air Traffic Organization (ATO)
 - Experimental Aircraft Association (EAA)
 - Detailed documentation of scale and complexity





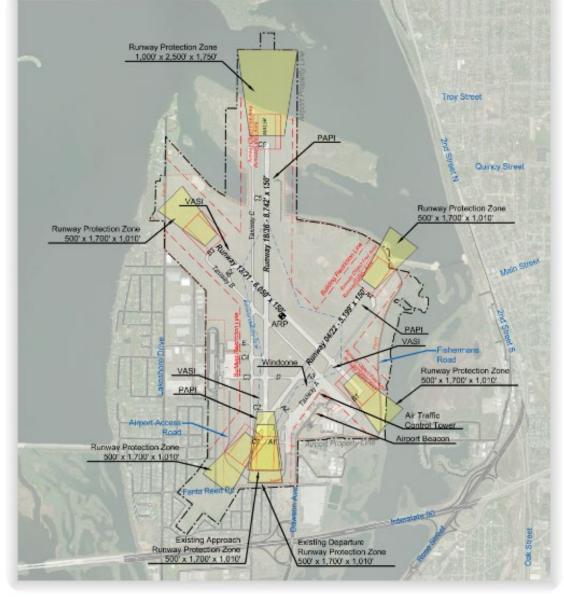




Wittman Regional Airport

La Crosse Regional Airport (LSE)

- Three runways
 - 18/36 is the primary runway
 - 8,742' x 150' with ILS to RW 18
 - Regular use by C-III aircraft
 - < 95% wind coverage for A/B-I (small piston) aircraft
 - > 95% wind coverage for all larger aircraft
 - 13/31 is the crosswind/secondary runway
 - 6,050'x 150' with only GPS approaches
 - Currently built to same C-III standards as 18/36
 - Regular use by B-II aircraft
 - Secondary runway status necessary to maintain C-III standards
 - 4/22 is an additional runway







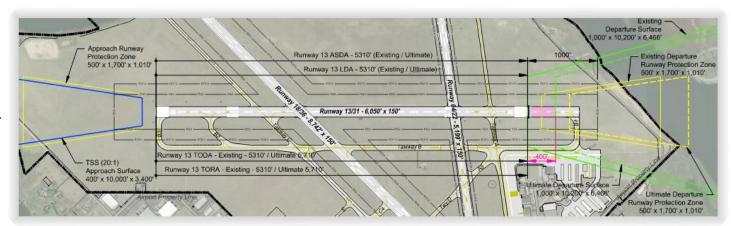






La Crosse Regional Airport (LSE)

- The case for 13/31
 - Operational use
 - 500+ operations by C-III some years
 - Increased use post-4/22 closure
 - Runway condition codes and takeoff minimums
 - Based aircraft need
 - Gulfstreams with low crosswind components
 - Cost/benefit
 - Rehabilitation is \$5.5 million
 - Reconfiguration to B-II exceeds \$10 million
 - Wind coverage
 - Prevailing winds favor 13/31
 - Approach/departure procedures
 - Public input
 - U.S. Army support















Questions?

Ideas?

Thank you!