Introductions

- ITD Aeronautics Team
- Kimley-Horn Team
- InterVISTAS Team
- J-U-B Engineers Team
- Project Advisory Committee (PAC) Members
Agenda

- PAC Meeting No. 3 Highlights
- Aviation System Context
- Future System Performance
- Aviation System Costs
- Policy Analysis and Statewide Recommendations
- Economic Impact Analysis
- Value Added Aviation Benefits
- Documentation and Next Steps
**Status**

**Legend**
- Task complete
- Task in progress

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**PHASE 1**

**SYSTEM PLAN TASKS**
- TASK 1 - Scoping-Study Design
- TASK 2 - Public Consultation and Project Advisory Committee (PAC)
- TASK 3 - System Goals and Performance Measurements
- TASK 4 - State, Regional, and Local Airport Issues
- TASK 5 - Inventory of System Condition and Performance
- TASK 6 - Conduct Role Analysis
- TASK 7 - Develop Aviation Forecasts
- TASK 8 - Analyze System Adequacy

**ECONOMIC IMPACT TASKS**
- TASK 1 - Conduct Data Collection and Surveys for Direct/First Round Impacts
- TASK 2 - Conduct Data Collection and Surveys for Indirect/First Round Impacts
- TASK 3 - Estimate First Round Impacts (Direct and Indirect)

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**PHASE 2**

**SYSTEM PLAN TASKS**
- TASK 2 - Public Consultation and Project Advisory Committee (PAC)
- TASK 9 - System Requirements
- TASK 10 - Environmental Considerations
- TASK 11 - Evaluate Alternatives
- TASK 12 - Recommended System of Airports
- TASK 13 - Inter-Modal Integration and Airport Access
- TASK 14 - Policy Analysis and Investigation Recommendations
- TASK 15 - NPIAS Changes
- TASK 16 - Deliverables - Documentation and Coordination

**ECONOMIC IMPACT TASKS**
- TASK 4 - Estimate Second Round Impacts (Induced Impacts)
- TASK 5 - Estimate Total Annual Economic Impacts
- TASK 6 - Value-Added Business Benefits
- TASK 7 - Tax Impacts
- TASK 8 - Qualitative Benefits
- TASK 9 - Timeline Economic Impact Changes
- TASK 10 - Documentation and Coordination

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**PHASE 3**

**ECONOMIC IMPACT TASKS**
- TASK 15 - Implement Plan, Priorities, and Justification
- TASK 17 - Deliverables - Documentation and Coordination
PAC Meeting No. 3
Highlights

IDAHO AIRPORT SYSTEM PLAN UPDATE
& AIRPORT ECONOMIC IMPACT ANALYSIS UPDATE
PAC Mtg. 3 Summary

- Aviation trends
- Aviation forecasts
- Existing system adequacy analysis
- Preliminary economic impact analysis results
- Key PAC mtg. 3 takeaways presented on next slides
Aviation Trends: Commercial Service

- Airline industry consolidation and restructuring
- Continued capacity discipline
- Emergence of ancillary airline revenues

Key Factors Influencing Commercial Service

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended validity of student pilot certificates – more potential pilots for commercial carriers</td>
<td>Second in Command mandated to obtain an Airline Transport Pilot (ATP) certificate (“1,500-hour rule”)</td>
</tr>
<tr>
<td>Expansion of air traffic control and emergence of new technologies to control airspace</td>
<td>U.S. Commercial Pilot population continues to slowly decline</td>
</tr>
<tr>
<td>Commercial aircraft fleet anticipated to grow at a rate of 0.9 percent CAGR due to growing demands</td>
<td>Relatively low oil prices, with slow declines until 2021 before gradually increasing through the forecast horizon</td>
</tr>
</tbody>
</table>
# Commercial Service Forecasts

## Idaho Commercial Service Airport Forecasts (2017 – 2037)

<table>
<thead>
<tr>
<th>Forecast Element</th>
<th>2017</th>
<th>2022</th>
<th>2027</th>
<th>2037</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enplanements</td>
<td>2,187,301</td>
<td>2,750,115</td>
<td>3,013,298</td>
<td>3,642,712</td>
<td>2.6%</td>
</tr>
<tr>
<td>Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Service</td>
<td>99,437</td>
<td>107,891</td>
<td>114,120</td>
<td>127,408</td>
<td>1.2%</td>
</tr>
<tr>
<td>General Aviation (GA)</td>
<td>167,673</td>
<td>196,088</td>
<td>199,939</td>
<td>208,569</td>
<td>1.1%</td>
</tr>
<tr>
<td>Military</td>
<td>12,566</td>
<td>12,035</td>
<td>12,062</td>
<td>12,132</td>
<td>-0.2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>280,904</td>
<td>292,478</td>
<td>303,223</td>
<td>329,251</td>
<td>0.8%</td>
</tr>
<tr>
<td>Based Aircraft</td>
<td>922</td>
<td>960</td>
<td>1,005</td>
<td>1,081</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Source: FAA TAF, February 22, 2019

- Boise Air Terminal/Gowen Field (BOI)
- Idaho Falls Regional (IDA)
- Pocatello Regional (PIC)
- Joslin Field/Magic Valley Regional (TWF)
- Friedman Memorial (SUN)
- Lewiston-Nez Perce (LWS)
- Pullman-Moscow Regional (PUW)
Aviation Trends: GA

- Modest growth of new GA aircraft
- Constrained growth of U.S. GA fleet
- Minimal growth of GA activity

Key Factors Influencing GA

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheaper used aircraft costs (16 percent decrease between 2016 – 2017)</td>
<td>Rising new aircraft costs (3.4 – 6.5 percent annual growth since 2008)</td>
</tr>
<tr>
<td>Growth of corporate/business aviation</td>
<td>Reduction in single-engine fleets (-1 percent annually over the forecast horizon)</td>
</tr>
<tr>
<td>New opportunities for GA operations concurrent with reductions in scheduled air carrier services</td>
<td>Minimal GA traffic growth at towered facilities through 2038 (0.3 percent)</td>
</tr>
</tbody>
</table>
GA Airport Forecasts

<table>
<thead>
<tr>
<th>Forecast Element</th>
<th>2017</th>
<th>2037</th>
<th>CAGR</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA Operations</td>
<td>834,625</td>
<td>952,824</td>
<td>0.66%</td>
<td>ARC Category Growth Rate</td>
</tr>
<tr>
<td>Based Aircraft</td>
<td>2,308</td>
<td>2,820</td>
<td>1.0%</td>
<td>Based Aircraft By Type</td>
</tr>
</tbody>
</table>

Based Aircraft Forecasts

```
Year
2017 2022 2027 2037
Based Aircraft
2300 2500 2800 3000
```

GA Operations Forecasts

```
Projection Year
2017 2022 2027 2037
GA Operations
830,000 850,000 870,000 890,000 910,000 930,000 950,000 970,000
```

General Aviation Opt. 2
GA Forecasts: IASP versus TAF

- Only applies to NPIAS airports

<table>
<thead>
<tr>
<th>Forecast Element</th>
<th>IASP CAGR</th>
<th>TAF CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA Operations</td>
<td>0.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Based Aircraft</td>
<td>1.0%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

**Based Aircraft: IASP versus TAF**

- Year 2017: 2,000
- Year 2022: 2,100
- Year 2027: 2,200
- Year 2037: 2,300

**GA Operations: IASP versus TAF**

- Year 2017: 690,000
- Year 2022: 740,000
- Year 2027: 790,000
- Year 2037: 840,000
Existing System Adequacy Analysis

Key Takeaways

84% of Idaho’s population has access to an airport within a 30-minute drive time

Low percent of NPIAS airports meeting FAA taxiway design standards
Aviation System Context

IASP Tasks 10 and 13
Intermodal Connectivity

- Identified 25 airports with no multimodal connectivity
- Growth in Treasure Valley is a key area of concern
  - Rapid population growth may stress transportation infrastructure including BOI and roadway networks
  - Proliferation of rideshare companies leads to increase in vehicular traffic, congestion at airport curb fronts, reduction in airport parking revenues, and inequitable Americans with Disabilities Act (ADA) accessibility
- Emphasizes the importance of airports’ inclusion in other modal and comprehensive planning efforts
Intermodal Connectivity

- All airports have access to at least one major roadway within 13 miles (excluding Thomas Creek because it’s only accessible by air)
Environmental Considerations

No. of Airports Reporting Concerns

- Wetlands: 49 None, 14 Moderate, 2 Significant, 10 N/P
- Floodplains: 53 None, 10 Moderate, 2 Significant, 10 N/P
- Noise: 54 None, 9 Moderate, 2 Significant, 10 N/P
- Endangered Species: 58 None, 7 Moderate, 10 Significant
- Water Quality: 60 None, 4 Moderate, 10 Significant
- Solid Waste: 62 None, 3 Moderate, 10 Significant
- Environmental Justice: 63 None, 12 Significant

Silver Creek Preserve, Idaho
69% publicly-owned land

- USFS National Forests, 12
- USFS National Recreation Areas, 2
- USFS NWRs, 7
- NPS National Parks, Trails, Reserves, Monuments, and Historic Sites, 10
- Idaho State Parks and Trails, 27
- BLM Areas of Critical Environmental Concern, 2
- BLM National Conservation Areas, 1
- BLM Wilderness Study Areas, 40

No. of Major Public Lands by Managing Agency

U.S. DOT Section 4(f) Lands
Land Use Compatibility

- Land use compatibility guidelines limit activities on land adjacent to or near airports to protect airport operations and minimize people’s exposure to unacceptable levels of noise and safety hazards.
- Height restrictions on natural and manmade structures near airports protect navigable airspace.
- ITD Aviation has developed specific guidance to help airports and local planning officials understand airport land use compatibility and comply with federal and state obligations:
  - *Idaho Airport Land Use Guidelines* (updated July 2016)
Future System Performance & Recommendations

IASP Tasks 9, 12, and 16
Outside Influences

- Population growth
- Economic growth
- Tourism, recreation, and the Idaho backcountry
- Transportation projects
- Emerging technologies
- State issues and policies

Sources: U.S. Census Bureau, 2019; FAA Terminal Area Forecast (TAF), 2019; and U.S. Department of Transportation (DOT) Bureau of Transportation Statistics (BTS) Trans Stats, 2019
Future Role Analysis

- Evaluation of non-NPIAS airports
  - Included in the IASP Update
  - 10+ based aircraft
  - 30+ miles from nearest NPIAS airport

- Re-evaluation of current NPIAS airports based on current activity levels

<table>
<thead>
<tr>
<th>Airport</th>
<th>FAA ID</th>
<th>Current NPIAS Status</th>
<th>Current</th>
<th>Potential Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emmett Municipal</td>
<td>S78</td>
<td>Non-NPIAS</td>
<td>Utility</td>
<td>Local</td>
</tr>
<tr>
<td>Mud Lake/West Jefferson County</td>
<td>1U2</td>
<td></td>
<td>Utility</td>
<td>Basic</td>
</tr>
<tr>
<td>Buhl Municipal</td>
<td>UO3</td>
<td></td>
<td>Basic</td>
<td>Local</td>
</tr>
<tr>
<td>Challis</td>
<td>LLJ</td>
<td>NPIAS</td>
<td>Basic</td>
<td>Local</td>
</tr>
<tr>
<td>Kamiah Municipal</td>
<td>S73</td>
<td>Unclassified</td>
<td>Basic</td>
<td>Basic</td>
</tr>
</tbody>
</table>
Future System Performance

- Performance targets identified by percent of airports that should achieve each measure to optimally support aviation in the state
- Targets established with ITD Aeronautics and PAC input
Airports with Zoning for Height and Land Use Regulations

Recommendations

- Continue to work with airports and city/county planners to implement the Idaho Airport Compatible Land Use Guidelines
- Support the implementation of Idaho Code Section 67-6508(q)
- Include land use compatibility guidelines in scopes of work for small airport master plans/ALPs for non-NPIAS airports
Percent of Airports with Master Plans or ALPs with Narrative (Within past 10 years)

Recommendations

- Continue to fund master plans at all airports eligible for the Idaho Airport Aid Program (IAAP)
- Work with airport sponsors to encourage updating planning documents on a continuous basis
- Adopt formal program that groups multiple non-NPIAS airports under one project to complete master plans with abridged and highly airport-specific final documentation

All airports eligible to receive IAAP funds should have an updated master plan
### Percent of Airports Meeting ITD Aeronautics PCI Standards

**Recommendations**

- Continue to monitor and prioritize pavement-related needs via the Network Pavement Management System (NPMS)
- Develop an ITD program to support the design and construction of pavement maintenance projects at non-NPIAS airports as prioritized by NPMS
Percent of Airports Without Close-In Obstructions

Recommendations

- Increase consideration of clear approaches during airport-specific planning processes
- Prioritize IAAP funding for clearing approaches
- Conduct a Statewide Obstacle Study (ITD Aeronautics or a consultant)
Recommendations

- Review master plan scopes of work for inclusion of taxiway design evaluation to meet current FAA design standards
- Include airfield geometry evaluation in scopes of work for small airport master plans/ALPs
Percent of Population and Land Area within a 30-Minute Drive Time of an Airport Capable of Meeting Business User Needs

**Recommendation**

- Shift this PM to become an informational Performance Indicator (PI) during the next IASP update
- Facilities and services needed to support business users are based on market demands and need to be supported at the local level to receive state support
Percent of Airports that Accommodate Aerial Application Services

Recommendation

- Shift this PM to become an informational PI during the next IASP update
- Facilities and services needed to support aerial application services are based on market demands and need to be supported at the local level to receive state support
## Airside Facility Objectives

### Table: Runway Lengths

<table>
<thead>
<tr>
<th>Runway Length</th>
<th>Primary</th>
<th>National</th>
<th>Regional</th>
<th>Local</th>
<th>Basic</th>
<th>Utility</th>
<th>General</th>
<th>Backcountry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Future runway length from ALP/MP</td>
<td>Future runway length from ALP/MP</td>
<td>To accommodate 100 percent of small aircraft fleet</td>
<td>To accommodate 95 percent of small aircraft fleet</td>
<td>Maintain existing</td>
<td>To accommodate 95 percent of small aircraft fleet</td>
<td>Maintain existing</td>
<td>Maintain existing</td>
</tr>
<tr>
<td>Runway Width</td>
<td>100 feet</td>
<td>75 feet</td>
<td>75 feet</td>
<td>60 feet</td>
<td>Maintain existing</td>
<td>60 feet</td>
<td>50 feet</td>
<td>Maintain existing</td>
</tr>
<tr>
<td>Runway Strength</td>
<td>Single-wheel landing gear (60,000 pounds)</td>
<td>Single-wheel landing gear (30,000 pounds)</td>
<td>Single-wheel landing gear (12,500 pounds)</td>
<td>Single-wheel landing gear (12,500 pounds)</td>
<td>Maintain existing</td>
<td>Single-wheel landing gear (12,500 pounds)</td>
<td>Maintain existing</td>
<td>Maintain existing</td>
</tr>
<tr>
<td>Taxiway</td>
<td>Full Parallel</td>
<td>Full or Partial Parallel</td>
<td>Partial Parallel, Connectors, or Turnarounds</td>
<td>Turnarounds</td>
<td>Maintain existing</td>
<td>Partial Parallel or Turnarounds</td>
<td>Maintain existing</td>
<td>Maintain existing</td>
</tr>
<tr>
<td>Instrument Approach</td>
<td>Precision or PBN</td>
<td>PBN</td>
<td>Visual, PBN desired</td>
<td>Visual</td>
<td>Visual</td>
<td>Visual</td>
<td>Visual</td>
<td></td>
</tr>
<tr>
<td>Visual Aids</td>
<td>Rotating Beacon, Lighted Wind Cone, REILs, PAPIs/VASIs, ALS (as appropriate based on ALS)</td>
<td>Rotating Beacon, Lighted Wind Cone, REILs, PAPIs/VASIs, ALS as required</td>
<td>Rotating Beacon, Wind Cone, REILs, PAPIs/VASIs, ALS as required</td>
<td>Rotating Beacon, Wind Cone as required, Wind Cone</td>
<td>Rotating Beacon as required, Wind Cone</td>
<td>Wind Cone</td>
<td>Wind Cone</td>
<td></td>
</tr>
<tr>
<td>Runway Lighting</td>
<td>MIRL, HIRL desired</td>
<td>MIRL, HIRL as required</td>
<td>MIRL</td>
<td>LIRL</td>
<td>Reflectors, LIRL desired</td>
<td>Reflectors, LIRL as required</td>
<td>Reflectors</td>
<td>None</td>
</tr>
<tr>
<td>Weather Reporting</td>
<td>ATCT, On-site ASOS or AWOS</td>
<td>On-site ASOS or AWOS</td>
<td>On-site ASOS or AWOS as required</td>
<td>On-site ASOS or AWOS as required</td>
<td>None</td>
<td>Unicom and Dual Barometers</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

---

*ITD Aeronautics is now recommending that all airports minimally achieve A-I design standards, as these FAA standards are defensible, transparent, and based on industry best practices.*
Airside Facilities

- Runway Length: 20% Meets, 27% Does Not Meet, 53% Maintain Existing/Not Applicable/None
- Runway Width: 60% Meets, 17% Does Not Meet, 23% Maintain Existing/Not Applicable/None
- Runway Strength: 36% Meets, 11% Does Not Meet, 53% Maintain Existing/Not Applicable/None
- Taxiway: 43% Meets, 4% Does Not Meet, 53% Maintain Existing/Not Applicable/None
- Instrument Approach: 100% Meets
- Visual Aids: 95% Meets, 5% Does Not Meet
- Runway Lighting: 67% Meets, 21% Does Not Meet, 12% Maintain Existing/Not Applicable/None
- Weather Reporting Facilities: 31% Meets, 16% Does Not Meet, 53% Maintain Existing/Not Applicable/None
### Landside Facility Objectives

<table>
<thead>
<tr>
<th>LANDSIDE FACILITIES</th>
<th>NPIAS</th>
<th>Non-NPIAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY</td>
<td>National</td>
<td>Regional</td>
</tr>
<tr>
<td>Terminal (Commercial Service and GA Facility(ies)) with Public Restrooms, Conference Rooms, and Pilots Lounge; Hangar Storage for 80% of Based Aircraft and 25% of Transient Aircraft; Apron (Tie-Downs) for 20% of Based Fleet and 50% of Transient; Full Perimeter Fencing; Auto Parking</td>
<td>GA Terminal with Public Restrooms and Pilots Lounge; Hangar Storage for 60% of Based Aircraft and 25% of Transient Aircraft; Apron (Tie-Downs) for 40% of Based Fleet and 50% of Transient; Full Perimeter Fencing; Auto Parking</td>
<td>GA Terminal/ Facilities with Public Restrooms and Pilots Lounge; Hangar Storage for 60% of Based Aircraft; Apron (Tie-Downs) for 40% of Based Aircraft and 50% of Transient Aircraft; Partial Perimeter Fencing; Auto Parking</td>
</tr>
</tbody>
</table>

**Notes:**
- NPIAS: National Primary Infrastructure Assessment System
- Non-NPIAS: Non-National Primary Infrastructure Assessment System
- PRIMARY: Landside facilities primary objective.
- National: National level objective.
- Regional: Regional level objective.
- Local: Local level objective.
- Basic: Basic level objective.
- Utility: Utility level objective.
- General: General level objective.
- Backcountry: Backcountry level objective.
Landside Facility Performance

- Commercial Terminal: 9% Meets, 91% Does Not Meet
- GA Terminal: 31% Meets, 4% Does Not Meet, 65% Not Applicable
- Restroom: 9% Meets, 67% Does Not Meet, 33% Not Applicable
- Conference Room: 9% Meets, 65% Does Not Meet
- Pilot Lounge: 28% Meets, 7% Does Not Meet, 65% Not Applicable
- Hangar: 20% Meets, 15% Does Not Meet, 65% Not Applicable
- Apron Tie-Downs: 48% Meets, 49% Does Not Meet, 3% Not Applicable
- Perimeter Fencing: 48% Meets, 12% Does Not Meet, 40% Not Applicable
- Auto Parking: 49% Meets, 51% Does Not Meet

Legend: Blue = Meets, Orange = Does Not Meet, Green = Not Applicable
## Service Objectives

<table>
<thead>
<tr>
<th>SERVICES</th>
<th>NPIAS</th>
<th>Non-NPIAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRIMARY</td>
<td>National</td>
</tr>
<tr>
<td>Cell Coverage, Wi-Fi, FBO, Maintenance Services, SRE, 24/7 AvGas, 24/7 Jet A Fuel, Rental Car Access</td>
<td>Cell Coverage, Wi-Fi, FBO, Maintenance Services, SRE, 24/7 AvGas and Jet A Fuel, Rental Car Access</td>
<td>Cell Coverage, Wi-Fi, SRE, AvGas and Jet A as needed, Courtesy/Loaner Car</td>
</tr>
</tbody>
</table>
Service Performance

- Cell Phone Coverage: 95% Meets, 5% Does Not Meet, 0% Not Applicable
- Wi-Fi Availability: 27% Meets, 8% Does Not Meet, 65% Not Applicable
- FBO: 9% Meets, 0% Does Not Meet, 91% Not Applicable
- Maintenance Services: 9% Meets, 0% Does Not Meet, 91% Not Applicable
- Snow Removal Equipment: 12% Meets, 1% Does Not Meet, 87% Not Applicable
- AvGas/Jet A Fuel: 32% Meets, 3% Does Not Meet, 65% Not Applicable
- Rental/Courtesy Car: 40% Meets, 5% Does Not Meet, 55% Not Applicable
Summary of Performance Measures

Airports Meeting Minimum Facility & Service Objectives
Airports with Zoning for Height and Land Use Regulations
Airports with Master Plans or ALPs with Narrative (within past 10 years)
Airports Meeting ITD Aeronautics PCI Standards
Airports Without Close-in Obstructions
NPIAS Airports Meeting Current FAA Taxiway Design Standards
Population Within a 30-Minute Drive Time of an Airport Capable of Meeting Business User Needs
Airports that Accommodate Aerial Application Services

- Current Performance
- Future Performance Targets
Future Storage Needs

- Forecasted hangar and apron tie-down needs based on forecasted activity levels
- Methodology aligns with Airport Cooperative Research Program’s (ACRP) Guidebook for Managing Small Airports
No Primary airports in Idaho have adequate hangar facilities to meet current or anticipated future aircraft storage needs.
No Utility airports in Idaho have adequate hangar tie-downs to meet current or anticipated future aircraft storage needs.
Airport Report Cards

- Report cards to be included in airport-specific brochures
- Will include costs for projects identified by the IASP and existing needs included in the Idaho State Capital Improvement Plan (ISCIP)
- Future storage needs and costs represent additional needs after facility objectives have been met
Statewide Needs

- Statewide Obstacle Study
- Regional Air Service Study
- Emerging Technology Study
- Expand/enhance online data management capabilities
- Conduct IASP Update
- Conduct AEIA Update
Break

Please take 15 minutes for refreshment.
Aviation System Costs

IASP Task 12
Cost Estimating Process

- Planning-level costs - Airport-specific and unit costs by classification
- Duplicate projects removed between sources
Purposes of IASP Cost Estimating

- Identify deficiencies between projected funding levels and preservation and improvement needs
- Justify additional investment into the Idaho aviation system
- Provide high-level costs for ITD planning and programming
Facility & Service Objectives Costs

- Significant needs include:
  - Hangar storage ($117.5M)
  - Apron tie-downs ($15.7M)
  - Runway extensions ($11.4M)
  - Runway strength ($8.9M)
  - Runway widening ($3.6M)
Performance Measures Costs

- FAA standards are obligatory for NPIAS airports and recommended for all facilities
- Airfield geometry issues should be evaluated and deficiencies addressed as feasible
Life-cycle Pavement Needs

- 20-year lifecycle approach:
  - Major (full-depth) reconstructions: Every 40 years (costed at 50% to reflect 20-year needs)
  - Maintenance (crack seal/slurry seal): Three within every 20 years
- Revised methodology results in significantly higher costs than 2010
Future Storage Needs

- Needs identified after facility objective had been achieved
- Hangars type mix selected by classification (T-, box, executive)
- Tie-down costs include additional paved apron needs by airport

![Future Storage Needs Graph]
Idaho State Capital Improvement Plan

- Duplicate projects removed from those identified during the IASP analyses
- ISCIP costs incorporated into IASP project needs for all duplicate projects
Airport Needs by Classification

- **Primary**: $610,013,677 (68%)
- **Regional**: $103,356,073 (12%)
- **Local**: $123,413,186 (14%)
- **Basic**: $13,567,398 (1%)
- **Utility**: $17,864,179 (2%)
- **General**: $24,201,193 (3%)
- **Backcountry**: $913,100 (0%)
Statewide Obstacle Study $1,000,000 38%
IASP Update $600,000 23%
AEIA Update $500,000 19%
Online data management $100,000 4%
Emerging Technology Study $175,000 7%
Regional Air Service Study $250,000 9%
Emerging Technology Study $175,000 7%
Online data management $100,000 4%
Total Idaho Aviation Need

Total Idaho Airport Need (2018 – 2038)

$1.24B
State Aeronautics Fund

State Aeronautics Funds (2010 – 2019)

Funding ($)

Year


$2,291,164  $2,207,285  $2,065,099  $2,451,734  $2,390,683  $2,309,940  $2,796,943  $2,929,400  $3,272,830  $3,609,614

$2,000,000  $2,200,000  $2,400,000  $2,600,000  $2,800,000  $3,000,000  $3,200,000  $3,400,000  $3,600,000  $3,800,000
Policy Analysis and Statewide Recommendations

IASP Tasks 14 and 15
# 2020 IASP Update Recommendations

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Conduct a Regional Air Service Study</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Conduct an Emerging Technology Impact Study</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Emerging technologies</td>
</tr>
<tr>
<td>Expand/enhance online data management capabilities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Government transparency and efficiency</td>
</tr>
<tr>
<td>Coordinate and maintain continuous airport system planning activities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Enhance aviation-related outreach efforts to policymakers and the public</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Promote the economic and social value of airports, both commercial service and general aviation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Provide guidance on through-the-fence operations at state-owned airports</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Evaluate ways to improve the priority system to provide for more accountability and reappraise the funding distribution process to allow for more flexibility as the need arises</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Government transparency and efficiency</td>
</tr>
</tbody>
</table>
## 2010 IASP Recommendations

<table>
<thead>
<tr>
<th>2010 IASP Recommendation</th>
<th>Link with 2020 IASP Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote the economic and social value of airports, both commercial service and general aviation.</td>
<td>Maintain</td>
</tr>
<tr>
<td>Coordinate and maintain Continuous Airport System Planning activities.</td>
<td></td>
</tr>
<tr>
<td>Promote compatible land use near airports through use of and education related to the Idaho Airport Land Use Guidelines.</td>
<td></td>
</tr>
<tr>
<td>Maintain adequate access to public-use commercial service and general aviation airports for all of Idaho.</td>
<td></td>
</tr>
<tr>
<td>Continue to promote the importance of backcountry airports to Idahoans quality of life and economic growth.</td>
<td>Modify</td>
</tr>
<tr>
<td>Support efforts to work internally with other ITD divisions and groups to promote aviation planning efforts.</td>
<td></td>
</tr>
<tr>
<td>Evaluate and seek changes to plans and facilities to respond to new technology and aircraft fleets to accommodate future air transportation system needs.</td>
<td></td>
</tr>
<tr>
<td>Improve remote communications and weather reporting capabilities in rural areas such as Northern and Central Idaho to fill voids in the state’s system coverage.</td>
<td></td>
</tr>
<tr>
<td>Consider expanding IDAPA 39.04.06, which provides guidance on through-the-fence operations on state-owned airports, to non-NPIAS airports as well as working with the FAA on possible beneficial through-the-fence operations at NPIAS airports.</td>
<td></td>
</tr>
<tr>
<td>Advocate for the promotion of environmentally friendly actions such as through the adoption and implementation of Storm Water Pollution Prevention (SWPP) Plans and Spill Prevention Control and Countermeasures (SPCC) Plans.</td>
<td>Delete</td>
</tr>
<tr>
<td>Consider the creation of public law to register and license airports and heliports.</td>
<td></td>
</tr>
</tbody>
</table>
Activity

Did the 2020 IASP Update address the key issues affecting the Idaho aviation system?
Issues Identified by PAC (Mtg. 1)

Most Impact

- Airport access
- Changing general aviation landscape
- Cost of private pilot license/flight training
- Encroachment
- Land use compatibility
- Local funding
- Through-the-fence activity
- Unmanned aircraft systems
- Agricultural spraying aircraft as the critical (design) aircraft
- Airport focus: agricultural or general aviation
- Intrastate commercial air service
- Education
- Funding: user fees, taxes, back-country airports, local
- Land use (encroachment, multi-jurisdictional)
- Limited airport goals by ownership
- Technology (unmanned aircraft systems, electric aircraft, fuel)

*Issues identified through the airport inventory process*
What is Economic Impact?

**Employment**
Employment is usually expressed in terms of jobs. Because certain jobs may only be part-time or seasonal, the number of jobs is sometimes expressed in terms of “full-time equivalents (FTEs)” or person years of employment. For Idaho, we’re using jobs.

**Wages or Earnings**
The income (i.e., wages, salaries, bonuses, benefits and other remuneration) earned by the associated workforce. Includes income from sole proprietorships.

**Gross Domestic Product (GDP)**
GDP is a measure of the dollar value of final goods and services produced locally as a result of economic activity. This measure does not include the value of intermediate goods and services used up to produce the final goods and services.

**Economic Output (or Economic Activity)**
Economic output is the gross dollar value of industrial output produced. It reflects the spending (i.e., capital improvement plus revenue) by firms, organizations and individuals.
Economic Impact: What Gets Counted?

- Airline Operations
- Airport Tenants
- Air Traffic Control
- Customs & Security
- Airport Operations
- General Aviation
- Concessions
- Fixed Base Operators
- Ground Transport
- Cargo & Freight Forwarders

...and the impacts on local or regional economies introduced by spending of visitors who arrive by air.
## Statewide Economic Impacts

<table>
<thead>
<tr>
<th>Airport Service Type</th>
<th>Jobs</th>
<th>Earnings ($)</th>
<th>GDP ($)</th>
<th>Output ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial service</td>
<td>26,287</td>
<td>$987,137,021</td>
<td>$1,852,910,564</td>
<td>$3,653,183,709</td>
</tr>
<tr>
<td>General aviation</td>
<td>4,822</td>
<td>$233,563,781</td>
<td>$425,584,442</td>
<td>$1,307,166,371</td>
</tr>
</tbody>
</table>

- **Jobs**: 31,109
- **Earnings**: $1.22B
- **GDP**: $2.28B
- **Output**: $4.69B
Tax Impacts

Total Tax Impacts (2018)

$168.3M
Value Added Aviation Benefits

AEIA Task 6
Business Reliance

Received survey responses from over 100 businesses, many confirming a strong link between aviation and business development.

- 33% Indicated that their company owns, leases, charters, or has partial ownership of GA aircraft
- 83% Indicated that they utilize commercial airline service for routine business functions
- 65% Indicated that their company averages at least 10 trips per year on commercial airlines
- 86% Indicated that they have customers/suppliers who travel by scheduled airline service to visit their company
- 30% Indicated that they have customers/suppliers who travel by GA aircraft to visit their company
Hospitals and Clinics

- 76% of IASP airports support health care needs across the state

- Air ambulance
- Clinician travel
- Organ & tissue donation
- Angel Flights
Wildland Firefighting

### Idaho Airports with a Based Wildland Firefighting Agency

<table>
<thead>
<tr>
<th>Associated City</th>
<th>Airport</th>
<th>FAA ID</th>
<th>Wildland Firefighting Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boise</td>
<td>Boise Air Terminal/Gowen Field</td>
<td>BOI</td>
<td>BLM</td>
</tr>
<tr>
<td>McCall</td>
<td>McCall Municipal</td>
<td>MYL</td>
<td>U.S. Forest Service</td>
</tr>
<tr>
<td>Pocatello</td>
<td>Pocatello Regional</td>
<td>U02</td>
<td>U.S. Forest Service</td>
</tr>
<tr>
<td>Twin Falls</td>
<td>Joslin Field/Magic Valley Regional</td>
<td>TWF</td>
<td>BLM</td>
</tr>
<tr>
<td>Coeur d’Alene</td>
<td>Coeur d’Alene/Pappy Boyington Field</td>
<td>COE</td>
<td>U.S. Forest Service SEAT Base</td>
</tr>
<tr>
<td>Grangeville</td>
<td>Idaho County</td>
<td>GIC</td>
<td>U.S. Forest Service SEAT Base</td>
</tr>
<tr>
<td>Mountain Home</td>
<td>Mountain Home Municipal</td>
<td>U76</td>
<td>U.S. Forest Service SEAT Base</td>
</tr>
<tr>
<td>Gooding</td>
<td>Gooding Municipal Airport</td>
<td>GNG</td>
<td>U.S. Forest Service and BLM SEAT Base</td>
</tr>
<tr>
<td>Salmon</td>
<td>Lemhi County Airport</td>
<td>SMN</td>
<td>U.S. Forest Service</td>
</tr>
</tbody>
</table>

### Number of Fires Managed by Agency

- Bureau of Indian Affairs: 26
- Bureau of Land Management: 185
- C&L Department of Defense: 65
- U.S. Forest Service: 408
- U.S. Fish and Wildlife Service: 2
- Idaho Department of Lands: 273

The graph shows the number of fires managed by each agency in Idaho.
Documentation and Next Steps

IASP Task 17; AEIA Tasks 8, 9, and 10
Project Deliverables

- IASP Technical Report
- AEIA Technical Report
- Individual airport brochures
  - Airport report cards
  - Timelines of economic change
  - Qualitative airport stories
- Executive summary
Please continue to check the project website for updated information and draft documentation.

https://www.idaho-airport-system-plan.com/
Next Steps

- **IASP**
  - Finalize system costs and alternatives (Chapter 8)
  - Finalize recommendations (Chapter 9)
  - Submit chapters for ITD/PAC review

- **AEIA**
  - Submit AEIA technical report for ITD/PAC review
  - Finalize value added narratives

- **Final deliverables**
  - Compile final technical report
  - Individual airport brochures
  - Executive summary
Contact

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  - P: (480) 207-2670
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Thank You!