



# Federal Aviation Administration

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## Memorandum

Date: **JAN 22 2020**

To: Office of Airports Regional Directors, AXX-600s  
Regional Airport Planning & Programming, AXX-610s  
Airports District Office Managers, XXX-ADOs

From: Robert J. Craven, Director, Office of Airport Planning  
and Programming, APP-1 

Subject: Reauthorization Program Guidance Letter (R-PGL) 19-04: Pilot Program  
Eligibility

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This Reauthorization Program Guidance Letter (R-PGL) 19-04 explains and implements provisions in the FAA Reauthorization Act of 2018 (the 2018 Act) (P.L. 115-254) that establish or sunset pilot programs under 49 U.S.C., Chapter 471 (the primary statutory provision governing the Airport Improvement Program (AIP)). This R-PGL also references pilot programs under the authority of the Transportation Security Administration (TSA) for clarity purposes. This R-PGL is directed to Office of Airports' staff for the purpose of helping them implement statutory changes. This R-PGL is not legally binding in its own right and will not be relied upon by the FAA as a separate basis for affirmative enforcement action or other administrative penalty.

This PGL includes analyses and implementation strategies for the following topics and bill Sections:

Bill Section(s)	Topic	49 USC Section(s) impacted
140	Non-movement area surveillance pilot program	47143
161(c)	Remote Tower Pilot Program for rural and small communities	47124, 47102
166	Pilot Program Sunsets	47136, 47136a, 47140, 47140a
184	Eligibility of Pilot Program Airports	47115, 47134, 47110
190	Environmental Mitigation Pilot Program	47117(e)(1)(A)
383(a)(e)	Airport Safety and Airspace Hazard Mitigation and Enforcement	44810; FY19-23 only

1920	Pilot Program for Automated Exit Lane Technology	TSA only
1925	Computed topography pilot program	TSA only

### **Section 140, Non-movement area surveillance surface systems pilot program.**

Section 140 creates 49 U.S.C. section 47143, which establishes a pilot program for AIP funding of certain aspects of non-movement area surveillance surface systems at airports eligible to receive primary passenger or cargo entitlements under 47114(c). The purpose of the program is to allow non-Federal, on-airport sensors to provide surveillance coverage in the non-movement area, to supplement existing coverage of the movement area provided by FAA systems such as ASDE-X or ASSC. Non-movement area systems can aid airport efficiency by facilitating surface management actions by the airport operator and provide surface traffic flow information to the FAA in the interest of surface metering to mitigate delays.

The non-movement area surveillance display program created under 49 U.S.C. § 47143, is described below.

### **Non-movement area surveillance pilot program**

<b>The pilot program scope:</b>
<p><b>a. Program Authorization.</b> Per Section 140 of the FAA Reauthorization Act of 2018 (P.L. 115-254) the FAA may carry out the pilot program established under 49 U.S.C. § 47143.</p>
<p><b>b. Program purpose.</b> To support non-Federal acquisition and installation of qualifying non-movement area surveillance surface display systems and sensors if:</p> <ol style="list-style-type: none"> <li>1. Systems and sensors would improve safety or capacity in the National Airspace System; and</li> <li>2. The non-movement area surveillance surface display systems and sensors supplement existing movement area systems and sensors established under other programs administered by the FAA (i.e., there is an FAA operated ASDE-X or ASSC system at the airport).</li> </ol>

## Non-movement area surveillance pilot program

<b>The pilot program scope:</b>
<p><b>c. Eligible Airports.</b> Per 49 U.S.C. § 47143(b)(1), the program is open to up to five airport sponsors to acquire and install qualifying non-movement area surveillance surface display systems and sensors. Eligible airports shall have an existing system and sensors under other programs administered by the FAA. At this time, only ASDE-X or ASSC systems and sensors meet the movement area criteria prescribed under 49 U.S.C. 47143(a)(2). Additionally 49 U.S.C. 47143(b) limits airports eligible to participate to those with existing FAA movement area systems and sensors (i.e., ASDE-X or ASSC) as well as those with airlines that are participants in the FAA’s collaborative decision-making (CDM) process. To improve capacity in the NAS, the non-movement area surveillance display systems provide needed operational data to the CDM system in order to enable delay savings with surface metering. There are 27 large hub airports that meet capacity criteria due to their inclusion in surface metering with deployment of the FAA’s Terminal Flight Data Manager (TFDM) program. Safety benefits are secondary, and mostly in terms of situational awareness, since non-Federal, non-movement area systems are not used for active separation of aircraft and vehicles on the surface.</p>
<p><b>d. Data Exchange Processes.</b> Per 49 U.S.C. § 47143(b)(2), the FAA may establish data exchange processes to allow airport participation in collaborative decision-making processes.</p>
<p><b>e. Display System And Sensors.</b> Per 49 U.S.C. § 47143(d), the non-movement area surveillance surface display systems and sensors must be airport-owned with the sensors installed on-airport. Distribution of the data to off-airport stakeholders via the data exchange processes (e.g., in part (d) of this table) is expected and encouraged in order to achieve the intended capacity goals of the program.</p>
<p><b>f. AIP Grants.</b> The FAA is authorized to award grants from AIP passenger entitlement or cargo entitlement funds for this pilot program. Only capital expenses are eligible for AIP grants; O&amp;M and subscription costs would remain the responsibility of the airport sponsor.</p>
<p><b>g. Sunset.</b> Per 49 U.S.C. § 47143(c), the program will sunset on October 1, 2023.</p>

## Non-movement area surveillance pilot program definitions

The definitions for terms used for the pilot program are ...	
a.	<b>Non-Movement Area.</b> Per 49 U.S.C. § 47143(d)(1), the term ‘non-movement area’ means the portion of the airfield surface that is not under the control of air traffic control.
b.	<b>Non-Movement Area Surveillance Surface Display Systems and Sensors.</b> Per 49 U.S.C. § 47143(d)(2), the term ‘non-movement area surveillance surface display systems and sensors’ means a non-Federal surveillance system that uses on-airport sensors that track vehicles or aircraft that are equipped with transponders in the non-movement area.
c.	<p><b>Qualifying Non-Movement Area Surveillance Surface Display System And Sensors.</b> Per 49 U.S.C. § 47143(d)(3), the term ‘qualifying non-movement area surveillance surface display system and sensors’ means a non-movement area surveillance surface display system that—</p> <p>(1) provides the required transmit and receive data formats consistent with the National Airspace System architecture at the appropriate service delivery point;</p> <p>(2) is on-airport; and</p> <p>(3) is airport operated.</p>

### Moving forward:

Due to the specialized nature of this program, APP-400 will reach out directly to Regional Offices and Airports District Offices to discuss the airports that are potential candidates for this pilot program. There are 27 large hub airports that meet the criteria shown in Table 1. Many of the applicable airports already have some version of a non-movement area surveillance surface system that was funded by the airport and/or airlines. The existing systems provide for situational awareness for ramp control as well as surface management to assist the airport operator. Several airports are involved in ongoing pilot programs to provide non-movement area data to CDM, in advance of TFDm deployment (PANYNJ, FLL, LAS, DFW and CLT). This work is establishing the data exchange mechanisms between FAA and airports. [Reference 49 U.S.C. § 47143(b)(2).]

However, there are gaps in some non-movement area surveillance surface systems: while the primary airline ramps may be covered, the international or secondary terminals used by non-alliance airlines may not be; and the GA ramps are often not covered as well. Accordingly, the intended priority for any AIP funding of non-movement area surveillance surface systems is to address surveillance gaps so that GA and non-alliance airlines are not adversely delayed during surface metering (and subsequent access to congested overhead airborne routes).

Capacity benefits at airports not part of surface metering would be nominal and not meet the intent under 49 U.S.C. § 47173 to improve NAS capacity. Safety benefits are secondary, and mostly in terms of situational awareness, since non-Federal systems are not used for active

separation of aircraft and vehicles on the surface. Rather, capacity benefits are expected at airports participating in surface metering initiatives with ATO, to include robust participation of the aircraft operators using the airport that are also participating in data exchange initiatives.

This provision limits funding for the airports selected to funds apportioned under 49 U.S.C. § 47114(c)(1) and (2), which includes only primary and cargo apportionments, as defined in the statute. Accordingly, these projects cannot compete for discretionary funding, which is made available under 49 U.S.C. § 47115. Because the statute limits the number of participants and requires airports have existing systems as prescribed under 49 U.S.C. § 47143(a) and (b), APP-400 must concur with the airport selection for this pilot program.

RO/ADO personnel will be notified by APP-400 if airports in their region/office have been determined to be qualified to participate in the pilot program. If notified, RO/ADO personnel may use the following new SOAR code for projects at selected airports meeting the criteria prescribed under 49 U.S.C. § 47143(d)(3):

**For FY20 planning and FY21 planning and programming, use these codes (New NPS equation)**

CA (capacity) = 70	EQ (Equipment) = 85	SR (Sensors) = 85
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These values reflect the new codes and values implemented with the release of FAA Order 5090.5, *Formulation of the NPIAS and ACIP*.

NOTE: As implemented in accordance with 49 U.S.C. § 47143(c), this pilot program shall cease to be effective on October 1, 2023. If this program is not extended by Congress, this code will expire in SOAR on that date.

#### **Guidance and Tools:**

The FAA will update the current version of the AIP Handbook (FAA Order 5100.38D, Change 1) in its next version to reflect this provision. SOAR has been updated with the new codes. In addition, draft Surveillance guidance has been developed with ATO that may be published to support this initiative as an AC or EB.

#### **Section 161(c), Remote Tower Pilot Program for Rural and Small Communities.**

Section 161 has three provisions. The first provision under paragraph (a) establishes a remote tower pilot program. The Office of NextGen (ANG)'s Technology Development and Prototyping Division (ANG-C5) is leading the pilot program. APP-400 coordinates regularly with ANG-C5 on the status of the pilot program. The second provision in paragraph (b) establishes a longer-term remote tower program for the construction and commissioning of additional certificated remote towers. Thirdly, Section 161(c) makes remote towers eligible for AIP funding as an airport development project under 49 U.S.C. § 47102. In addition, 49 U.S.C. § 47124 limits AIP funding to only remote tower technologies that have been certificated by FAA. No remote towers are AIP-eligible at this time since there are not yet any certificated remote tower technologies. However, certification of one or more systems is expected.

## **Moving Forward**

Remote towers will first need to be certificated before they can be eligible for AIP funding, as directed in 49 U.S.C. § 47124. Further, as prescribed by 49 U.S.C. 47124(b)(4)(b), to qualify for AIP funding an airport sponsor must be a participant in the FAA's Contract Tower Program or acceptance into the program is contingent upon the construction of a contract tower. Once remote towers are certificated, we will work with airport sponsors in the Federal Contract Tower program per 49 U.S.C. § 47124 (4)(a) and (b) to provide AIP funds for eligible costs and equipment. An airport that is in the Contract Tower Program could choose between a traditional, staffed tower structure or a certificated remote tower, as applicable to the complexity of air traffic operations at the airport. Statute requires that AIP funds can only be used for airport sponsor owned projects.

## **Guidance and Tools**

The AIP Handbook will be updated to reflect eligibility for remote towers when there are certificated systems and equipment. SOAR will be updated to add a new code for remote tower projects.

## **Section 166, Pilot Program Sunsets.**

Section 166 sunsets two pilot programs that have been replaced by permanent programs, re-designates two sections of statute to conform to these changes, and amends a subsection of Section 47139.

## **Emission credits for air quality projects**

1. The Inherently Low-Emission Airport Vehicle pilot program, formerly located under Section 47136, has been canceled. The former Section 47136(a), *Zero-emission airport vehicles and infrastructure*, has been re-designated as Section 47136. Additional information on the changes to the ZEV program will be included in R-PGL 19-05.

2. The Airport Ground Support Equipment Emissions Retrofit pilot program, formerly under Section 47140, has been canceled. The former Section 47140(a), *Increasing the energy efficiency of airport power sources*, has been re-designated as Section 47140. Additional information on changes to airport energy efficiency will be included in R-PGL 19-05.

The Emissions Credit for air quality projects program, Section 47139, was amended to eliminate former paragraph (c), which provided authority for the now defunct process the FAA employed to work with the Environmental Protection Agency (EPA) to determine how to allocate emission credits for pre-existing programs. Further information may be forthcoming from APP-400, and this change is addressed in R-PGL-05.

## **Moving Forward**

The changes pertaining to eligibility and program requirements for the ZEV program and energy efficiency of airport power sources program contained in Sections 165, 171, and 192 of the 2018 Act will be addressed in R-PGL 19-05.

## Guidance and Tools

The FAA will update the current version of the AIP Handbook (FAA Order 5100.38D Change 1) in its next version to reflect the cancelation of these two pilot programs and re-designations. The provision amended under Section 47139 is not cited in the Handbook. Therefore, no changes are needed.

## Section 184, Eligibility of Pilot Program Airports.

Section 184 includes two provisions pertaining to airports participating in the Airport Investment Partnership Program (AIPP, formerly entitled the Pilot Program on Private Ownership of Airports), under 49 U.S.C. § 47134. These provisions only are applicable to airports for which the FAA approved a privatization application during FY 2019. The first provision adds paragraph (k) 49 U.S.C. § 47115, which permits the FAA to issue discretionary grants to airports, provided certain criteria are met. The second provision amends 49 U.S.C. § 47110(e) by adding subparagraph (7), which permits the FAA to issue a letter of intent to such airports, provided certain criteria are met.

With regard to the first provision, the criteria an airport must meet to be eligible to receive discretionary grants are:

### Section 47134 Discretionary Eligibility

FAA may issue a discretionary grant to an airport provided:
<p><b>a. Program Approval.</b> The airport was approved to participate in the Airport investment partnership program, under Section 47134(b), in fiscal year 2019.</p>
<p><b>b. Grant purpose.</b> The grant will—</p> <ol style="list-style-type: none"> <li>1. satisfy an obligation incurred by an airport sponsor under Section 47110(e) or funded by a nonpublic sponsor for an airport development project on the airport; or</li> <li>2. Provide partial Federal reimbursement for airport development (as defined in Section 47102) on the airport layout plan initiated in the fiscal year in which the AIPP application was approved, or later, for over a period of not more than 10 years.</li> </ol>

With regard to the second provision, the criteria an airport must meet to be eligible to receive discretionary grants are:

### Section 47134 Letter of Intent (LOI) eligibility

FAA may issue a letter of intent, as prescribed in Section 47110(e) an airport provided:
<p><b>a. Program Approval.</b> The FAA approved an application for airport privatization, under Section 47134(b), in fiscal year 2019.</p>

## Section 47134 Letter of Intent (LOI) eligibility

<b>FAA may issue a letter of intent, as prescribed in Section 47110(e) an airport provided:</b>
<b>b. Project purpose.</b> The project for which the LOI is issued meets all other requirements set forth in Title 49 U.S.C. Chapter 471 (the primary location of most provisions related to AIP).
<b>c.</b> All other requirements for an LOI as prescribed in Section 47110(e) apply.

### Moving Forward

ACO and APP-500 will work directly with ROs/ADOs for airports eligible to participate under the terms of this provision.

### Guidance and Tools

The AIP Handbook may be updated to reflect eligibility of airports approved for the Airport improvement and partnership program, under Section 47134 in FY 2019 for discretionary grants and LOIs, subject to the prescribed criteria.

### Section 190, Environmental Mitigation Pilot Program.

Section 190 creates a pilot program for environmental mitigation projects for a limited number of airports, meeting specific criteria. The FAA may establish and publish best practices for reducing or mitigating aviation impacts on noise, air quality, and water quality at airports or in the vicinity of airports based on the projects carried out under the program.

The scope of the Environmental Mitigation Pilot Program defined in the statute is included in the table below:

### Environmental Mitigation pilot program scope

<b>The pilot program scope</b>
<b>a. Program Authorization.</b> Per Section 190 of the FAA Reauthorization Act of 2018 (P.L. 115-254) the FAA may carry out the pilot program.
<b>b. Eligibility.</b> Per section 190(a), the FAA may fund up to six projects at public use airports. Per section 190(k), additional projects may be carried out at a site previously, but not currently managed by the Department of Defense if the DOD provides funds to the FAA for funding such projects.
<b>c. Funding.</b> FAA may make grants from the noise and environmental set-aside (49 U.S.C. § 47117(e)(1)(a)). The DOD may provide additional funding for specific projects.
<b>d. Use of Funds.</b> The pilot program is open to environmental mitigation projects that will measurably reduce or mitigate aviation impacts on noise, air quality, or water quality at the airport or within 5 miles of the airport.

## Environmental Mitigation pilot program scope

The pilot program scope
<p><b>e. Selection Criteria.</b> Priority Consideration may be given to projects that:</p> <p>(1) will achieve the greatest reductions in aircraft noise, airport emissions, or airport water quality impacts either on an absolute basis or on a per dollar of funds expended basis; and</p> <p>(2) will be implemented by an eligible consortium.</p>
<p><b>f. Federal Share.</b> Fifty percent.</p>
<p><b>g. Maximum Grant Amount.</b> Not more than \$2,500,000 per project. The DOD may provide to the FAA additional funding for specific projects, which may increase the overall funding levels for this program but do not have an impact on the local share.</p>
<p><b>h. Sunset.</b> Five years after the first grant is issued by the FAA.</p>
<p><b>i. AIP Requirements.</b> AIP requirements for off-airport projects, grants management and all other AIP requirements apply to this pilot program. There are no waivers to any AIP provisions.</p>

There are several specific definitions associated with this pilot program, as follows:

## Environmental Mitigation pilot program definitions

The pilot program definitions include...
<p><b>a. Eligible Consortium.</b> A consortium that is composed of 2 or more of the following entities:</p> <p>(1) Businesses incorporated in the United States.</p> <p>(2) Public or private educational or research organizations located in the United States.</p> <p>(3) Entities of State or local governments in the United States.</p> <p>(4) Federal laboratories.</p>

## Environmental Mitigation pilot program definitions

### The pilot program definitions include...

**b. Environmental Mitigation Project.** The term “environmental mitigation project” means a project that—

- (1) introduces new environmental mitigation techniques or technologies that have been proven in laboratory demonstrations;
- (2) proposes methods for efficient adaptation or integration of new concepts into airport operations; and
- (3) will demonstrate whether new techniques or technologies for environmental mitigation are—
  - (i) practical to implement at or near multiple public-use airports; and
  - (ii) capable of reducing noise, airport emissions, or water quality impacts in measurably significant amounts.

**Note:** This definition of Environmental Mitigation is specific to this pilot program and does not extend to other projects.

### Moving Forward:

Airport sponsors or other eligible consortium entities expressing interest in this program should contact their local FAA Airports Regional or District Office.

### Guidance and Tools:

The FAA will update the current version of the AIP Handbook (FAA Order 5100.38D Change 1) in its next version to reflect this provision. The FAA will distribute program information to ROs/ADOs.

### Section 383(e) - Airport Safety and Airspace Hazard Mitigation and Enforcement

Section 383 amends 49 U.S.C. Chapter 448 by creating Section 44810. Section 44810 directs the Administrator to establish a team from multiple departments and agencies to ensure technologies or systems that are developed, tested, or deployed by Federal departments and agencies to detect and mitigate potential risks posed by errant or hostile unmanned aircraft systems to ensure operations do not adversely impact or interfere with safe airport operations, navigation, air traffic services, or the safe and efficient operation of the national airspace system. The program will evaluate and deploy technologies or systems at five airports, including a large hub airport in the top 10 airports in terms of enplanements.

Paragraph (e) requires the equipment subject to this pilot program, be certified, permitted, authorized, or allowed only after successfully testing under this section has been completed. AIP funding will not be available unless and until there has been completion of successful testing, which results in certification, permitting, authorization, or allowing of the equipment.

Once those requirements are met, the purchasing of an unmanned aircraft detection and mitigation system shall be considered airport development (as defined in Section 47102) for the duration of the program.

Currently there is no AIP eligibility for these systems, equipment, or other associated items or costs.

The remaining paragraphs of Section 383 detail the pilot program parameters and do not impact or include APP.

### **Moving Forward:**

The FAA will issue additional information regarding AIP eligibility once the equipment becomes eligible and other statutory limitations are addressed.

### **Guidance and Tools:**

The FAA will update the current version of the AIP Handbook (FAA Order 5100.38D Change 1) in its next version to reflect the existence of this provision as it pertains to the Airport Improvement Program.

### **DIVISION K, Transportation Security Administration (TSA)**

The following provisions are located under Division K of Public Law 115-254. This Division is the TSA Modernization Act (TSA Act). While contained in the same piece of legislation as the FAA Reauthorization Act, this Division applies only to TSA. The FAA is including these provisions to clarify that TSA-mandated programs are not a category of airport development under 49 U.S.C. § 47102(3) because they are covered under TSA's authorization.

### **Section 1920 - Pilot Program for Automated Exit Lane Technology.**

Section 1920 of the TSA Act directs the TSA Administrator to establish a pilot program to implement and evaluate the use of automated exit lane technology at small hub airports and nonhub airports.

Although this legislation is not directed to the FAA, it is relevant to the AIP program as it affirms information provided in FAA Order 5100.38D (AIP Handbook), which states exit lane technologies are not fundable with AIP. There has been some confusion about exit lanes and whether they were AIP eligible. The responsibility for exit lanes rests with the Department of Homeland Security and AIP funds cannot be used for these types of projects as clearly stated in this section of the Act.

The statement in Table C-2 of the AIP Handbook, Examples of Prohibited Projects/Costs for Construction line 50, item I is still in effect, as follows:

**Passenger Screening Area Build Out and Equipment.** All build out costs and equipment (as with other terminal tenants) are ineligible. This includes exit doors or walls not needed for eligible purposes. Unlike access control and perimeter fencing, passenger screening is not 49 CFR part 1542 requirement.

**Moving forward:**

The ADO and RO Program Managers may choose to remind airports that the responsibility for the pilot program rests with TSA and that funding through AIP is not available for the work.

**Guidance and Tools:**

There is no change to the AIP Handbook because of this TSA pilot program. The current version of the AIP Handbook (FAA Order 5100.38D Change 1) is unchanged, as this does not change allowable funding or eligibility.

**Section 1925 – Computed Tomography Pilot Program.**

Section 1925 of TSA Act establishes a pilot program for the TSA to test the use of screening equipment using computed tomography technology to screen baggage at passenger screening checkpoints at airports. Similar to above, the inclusion of this section in the TSA Act and direction given to the TSA to carry out this program affirms there is no AIP eligibility associated with baggage screening or this pilot program.

**Moving forward:**

The ADO and RO Program Managers may choose to remind airports that the responsibility for the pilot program rests with TSA and that funding through AIP is not available for the work.

**Guidance and Tools:**

There is no change to the AIP Handbook because of this TSA pilot program.

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