MODOT STATE AIRPORT SYSTEM PLAN

Webinar #3

Final System Plan Summary Presentation

January 10, 2019

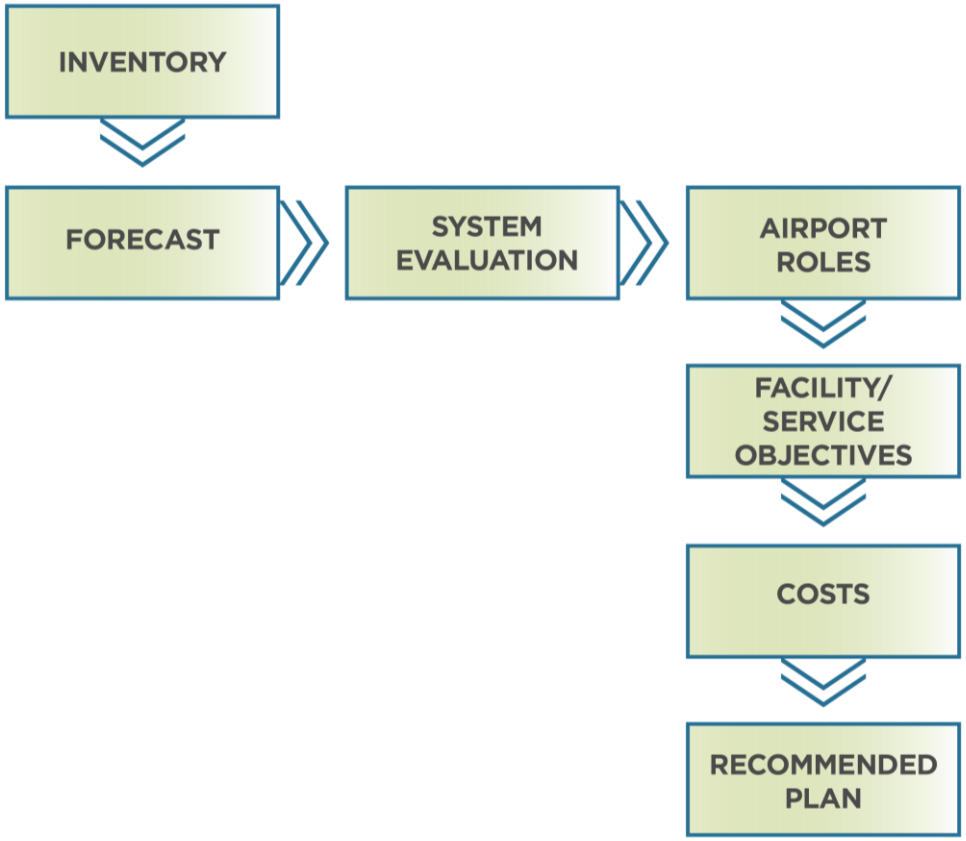
STUDY PURPOSE/ OUTPUT

The purpose of the Missouri State Airport System Plan is to:

- Establishing a blueprint for Missouri's future airport system
- Evaluate current system performance and identify deficiencies/gaps
- Determining the ability of each airport to meet its objectives to support its role in the system plan
- Provide guidance to support informed investment decisions

System Planning Process

- Study followed FAA Advisory Circular
- AC 150/5070-7, *The Airport System Planning Process*



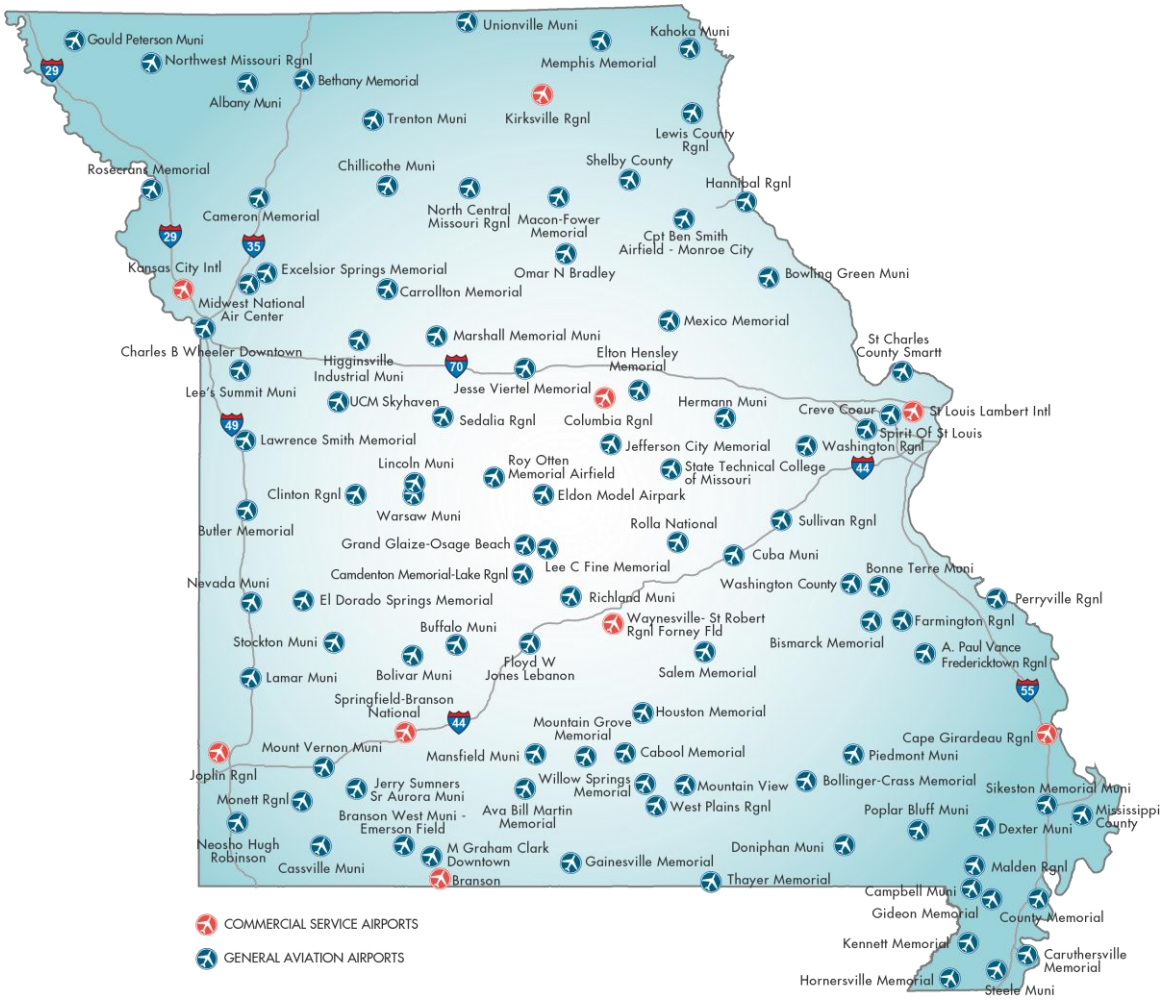
PUBLIC OUTREACH/COMMUNICATION

Communication with stakeholders/airports was essential to study success

- Outreach at key milestones to 107 study airports
- A study Focus Group to identify strengths, weaknesses, and trends for Missouri airports
- Three Project Advisory Committee (PAC) meetings
- Project briefing at Missouri airports conference
- Three project webinars advertised to all airports and others through MoDOT Department of Communications
- A project website: http://sites.jviation.com/MoDOTAirportSystemPlan/index.html

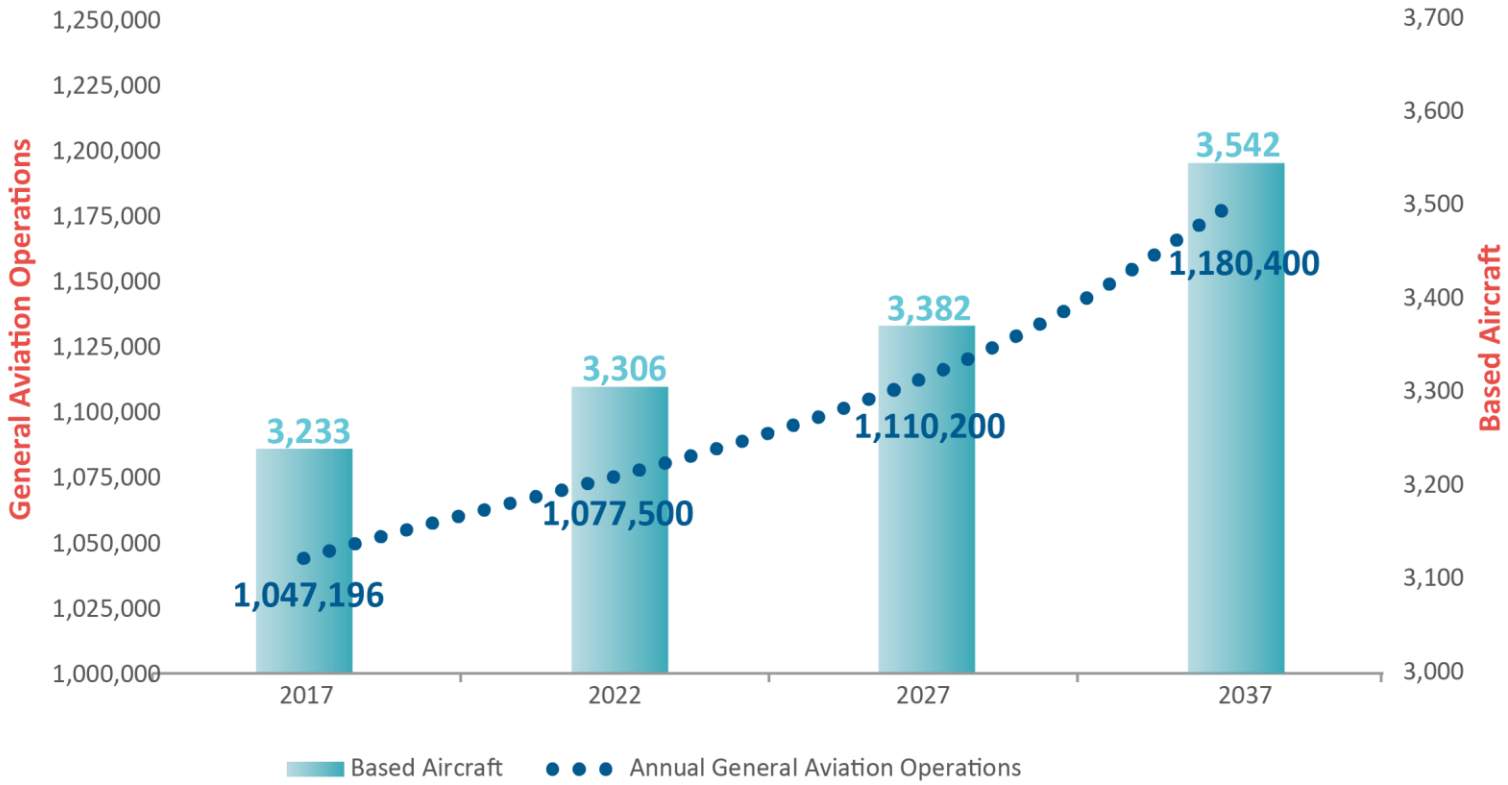
Existing Missouri Airport System

- 107 airports in Missouri's state airport system
- 9 commercial airports and 98 general aviation airports
- 75 airports included in FAA's National Plan of Integrated Airport Systems (NPIAS)
- 32 system airports are non-NPIAS
- Non-NPIAS airports are not eligible to compete for FAA funding



JVIATION

General Aviation Outlook



- Forecast follows FAA anticipated growth trends
- FAA approved system plan forecast
- Based aircraft forecast to increase from 3,233 to 3,542
- Annual general operations projected to increase from 1.05 million to 1.18 million

State Roles for Missouri Airports

- Provide a foundation for system analysis
- Airport roles reflect: airport facilities/services and users, along with the characteristics of the community the airport serves
- Recommended roles considered FAA NPIAS/ASSET roles and current airport/community conditions
- PAC provided input on recommended roles

    a. Additional role added

    b. Changes in role “names” from the 2002 system plan

Role Categories for Missouri Airports

COMMERCIAL

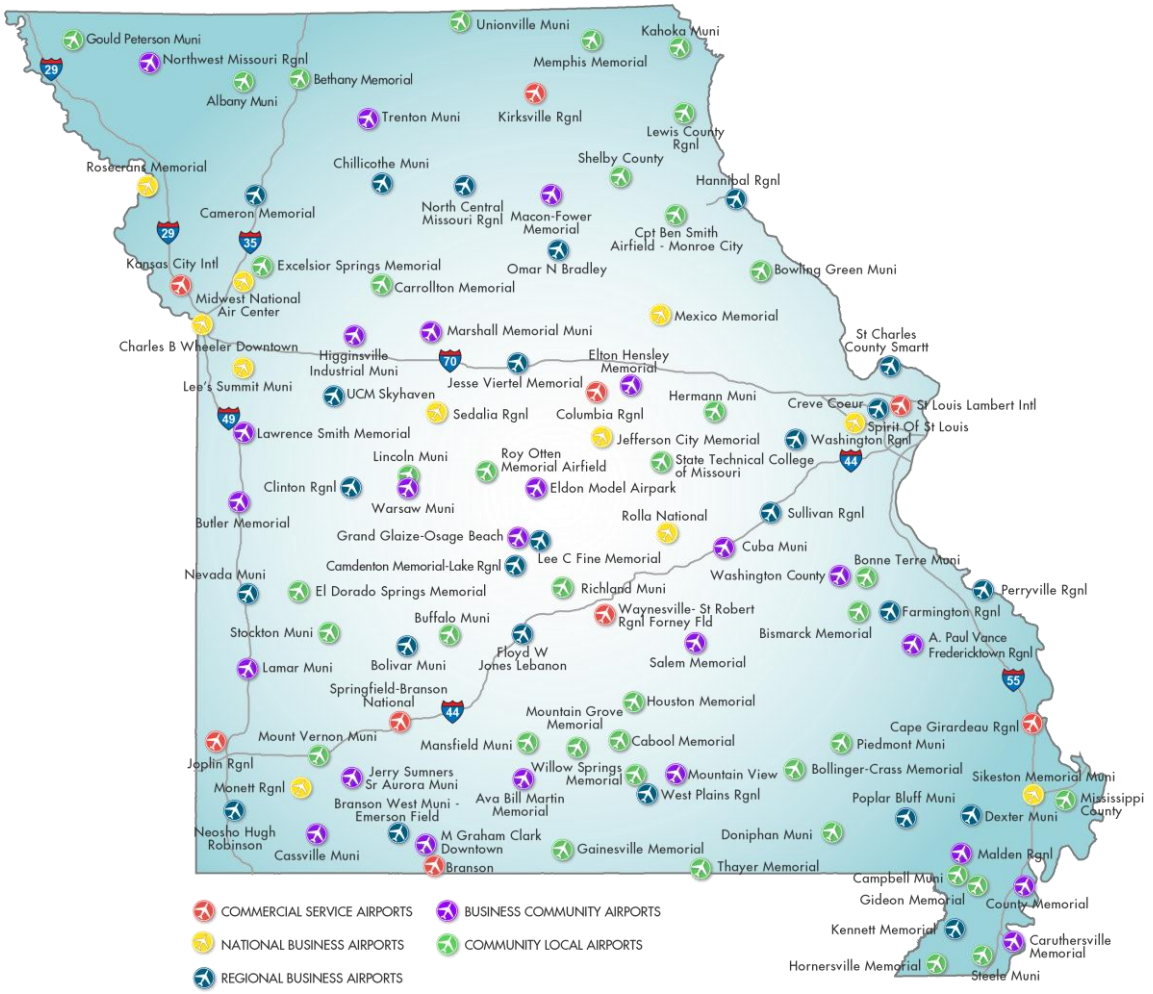
NATIONAL BUSINESS

REGIONAL BUSINESS

BUSINESS COMMUNITY

COMMUNITY LOCAL

Recommended Roles For Missouri Airports



System Evaluation

- Measures established to evaluate how well the system is currently doing
- Measures reflect the “characteristics” of a system that meets both aviation needs, while supporting objectives for the economy
- Various drive times and resultant airport service areas used to evaluate the system
- Analysis identifies deficiencies and gaps in the system performance
- Results establish the foundation for the recommended system

Current System Performance/Accessibility

CURRENT SYSTEM PERFORMANCE BY MEASURE	
Performance Measure	**Current Accessibility Rating**
30 Minute Current Accessibility to a Missouri Airport with a Published Approach	**84.8%**
30 Minute Current Accessibility to a Missouri or Nearby Airport with a Published Approach	**86.8%**
30 Minute Accessibility to an Airport with an Approach Supported by Vertical Guidance	
30 Minute Current Accessibility to a Missouri Airport with a Vertical Guidance Approach	**79.8%**
30 Minute Current Accessibility to a Missouri or Nearby Airport with an Approach Supported by Vertical Guidance	**83.9%**
30 Minute Accessibility to an Airport with Weather Advisory Reporting	
30 Minute Current Accessibility to a Missouri Airport with Weather Advisory Reporting	**82.6%**
30 Minute Current Accessibility to Missouri or Nearby Airport with Weather Advisory Reporting	**88.0%**
30 and 45 Minute Accessibility to Airports Exhibiting Selected NBAA Medium & Light Business Jet Airport Characteristics	
45 Minute Current Accessibility to Missouri Airports Meeting Acceptable NBAA Medium Business Jet Airport Characteristics	**77.8%**
45 Minute Current Accessibility to Missouri or Nearby Airports Meeting Acceptable NBAA Medium Business Jet Airport Characteristics	**79.3%**
30 Minute Current Accessibility to Missouri Airports Meeting Acceptable NBAA Light Business Jet Airport Characteristics	**70.9%**
30 Minute Current Accessibility to Missouri or Nearby Airports Meeting Acceptable NBAA Light Business Jet Airport Characteristics	**73.1%**
45 and 30 Minute Current Accessibility to Missouri Airports Meeting Acceptable NBAA Medium or Light Business Jet Airport Characteristics	**84.6%**
45 and 30 Minute Current Accessibility to Missouri or Nearby Airports Meeting Acceptable NBAA Medium or Light Business Jet Airport Characteristics	**85.7%**
System Performance for Primary Runway Pavement Condition Index (PCI)	
Percentage of System Airports with a PCI of 70 or greater	**68.0%**

Highlights from System Performance Evaluation

Missouri airport system generally performing at a high level, based on system accessibility ratings

Airport improvement to meet role related facility/service objectives could improve system performance

Missouri airport system is generally mature, improvements are those needed to bring the system to the next level

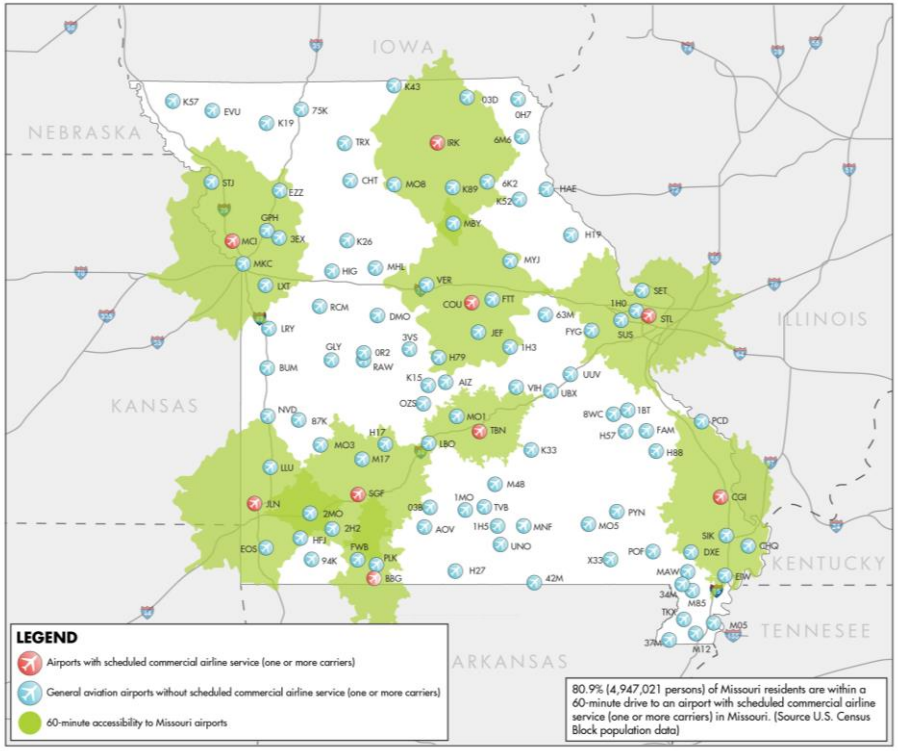
Some performance measure warrant particular focus

Small Commercial Service Airports at Risk

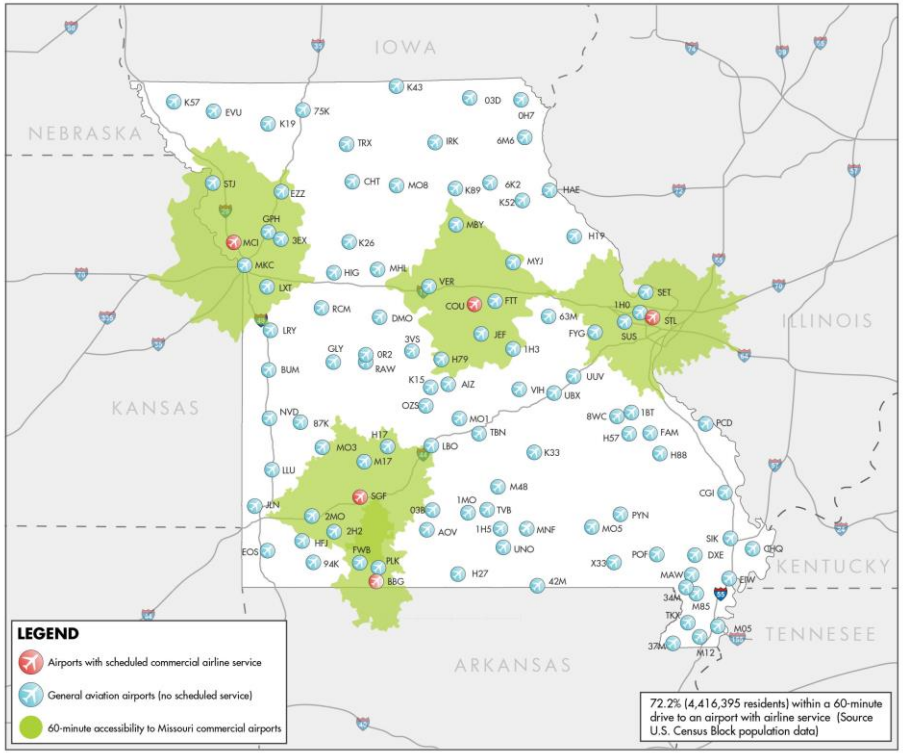
- Seating capacity of commercial aircraft serving small markets is increasing
- Larger aircraft reduce service frequency
- Pilot shortage has/will impact smaller commercial airports
- Pilots being assigned to larger/higher profit margin markets
- Airlines seeking ways to reduce costs; revenue enhancement options have been tapped
- Best “defense” to commercial air service reduction is to use existing service

Access to Airports with Airline Service

60-MINUTE ACCESSIBILITY TO MISSOURI COMMERCIAL AIRPORTS – 81%



60-MINUTE ACCESSIBILITY TO MISSOURI COMMERCIAL AIRPORTS WITH TWO OR MORE CARRIERS – 72%



Airports are Essential to Missouri's Economic Infrastructure

- National Business Aviation Association (NBAA) guidance used to evaluate system performance related to economic support
- NBAA member objectives used to identify airports now equipped to meet the needs of "light" and "medium" business jets
- Current and future/potential system performance could change
- Fulfillment of facility/service objectives would increase accessibility to NBAA business ready airports, both light and medium business jets

NBAA Light and Medium Business Jet Business Ready Airport Needs

UP TO 50,000 LBS

NBAA MEDIUM BUSINESS JET AIRPORTS

- Runway 5,000 feet by 100 feet
- Approach supported by vertical guidance
- Visual Glide Slope Indicator (VGSI)
- Medium Intensity Runway Lighting (MIRL)
- On-site weather advisory reporting equipment
- FBO services/aircraft maintenance
- Jet fuel

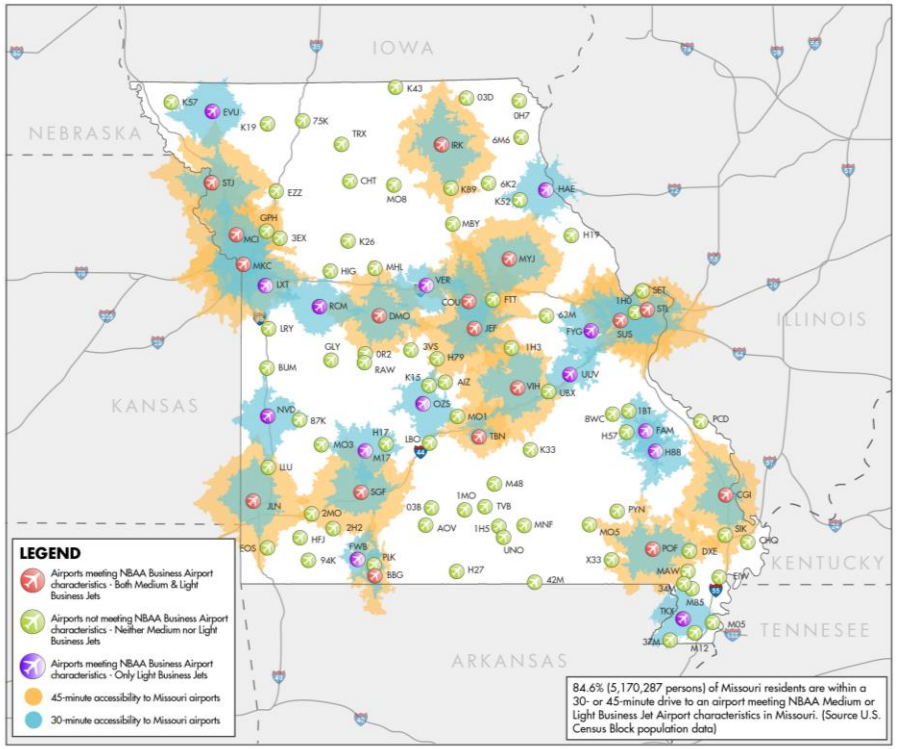
UP TO 25,000 LBS

NBAA LIGHT BUSINESS JET AIRPORTS

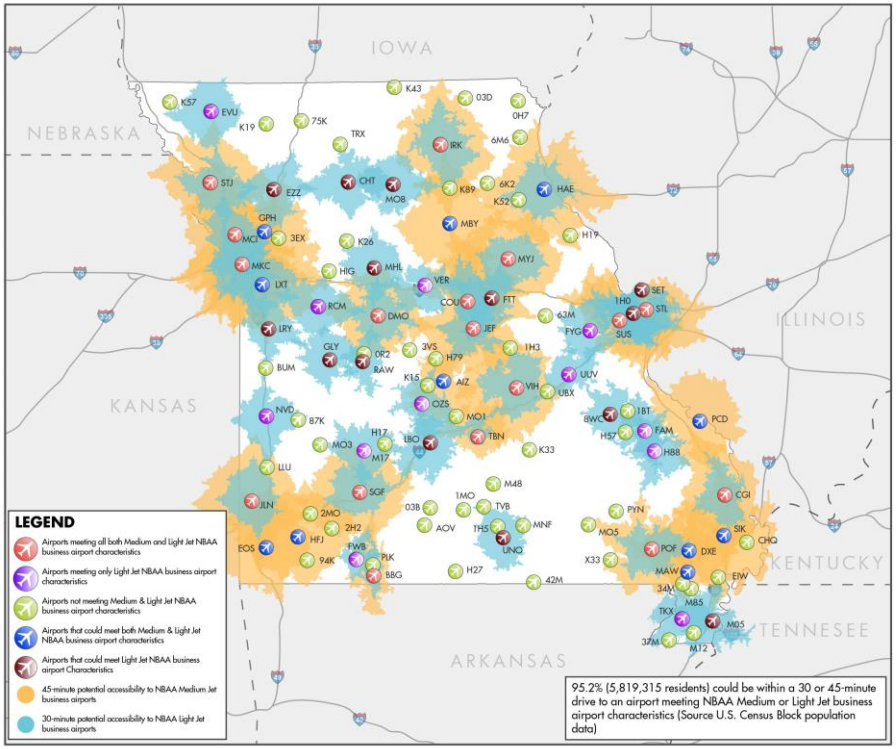
- Runway 4,000 feet by 75 feet
- Approach supported by vertical guidance
- Visual Glide Slope Indicator (VGSI) – at least one runway end
- Medium Intensity Runway Lighting (MIRL)
- On-site weather advisory reporting equipment
- FBO services/aircraft maintenance
- Jet fuel

Current/Potential System Performance NBAA Business Ready Airports

CURRENT ACCESSIBILITY – 85%



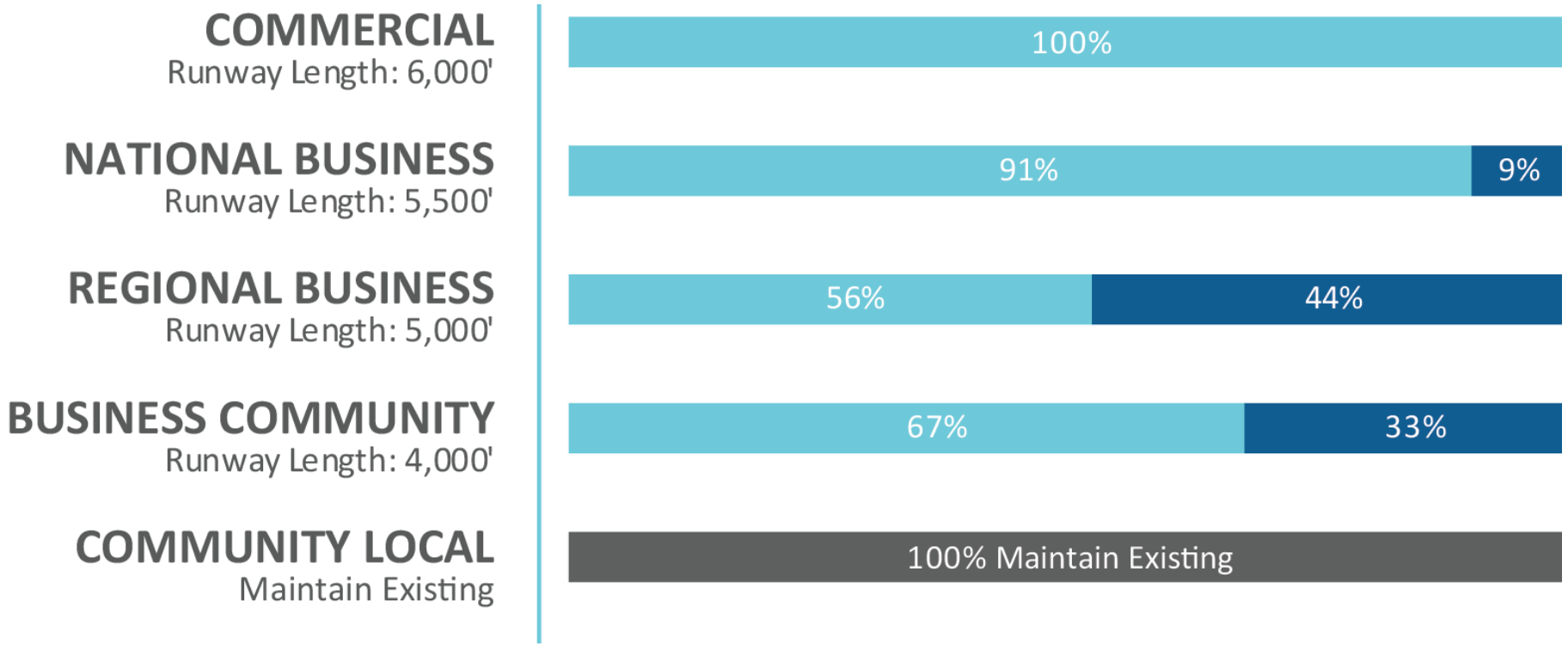
POTENTIAL ACCESSIBILITY – 95%



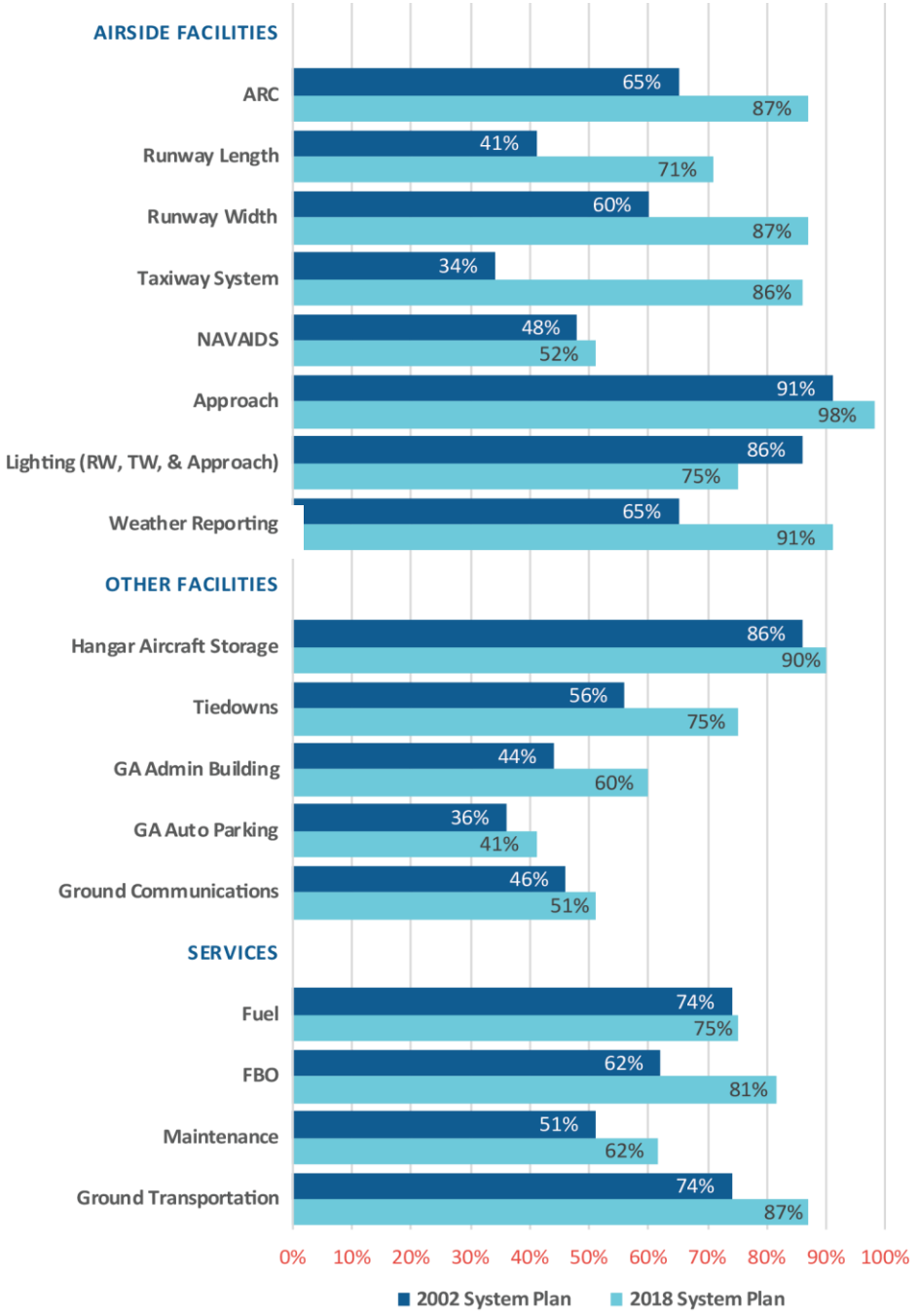
Facility/Service Objectives

- Different for each of the five airport role categories
- Identify the minimum level to which each airport should be developed to fulfill its recommended role in the state airport system
- Current facilities/services compared to objectives to identify desired improvements for each airport
- Almost 30 objectives reviewed for airports in each role category
- Objectives are “graduated” with larger/high activity airports having more demanding objectives

Current System Performance for Runway Length Objectives



System Performance Has Improved



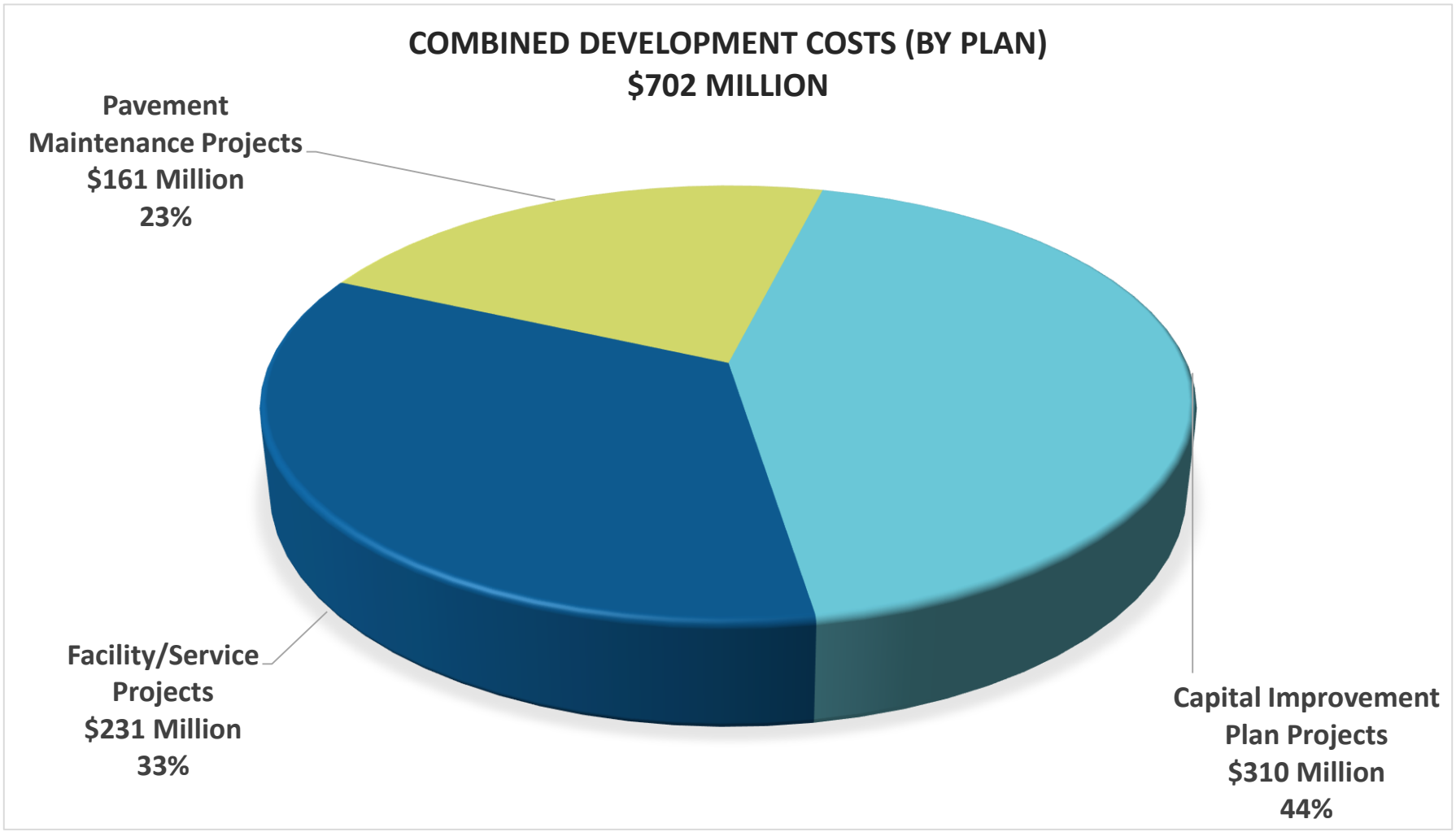
Work Still To Be Done

- System performing generally at a high level
- Airports in individual role categories still require projects for all applicable facility and service objectives to be met
- Addressing continuous pavement maintenance needs requires on-going annual investment
- Airports have improvement, maintenance, and equipment needs that are beyond the scope of the system plan

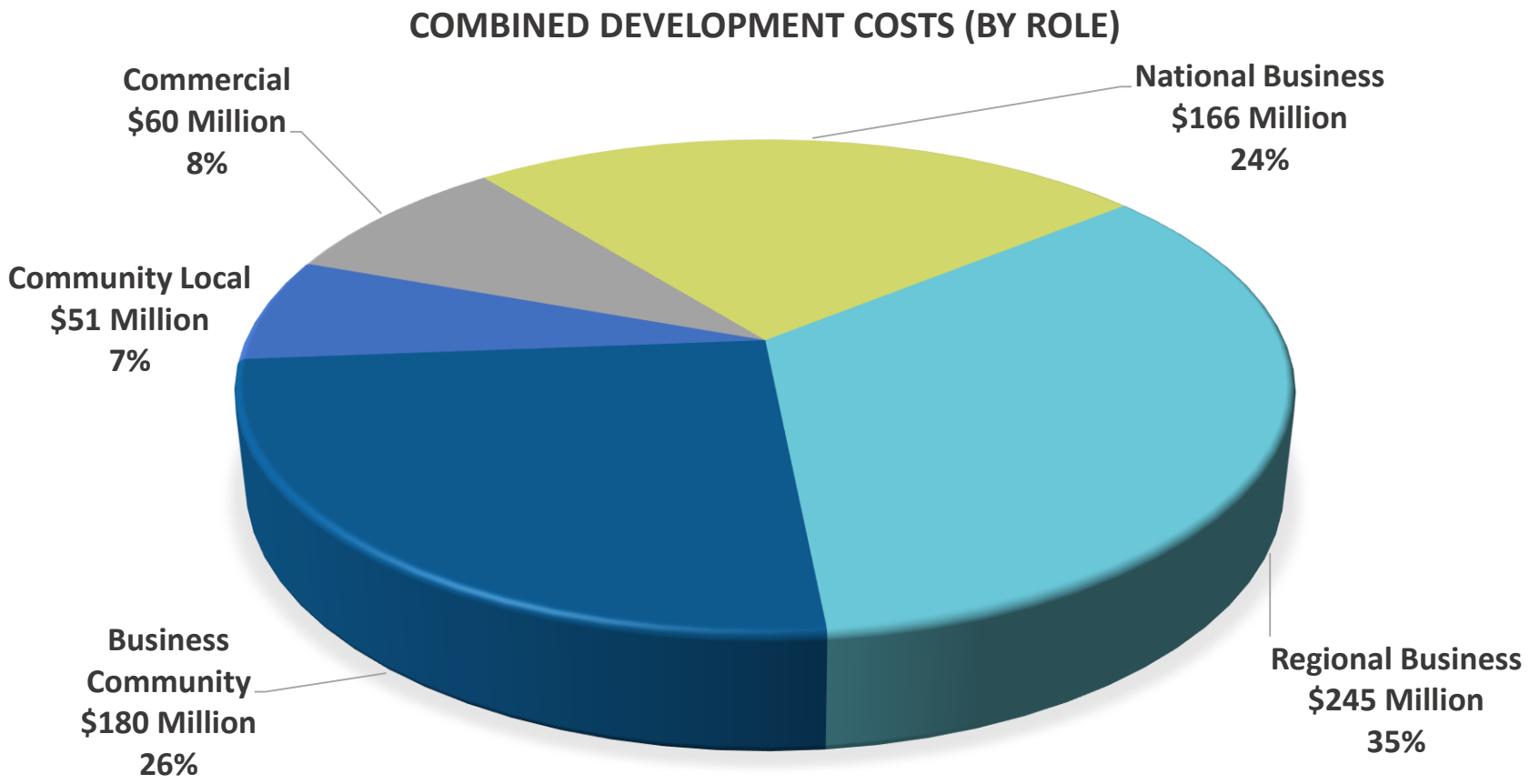
Costs To Elevate System Performance

- Projects/costs come from three sources: system plan, state pavement maintenance plan, and airport CIPs
- System plan costs developed using unit costs from similar projects in Missouri
- Airport “report cards” summarize costs for each airport from each of the three sources
- Costs/projects identified in the System Plan do not reflect a commitment of funding from either MoDOT or FAA

Total Estimated Development Costs - $702 million



Total Estimated Development Costs by Airport Role: $702 million



Most commercial airports meet their system plan facility objectives; major investment needs for St. Louis/Kansas City International airports are not reflected.

Results From The Statewide System Plan

1

Should be considered by individual airports as they update their CIPs and master plans

2

Should be considered by FAA for NPIAS airports

3

Help MoDOT understand the magnitude of investment that could be required in the near term

4

Provide information that MoDOT can use to make informed decisions on how best to invest in the system

Summary of Key Findings

Estimated five-year system planning funding needs	$702 million
Estimated average annual system planning funding needs	$140 million
Estimated state/federal funds available to address annual need	$52 million
Estimated annual economic impact of study airports	$1.5 billion

Note: Costs and economic impacts reported here do not include those associated with Saint Louis or Kansas City International airports

Questions

For more information on the Missouri State Airport System Plan contact:

Multimodal Operations Division-Aviation Section
105 West Capitol Avenue
Jefferson City, Missouri 65101
573.751.2589
aviation@modot.mo.gov
www.modot.org

Project Website
http://sites.jviation.com/MoDOTAirportSystemPlan/index.html