



KDOT Airport Facilities Inventory and Needs Assessment Report Briefing



Kansas Airport System

- \$9B in annual economic output
- 80 airports classified in the FAA's National Plan of Integrated Airport Systems (NPIAS)
- 29 non-NPIAS public use airports with paved runways.

These 109 airports are the backbone of the state's aviation transportation system, serving the needs of Kansas residents, businesses, educational institutions, emergency management, and the traveling public.

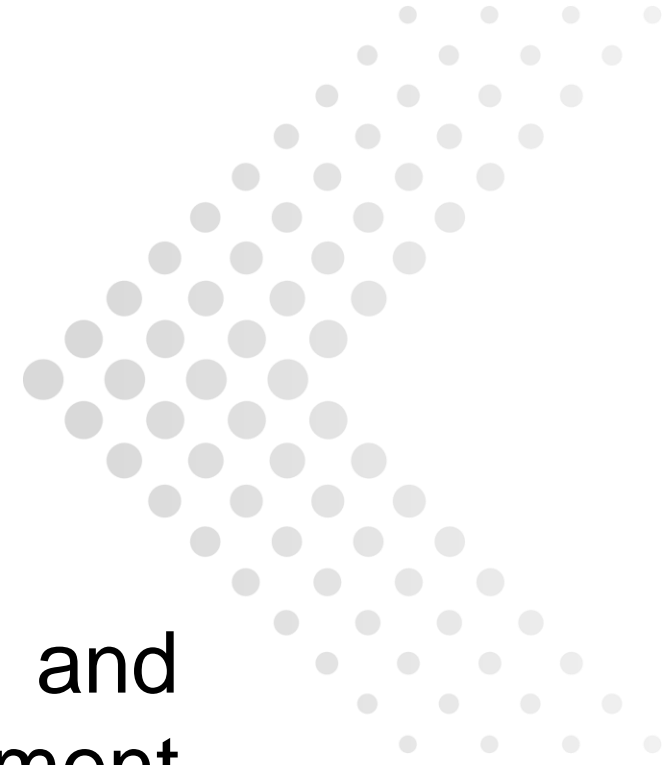
Kansas Airport Improvement Program



The Kansas Airport Improvement Program (KAIP) is a funding program administered through KDOT Aviation that is designed to assist airport sponsors in improving and maintaining the State's system of public-use airports. The primary strategy of the KAIP program is to preserve and enhance (modernize) the Kansas airport system through four objectives:

- Maintaining the system's runway condition rating of "very good."
- Minimizing surface travel time to air ambulance pick-up locations.
- Improve Safety.
- Enhance airport and community economic development appeal.

Airport Facilities Inventory and Needs Assessment



In June 2023, KDOT Aviation initiated a statewide Airport Facilities Inventory and Needs Assessment to supplement the recently completed Pavement Management Plan (PMP) report and determine airport infrastructure needs in the state as well as funding levels necessary to achieve the KAIP Program objectives. 109 public-use airports were included in the assessment.

A Joint Task Force (JTF) of airport managers, airport planning/engineering consultants, construction professionals, economic development partnerships, a state hospital association, and other industry stakeholders were engaged to evaluate current statewide guidelines for airport infrastructure.

Airport Facilities Inventory and Needs

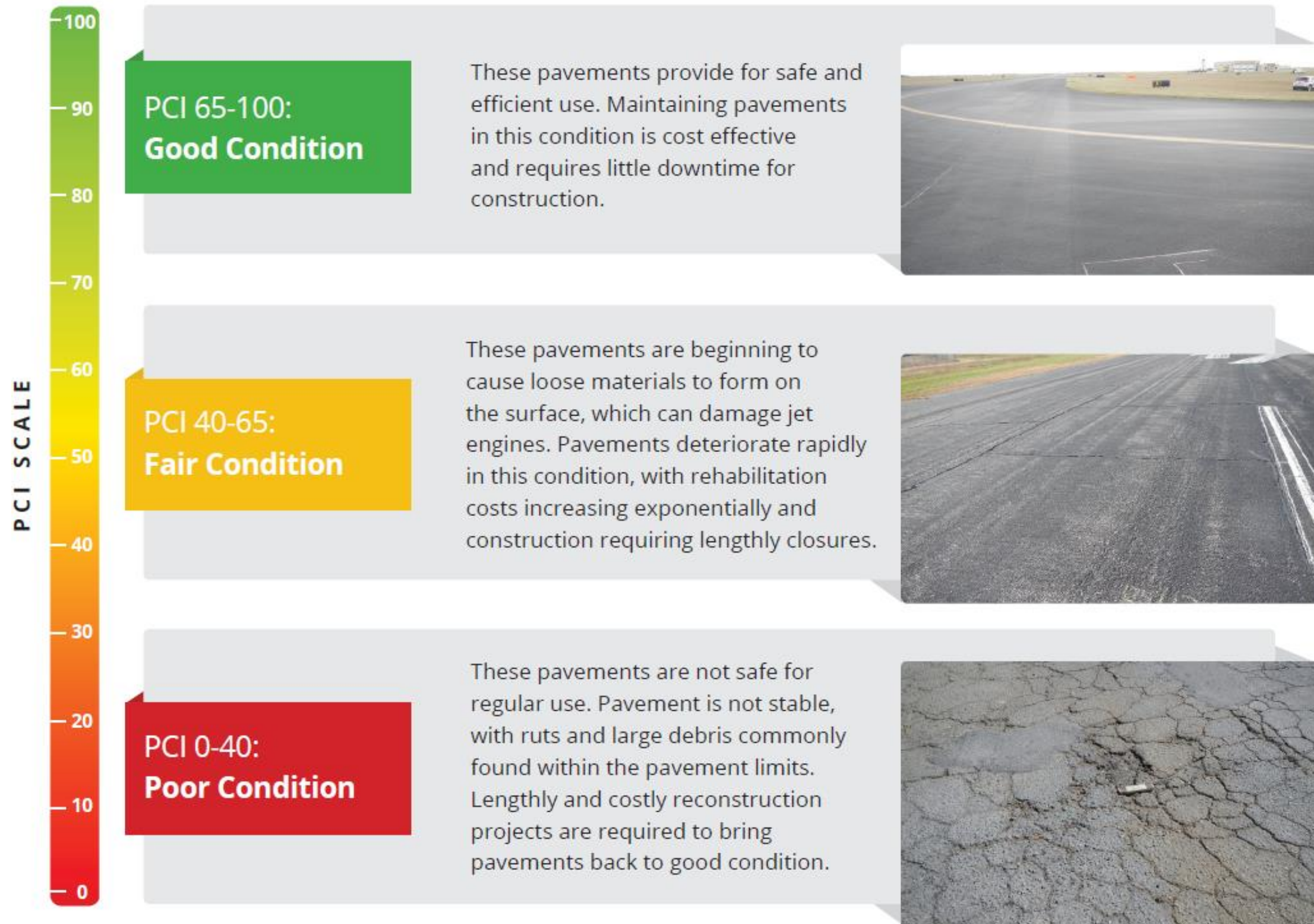


The JTF created a strategic plan focused on:

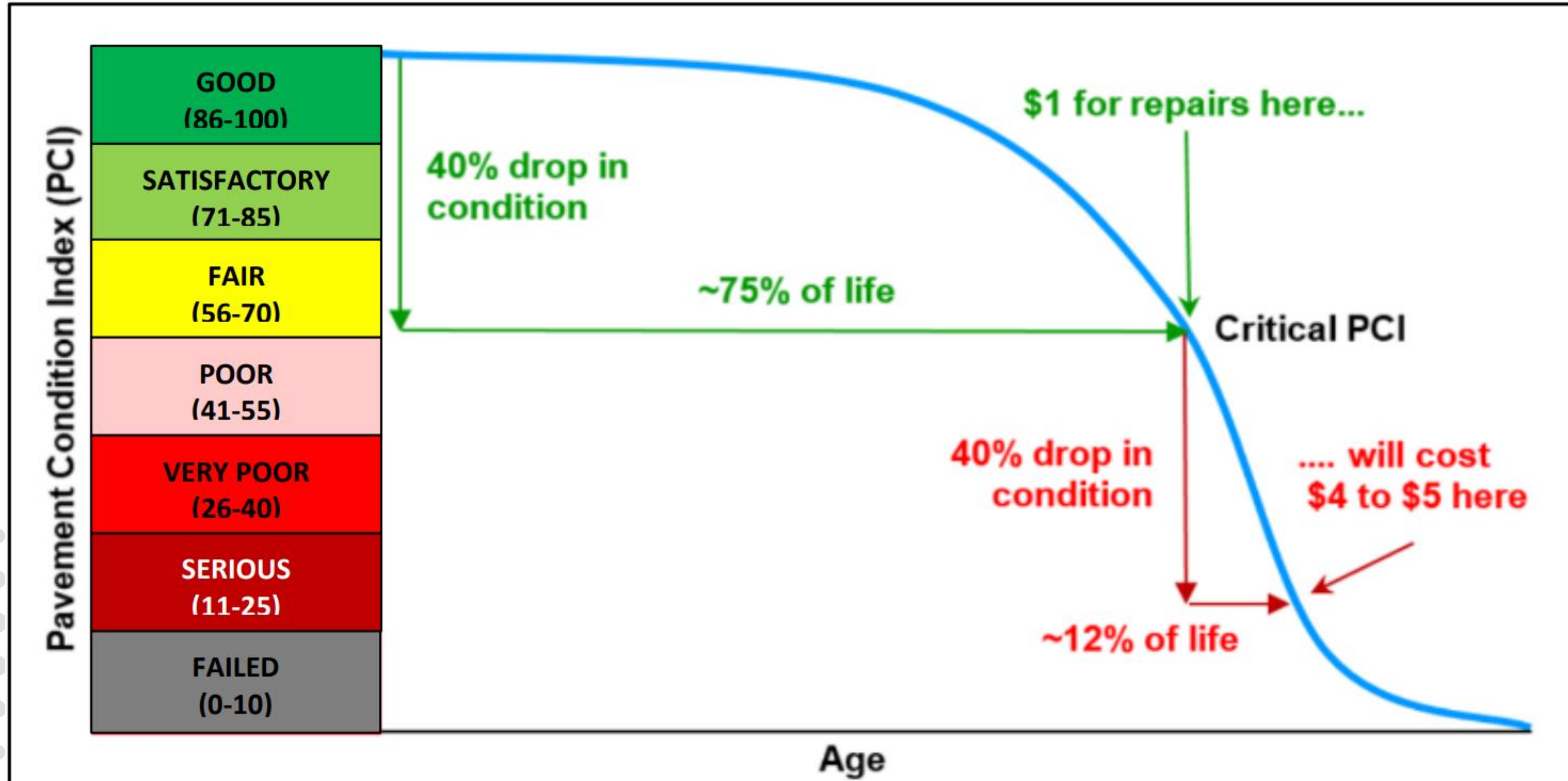
- Reviewing Pavement Condition Index (PCI) and determine funding levels needed to meet KAIP program objectives.
- Reviewing current minimum infrastructure (pavement, buildings, lighting/NAVAIDS, equipment, etc.) for airports of each category and recommend revisions that better meet current airport needs and service levels.
- Evaluating the capability of the statewide airport system to support emergency management and air ambulance operations.

Pavement Condition Index (PCI) Review

Every 3 years, KDOT grades airport pavements on a scale of 0-100, called a Pavement Condition Index (PCI). This PCI data assists KDOT in determining appropriate pavement maintenance at airports.

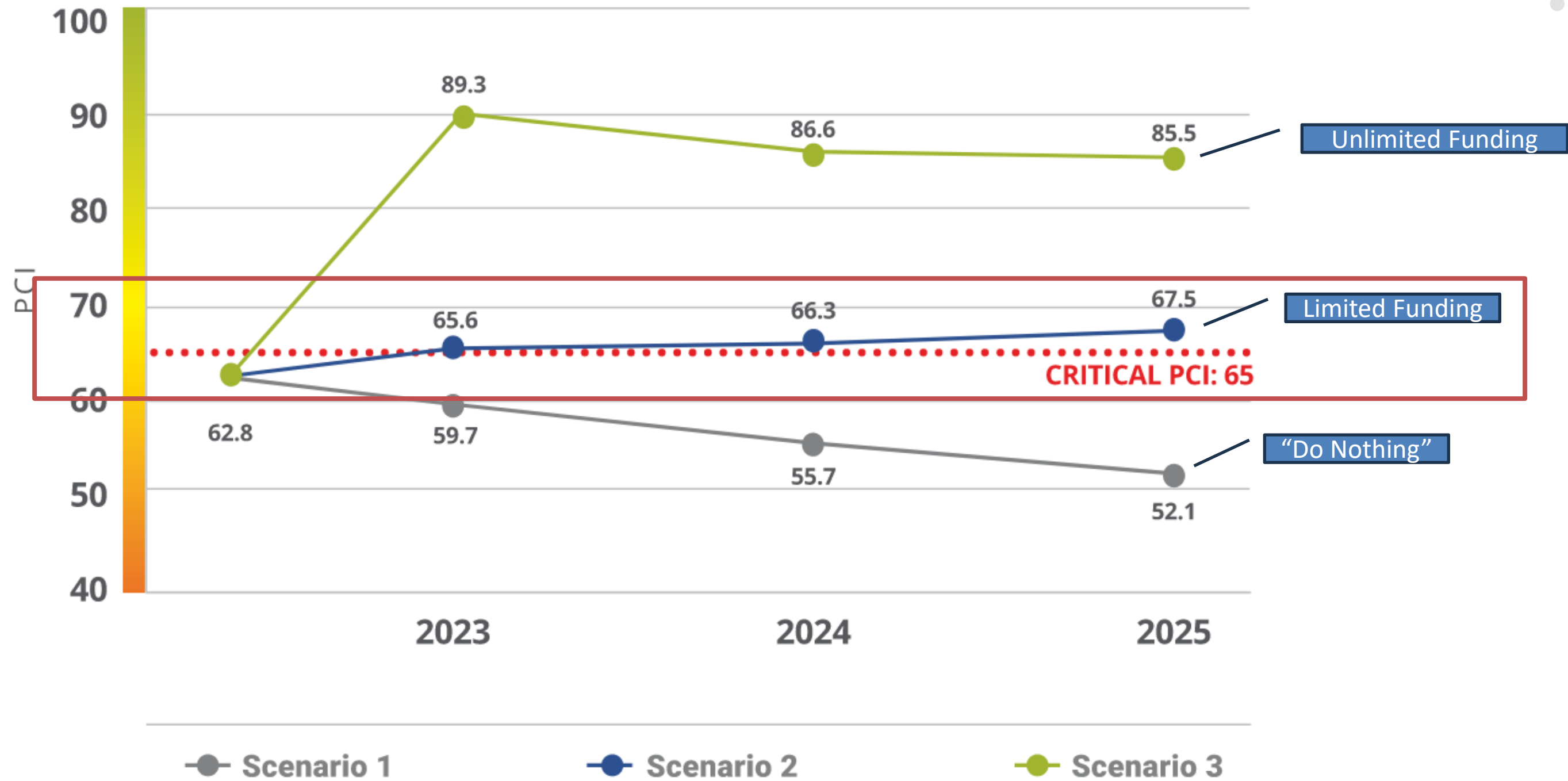


Pavement Condition Index (PCI) Review



CRITICAL PCI

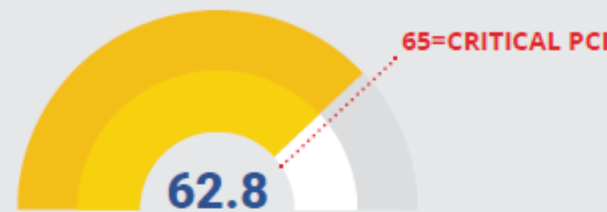
Maintenance Scenario Comparison



Pavement Condition Index (PCI) Review

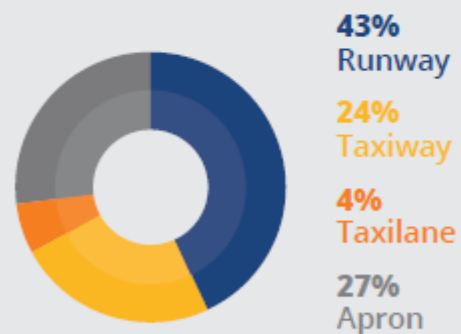
System Status

Current PCI



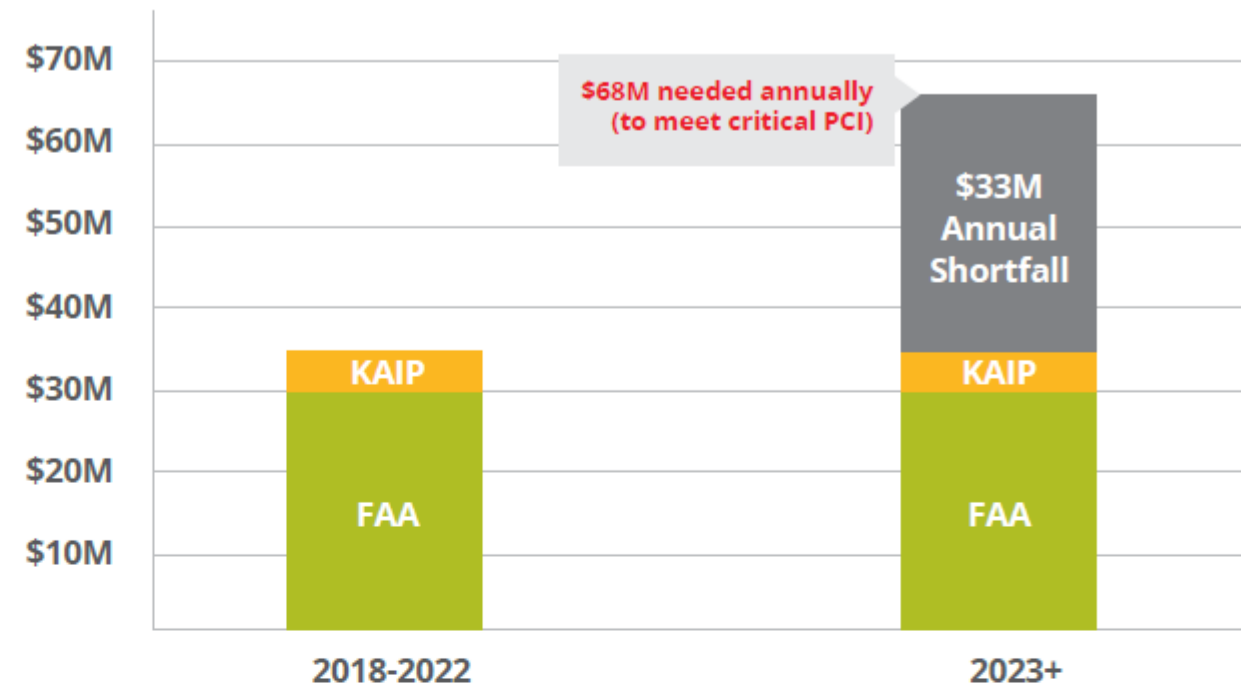
The current KDOT system-wide Pavement Condition Index (PCI) is 62.8, which is below the Critical PCI of 65. If the PCI continues decreasing below this PCI, costs to maintain the system will increase exponentially.

Current Pavement Use

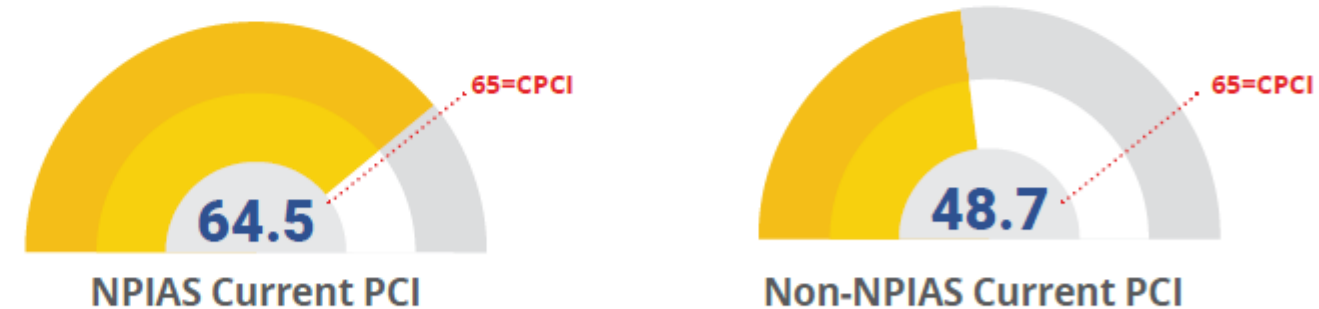


Runway pavement makes up the vast majority of the system's pavement asset. Runway pavements also have the highest average PCI in the system, with an average PCI of 68.7.

Total Annual Funding Review



NPIAS and Non-NPIAS Current Conditions



At the existing rate of funding, the combined system-wide PCI for both NPIAS and Non-NPIAS fell below the "Critical PCI" (CPCI) of 65 in 2022. The Critical PCI is the point in a pavement's life where the cost of pavement rehabilitation increases exponentially with time. It is vital to maintain an average state system PCI above the "Critical PCI" to avoid rapid pavement deterioration and future rehabilitation costs that far exceed available funding budgets.

Airport Role Analysis

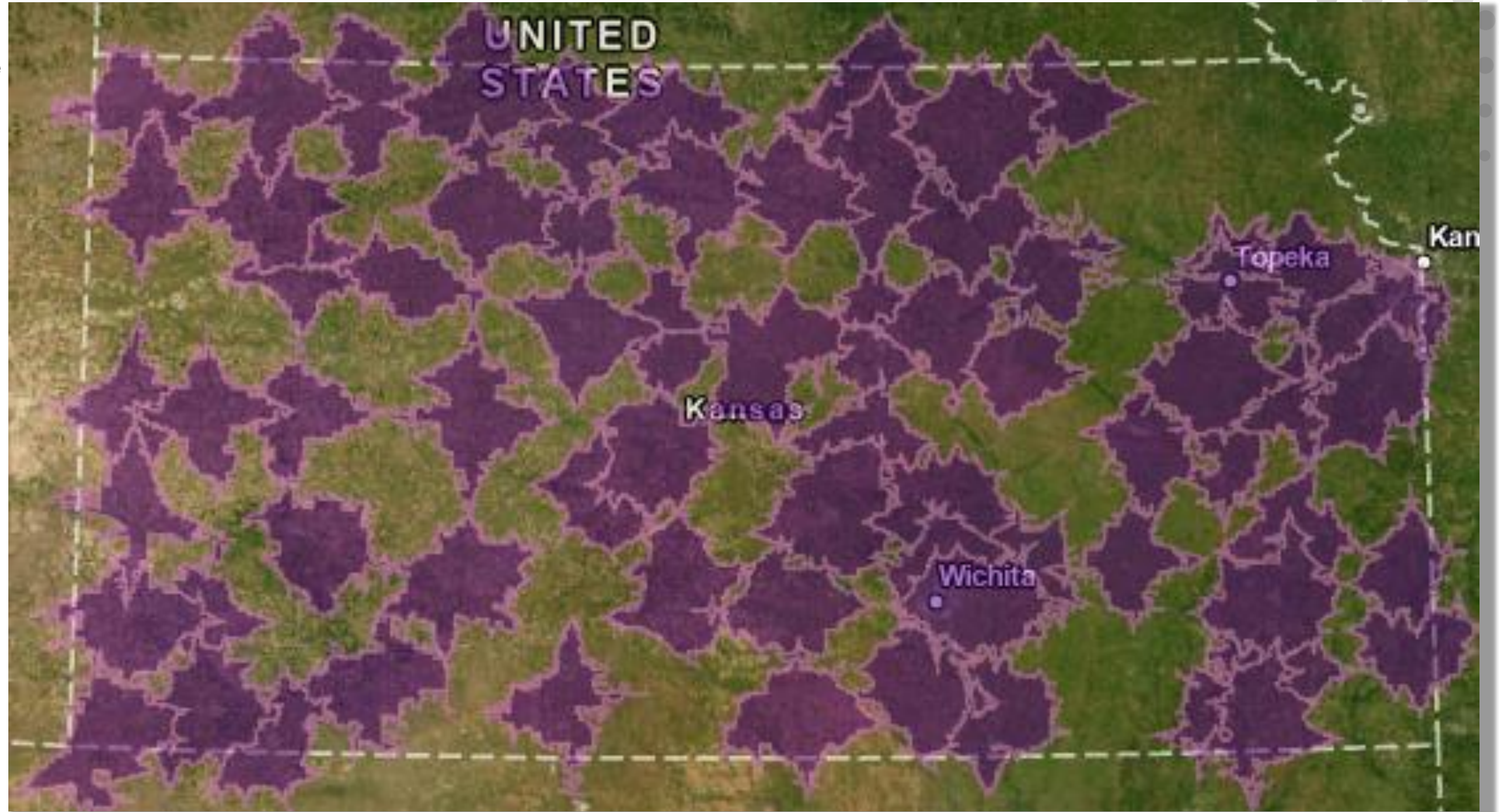


The JTF worked with stakeholders to review and recommend updates to the categories and role definitions contained within the 2016 KASP. The JTF also recommended role changes for a few airports in the interest of public safety, in order to improve air ambulance access to the airport and the community. With more and more hospitals in remote locations reducing services, air ambulance flights have increased due to transporting patients to other facilities.

- Belleville, Clay Center, Eureka, Herington, Ness City, Oberlin, St. Francis, and Stockton (Rooks County) are recommended to change category from Community to Business to improve statewide coverage.
- Sabetha is recommended to change category from Community to Business to improve statewide coverage for air ambulance service.

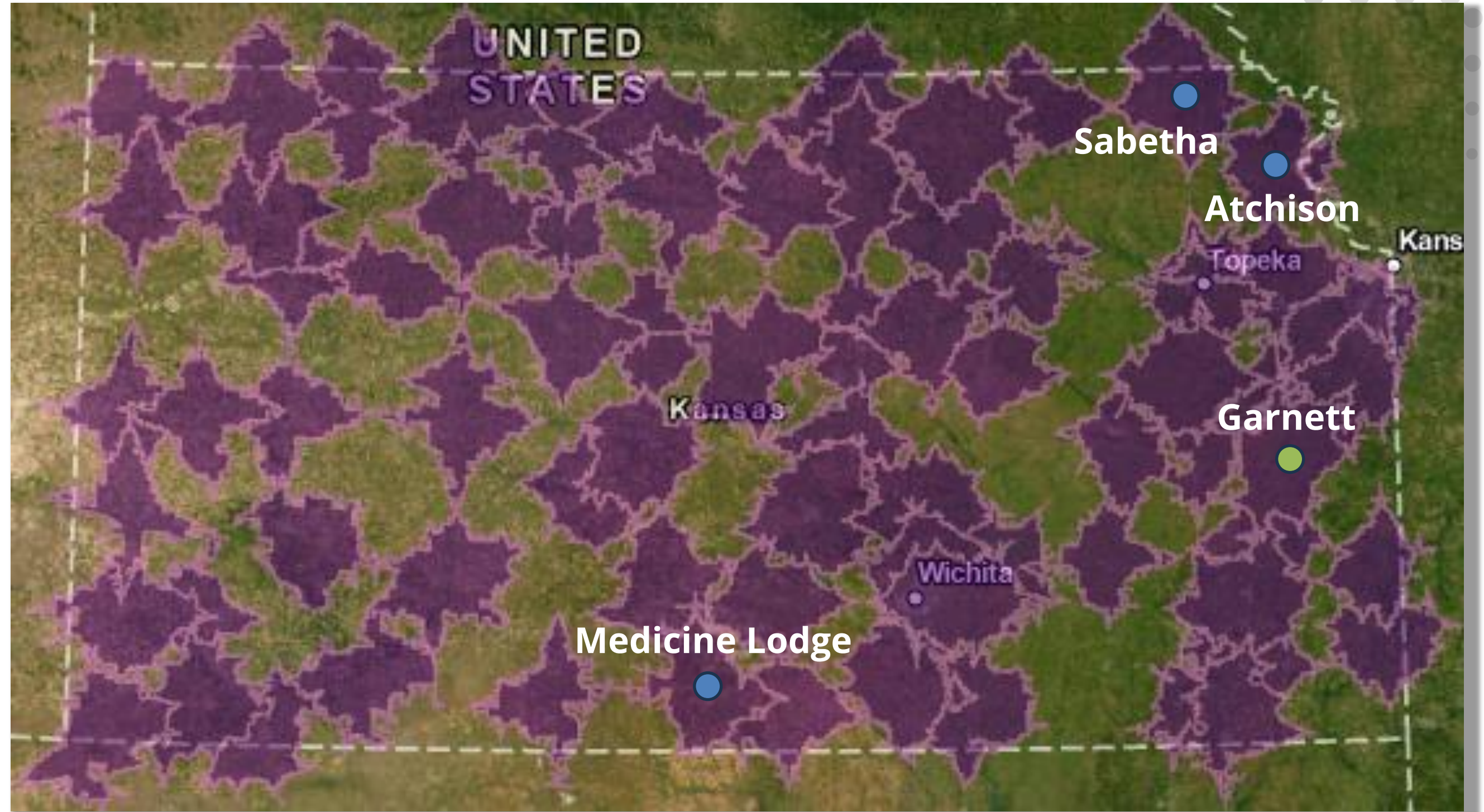
AIR AMBULANCE – EXISTING COVERAGE

1. Purple shape = 30-minute drive time from airports that already meet minimum runway requirements to support air ambulance operations.
2. Existing Coverage:
 - Population = 2.60M (88.7%)
 - Area = 62,080 sq miles



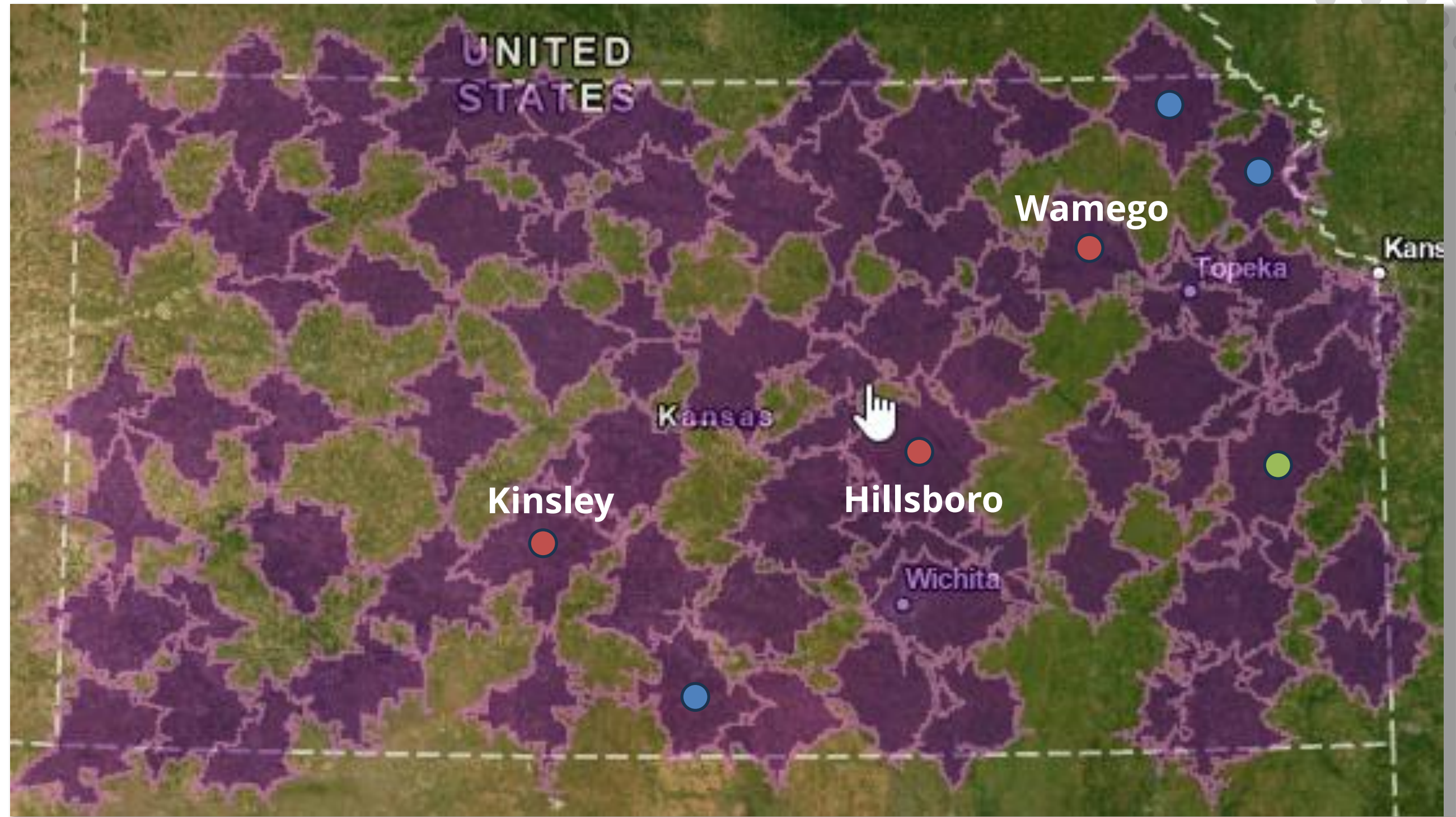
AIR AMBULANCE – BUSINESS ROLE CHANGES

1. Blue dots = “Business” airports that need runway expanded to meet minimum infrastructure requirements & support air ambulance.
2. Green dot = Has already received FAA justification to expand runway, but no funding yet.
3. Added Coverage vs. Existing:
Population = 45,500
Area = 3,560 sq miles
4. New Total Coverage:
Population = 2.65M (90.3%)
Area = 65,650 sq miles

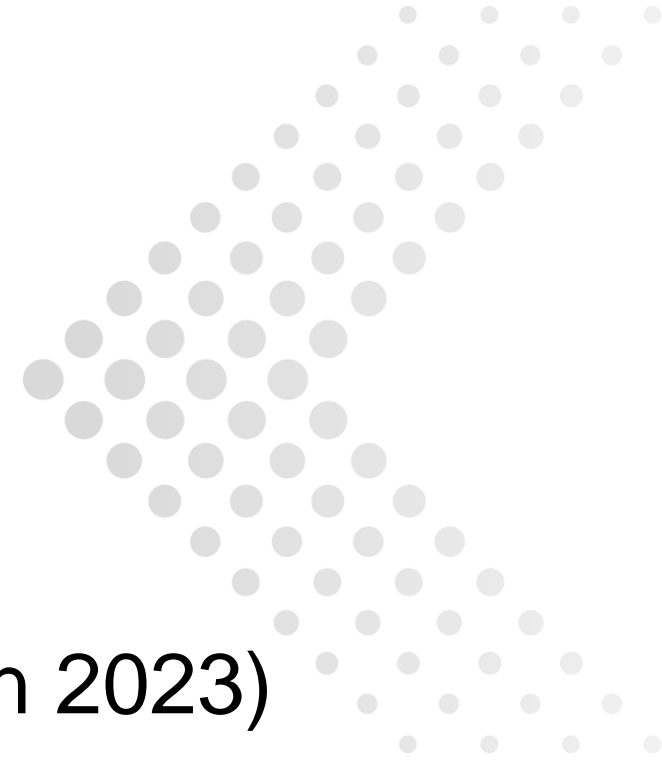


AIR AMBULANCE – ADDITIONAL AIRPORTS

1. Red dots indicate additional airports that are close to meeting air ambulance requirements.
2. Added Coverage vs. Existing:
Population = 85,300
Area = 6,500 sq miles
3. New Total Coverage:
Population = 2.69M (91.7%)
Area = 68,580 sq miles



KAIP



Kansas Airport Improvement Program (KAIP)

- State grant program that by statute receives \$5 million annually (\$11 million in 2023)
- Secretary can increase funding under the bipartisan Eisenhower Legacy Transportation Program, known as IKE.
- Variable state funding for the project costs, with a project match required from the airport sponsors.
- All public NPIAS and non-NPIAS airports are eligible for KAIP funding.
- Oversubscribed with applications and needs vastly outnumbering funding.
 - FY2025: \$10 million in state funds available
 - 135 applications, \$46,485,829 Requested from KDOT, total project value \$83,291,119.

KAIP Project Categories



KAIP project categories:

1. System preservation
 - a) Infrastructure – maintenance, repair and rehab of landside or airside facilities (pavement)
 - b) Vertical development- maintenance, repair, or rehab of existing vertical development
2. Modernization
 - a) Geometric Improvements- projects that increase the capacity of existing facilities such as line of sight, obstruction removal, changing alignment
 - b) Vertical Development- projects that create new facilities/vertical development
3. Equipment
 - a) Purchase of equipment such as snow removal or mowing
 - b) Facilities
 - i. Navigational- airfield lights, AWOS, PAPI
 - ii. Non-navigational – fuel systems, credit card readers
4. Design/Planning- aeronautical surveys, airport layout plans, etc.

KAIP Funding Match

KAIP Projects are funded based on the following ratio:

1. System Preservation Projects
 - a. Infrastructure Improvements(90/10)
 - b. Vertical Development(85/15)
2. Modernization Projects
 - a. Geometric Improvements(90/10)
 - b. Vertical Development(50/50)
3. Equipment and Facilities Projects
 - a. Equipment(50/50)
 - b. Facilities
 - i. Navigational(90/10)
 - ii. Non-Navigational(85/15)
4. Design/Planning Projects
 - a. All planning grants(95/5)

KAIP Project Selection

Priority Rating System

Factors used in evaluating projects:

- Safety
- System Preservation
- Kansas Airport System Plan recommendations
- Geographic remoteness
- Discretionary
 - Willingness of sponsor to exceed minimum match
 - Previous project experience
 - Economic impact
 - Other considerations not falling under previous factors

Airport Funding Available- FAA AIP

The FAA Airport Improvement Program (AIP) provides funding for public use NPIAS airports. AIP funding supports airport master planning and capital projects as identified and programmed by the FAA. Over the past 10 years, Kansas has received a total of \$340 million in FAA AIP Grant funding.

| Funding Year | FAA AIP Funding Type | | | Totals |
|---------------------------------------|----------------------|---------------|----------------------------|----------------------|
| | Entitlements | Discretionary | Supplemental Discretionary | |
| 2022 | \$ 16,280,615 | \$ 23,595,886 | \$ - | \$ 39,876,501 |
| 2021 | \$ 24,124,300 | \$ 4,654,069 | \$ 6,168,853 | \$ 34,947,222 |
| 2020 | \$ 19,953,577 | \$ 7,345,572 | \$ 14,721,155 | \$ 42,020,304 |
| 2019 | \$ 13,655,021 | \$ 5,953,507 | \$ - | \$ 19,608,528 |
| 2018 | \$ 18,239,089 | \$ 13,058,875 | \$ - | \$ 31,297,964 |
| 2017 | \$ 21,143,435 | \$ 18,255,869 | \$ - | \$ 39,399,305 |
| 2016 | \$ 20,669,958 | \$ 20,602,228 | \$ - | \$ 41,272,186 |
| 2015 | \$ 19,160,443 | \$ 7,474,116 | \$ - | \$ 26,634,559 |
| 2014 | \$ 18,841,467 | \$ 19,825,078 | \$ - | \$ 38,666,545 |
| 2013 | \$ 18,902,179 | \$ 8,052,065 | \$ - | \$ 26,954,244 |
| 10 Year Average Annual Funding | | | | \$ 34,067,736 |

NEEDS ASSESSMENT: 10-YEAR PROGRAM


| 10-Year Annualized Costs with 3% Inflation | | | | | | | | | | | |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| System Goal | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | Total |
| Preserve Pavements | \$ 67,470,743 | \$ 69,494,865 | \$ 71,579,711 | \$ 73,727,103 | \$ 75,938,916 | \$ 78,217,083 | \$ 80,563,596 | \$ 82,980,503 | \$ 85,469,919 | \$ 88,034,016 | \$ 773,476,455 |
| Preserve Buildings | \$ 24,118,460 | \$ 24,842,014 | \$ 25,587,274 | \$ 26,354,892 | \$ 27,145,539 | \$ 27,959,905 | \$ 28,798,703 | \$ 29,662,664 | \$ 30,552,544 | \$ 31,469,120 | \$ 276,491,115 |
| Preserve Equipment | \$ 5,690,500 | \$ 5,861,215 | \$ 6,037,051 | \$ 6,218,163 | \$ 6,404,708 | \$ 6,596,849 | \$ 6,794,755 | \$ 6,998,597 | \$ 7,208,555 | \$ 7,424,812 | \$ 65,235,205 |
| Modernize for State Standards | \$ 14,433,391 | \$ 14,433,391 | \$ 14,433,391 | \$ 14,433,391 | \$ 14,433,391 | \$ 14,433,391 | \$ 14,433,391 | \$ 14,433,391 | \$ 14,433,391 | \$ 14,433,391 | \$ 144,333,912 |
| Modernize per FAA Justification | \$ 7,388,374 | \$ 7,388,374 | \$ 7,388,374 | \$ 7,388,374 | \$ 7,388,374 | \$ 7,388,374 | \$ 7,388,374 | \$ 7,388,374 | \$ 7,388,374 | \$ 7,388,374 | \$ 73,883,735 |
| Total Program Need | \$119,101,468 | \$122,019,859 | \$125,025,802 | \$128,121,923 | \$131,310,927 | \$134,595,602 | \$137,978,817 | \$141,463,529 | \$145,052,782 | \$148,749,712 | \$1,333,420,421 |
| Average Annual Program Need | | | | | | | | | | | \$ 133,342,042 |
| Funding Available | | | | | | | | | | | |
| Funding Source | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | Total |
| FAA Entitlements & Discretionary | \$ 32,000,000 | \$ 32,000,000 | \$ 32,000,000 | \$ 32,000,000 | \$ 32,000,000 | \$ 32,000,000 | \$ 32,000,000 | \$ 32,000,000 | \$ 32,000,000 | \$ 32,000,000 | \$ 320,000,000 |
| FAA Supplemental Discretionary | \$ 7,300,000 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 7,300,000 |
| FAA BIL-AIG Apportionments | \$ 17,519,887 | \$ 17,519,887 | \$ 17,519,887 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 52,559,660 |
| FAA BIL-ATP | \$ 7,055,562 | \$ 7,055,562 | \$ 7,055,562 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 21,166,686 |
| KDOT KAIP Program | \$ 5,000,000 | \$ 5,000,000 | \$ 5,000,000 | \$ 5,000,000 | \$ 5,000,000 | \$ 5,000,000 | \$ 5,000,000 | \$ 5,000,000 | \$ 5,000,000 | \$ 5,000,000 | \$ 50,000,000 |
| KDOT Cost Share Program | \$ 875,000 | \$ 875,000 | \$ 875,000 | \$ 875,000 | \$ 875,000 | \$ 875,000 | \$ - | \$ - | \$ - | \$ - | \$ 5,250,000 |
| Sponsor 10% Local Match | \$ 11,910,147 | \$ 12,201,986 | \$ 12,502,580 | \$ 12,812,192 | \$ 13,131,093 | \$ 13,459,560 | \$ 13,797,882 | \$ 14,146,353 | \$ 14,505,278 | \$ 14,874,971 | \$ 133,342,042 |
| Total Funding Available | \$ 81,660,595 | \$ 74,652,434 | \$ 74,953,029 | \$ 50,687,192 | \$ 51,006,093 | \$ 51,334,560 | \$ 50,797,882 | \$ 51,146,353 | \$ 51,505,278 | \$ 51,874,971 | \$ 589,618,388 |
| Average Annual Funding Available | | | | | | | | | | | \$ 58,961,839 |
| Total Additional Funding Need Over 10 Year Period | | | | | | | | | | | \$ 743,802,034 |
| Annual Additional Funding Need | | | | | | | | | | | \$ 74,380,203 |

Future Solutions and Next Steps



An increase from the current statutory levels of \$5 million annually will be an important next step to supporting KAIP objectives and airport needs.

KDOT Aviation will continue to work with local, state, and federal partners to identify strategic funding opportunities to help meet the needs.



Questions?

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The **KDOT Airport Facilities Inventory and Needs Assessment Report** is available on the KDOT website at

www.ksdot.gov/publications.asp.