9

System Evaluation - Stewardship

The previous chapter of the Kentucky Statewide Aviation System Plan (SASP) stratified the Commonwealth's 59 public airports into one commercial service and four general aviation roles, while making recommendations of the types of facilities and services that airports in each of these roles would ideally have. This chapter and the two that follow present an evaluation of the Kentucky airport system. This evaluation is based on a number of factors, including those benchmarks based on roles and geographic coverage of the system. This chapter evaluates how each of Kentucky's public airports maintains a level of stewardship to its community and the aviation public as a whole. This evaluation is based on the following factors:

- **Factors Limiting Future Development** During the inventory phase of the SASP, airport representatives were asked to summarize factors that might limit future development at their airports, including physical, environmental, community, and financial limitations.
- **Pavement Condition Index (PCI) Analysis** The PCI is an industry standard method of rating the condition of airport pavements. This section details the condition of runway pavements at Kentucky airports using the most recent KYTC information available.
- **Airport Lease Standards** During the inventory phase of the SASP, airport representatives reported on the status of their airport leasing, including their currency and standardization. Airports were also asked to provide details on non-standard leases.
- **Local Commitment** During the inventory phase of the SASP, airport representatives reported on their airport's level of local commitment and coordination. This includes the dollar amount of local commitment provided by each airport's associated city and county, the relative level of coordination between the airport and agencies such as the FAA and KDA, and the form of local commitment. This section summarizes this data and research.
- **Environmental Stewardship** Airport representatives reported on several environmental compliance and stewardship factors during the inventory phase of the study. This section summarizes these findings, including compliance with the Kentucky Division of Water standards and airport environmental policies.
- **Wildlife Safety** Wildlife hazards are a common issue for airports, including both rural and urban facilities. This section summarizes findings of airports that have an adopted wildlife management plan.

This analysis is primarily intended to be an analysis of existing conditions, in addition to being a guidebook to airports and the Kentucky Department of Aviation (KDA) when working to improve each airport's level of stewardship to its community and the public. The analysis performed in this chapter is also not meant to replace or supersede detailed planning and engineering performed as part of an airport's master plan or specific airport project.

To perform these analyses, a number of data sources were utilized. The primary data sources were Kentucky's airports via the Airport Inventory and Data Survey. Additional data sources included individual airport master plans and airport layout plans (ALPs), the 2015 KDA PCI Study, the knowledge of KDA staff members, satellite imagery from sources such as Google, and various internet resources.

Several sections of this chapter are tied directly back to SASP objectives established in Chapter 2: Goals, Objectives, and Performance Measures.

Factors Limiting Future Development

The expansion and future development of an airport can be constrained by any number of factors, from the obvious such as urban development and terrain to the less obvious such as financial limitations, community perception and/or public concern. During the inventory effort of the SASP, airport representatives were asked to report the factors that most limit their airport's potential for future development and expansion. Airports were asked to report limiting factors that fall into four categories: physical limitations, environmental factors, community relations, and financial shortfalls. In addition, satellite imagery was inspected to determine other physical and environmental limitations not reported by airports. The types of development limitations found at Kentucky airports include the following:

Physical Limitations –

- Public roads or railroads off of runway ends that may limit future extensions of runways, or otherwise located as to impede future airport development.
- Surrounding development, from dense urban development to less dense suburban, industrial, or commercial development.
- The airport property itself may limit development, as the airport sponsor has difficulty acquiring land for either future development or the optimization of existing airport operations (for example, RPZ compliance).
- Other physical limitations at Kentucky airports include obstructions such as towers and power lines not only affect current operations, but complicate the possibilities of expansion, and the locations of underground utilities.

Environmental Factors –

- Trees or other vegetation may act as obstructions to current activities while also complicating future airport development and expansion.
- Water bodies, including streams and rivers, lakes, and retention ponds, are often viewed of as permanent impediments to airport expansion. Floodplains may also limit airport development.
- Topography and terrain also limit expansion at many Kentucky airports, particularly in the eastern region of the state in the Appalachian foothills.
- Other environmental factors limiting development at Kentucky airports include wildlife
 habitats and weather conditions such as high winds and heavy snowfall during the winter
 months.
- **Community Relations** Relatively few Kentucky airports reported issues with community relations or related factors. Reported issues included noise complaints, a lack of utilities, or certain residents being opposed to expansion. Kentucky airports were largely found to report having positive relationships with their surrounding communities.
- **Financial Shortfalls** Including limitations in both local and state funding, as well as limited revenue from airport revenue streams such as hangar rentals and fuel sales. Some Kentucky airports also reported long term debt being a major limitation on not only current operations but also future expansion.

Figure 9-1 summarizes the percentage of Kentucky system airports that reported or were found to be limited by the above factors. In total, physical limitations and environmental factors were found to be the most common factors limiting future development at Kentucky airports. With only 15 percent of the system reporting issues with community relations, this was the least reported limiting factor.

Physical Limitations 59% **Environmental Factors** 54% **Community Relations Financial Shortfalls** 47% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Figure 9-1
Factors Limiting Future Development at Kentucky Airports

Source: Airport Inventory and Data Survey, Google Maps.

Due to the varying nature of both physical limitations and environmental factors, it is possible to provide further details on how such limitations affect Kentucky airports. As explained above, future development at 59 percent of Kentucky airports is limited by physical limitations. **Figure 9-2** reveals the most common forms of these physical limitations, with public roadways and existing surrounding development being the most common. Environmental factors, meanwhile, limit future development at 54 percent of the Commonwealth's public-use airports. **Figure 9-3** reveals that surrounding topography/terrain or trees are the most common environmental limitations.

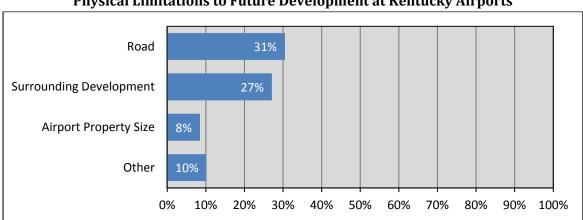


Figure 9-2
Physical Limitations to Future Development at Kentucky Airports

 $Source: Airport\ Inventory\ and\ Data\ Survey,\ Google\ Maps.$

Trees/Vegetation Topography 24% **Water Bodies** Other 14% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Figure 9-3
Environmental Factors Limiting Future Development at Kentucky Airports

Source: Airport Inventory and Data Survey, Google Maps.

Table 9-1 details physical and environmental constraints on future development at Kentucky airports, as reported by airport representatives or found on satellite imagery. It should again be noted that this list is not all encompassing, but representative of the best available data.

Table 9-1
Details of Physical Limitations and Environmental Factors at Kentucky Airports

FAA	Associated			
ID	City	Airport Name	Physical Limitations	Environmental Factors
		Commerc	cial Service	
BWG	Bowling Green	Bowling Green-Warren County Regional	Surrounding development	
CVG	Covington	Cincinnati/Northern Kentucky International	Surrounding development	Trees
LEX	Lexington	Blue Grass	Roads, thoroughbred horse farms, and Keeneland race track	Terrain/topography
SDF	Louisville	Louisville International-Standiford Field	Roads, railroads, and surrounding industrial development	Trees
OWB	Owensboro	Owensboro-Daviess County Regional	Roads	
PAH	Paducah	Barkley Regional	Roads and surrounding development	
		Econom	nic Level 1	
AAS	Campbellsville	Taylor County	Airport road on approach end of RW 5	
DVK	Danville	Stuart Powell Field	Residential development	Blue line stream, wetland and agricultural trust on the north side of RW 30
EKX	Elizabethtown	Addington Field		
FGX	Flemingsburg	Fleming-Mason	Kentucky Highway 11	
FFT	Frankfort	Capital City		
27K	Georgetown	Georgetown Scott County - Marshall Field		
JQD	Hartford	Ohio County		
CPF	Hazard	Wendell H. Ford Regional		Trees
EHR	Henderson	Henderson City-County	Road to east	Bat habitats; hot runway during summer months and weight limitations
HVC	Hopkinsville	Hopkinsville-Christian County	Pennyrile Parkway to west, road and unowned property to east	Little River Fork on south side.
K24	Jamestown	Russell County		
LOZ	London	London-Corbin-Magee Field	Public highways within 3,000ft. of both ends of runway; surrounding development	
LOU	Louisville	Bowman Field	Roads, golf courses, and residential development	Trees
210	Madisonville	Madisonville Regional		Ditch designated by EPA as possible blue water

Table 9-1
Details of Physical Limitations and Environmental Factors at Kentucky Airports

FAA	Associated			
ID	City	Airport Name	Physical Limitations	Environmental Factors
			Roads on each side of runway; Road on	
M25	Mayfield	Mayfield Graves County	RW 19 end is the future I-69	
		Morehead-Rowan County Clyde A. Thomas		
SYM	Morehead	Regional		Terrain/topography
IOB	Mount Sterling	Mount Sterling-Montgomery County	Roads off of both RW ends	
CEY	Murray	Kyle-Oakley Field		
PBX	Pikeville	Pikeville – Pike County Regional	Limited property size	Terrain/topography
				EPA valley issues for any RSA
CIC	Dunatanahuun	Die Condu Designal		improvement, Terrain/topography,
SJS	Prestonsburg	Big Sandy Regional	Roads	trees
RGA	Richmond	Central Kentucky Regional	Natural gas line to the south of airfield	Terrain/topography
SME	Somerset	Lake Cumberland Regional	Roads	Terrain/topography
612	Springfield	Lebanon-Springfield		Crosswinds, trees
BYL	Williamsburg	Williamsburg-Whitley County	Roads to the north and west	Terrain/topography and trees
		Economic	Level 2	
DWU	Ashland	Ashland Regional	Existing development	Ohio river and tributaries
BRY	Bardstown	Samuels Field	Unowned adjacent property	Lake to the south
GLW	Glasgow	Glasgow Municipal	Kentucky Highway 90	Terrain/topography
M21	Greenville	Muhlenberg County	Development to north	Terrain/topography
5M9	Marion	Marion-Crittenden County	Roads	
EKQ	Monticello	Wayne County		Terrain/topography
4M7	Russellville	Russellville-Logan County		
TWT	Sturgis	Sturgis Municipal		
	3	Economic	Level 3	
				Southfork Licking River is on the
				Scenic River list; trees and
018	Cynthiana	Cynthiana-Harrison County	Power lines near approach	floodplain
K62	Falmouth	Gene Snyder		Terrain/topography, trees
1M7	Fulton	Fulton	Roads off both RW ends	
193	Hardinsburg	Breckinridge County		
135	Harlan	Tucker-Guthrie Memorial		Terrain/topography, trees
M20	Leitchfield	Grayson County	Roads, surrounding development	Trees

Table 9-1
Details of Physical Limitations and Environmental Factors at Kentucky Airports

FAA	Associated	Details of Figsical Emiliations and Enviro		
ID	City	Airport Name	Physical Limitations	Environmental Factors
KY8	Lewisport	Hancock Co-Ron Lewis Field	Roads, surrounding development	
1A6	Middlesboro	Middlesboro-Bell County	Roads, levee, obstructions, surrounding development	Trees
2M0	Princeton	Princeton-Caldwell County		
TZV	Tompkinsville	Tompkinsville-Monroe County	Limited property size	
		Economic I	evel 4	
1M9	Cadiz	Lake Barkley State Resort Park		Trees and vegetation
196	Columbia	Columbia-Adair County		
	Dawson			
8M7	Springs	Tradewater		
213	Falls of Rough	Rough River State Resort Park		
M34	Gilbertsville	Kentucky Dam Village State Resort Park		
JKL	Jackson	Julian Carroll		Terrain/topography, trees
153	Liberty	Liberty-Casey County		
181	Pine Knot	McCreary County	Irregularities in airport property line at RW 22 end	Pond located on airport property
8M9	Providence	Providence-Webster County	Limited property size; roads	Trees
150	Stanton	Stanton-Powell County	Surrounding development	Terrain/topography
913	West Liberty	West Liberty	Surrounding residential development	

Source: Airport Inventory and Data Survey, Google Maps.

Land Use Controls

Many of the above limiting factors – particularly physical limitations and certain aspects of community relations – can be combated or at best prevented by instituting appropriate land use controls. Airports that are not included in regional or local land use policies often experience limitations to development and expansion, but airports that are included in regional transportation and land use planning are best prepared to not only combat existing limiting factors, but to grow into the future.

During the inventory phase of the SASP, airport representatives were asked about land use controls implemented by their surrounding jurisdictions specifically include the airport in area planning and zoning. The types of zoning and land use controls reported by Kentucky airports include the following:

- Land Use Zoning In airport environs, land use zoning aims to reduce land uses and development densities that are incompatible with the airport and its operations, with recommended land uses and densities differing based on the airport's location. While it has no authority over controlling the types of land uses near an airport, the FAA typically supports land uses such as industrial, agricultural, and commercial over residential and institutional. A common result of the land use planning process is an airport overlay zone within which airport land use planning and zoning applies.
- **Height Zoning** The construction or presence of tall structures such as buildings, construction cranes, and cell towers in the vicinity of an airport can be hazardous to the navigation of airplanes and development on the ground. Federal Aviation Regulation (FAR) Part 77 identifies the maximum height at which a structure should be constructed at any given point around an airport. When exceeding that height, the structure is considered an obstruction. At its most basic, airport height zoning ensures that Part 77 requirements are accounted for in local and regional planning and included in zoning codes.
- Noise Abatement Procedures The FAA supports efforts to minimize the impacts of airport noise, including noise reduction of night flights, noise compatibility programs, encouraging compatible land uses in an airport's environs, and other mitigation efforts. The FAA advises airports on noise abatement through FAR Part 150, Airport Noise Compatibility Planning. A Part 150 study includes analyzing existing conditions such as noise levels (using noise contour maps), area land uses, and other applicable factors with the goal of developing a noise compatibility plan. An airport noise compatibility plan should optimize noise abatement procedures without interfering with the operational viability of the airport, while also providing a framework for noise-compatible land uses in the surrounding areas.

In total, 16 of Kentucky's 59 public-use airports stated that their communities include at least one form of airport-specific zoning. **Figure 9-4** summarizes the percentage of Kentucky airports that reported these types of land use controls being implemented in their airport environs. Both land use zoning and height zoning were reported by 24 percent of the Kentucky system, while only seven airports (12 percent) reported noise abatement procedures being in place at their airports. **Table 9-2** details land use controls at individual airports.

The Kentucky Airport Zoning Commission, part of the Kentucky Transportation Cabinet, has been working with local zoning commissions over the past 10 years to encourage adoption of airport zoning regulations.

Figure 9-4
Land Use Controls at Kentucky Airports

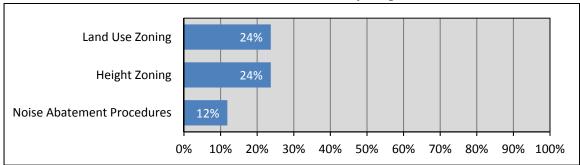


Table 9-2 Land Use Controls at Individual Kentucky Airports

		Land Use Controls at murridual Kentucky An	ports		
FAA ID	Associated City	Airport Name	Land Use Zoning	Height Zoning	Noise Abatement Procedures
		Commercial Service			
BWG	Bowling Green	Bowling Green-Warren County Regional	Yes	Yes	Yes
CVG	Covington	Cincinnati/Northern Kentucky International	Yes	Yes	Yes
LEX	Lexington	Blue Grass	Yes	Yes	No
SDF	Louisville	Louisville International-Standiford Field	Yes	Yes	Yes
OWB	Owensboro	Owensboro-Daviess County Regional	Yes	Yes	Yes
PAH	Paducah	Barkley Regional	Yes	No	No
		Economic Level 1			
AAS	Campbellsville	Taylor County	No	No	No
DVK	Danville	Stuart Powell Field	No	No	No
EKX	Elizabethtown	Addington Field	No	No	No
FGX	Flemingsburg	Fleming-Mason	Yes	No	No
FFT	Frankfort	Capital City	Yes	No	No
27K	Georgetown	Georgetown Scott County - Marshall Field	No	Yes	No
JQD	Hartford	Ohio County	No	No	No
CPF	Hazard	Wendell H. Ford Regional	No	No	No
EHR	Henderson	Henderson City-County	Yes	Yes	Yes
HVC	Hopkinsville	Hopkinsville-Christian County	No	No	No
K24	Jamestown	Russell County	No	No	No
LOZ	London	London-Corbin-Magee Field	No	No	No
LOU	Louisville	Bowman Field	No	No	No
210	Madisonville	Madisonville Regional	Yes	Yes	No
M25	Mayfield	Mayfield Graves County	No	No	No
SYM	Morehead	Morehead-Rowan County Clyde A. Thomas Regional	No	No	No
IOB	Mount Sterling	Mount Sterling-Montgomery County	No	No	No
CEY	Murray	Kyle-Oakley Field	No	No	No
PBX	Pikeville	Pikeville – Pike County Regional	No	No	No
SJS	Prestonsburg	Big Sandy Regional	No	No	No
RGA	Richmond	Central Kentucky Regional	Yes	No	No
SME	Somerset	Lake Cumberland Regional	No	No	No

Table 9-2 Land Use Controls at Individual Kentucky Airports

			Land		Noise
FAA			Use	Height	Abatement
ID	Associated City	Airport Name	Zoning	Zoning	Procedures
612	Springfield	Lebanon-Springfield	No	No	No
BYL	Williamsburg	Williamsburg-Whitley County	No	No	No
ı		Economic Level 2	1	1	
DWU	Ashland	Ashland Regional	No	No	No
BRY	Bardstown	Samuels Field	No	No	No
GLW	Glasgow	Glasgow Municipal	No	Yes	No
M21	Greenville	Muhlenberg County	Yes	Yes	No
5M9	Marion	Marion-Crittenden County	No	No	No
EKQ	Monticello	Wayne County	No	No	No
4M7	Russellville	Russellville-Logan County	No	Yes	No
TWT	Sturgis	Sturgis Municipal	No	No	No
		Economic Level 3			
018	Cynthiana	Cynthiana-Harrison County	No	Yes	No
K62	Falmouth	Gene Snyder	No	No	No
1M7	Fulton	Fulton	No	No	No
193	Hardinsburg	Breckinridge County	No	No	No
135	Harlan	Tucker-Guthrie Memorial	No	No	No
M20	Leitchfield	Grayson County	No	No	No
KY8	Lewisport	Hancock Co-Ron Lewis Field	No	No	No
1A6	Middlesboro	Middlesboro-Bell County	No	No	No
2M0	Princeton	Princeton-Caldwell County	No	No	No
TZV	Tompkinsville	Tompkinsville-Monroe County	No	No	No
		Economic Level 4			
1M9	Cadiz	Lake Barkley State Resort Park	No	No	No
196	Columbia	Columbia-Adair County	No	No	No
8M7	Dawson Springs	Tradewater	No	No	No
213	Falls of Rough	Rough River State Resort Park	Yes	Yes	Yes
M34	Gilbertsville	Kentucky Dam Village State Resort Park	No	No	No
JKL	Jackson	Julian Carroll	No	No	No
153	Liberty	Liberty-Casey County	No	No	No
181	Pine Knot	McCreary County	No	No	No
8M9	Providence	Providence-Webster County	No	No	No
150	Stanton	Stanton-Powell County	Yes	Yes	Yes
913	West Liberty	West Liberty	No	No	No

Pavement Condition Index (PCI) Analysis

Pavement strength is a critical planning and airport maintenance consideration for several reasons. Not only does pavement condition tie in closely with operational safety and efficiency, but the upkeep of airport pavements presents one of the most significant capital investments for airport sponsors. Reasons for monitoring and planning the maintenance of airport pavements are many. All pavements must have sufficient inherent stability to continuously withstand and support the weight of aircraft, the action of aircraft traffic include takeoffs, landings, taxiing, and parking, and the deteriorating influences of factors such as weather. Pavement strength is normally achieved with adequate initial design, periodic seals, and overlays that can be included with normal runway maintenance and upkeep projects. Please note that a crosswind runway is eligible for repair or rehabilitation if it is designated the primary runway.

Based on the existing condition of all runway pavements, many areas will require re-work of the runway pavements, overlays, and drainage work to restore crown and grade to extend the life of the existing pavement. The longer these items are delayed, the greater the quantity of the existing pavement that will have to be either overlaid or replaced, and the greater the cost of rehabilitation.

The pavement condition index (PCI) is an industry standard method for measuring and rating airport pavements so that appropriate maintenance and upkeep can be planned and financed. PCI is expressed in a range of numbers from 100 (perfect, new pavements) to 0 (failed pavements). PCI at Kentucky airports was most recently assessed as part of the Kentucky Airport Pavement Management System (APMS), published in 2014 by Applied Pavement Technology (APTech). The KDA will be completing a new Kentucky airport pavement management study in 2018. The following sections provide an overview of the FAA's policy on airport pavement maintenance, and summarize the results of the APMS.

FAA Pavement Maintenance Standards and Policy

A pavement management program (PMP) is required by the FAA for any airport sponsor that has used federal assistance to construct, reconstruct, or repair airfield pavement. One element of a grant agreement for pavement reconstruction, repair, or rehabilitation is a grant assurance that includes an obligation for a PMP. The goal of an airport PMP is to provide safe and operable pavement for the lowest possible cost.

Knowing when to repair and when to replace pavement is crucial to establishing the most cost effective approach. **Figure 9-5** displays the pavement lifecycle curve, which the FAA uses to illustrate the useable life of an airport pavement. In the early years of an airport pavement, deterioration occurs relatively slowly, but as more time passes, that deterioration accelerates, regardless of regular upkeep. The lifecycle curve states that for every dollar spent on preventative maintenance early in the pavement life (theoretically, at the beginning of the "fair" condition), repair would cost four to five dollars when conditions reach "serious" conditions. As a result, the FAA's policy is to emphasize and encourage preventative maintenance. A PMP assists the FAA and airport sponsors in determining the best time to apply funding towards pavement projects.

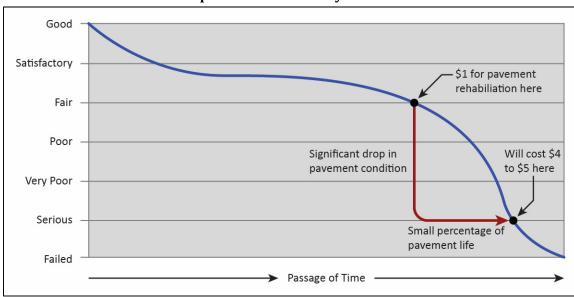


Figure 9-5
Airport Pavement Lifecycle Curve

Source: FAA.

Pavement Management Program

The FAA offers general guidelines for developing an airport PMP, stating that each program should be customized to best fit the needs and conditions of individual airports, and that programs can evolve over time, if necessary. Facilities with more or larger pavements require a more extensive PMP. FAA guidelines state that a PMP must include the following elements at a minimum:

- **Database** A place where all data collected as part of the PMP can be stored and organized. Includes an inventory of all runways, taxiways, and aprons, the structure, composition, and age of these pavements, and the maintenance and rehabilitation (M&R) history of these pavements. The database also includes details on pavement condition and airport traffic data.
- **System Capabilities** Includes predicting current and future pavement conditions, developing an ideal M&R plan for an airport's budget, and determining budget requirements necessary to meet pavement management objectives. Balancing budget requirements and constraints leads to a formulation and prioritization of M&R projects.
- **PMP Management** Includes the definition of pavement networks, branches, and sections. Also includes network- and project-level pavement management, pavement condition prediction, and application of PMP software. PMP management also involves issues of pavement roughness and friction.
- **Reports** Various PMP reports include an inventory report, inspection scheduling report, pavement condition report, budget planning report, network maintenance report, and economic analysis report, among others.
- **PMP Software** Several software options exist for developing a PMP, including but not limited to PAVER and FAA PAVEAIR.¹

Each PMP should include a comprehensive prioritization system. As shown by the pavement lifecycle curve, the cost of maintenance increases as a pavement ages. Prioritization of maintenance should include cost comparisons of both initial and anticipated maintenance alternatives. Potential causes of distresses should be determined first, so that repairs can address existing damage while

¹ FAA Advisory Circular 150/5380-7B, Airport Pavement Management Program (PMP).

attempting to prevent or slow future damage. In addition, areas of higher traffic should receive increased priority to meet user needs and to address the increased wear.

A PMP budget often has a period of up to three years and should be updated annually. This helps to account for the regular upkeep of pavement maintenance, even if damage has not yet occurred. Planning timely and regular pavement maintenance requires airport sponsors to know all possible funding sources. Reliable funding allows for regular scheduling of certain pavement maintenance, such as crack sealing.

PCI Rating

The FAA states that the PCI is "a rating of the surface condition of a pavement and indicates functional performance." The PCI is expressed as a number from 0 (failed pavement) to 100 (new pavements in perfect condition), as shown in **Figure 9-6**.

PCI **RATING REPAIR** 100 85 **PREVENTATIVE SATISFACTORY MAINTENANCE** 70 FAIR 55 MAJOR **POOR** REHABILITATION 40 **VERY POOR** 25 **SERIOUS** RECONSTRUCTION 10 **FAILED** 0

Figure 9-6
PCI Values, Ratings, and Necessary Repair Actions

Source: CDM Smith

When performing a PCI analysis, airport pavement is divided into the following measurable divisions:

- **Network** The airport's pavement network contains all airside pavements, including runways, taxiways, aprons, blast pads, shoulders, and any other airside pavement.
- **Branch** A subdivision of the network that is easily identifiable and has a distinct function, such as an individual runway or taxiway.
- **Section** A subdivision of a branch that has consistent characteristics throughout. Such characteristics include age, structural composition, traffic, and condition.
- **Sample Units** An arbitrarily defined portion of a section that is designated as such only for the purpose of a pavement condition survey.²

² American Society for Testing and Materials, "Standard D5340, Standard Test Method for Airport Pavement Condition Index Surveys," and Federal Aviation Administration, FAA Advisory Circular 150/5380-7B, Airport Pavement Management Program (PMP).

The type of pavement maintenance necessary is determined by the severity of distresses and damage. When distresses are found in each pavement section, they are used to calculate the PCI, while also allowing for the analysis of possible maintenance procedures. Thus, pavement improvement projects can be conducted on a section by section basis. When determining and grouping pavement elements, the following features should be considered:

- Pavement type
- Pavement materials and base characteristics
- Drainage characteristics
- Age of pavement
- Pavement usage
- Allowable pavement load pavement strength

Findings of the Kentucky Airport Pavement Management System

Objective 6.02: Assess how well each system airport is maintaining its runway infrastructure by tracking the upkeep status of the primary runway as reported by Kentucky's most recent pavement condition index (PCI) report.

The Kentucky Transportation Cabinet (KYTC) Department of Aviation (KDA) established a statewide airport pavement management system (APMS) in 2011. The goal of the APMS was to provide airports, KDA, and the FAA with the necessary tools and information for identifying and prioritizing pavement-related projects and maintenance. The APMS was most recently updated by APTech in 2014, and includes 2014 PCI ratings for 52 of the Commonwealth's 59 public airports.

Seven airports were not scoped for inclusion in the APMS, including three of the Commonwealth's four public non-NPIAS airports and three major commercial service airports. The following airports were not included in the study:

- Tradewater Airport in Dawson Springs (non-NPIAS airport with a turf runway)
- Providence-Webster County Airport (non-NPIAS airport)
- Cincinnati/Northern Kentucky International Airport
- Liberty-Casey County Airport (non-NPIAS airport)
- Blue Grass Airport in Lexington
- Bowman Field in Louisville
- Louisville International Airport-Standiford Field

For the remaining 52 public-use Kentucky airports, all airport pavements were assessed and given a PCI number. **Figure 9-7** summarizes the results of this assessment, showing the percentage of airports that meet each PCI rating for primary runway, taxiway, apron, and hangar area pavements. Note that each PCI number represents the average PCI for that pavement. For example, the PCI of a primary runway is the average for all sections of that runway, while taxiway PCI is the average PCI of all taxiway pavements at an airport. The overwhelming majority of all airports included in the study have primary runway, taxiway, and apron pavements that rated as satisfactory or good (a PCI of 70 to 100) at the time of the plan, while over half of the airports have a hangar area PCI within this range.

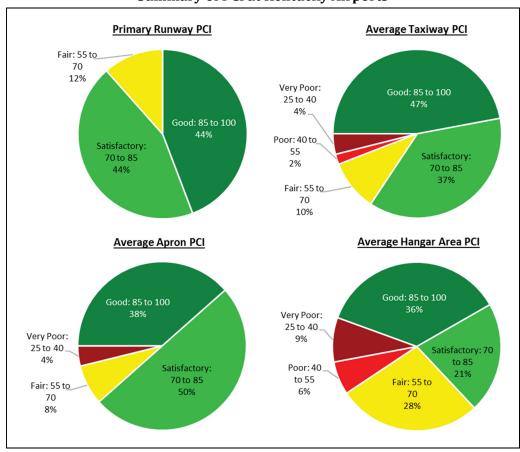


Figure 9-7
Summary of PCI at Kentucky Airports

Source: Kentucky Airport Pavement Management System (2014).

When accounting for all runways, aprons, taxiways, and hangar areas, these 52 public-use airports have over 49.2 million square feet of total airport pavement. The APMS found that approximately 83 percent of this total airport pavement area was of good or satisfactory quality, justifying preventative maintenance actions such as crack sealing and patching. An additional 15 percent of all pavement needed rehabilitation such as overlays, while approximately 2 percent was nearing the need for reconstruction.³

Tables 9-3 and **9-4** detail PCI on airport pavements in Kentucky. For airports not included in the APMS, a general pavement condition of runways is provided from FAA Form 5010, where available.

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³ Kentucky Airport Pavement Management System (2014).

KENTUCKY STATEWIDE AVIATION SYSTEM PLAN 9-16

Table 9-3 **Runway PCI at Kentucky Airports**

		Runway i Gi at Rentucky An p	Primary	Primary	Secondary	
FAA			Runway	Runway	Runway	Secondary
ID	Associated City	Airport Name	ID	PCI	ID	Runway PCI
		Commercial Service				
BWG	Bowling Green	Bowling Green-Warren County Regional	03/21	94	12/30	71.11
CVG	Covington	Cincinnati/Northern Kentucky International	09/27	Excellent	18C/36C	Good
LEX	Lexington	Blue Grass	04/22	Good	09/27	Excellent
SDF	Louisville	Louisville International-Standiford Field	17L/35R	Good	17R/35L	Good
OWB	Owensboro	Owensboro-Daviess County Regional	18/36	95.14	06/24	71.23
PAH	Paducah	Barkley Regional	04/22	88	14/32	86
		Economic Level 1				
AAS	Campbellsville	Taylor County	05/23	100		
DVK	Danville	Stuart Powell Field	12/30	81	01/19	76.83
EKX	Elizabethtown	Addington Field	05/23	80		
FGX	Flemingsburg	Fleming-Mason	07/25	79		
FFT	Frankfort	Capital City	07/25	65.29		
27K	Georgetown	Georgetown Scott County - Marshall Field	03/21	87		
JQD	Hartford	Ohio County	03/21	86		
CPF	Hazard	Wendell H. Ford Regional	14/32	77.69	06/24	100
EHR	Henderson	Henderson City-County	09/27	88		
HVC	Hopkinsville	Hopkinsville-Christian County	08/26	87		
K24	Jamestown	Russell County	17/35	77		
LOZ	London	London-Corbin-Magee Field	06/24	78		
LOU	Louisville	Bowman Field	06/24	Good	15/33	Good
210	Madisonville	Madisonville Regional	05/23	95		
M25	Mayfield	Mayfield Graves County	01/19	89.93		
SYM	Morehead	Morehead-Rowan County Clyde A. Thomas Regional	02/20	83		
IOB	Mount Sterling	Mount Sterling-Montgomery County	03/21	75		
CEY	Murray	Kyle-Oakley Field	05/23	76		
PBX	Pikeville	Pikeville – Pike County Regional	09/27	85.93		
SJS	Prestonsburg	Big Sandy Regional	03/21	76		
RGA	Richmond	Central Kentucky Regional	18/36	75		

Table 9-3 Runway PCI at Kentucky Airports

FAA ID	Associated City	Airport Name	Primary Runway ID	Primary Runway PCI	Secondary Runway ID	Secondary Runway PCI
SME	Somerset	Lake Cumberland Regional	05/23	83		
612	Springfield	Lebanon-Springfield	11/29	68.3		
BYL	Williamsburg	Williamsburg-Whitley County	02/20	82		
		Economic Level 2				
DWU	Ashland	Ashland Regional	10/28	100		
BRY	Bardstown	Samuels Field	02/20	57.75		
GLW	Glasgow	Glasgow Municipal	08/26	96		
M21	Greenville	Muhlenberg County	06/24	83		-
5M9	Marion	Marion-Crittenden County	07/25	100		-
EKQ	Monticello	Wayne County	03/21	100		-
4M7	Russellville	Russellville-Logan County	07/25	71		-
TWT	Sturgis	Sturgis Municipal	01/19	100		
		Economic Level 3				
018	Cynthiana	Cynthiana-Harrison County	11/29	80.07		
K62	Falmouth	Gene Snyder	03/21	67		
1M7	Fulton	Fulton	09/27	98		
193	Hardinsburg	Breckinridge County	10/28	100		
135	Harlan	Tucker-Guthrie Memorial	08/26	81		
M20	Leitchfield	Grayson County	02/20	82		
KY8	Lewisport	Hancock Co-Ron Lewis Field	05/23	87		
1A6	Middlesboro	Middlesboro-Bell County	10/28	76		
2M0	Princeton	Princeton-Caldwell County	05/23	81		
TZV	Tompkinsville	Tompkinsville-Monroe County	04/22	66		
		Economic Level 4				
1M9	Cadiz	Lake Barkley State Resort Park	02/20	100		
196	Columbia	Columbia-Adair County	08/26	98		
8M7	Dawson Springs	Tradewater	18/36	Turf		
213	Falls of Rough	Rough River State Resort Park	02/20	61		
M34	Gilbertsville	Kentucky Dam Village State Resort Park	09/27	76		

Table 9-3 Runway PCI at Kentucky Airports

FAA ID	Associated City	Airport Name	Primary Runway ID	Primary Runway PCI	Secondary Runway ID	Secondary Runway PCI
JKL	Jackson	Julian Carroll	01/19	88		-
153	Liberty	Liberty-Casey County	01/19	Good		
181	Pine Knot	McCreary County	04/22	100		
8M9	Providence	Providence-Webster County	16/34	Fair		
150	Stanton	Stanton-Powell County	06/24	83		
913	West Liberty	West Liberty	07/25	70		

Source: FAA Form 5010 Airport Master Record (2016), Kentucky Airport Pavement Management System (2014).

Table 9-4 Other Pavement PCI at Kentucky Airports

FAA			Average	Average	Average
ID	Associated City	Airport Name	Taxiway PCI	Apron PCI	Hangar PCI
		Commercial Service			
BWG	Bowling Green	Bowling Green-Warren County Regional	48.62	73.39	72.94
CVG	Covington	Cincinnati/Northern Kentucky International	Not in report	Not in report	Not in report
LEX	Lexington	Blue Grass	Not in report	Not in report	Not in report
SDF	Louisville	Louisville International-Standiford Field	Not in report	Not in report	Not in report
OWB	Owensboro	Owensboro-Daviess County Regional	73.31	73.25	60
PAH	Paducah	Barkley Regional	83.66	76.78	90
		Economic Level 1			
AAS	Campbellsville	Taylor County	100	100	64.65
DVK	Danville	Stuart Powell Field	73.81	86.59	71.01
EKX	Elizabethtown	Addington Field	91.77	100	60.11
FGX	Flemingsburg	Fleming-Mason	84.14	81.95	76.08
FFT	Frankfort	Capital City	79.23	78.45	79.2
27K	Georgetown	Georgetown Scott County - Marshall Field	73.66	82.79	64.51
JQD	Hartford	Ohio County	93.43	83.44	97
CPF	Hazard	Wendell H. Ford Regional	77.82	81.39	31.03
EHR	Henderson	Henderson City-County	91.64	74.1	76.22

Table 9-4
Other Pavement PCI at Kentucky Airports

FAA ID	Associated City	Airport Name	Average Taxiway PCI	Average Apron PCI	Average Hangar PCI
HVC	Hopkinsville	Hopkinsville-Christian County	95	84.08	36.36
K24	Jamestown	Russell County	89.53	83.1	95
LOZ	London	London-Corbin-Magee Field	84.74	90.24	55.29
LOU	Louisville	Bowman Field	Not in report	Not in report	Not in report
210	Madisonville	Madisonville Regional	88	97	55
M25	Mayfield	Mayfield Graves County	81.81	80.57	97.26
SYM	Morehead	Morehead-Rowan County Clyde A. Thomas Regional	90	92.27	92
IOB	Mount Sterling	Mount Sterling-Montgomery County	61.36	87.82	59.89
CEY	Murray	Kyle-Oakley Field	79	86.96	56.27
PBX	Pikeville	Pikeville – Pike County Regional	95.5	90.57	99.65
SJS	Prestonsburg	Big Sandy Regional	74	92.1	100
RGA	Richmond	Central Kentucky Regional	76.7	70.94	81
SME	Somerset	Lake Cumberland Regional	93.79	83.99	61.57
612	Springfield	Lebanon-Springfield	80.87	31.87	43.9
BYL	Williamsburg	Williamsburg-Whitley County	93	87.17	95.86
		Economic Level 2			
DWU	Ashland	Ashland Regional	70	69.99	74
BRY	Bardstown	Samuels Field	60.59	78.12	66.15
GLW	Glasgow	Glasgow Municipal	86.2	83.19	67.32
M21	Greenville	Muhlenberg County	93.07	91.75	73.92
5M9	Marion	Marion-Crittenden County	99.39	93	100
EKQ	Monticello	Wayne County	90.79	85.16	91.83
4M7	Russellville	Russellville-Logan County	64	83.94	37
TWT	Sturgis	Sturgis Municipal	61	79.82	60.61
		Economic Level 3			
810	Cynthiana	Cynthiana-Harrison County	97.65	95.55	81
K62	Falmouth	Gene Snyder	73	68.98	Not in report
1M7	Fulton	Fulton	95.63	79.94	57
193	Hardinsburg	Breckinridge County	100	100	
135	Harlan	Tucker-Guthrie Memorial	Not in report	71	97

Table 9-4 Other Pavement PCI at Kentucky Airports

	other ruvement r or at nematically rim ports							
FAA ID	Associated City	Airport Name	Average Taxiway PCI	Average Apron PCI	Average Hangar PCI			
M20	Leitchfield	Grayson County	81	70.89	35.17			
KY8	Lewisport	Hancock Co-Ron Lewis Field	81	98.64	96.56			
1A6	Middlesboro	Middlesboro-Bell County	38	88.36	54.08			
2M0	Princeton	Princeton-Caldwell County	88.77	88	53.23			
TZV	Tompkinsville	Tompkinsville-Monroe County	83.7	83.86	100			
		Economic Level 4						
1M9	Cadiz	Lake Barkley State Resort Park	100	77				
196	Columbia	Columbia-Adair County	36.71	58.34	88			
8M7	Dawson Springs	Tradewater	Not in report	Not in report	Not in report			
213	Falls of Rough	Rough River State Resort Park	65.31	34.88				
M34	Gilbertsville	Kentucky Dam Village State Resort Park	81.82	79	86			
JKL	Jackson	Julian Carroll	92.89	83	70			
153	Liberty	Liberty-Casey County	Not in report	Not in report				
181	Pine Knot	McCreary County	100	68	97			
8M9	Providence	Providence-Webster County	Not in report	Not in report	Not in report			
150	Stanton	Stanton-Powell County	95.58	74	86.21			
913	West Liberty	West Liberty	90	93	Not in report			

Source: FAA Form 5010 Airport Master Record (2016), Kentucky Airport Pavement Management System (2014).

Pavement Classification Number (PCN)

The International Civil Aviation Organization (ICAO), of which the United States is a member state, employs a classification system called the Pavement Classification Number (PCN) to express pavement strength at airports. A PCN is given to all runways, taxiways, and aprons with bearing strengths of 12,500 pounds or more. A PCN is expressed as a five-part code with each part separated by a slash (such as 80/R/B/W/T) designed to be easily computer-coded. The five parts in order are:

- **Numerical PCN Value** This is the load carrying capacity of the pavement based on a standard single wheel load inflated to a tire pressure of 181 psi.
- **Pavement Type** This is classified as either flexible (coded as F) or rigid (coded as R).
- **Subgrade category** This classifies the subgrade strength into one of four ranges, labeled A (highest strength) to D (lowest strength).
- **Allowable Tire Pressure** The allowable tire pressure is classified into one of four categories, labeled W (no tire pressure limit) to Z (lowest tire pressure limit of 73 psi). This pertains mostly to flexible pavements since rigid pavements are generally rated W.
- Method Used to Determine PCN There are two methods for determining PCN. A technical evaluation (coded as T) involves computing the PCN based on a detailed analysis and study of the pavement. A "using aircraft" method (coded as U) consists of evaluating all aircraft operating at the airport and assigning the largest aircraft classification number (a relative measure of the effect that an aircraft has on a pavement structure) as the PCN. In general, the using aircraft method is faster and less expensive, but also less accurate, than the technical evaluation.

Airports report PCN values to their respective FAA Airports Division Regional Office or FAA Airports District Office. PCN is shown on the FAA Form 5010 in data element 39, after the data elements reporting runway gross weight limits (data elements 35 to 38).

The FAA advisory circular calling for airports to report PCN – FAA Advisory Circular 150/5335-5C, Standardized Method of Reporting Airport Pavement Strength - PCN – was only recently issued in August 2014. Thus, only a small number of airports have had time to comply. For current PCN data, see the airport's FAA 5010 data form.

The FAA states that PCN is not to be used for pavement design or the evaluation of pavement condition. Therefore, for the purposes of evaluating the airport pavements of the Kentucky airport system, PCI remains the preferred method.

Airport Lease Standards

The operation of a federally obligated airport involves complex relationships between the sponsor and its aeronautical tenants. In most instances, the sponsor will turn to private enterprise to provide the aeronautical services that make the airport attractive and self-sustaining. Airport lease agreements usually reflect a grant of three basic rights or privileges:

- The right for the licensee or tenant to use the airfield and public airport facilities in common with others so authorized.
- The right to occupy as a tenant and use certain designated premises exclusively.
- The commercial privilege to offer goods and services to airport users.

The FAA does not review all leases, and there is no requirement for a sponsor to obtain FAA approval before entering into a lease. The type of document or written instrument used to grant airport privileges is the sole responsibility of the sponsor. In the purview of the FAA, the most important articles of a lease include:

- Premises
- Rights and Obligations
- Term
- Payment of Fees to the Sponsor
- Title
- Subordination
- Assignment and Subletting

Leases of hangars and related facilities at federally obligated airports should be standardized to provide clear and impartial terms to all lessees. Examples of non-standard leases include non-aviation uses or very long lease terms that may limit development opportunities for the airport. It is important for the airport sponsor to maintain the right to approve in advance an assignment (sale of the lease) or sublease by a tenant. The sponsor must be able to intervene if an aeronautical tenant decides to lease aeronautical space to a non-aeronautical tenant to the detriment of aeronautical users. The FAA will not consent to lease terms that exceed 50 years. The leasehold must be consistent with the current and proposed development on the current ALP.

Lease Status at Kentucky Airports

According to inventory findings, 46 of Kentucky's 59 public airports (78 percent), reported that they have reviewed or updated the airport's leasing agreements in the last five years. Eight airports (14 percent) reported having non-standard leases amongst their various leasing agreements. These summary statistics are shown in **Figure 9-8**, while details by airport are shown in **Table 9-5**.

Figure 9-8
Airport Leases

Lease Review/Update in Last 5 Years

Non-Standard Leases

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Source: CDM Smith

Table 9-5 Lease Status at Kentucky Airports

	Lease Status at Kentucky Airports								
FAA			Leases Reviewed/	Non-Standard					
ID	Associated City	Airport Name	Updated in Last 5 Years	Leases					
		Commercial Service							
BWG	Bowling Green	Bowling Green-Warren County Regional	Yes	No					
CVG	Covington	Cincinnati/Northern Kentucky International	Yes	No					
LEX	Lexington	Blue Grass	Yes	No					
SDF	Louisville	Louisville International-Standiford Field	Yes	No					
OWB	Owensboro	Owensboro-Daviess County Regional	Yes	Yes					
PAH	Paducah	Barkley Regional	Yes	Yes					
		Economic Level 1							
AAS	Campbellsville	Taylor County	No	No					
DVK	Danville	Stuart Powell Field	Yes	No					
EKX	Elizabethtown	Addington Field	Yes	No					
FGX	Flemingsburg	Fleming-Mason	Yes	No					
FFT	Frankfort	Capital City	Yes	No					
27K	Georgetown	Georgetown Scott County - Marshall Field	Yes	No					
JQD	Hartford	Ohio County	Yes	No					
CPF	Hazard	Wendell H. Ford Regional	Yes	No					
EHR	Henderson	Henderson City-County	Yes	No					
HVC	Hopkinsville	Hopkinsville-Christian County	Yes	No					
K24	Jamestown	Russell County	Yes	No					
LOZ	London	London-Corbin-Magee Field	Yes	Yes					
LOU	Louisville	Bowman Field	Yes	No					
210	Madisonville	Madisonville Regional	Yes	No					
M25	Mayfield	Mayfield Graves County	Yes	No					
SYM	Morehead	Morehead-Rowan County Clyde A. Thomas Regional	Yes	No					
IOB	Mount Sterling	Mount Sterling-Montgomery County	Yes	No					
CEY	Murray	Kyle-Oakley Field	Yes	No					
PBX	Pikeville	Pikeville – Pike County Regional	Yes	No					
SJS	Prestonsburg	Big Sandy Regional	No	Yes					
RGA	Richmond	Central Kentucky Regional	Yes	No					
SME	Somerset	Lake Cumberland Regional	Yes	Yes					
612	Springfield	Lebanon-Springfield	Yes	No					
BYL	Williamsburg	Williamsburg-Whitley County	Yes	Yes					
	<u> </u>	Economic Level 2							
DWU	Ashland	Ashland Regional	Yes	No					
BRY	Bardstown	Samuels Field	Yes	No					
GLW	Glasgow	Glasgow Municipal	Yes	No					
M21	Greenville	Muhlenberg County	Yes	No					
5M9	Marion	Marion-Crittenden County	No	No					
EKQ	Monticello	Wayne County	Yes	No					
4M7	Russellville	Russellville-Logan County	Yes	No					
TWT	Sturgis	Sturgis Municipal	Yes	No					
		Economic Level 3							
018	Cynthiana	Cynthiana-Harrison County	Yes	No					
K62	Falmouth	Gene Snyder	No	No					
1M7	Fulton	Fulton	Yes	No					
	1	I.							

Table 9-5 Lease Status at Kentucky Airports

FAA ID	Associated City	Airport Name	Leases Reviewed/ Updated in Last 5 Years	Non-Standard Leases
193	Hardinsburg	Breckinridge County	Yes	No
135	Harlan	Tucker-Guthrie Memorial	No	No
M20	Leitchfield	Grayson County	Yes	No
KY8	Lewisport	Hancock Co-Ron Lewis Field	Yes	No
1A6	Middlesboro	Middlesboro-Bell County	Yes	No
2M0	Princeton	Princeton-Caldwell County	No	No
TZV	Tompkinsville	Tompkinsville-Monroe County	Yes	No
		Economic Level 4		
1M9	Cadiz	Lake Barkley State Resort Park	Yes	No
196	Columbia	Columbia-Adair County	Yes	No
8M7	Dawson Springs	Tradewater	No	No
213	Falls of Rough	Rough River State Resort Park	No	No
M34	Gilbertsville	Kentucky Dam Village State Resort Park	Yes	No
JKL	Jackson	Julian Carroll	Yes	No
153	Liberty	Liberty-Casey County	No	No
181	Pine Knot	McCreary County	No	No
8M9	Providence	Providence-Webster County	No	No
150	Stanton	Stanton-Powell County	No	Yes
913	West Liberty	West Liberty	No	Yes

Airports were also asked to report details on the reasons for leases being non-standard. The most common reason for an airport lease not being in a standard status is that an airport property is being used for a non-aviation use. Of the eight airports that reported non-standard leases, five reported non-aviation uses. **Table 9-6** shows those airports that reported non-aviation uses by leaseholders, as well as those airports that reported other reasons for leases not being standard.

Table 9-6
Airports with Non-Standard Leases

FAA ID	Associated City	Airport Name	Non-Aviation Leases	Other Non- Standard Lease		
	City	Commercial Service	Ecuses	Staridard Ecase		
OWB	Owensboro	Owensboro-Daviess County Regional	Yes	No		
PAH	Paducah	Barkley Regional	No	Yes		
	Economic Level 1					
LOZ	London	London-Corbin-Magee Field	No	Yes		
SJS	Prestonsburg	Big Sandy Regional	No	Yes		
SME	Somerset	Lake Cumberland Regional	Yes	Yes		
BYL	Williamsburg	Williamsburg-Whitley County	Yes	Yes		
	Economic Level 4					
150	Stanton	Stanton-Powell County	Yes	No		
913	West Liberty	West Liberty	No	Yes		

As shown in Table 9-5, six Kentucky airports reportedly have non-standard leases for a reason other than a non-aviation use. Airports provided the following details for these "other" reasons for non-standard lease agreements:

- Barkley Regional Airport in Paducah Land lease for Armed Forces Readiness Center.
- **London-Corbin-Magee Field** Non-FAA funded land lease to Department of Justice and U.S. Army. Kentucky National Guard granted a 50-year lease.
- **Big Sandy Regional in Prestonsburg** No details provided.
- Lake Cumberland Regional in Somerset Aviation manufacturer on airport property.
- **Williamsburg-Whitley County Airport** Whitley County 911 operations and hangar storage leases.
- **West Liberty Airport** Residential lease for house where local police officer resides, whom mows the airport's grass and provides security for the airport.

Local Commitment

A supportive and proactive airport sponsor is essential to the safety, efficiency, and viability of a public airport. An airport sponsor is defined as an airport owner that has accepted federal grant funds. A sponsor can be a public agency (municipality/county) or an independent/private entity (airport authority). Airport sponsors are charged with the operation and oversight of an airport, which often times requires local funding commitment to improve or maintain the operational safety and efficiency of the airport. Local funding commitment actions are typically coordinated with the FAA and KYTC.

Airport sponsors agree to certain obligations when they accept Federal grant funds or Federal property transfers for airport purposes. The FAA enforces these obligations through its Airport Compliance Program in the areas of operations, maintenance, land use, fee and rental structure, airport revenues, airport layout plan, preserving rights and powers, economic non-discrimination, exclusive rights, and enforcement/compliance.

Local Commitment at Kentucky Airports

Objective 4.02: Assess the level of local commitment from sponsors through an evaluation of local funding provided for: maintenance, operations, and local matching funds for airport capital projects at system airports.

The inventory effort revealed that Kentucky's 59 public airports have a strong level of cooperation with the FAA and KYTC on regulatory and compliance issues. Fifty-eight airports (98 percent) report having regular coordination with these organizations on items such as RSA improvements, obstruction removal, and non-standard leases, among others. The only airport that reported not coordinating with the FAA and KYTC was Providence-Webster County Airport, a non-NPIAS facility.

Local sponsor funding commitment to the airport is also important to keep an airport running optimally. Local funding commitment can be accomplished through many different methods, including as a line item in the sponsor's budget, by project-specific funding, or through special taxes, among other methods. Of the 59 total system airports, only eight (14 percent) reported not receiving any local funding. Several airports reported details to their local funding. In total, 56 percent of the system reported that they received local funding as a line item in their airport sponsor's budget, while 53 percent reported receiving project-specific funding. No Kentucky airports reported receiving local funding as the result of a special local tax. The breakout of local funding commitment type is presented in **Figure 9-9**, along with the rate of coordination with FAA and KYTC.

Coordination with FAA and KYTC

Funding as Line Item in Sponsor Budget

Project-Specific Funding

Special Taxes

Other

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Figure 9-9 Local Commitment

Source: CDM Smith

As shown in Figure 9-9, local funding commitment was reported as a line item in the sponsor budget for 32 airports (54 percent), while project specific funding was reported by 30 airports (51 percent). No airports reported receiving local funding through special taxes; however, three airports reported having local funding commitments through "other" means. The "other" local commitments were reported as follows:

- **Taylor County Airport** County Employee
- **London-Corbin-Magee Field** Tourist Commission
- Lake Cumberland Regional Airport Occupational Tax Revenue

The complete list of airports and their respective local commitment criteria are presented in **Table 9-7** below.

Table 9-7
Types of Local Commitment and Coordination at Kentucky Airports

				Local Financial	Local	Local Commitment:
FAA ID	Associated City	Airport Name	FAA & KYTC Coordination	Commitment from Sponsor	Commitment:	Project- Specific
IAAID	Associated City	Commercial Servi		Trom Sponsor	Line Item	эреспіс
BWG	Bowling Green	Bowling Green-Warren County Regional	✓	✓	✓	✓
CVG	Covington	Cincinnati/Northern Kentucky International	✓	√		
LEX	Lexington	Blue Grass	✓			
SDF	Louisville	Louisville International-Standiford Field	✓	√	✓	
OWB	Owensboro	Owensboro-Daviess County Regional	✓	√	√	√
PAH	Paducah	Barkley Regional	✓	√	✓	√
		Economic Level	1			
AAS	Campbellsville	Taylor County	✓	✓	✓	✓
DVK	Danville	Stuart Powell Field	✓	✓	✓	✓
EKX	Elizabethtown	Addington Field	✓	✓	✓	✓
FGX	Flemingsburg	Fleming-Mason	✓	✓	✓	✓
FFT	Frankfort	Capital City	✓			
27K	Georgetown	Georgetown Scott County - Marshall Field	✓	✓	✓	
JQD	Hartford	Ohio County	✓	✓		✓
CPF	Hazard	Wendell H. Ford Regional	✓	✓		✓
EHR	Henderson	Henderson City-County	✓	✓	✓	
HVC	Hopkinsville	Hopkinsville-Christian County	✓	✓	✓	✓
K24	Jamestown	Russell County	✓			
LOZ	London	London-Corbin-Magee Field	✓	✓		
LOU	Louisville	Bowman Field	✓	✓	✓	
210	Madisonville	Madisonville Regional	✓	✓	✓	✓
M25	Mayfield	Mayfield Graves County	✓	✓	✓	✓
SYM	Morehead	Morehead-Rowan County Clyde A. Thomas Regional	✓	✓	✓	
IOB	Mount Sterling	Mount Sterling-Montgomery County	✓	✓	✓	✓
CEY	Murray	Kyle-Oakley Field	✓	✓	✓	✓
PBX	Pikeville	Pikeville – Pike County Regional	✓			
SJS	Prestonsburg	Big Sandy Regional	✓			
RGA	Richmond	Central Kentucky Regional	✓	✓	✓	✓

System Evaluation – Stewardship

Table 9-7
Types of Local Commitment and Coordination at Kentucky Airports

FAA ID	Associated City	Airport Name	FAA & KYTC Coordination	Local Financial Commitment from Sponsor	Local Commitment: Line Item	Local Commitment: Project- Specific
SME	Somerset	Lake Cumberland Regional	✓	✓		
612	Springfield	Lebanon-Springfield	✓	✓		
BYL	Williamsburg	Williamsburg-Whitley County	✓	✓	✓	✓
		Economic Lev	vel 2			
DWU	Ashland	Ashland Regional	✓	✓	✓	
BRY	Bardstown	Samuels Field	✓	✓	✓	✓
GLW	Glasgow	Glasgow Municipal	✓	✓	✓	
M21	Greenville	Muhlenberg County	✓	✓		✓
5M9	Marion	Marion-Crittenden County	✓	✓	✓	✓
EKQ	Monticello	Wayne County	✓	✓	✓	✓
4M7	Russellville	Russellville-Logan County	✓	✓	✓	✓
TWT	Sturgis	Sturgis Municipal	✓			
		Economic Lev	vel 3			
018	Cynthiana	Cynthiana-Harrison County	✓	✓	✓	
K62	Falmouth	Gene Snyder	✓	✓	✓	✓
1M7	Fulton	Fulton	✓	✓	✓	✓
193	Hardinsburg	Breckinridge County	✓	✓		✓
135	Harlan	Tucker-Guthrie Memorial	✓	✓		✓
M20	Leitchfield	Grayson County	✓	✓		✓
KY8	Lewisport	Hancock Co-Ron Lewis Field	✓	✓	✓	✓
1A6	Middlesboro	Middlesboro-Bell County	✓	✓		✓
2M0	Princeton	Princeton-Caldwell County	✓	✓		
TZV	Tompkinsville	Tompkinsville-Monroe County	✓	✓	✓	
		Economic Lev	vel 4			
1M9	Cadiz	Lake Barkley State Resort Park	✓	✓		
196	Columbia	Columbia-Adair County	✓	✓	✓	
8M7	Dawson Springs	Tradewater	✓	✓	✓	
213	Falls of Rough	Rough River State Resort Park	✓			
M34	Gilbertsville	Kentucky Dam Village State Resort Park	✓	✓		

System Evaluation – Stewardship

System Evaluation – Stewardship

Table 9-7
Types of Local Commitment and Coordination at Kentucky Airports

FAA ID	Associated City	Airport Name	FAA & KYTC Coordination	Local Financial Commitment from Sponsor	Local Commitment: Line Item	Local Commitment: Project- Specific
JKL	Jackson	Julian Carroll	✓	✓		
153	Liberty	Liberty-Casey County	✓	✓		✓
181	Pine Knot	McCreary County	✓			
8M9	Providence	Providence-Webster County		✓		✓
150	Stanton	Stanton-Powell County	✓	✓	✓	
913	West Liberty	West Liberty	✓	✓		✓

Note: FAA and KYTC have provided funding for the proposed Gallatin County airport. Agreements have been reached over local commitment obligations.

Source: Airport Inventory and Data Survey, CDM Smith.

Environmental Stewardship

Another important element of airport stewardship is an airport's role in preserving the natural environment. Several SASP objectives detailed in Chapter 2 were designed specifically to assess the extent to which Kentucky airports are currently serving as stewards to the natural environment through airport policies and compliance with statewide and national regulations. The following sections assess several aspects of environmental stewardship, detailing the following factors:

- Spill Prevention, Control, and Countermeasure (SPCC) Plans
- Stormwater Pollution Prevention Plans (SWPPP)
- Airport environmental compliance officer training in regards to the Kentucky Division of Water General Permit requirements
- Airport Best Management Plans (BMP) being up to date with Division of Water General Permit requirements
- Airports with current Tier II inventories and reporting

Spill Prevention, Control, and Countermeasure (SPCC) Plans

Objective 5.01: Evaluate what percentage of system airports have EPA spill prevention control and countermeasure (SPCC) plans.

An SPCC is required by the Environmental Protection Agency (EPA) at facilities with above ground tanks. In the case of airports, this primarily refers to above ground fuel farm tanks. An SPCC aims to prevent discharges into navigable waters, groundwater, and adjoining shorelines. **Figure 9-10** summarizes the percentage of airports by role that have adopted an SPCC. In total, 51 of Kentucky's 59 system airports have a fuel farm. Of these, all airports in the Commercial Service and Economic Level 2 airports have an SPCC, as do 96 percent of Economic Level 1 airports. In total, 94 percent of applicable Kentucky system airports have adopted an SPCC.

Commercial Service 100% Economic Level 1 Economic Level 2 **Economic Level 3** 80% **Economic Level 4** 100% 0% 10% 30% 50% 60% 80% 100% 20% 70% Adopted Plan ■ No Adopted Plan Unreported

Figure 9-10
Percentage of Airports by Role with an SPCC

Source: Airport Inventory and Data Survey.

Stormwater Pollution Prevention Plans (SWPPP)

Objective 5.02: Evaluate what percentage of system airports have EPA stormwater pollution prevention plans (SWPPP).

The SWPPP is another EPA-mandated plan, required for any facility that could potentially pollute storm water runoff. An SWPPP applies to everyday airport activities as well as airport construction. Like airport SPCCs, SWPPPs have been adopted at most Kentucky system airports, 83 percent in

total. As shown in **Figure 9-11**, this includes nearly all Commercial Service, Economic Level 1, and Economic Level 2 airports.

Commercial Service Economic Level 1 92% 8% Economic Level 2 100% Economic Level 3 70% 20% Economic Level 4 27% 30% 50% 60% 70% 80% 0% 10% 20% 40% 90% 100% Adopted Plan ■ No Adopted Plan ■ Unreported

Figure 9-11
Percentage of Airports by Role with an SWPPP

Table 9-8 details which airports have a SPCC and SWPPP, including notes on airports that did not report this information.

Table 9-8
Airports with an SPCC and SWPPP

FAA				
ID	Associated City	Airport Name	SPCC	SWPPP
		Commercial Service		
BWG	Bowling Green	Bowling Green-Warren County Regional	Yes	Yes
CVG	Covington	Cincinnati/Northern Kentucky International	Yes	Yes
LEX	Lexington	Blue Grass	Yes	Yes
SDF	Louisville	Louisville International-Standiford Field	Yes	Yes
OWB	Owensboro	Owensboro-Daviess County Regional	Yes	Yes
PAH	Paducah	Barkley Regional	Yes	Yes
		Economic Level 1		
AAS	Campbellsville	Taylor County	Yes	Yes
DVK	Danville	Stuart Powell Field	Yes	Yes
EKX	Elizabethtown	Addington Field	Yes	No
FGX	Flemingsburg	Fleming-Mason	Yes	Yes
FFT	Frankfort	Capital City	Yes	Yes
27K	Georgetown	Georgetown Scott County - Marshall Field	Yes	Yes
JQD	Hartford	Ohio County	Yes	Yes
CPF	Hazard	Wendell H. Ford Regional	Yes	Yes
EHR	Henderson	Henderson City-County	Yes	Yes
HVC	Hopkinsville	Hopkinsville-Christian County	Yes	Yes
K24	Jamestown	Russell County	No	Yes
LOZ	London	London-Corbin-Magee Field	Yes	Yes
LOU	Louisville	Bowman Field	Yes	Yes
210	Madisonville	Madisonville Regional	Yes	Yes
M25	Mayfield	Mayfield Graves County	Yes	No
SYM	Morehead	Morehead-Rowan County Clyde A. Thomas Regional	Yes	Yes

Table 9-8
Airports with an SPCC and SWPPP

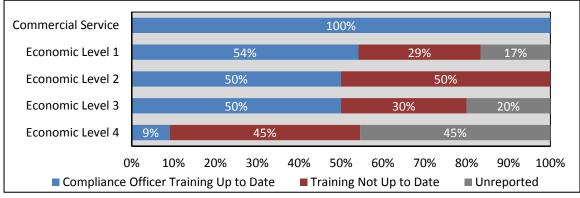
FAA	A and all all all all all all all all all al	Alimant Name	CDCC	CMADDD
ID	Associated City	Airport Name	SPCC	SWPPP
IOB CEY	Mount Sterling	Mount Sterling-Montgomery County	Yes Yes	Yes Yes
PBX	Murray Pikeville	Kyle-Oakley Field		
		Pikeville – Pike County Regional	Yes	Yes
SJS	Prestonsburg	Big Sandy Regional	Yes	Yes
RGA	Richmond	Central Kentucky Regional	Yes	Yes
SME	Somerset	Lake Cumberland Regional	Yes	Yes
612	Springfield	Lebanon-Springfield	Yes	Yes
BYL	Williamsburg	Williamsburg-Whitley County	Yes	Yes
DVA/LL	A = - - - - - - - - - - - - -	Economic Level 2		
DWU	Ashland	Ashland Regional	Yes	Yes
BRY	Bardstown	Samuels Field	Yes	Yes
GLW	Glasgow	Glasgow Municipal	Yes	Yes
M21	Greenville	Muhlenberg County	Yes	Yes
5M9	Marion	Marion-Crittenden County	Yes	Yes
EKQ	Monticello	Wayne County	Yes	Yes
4M7	Russellville	Russellville-Logan County	Yes	Yes
TWT	Sturgis	Sturgis Municipal	Yes	Yes
		Economic Level 3		
018	Cynthiana	Cynthiana-Harrison County	Yes	Yes
K62	Falmouth	Gene Snyder	Yes	Yes
1M7	Fulton	Fulton	Yes	No
193	Hardinsburg	Breckinridge County	Unreported	Unreported
135	Harlan	Tucker-Guthrie Memorial	No	Yes
M20	Leitchfield	Grayson County	Yes	Yes
KY8	Lewisport	Hancock Co-Ron Lewis Field	Yes	No
1A6	Middlesboro	Middlesboro-Bell County	Yes	Yes
2M0	Princeton	Princeton-Caldwell County	Yes	Yes
TZV	Tompkinsville	Tompkinsville-Monroe County	Yes	Yes
		Economic Level 4		
1M9	Cadiz	Lake Barkley State Resort Park	No Fuel	Unreported
196	Columbia	Columbia-Adair County	Yes	Yes
8M7	Dawson Springs	Tradewater	No Fuel	Yes
213	Falls of Rough	Rough River State Resort Park	No Fuel	Yes
M34	Gilbertsville	Kentucky Dam Village State Resort Park	No Fuel	Unreported
JKL	Jackson	Julian Carroll	No Fuel	No
153	Liberty	Liberty-Casey County	No Fuel	No
181	Pine Knot	McCreary County	Yes	Yes
8M9	Providence	Providence-Webster County	No Fuel	No
150	Stanton	Stanton-Powell County	Yes	Yes
913	West Liberty	West Liberty	No Fuel	Yes

Environmental Compliance Officer Training

Objective 5.03: Evaluate what percentage of system airports have maintained training as per Division of Water General Permit requirements.

For GA airports, a General Permit issued by the Kentucky Division of Water authorizes the airport to discharge storm water within the Commonwealth. Part of this permitting process requires associated training to be completed by airport environmental compliance officers. During the inventory phase of the SASP, airport representatives were asked to report if their General Permit training is up to date. As shown on **Figure 9-12**, approximately half of all airports in the state reported completing this training, including about half of all GA airports.

Figure 9-12
Percentage of Airports by Role that have Maintained Training per
Division of Water General Permit Requirements



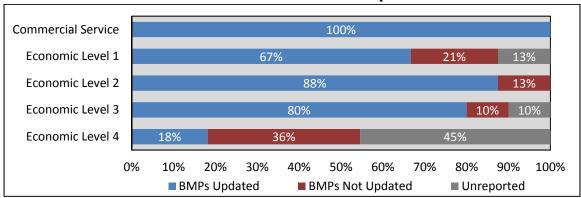
Source: Airport Inventory and Data Survey.

Best Management Plan (BMP)

Objective 5.04: Evaluate what percentage of system airports have updated their Best Management Plan (BMP) as per Division of Water General Permit requirements.

Another aspect of Division of Water permitting includes an airport's Best Management Plan (BMP). A BMP is a policy plan established by the airport that aims to limit and control water pollution from industrial runoff and discharge. A typical BMP includes such elements as required training and spill control policies. During the inventory phase of the SASP, Kentucky airports reported if they have updated their BMP to meet General Permit requirements of the Division of Water. **Figure 9-13** summarizes the percentage of airports by role that reported having an updated BMP. Over 60 percent of Economic Level 1 and over 80 percent each of Economic Level 2 and Economic Level 3 airports reported updating their BMPs to meet Division of Water requirements.

Figure 9-13
Percentage of Airports by Role that have Updated BMPs per
Division of Water General Permit Requirements



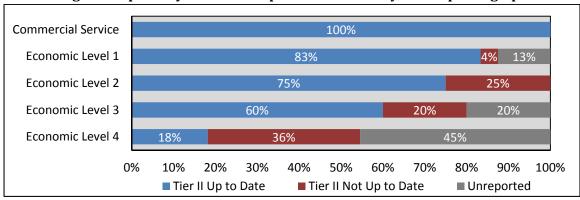
Tier II Inventory and Reporting

Objective 5.05: Evaluate what percentage of system airports have kept their Tier II inventory and reporting up to date.

Tier II reporting was established as part of the Emergency Planning and Community Right-to-Know Act (EPCRA). A Tier II inventory and report is required by the EPA for facilities that use hazardous chemicals. Hazardous chemicals that may be used at airports include fuels, aircraft paint, aircraft cleaning supplies, de-icing chemicals, and other industrial wastes. For these reasons, airports were asked to report the status of their Tier II reporting.

Figure 9-14 summarizes the percentage of airports by role that reporting having kept their Tier II inventory and reporting up to date. In total, 68 percent of the system reported having current Tier II reporting, including 64 percent of all general aviation airports.

Figure 9-14
Percentage of Airports by Role that Kept Tier II Inventory and Reporting Up to Date



Source: Airport Inventory and Data Survey.

Table 9-9 details which airports meet Division of Water training and BMP requirements, as well as airports that keep their Tier II inventory and reporting up to date. This table also includes notes on airports that did not report this information.

Table 9-9
Airports Meeting Division of Water and Tier II Requirements

		An ports meeting division of water and the	1		
FAA ID	Associated City	Airport Name	Division of Water General Permit Training	Division of Water General Permit BMPs	Tier II Inventory Up to Date
<u>п</u>	Associated City	Commercial Service	remit training	remit bivir 3	op to Date
BWG	Bowling Green	Bowling Green-Warren County Regional	Yes	Yes	Yes
CVG	Covington	Cincinnati/Northern Kentucky International	Yes	Yes	Yes
LEX	Lexington	Blue Grass	Yes	Yes	Yes
SDF	Louisville	Louisville International-Standiford Field	Yes	Yes	Yes
OWB	Owensboro	Owensboro-Daviess County Regional	Yes	Yes	Yes
PAH	Paducah	Barkley Regional	Yes	Yes	Yes
		Economic Level 1			
AAS	Campbellsville	Taylor County	Yes	Yes	Yes
DVK	Danville	Stuart Powell Field	Unreported	Unreported	Unreported
EKX	Elizabethtown	Addington Field	Unreported	Unreported	Unreported
FGX	Flemingsburg	Fleming-Mason	Yes	Yes	Yes
FFT	Frankfort	Capital City	Yes	Yes	Yes
27K	Georgetown	Georgetown Scott County - Marshall Field	Yes	Yes	Yes
JQD	Hartford	Ohio County	Yes	Yes	Yes
CPF	Hazard	Wendell H. Ford Regional	No	No	Yes
EHR	Henderson	Henderson City-County	Yes	Yes	Yes
HVC	Hopkinsville	Hopkinsville-Christian County	No	No	Yes
K24	Jamestown	Russell County	No	No	Yes
LOZ	Louisville	London-Corbin-Magee Field	Yes	Yes	Yes
LOU 2I0	Louisville Madisonville	Bowman Field Madicapuille Regional	Yes Yes	Yes	Yes
M25	Mayfield	Madisonville Regional Mayfield Graves County	Unreported	No Yes	Unreported Yes
SYM	Morehead	Morehead-Rowan County Clyde A. Thomas Regional	No	Yes	Yes
IOB	Mount Sterling	Mount Sterling-Montgomery County	Yes	Yes	Yes
CEY	Murray	Kyle-Oakley Field	Yes	Yes	Yes
PBX	Pikeville	Pikeville – Pike County Regional	No	Yes	No
SJS	Prestonsburg	Big Sandy Regional	No	No	Yes
RGA	Richmond	Central Kentucky Regional	Yes	Yes	Yes
SME	Somerset	Lake Cumberland Regional	Yes	Yes	Yes
612	Springfield	Lebanon-Springfield	Unreported	Unreported	Yes
BYL	Williamsburg	Williamsburg-Whitley County	No	Yes	Yes
		Economic Level 2			
DWU	Ashland	Ashland Regional	Yes	Yes	Yes
BRY	Bardstown	Samuels Field	No	Yes	Yes
GLW	Glasgow	Glasgow Municipal	Yes	Yes	Yes
M21	Greenville	Muhlenberg County	Yes	Yes	Yes
5M9	Marion	Marion-Crittenden County	No	Yes	No
EKQ	Monticello	Wayne County	No	Yes	Yes
4M7	Russellville	Russellville-Logan County	No	Yes	No
TWT	Sturgis	Sturgis Municipal	Yes	No	Yes
		Economic Level 3	1	I	ı
018	Cynthiana	Cynthiana-Harrison County	Yes	Yes	Yes
K62	Falmouth	Gene Snyder	Yes	Yes	Unreported

Table 9-9
Airports Meeting Division of Water and Tier II Requirements

FAA ID	Associated City	Airport Name	Division of Water General Permit Training	Division of Water General Permit BMPs	Tier II Inventory Up to Date
1M7	Fulton	Fulton	Unreported	Yes	Yes
193	Hardinsburg	Breckinridge County	Unreported	Unreported	Unreported
135	Harlan	Tucker-Guthrie Memorial	No	Yes	Yes
M20	Leitchfield	Grayson County	No	Yes	Yes
KY8	Lewisport	Hancock Co-Ron Lewis Field	Yes	Yes	Yes
1A6	Middlesboro	Middlesboro-Bell County	Yes	Yes	No
2M0	Princeton	Princeton-Caldwell County	Yes	Yes	Yes
TZV	Tompkinsville	Tompkinsville-Monroe County	No	No	No
		Economic Level 4			
1M9	Cadiz	Lake Barkley State Resort Park	Unreported	Unreported	Unreported
196	Columbia	Columbia-Adair County	No	Yes	Yes
8M7	Dawson Springs	Tradewater	Unreported	Unreported	Unreported
213	Falls of Rough	Rough River State Resort Park	No	No	No
M34	Gilbertsville	Kentucky Dam Village State Resort Park	Unreported	Unreported	Unreported
JKL	Jackson	Julian Carroll	Unreported	Unreported	Unreported
153	Liberty	Liberty-Casey County	No	No	No
181	Pine Knot	McCreary County	No	No	No
8M9	Providence	Providence-Webster County	Unreported	Unreported	Unreported
150	Stanton	Stanton-Powell County	Yes	Yes	Yes
913	West Liberty	West Liberty	No	No	No

Wildlife Safety

Objective 2.12: Assess the adequacy of wildlife plans at each system airport.

Wildlife hazards can be a common issue for airports located in both rural and urban environs. As stated in Chapter 3: Kentucky Airport System Inventory, 22 of the Commonwealth's 59 public airports reported that wildlife hazards are a common issue, and 13 reported experiencing a wildlife strike in the past five years. For these reasons, wildlife dispersal and control is important at many airports.

During the inventory effort, airport representatives were asked to report on the adoption of a wildlife management plan. While an airport wildlife management plan is more than just an aircraft safety issue, as it also aims to protect the wildlife that live in the vicinity of the facility through control and dispersal. As revealed in **Figure 9-15**, wildlife management plans are rare at Kentucky airports. However, all Commercial Service airports have adopted such a plan.

100% **Commercial Service** Economic Level 1 92% 88% Economic Level 2 90% Economic Level 3 Economic Level 4 73% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Adopted Plan ■ No Adopted Plan Unreported

Figure 9-15
Percentage of Airports by Role with Wildlife Management Plans

Table 9-10 details which airports have a wildlife management plan, and includes details on airports that did not report this information.

Table 9-10
Airports with a Wildlife Management Plan

FAA			Wildlife
ID	Associated City	Airport Name	Management Plan
		Commercial Service	
BWG	Bowling Green	Bowling Green-Warren County Regional	Yes
CVG	Covington	Cincinnati/Northern Kentucky International	Yes
LEX	Lexington	Blue Grass	Yes
SDF	Louisville	Louisville International-Standiford Field	Yes
OWB	Owensboro	Owensboro-Daviess County Regional	Yes
PAH	Paducah	Barkley Regional	Yes
		Economic Level 1	
AAS	Campbellsville	Taylor County	No
DVK	Danville	Stuart Powell Field	No
EKX	Elizabethtown	Addington Field	No
FGX	Flemingsburg	Fleming-Mason	No
FFT	Frankfort	Capital City	Yes
27K	Georgetown	Georgetown Scott County - Marshall Field	No
JQD	Hartford	Ohio County	No
CPF	Hazard	Wendell H. Ford Regional	No
EHR	Henderson	Henderson City-County	Yes
HVC	Hopkinsville	Hopkinsville-Christian County	No
K24	Jamestown	Russell County	No
LOZ	London	London-Corbin-Magee Field	No
LOU	Louisville	Bowman Field	No
210	Madisonville	Madisonville Regional	No
M25	Mayfield	Mayfield Graves County	No
SYM	Morehead	Morehead-Rowan County Clyde A. Thomas Regional	No
IOB	Mount Sterling	Mount Sterling-Montgomery County	No
CEY	Murray	Kyle-Oakley Field	No
PBX	Pikeville	Pikeville – Pike County Regional	No

Table 9-10
Airports with a Wildlife Management Plan

FAA ID	Associated City	Airport Name	Wildlife Management Plan
SJS	Prestonsburg	Big Sandy Regional	No
RGA	Richmond	Central Kentucky Regional	No
SME	Somerset	Lake Cumberland Regional	No
612	Springfield	Lebanon-Springfield	No
BYL	Williamsburg	Williamsburg-Whitley County	No
		Economic Level 2	1.10
DWU	Ashland	Ashland Regional	No
BRY	Bardstown	Samuels Field	No
GLW	Glasgow	Glasgow Municipal	Yes
M21	Greenville	Muhlenberg County	No
5M9	Marion	Marion-Crittenden County	No
EKQ	Monticello	Wayne County	No
4M7	Russellville	Russellville-Logan County	No
TWT	Sturgis	Sturgis Municipal	No
		Economic Level 3	
018	Cynthiana	Cynthiana-Harrison County	No
K62	Falmouth	Gene Snyder	No
1M7	Fulton	Fulton	No
193	Hardinsburg	Breckinridge County	Unreported
135	Harlan	Tucker-Guthrie Memorial	No
M20	Leitchfield	Grayson County	No
KY8	Lewisport	Hancock Co-Ron Lewis Field	No
1A6	Middlesboro	Middlesboro-Bell County	No
2M0	Princeton	Princeton-Caldwell County	No
TZV	Tompkinsville	Tompkinsville-Monroe County	No
		Economic Level 4	
1M9	Cadiz	Lake Barkley State Resort Park	Unreported
196	Columbia	Columbia-Adair County	No
8M7	Dawson Springs	Tradewater	Yes
213	Falls of Rough	Rough River State Resort Park	No
M34	Gilbertsville	Kentucky Dam Village State Resort Park	Unreported
JKL	Jackson	Julian Carroll	No
153	Liberty	Liberty-Casey County	No
181	Pine Knot	McCreary County	No
8M9	Providence	Providence-Webster County	No
150	Stanton	Stanton-Powell County	No
913	West Liberty	West Liberty	No

Summary

This chapter has been the first in a three-step process of evaluating the Kentucky system of 59 public-use airports. This chapter analyzed the extent to which Kentucky airports maintain a level of stewardship to their local communities and to the aviation public. The following summarizes some findings of this evaluation:

- Airports reported a wide variety of factors that may limit future development. Physical limitations such as roads, development, and other built structures were reported by 59 percent of the system, followed by environment factors such as lakes and vegetation (54 percent), financial shortfalls (47 percent), and community relation issues (15 percent).
- Kentucky communities often employ land use controls in airport environs to combat these limiting factors and land use compatibilities. Both land use zoning and height zoning were reported as being adopted in the communities of 20 percent of Kentucky airports each, followed by noise abatement procedures at eight percent of airports.
- The *Kentucky Airport Pavement Management System* assessed airport pavements at 52 of the 59 Kentucky system airports in 2014. At the time of the study, nearly 90 percent of primary runways, over 80 percent of taxiways, nearly 90 percent of aprons, and over 50 percent of hangar areas had a PCI rating of good or satisfactory.
- Another element of airport stewardship is maintaining updated and standard leases with airport tenants. In total, 78 percent of Kentucky airports were found to have updated and reviewed leases in the past five years, while only 14 percent of the system reported having any non-standard lease agreements.
- Local financial commitment of the airport sponsor is also important to the long-term viability of
 airports. In total, 86 percent of system airports reported receiving local commitment from their
 airport sponsor. This local commitment most often came in the form of either funding as a line
 item in the sponsor's budget, or as funding specifically allocated to a project.
- Environmental stewardship was measured based on each airport's adherence to both state and federal regulations. In total, 94 percent of system airports that offer fuel reported having an SPCC, while 83 percent of all airports reported having an SWPPP. In addition, 49 percent reported maintaining Division of Water permitting training, while 66 percent reported keeping BMPs up to date. Finally, 68 percent of the system reported keeping Tier II reporting up to date as per EPA requirements.
- Safety issues associated with wildlife were measured based on the number of airports with a wildlife management plan. Currently, 17 percent of the system has such a plan.

The next two chapters continue the evaluation of the Kentucky airport system. First is an evaluation of each airport's facilities and services, followed by a geographical analysis of the entire airport system.