

# City of Chicago



F2017-31

# Office of the City Clerk

# **Document Tracking Sheet**

**Meeting Date:** 

5/24/2017

Sponsor(s):

Dept./Agency

Type:

Communication

Title:

Federal Aviation Administration approval dated March 23, 2017 regarding application by City of Chicago for Passenger Facility Charge program at Chicago O'Hare International

Airport

**Committee(s) Assignment:** 



# CHICAGO DEPARTMENT OF AVIATION CITY OF CHICAGO

April 25, 2017

The Honorable Anna Valencia City Clerk City of Chicago City Hall Room 107 121 N. LaSalle Street Chicago, IL 60602

Dear Ms. Valencia:

Pursuant to the ordinance passed on January 12, 1993, attached hereto please find the approval by the Federal Aviation Administration (FAA) dated March 23, 2017 regarding an application by the City of Chicago for the Passenger Facility Charge (PFC) program at Chicago O'Hare International Airport.

If you have any questions regarding these matters, please contact me at (773) 686-3579.

Sincerely,

Michael Cosentino
Department of Aviation

Attachment

OFFICE OF THE

RECEIVED #3 YES



Federal Aviation Administration Great Lakes Region 2300 E Devon Avenue Des Plaines, Illinois 60018

March 23, 2017

Federal Aviation Administration

Ms. Ginger S. Evans Commissioner, Department of Aviation City of Chicago, O'Hare International Airport P.O. Box 66142 Chicago, Illinois 60666

Attn: Ms. Reshma Soni

Dear Ms. Evans:

In accordance with section 158.29 of the Federal Aviation Regulations (Title 14, Code of Federal Regulations, Part 158), the Federal Aviation Administration has approved your application to impose and use a passenger facility charge (PFC) at Chicago O'Hare International Airport (ORD). The authority to impose a PFC is contingent on your continued compliance with the terms of the regulation and any conditions included in this letter.

Enclosed is a Final Agency Decision which provides specific information about this approval including the approved PFC level, total amount approved, net PFC revenue to be collected, earliest charge effective date, and duration of authority to impose the PFC. This Decision also includes information on the approved projects, as well as the FAA's reason for the decision. The FAA's findings and determinations required by statute and Part 158 as well as the FAA's disposition of comments received in response to your air carrier consultation and public notice are also included in the Decision.

The FAA has approved authority to impose a PFC at ORD for two projects. The total approved net PFC revenue to be collected for the projects is \$376,096,529, which is the entire amount requested by the City of Chicago Department of Aviation.

The FAA has approved authority to use a PFC at ORD for one project. The total approved net PFC revenue to be used for the project is \$27,092,883, which is the entire amount requested by the City of Chicago Department of Aviation.

The FAA has also approved your request to exempt that class of carriers defined as *Air Taxi* from the requirement to collect the PFC. We request that you notify the carriers in the excluded class, which were listed in your application, of this exemption.

Reporting, recordkeeping, and auditing requirements are described in Part 158, Subpart D. Please issue your required quarterly reports in accordance with the previously issued guidance on reports. We request that you advise our Chicago Airports District Office when you notify the air carriers and foreign air carriers to begin collecting PFCs.

In accordance with §158.33(a)(1), you are required to implement your projects approved for concurrent impose and use authority at ORD no later than two (2) years after receiving approval to use PFC revenue on the project.

We have enclosed the list of advisory circulars with which you must comply in accordance with your certification of assurance number 9, standards and specifications.

Sincerely,

Susan Mowery-Schalk

Director, Great Lakes Airports Division Office

#### FINAL AGENCY DECISION

# CITY OF CHICAGO, DEPARTMENT OF AVIATION CHICAGO, ILLINOIS

Application number 17-29-C-00-ORD is to impose and use a passenger facility charge (PFC) at Chicago O'Hare International Airport (ORD).

In accordance with §158.29 of Title 14, Code of Federal Regulations ("CFR") of the Federal Aviation Regulations<sup>1</sup>, this Final Agency Decision (FAD) includes the appropriate determinations to approve or disapprove, in whole or in part, imposition of a PFC at ORD and use of PFC revenue on a project at ORD.

# **Procedural History (Dates)**

Air carrier consultation meeting: July 28, 2016.

Public notice: July 28, 2017.

FAA receipt of application: November 23, 2015.

FAA finding that application is substantially complete: December 21, 2016.

#### PFC Level, Amount, and Charge Effective Date

Level of PFC: \$4.50

Total approved net PFC revenue

in this decision: \$376,096,529 Earliest charge effective date: January 1, 2039

January 1, 2039, is the "earliest" date on which air carriers are obliged to begin collecting PFCs from passengers ("charge effective date") and is based upon the estimated "charge expiration date" for the previously approved collections in application 15-28-C-00-ORD<sup>2</sup>. If the City of Chicago Department of Aviation (City) changes the charge expiration date for the previous application, the charge effective date for this application will also change, so that the City can continue to collect the authorized amount of PFC revenue without a cessation in collections. Title 14 CFR §158.43 contains information regarding notification to air carriers and foreign air carriers of the charge effective date and changes to the charge expiration date. In establishing its charge effective date, the public agency must comply with §158.43(b)(3), which states, in part, that the charge effective date will be the first day of a month which is at least 30 days from the date the public agency notifies the carriers of approval to impose the PFC.

### **Duration of Authority**

<sup>&</sup>lt;sup>1</sup> Elsewhere in this document 14 CFR Part 158 may be referred to in abbreviated form as "Section 158.xx" or "§ 158.xx".

<sup>&</sup>lt;sup>2</sup> Pursuant to Title 14 CFR §158.3: "charge effective date" means the date on which air carriers are obliged to begin collection of a PFC; "charge expiration date" means the date on which air carriers are to cease collecting a PFC.

The City is authorized to impose a PFC at ORD until the date on which the total net PFC revenue collected plus interest thereon equals the allowable cost of the approved projects or the charge expiration date is reached, whichever comes first. Based on information submitted by the City, the FAA estimates the charge expiration date for this decision is July 1, 2041. Should the amount of PFC revenue collected for this application ever exceed the allowable costs for all approved projects in this application, the public agency's authority to impose a PFC for this application ceases.<sup>3</sup> If the public agency's authority to impose a PFC ceases, the public agency must, without delay, submit a plan acceptable to the FAA to insure that it complies with applicable law, subject to loss of Airport Improvement Program (AIP) grant funds. Section 158.39(d).

# CUMULATIVE PFC AUTHORITY DECISION SUMMARY TABLE (including current decision)

Application Number	-	proved for ellection		oproved r Use
93-01-C-00-ORD	\$	500,418,285	\$	203,169,288
93-01-C-01-ORD	\$	3,043,976	\$	0
93-01-C-02-ORD		4,070,943	\$	4,070,943
93-01-C-03-ORD	\$ \$	2,310,816	\$ \$	0
93-01-C-04-ORD	(\$	49,381,374)	(\$	49,381,374)
93-01-C-05-ORD		2,228,896	\$	Ó
93-01-C-06-ORD	\$ \$ \$ \$ \$ \$	33,289,404	\$	52,607,489
93-01-C-07-ORD	\$	7,211,803	\$	0
93-01-C-08-ORD	\$	12,397,557	\$	0
93-01-C-09-ORD	\$	6,455,531	\$	5,228,339
93-01-C-10-ORD	(\$	4,774,097)	· (\$	4,774,097)
93-01-C-11-ORD	\$	612,594,021	\$	Ó
93-01-C-12-ORD	(\$	115,037,047)	\$	23,053,275
93-01-C-13-ORD	\$	214,109,256	\$	109,210,915
93-01-C-14-ORD	(\$	80,400,000)	\$	0
93-01-C-15-ORD	\$	9,947,249	\$	8,367,249
94-02-U-00-ORD	\$	0	\$	59,572,172
94-02-U-01-ORD	\$	0	\$	2,228,896
94-02-U-02-ORD	\$	0	\$	7,072,870
94-02-U-03-ORD	\$	0	(\$	2,572,624)
95-03-C-00-ORD	\$	21,343,524	\$	48,078,691
95-03-C-01-ORD	\$	0	\$	7,211,803
95-03-C-02-ORD	\$	0	\$	218,210,000

<sup>&</sup>lt;sup>3</sup> See Title 14 CFR § 158.63(a) (The public agency must provide quarterly reports to air carriers collecting PFCs for the public agency with a copy to the appropriate FAA Airports Office.), § 158.67(c) (The public agency shall annually provide for an audit of its PFC account.), and § 158.39(a) (If excess PFC revenue has been collected, the public agency must use the excess funds for approved PFC projects or to retire outstanding PFC – financed bonds.).

}

95-03-C-03-ORD	\$ 0	(\$ 153,928,673)
95-03-C-04-ORD	(\$ 21,343,524)	(\$ 21,343,524)
95-03-C-05-ORD	\$ 0	\$ 23,020,309
95-03-C-06-ORD	\$ 0	\$ 11,700,000
96-04-C-00-ORD	\$ 1,450,000	\$ 1,450,000
96-04-C-01-ORD	(\$ 346,500)	(\$ 346,500)
96-04-C-02-ORD	(\$ 1,103,500)	(\$ 1,103,500)
96-05-C-00-ORD	\$ 386,444,323	\$ 588,747,375
96-05-C-01-ORD	\$ 26,474,108	\$ 27,701,300
96-05-C-02-ORD	\$ 10,774,097	\$ 10,774,097
96-05-C-03-ORD	\$ 33,191,669	\$ 427,575,690
96-05-C-04-ORD	\$ 0	\$ 18,410,975
96-05-C-05-ORD	(\$ 5,288,448)	(\$ 5,288,448)
96-05-C-06-ORD	\$ 16,118,381	\$ 97,996,413
96-05-C-07-ORD	\$ 0	(\$ 80,400,000)
96-05-C-08-ORD	\$ 0	(\$ 10,120,000)
96-05-C-09-ORD	\$ 20,426,238	\$ 20,426,238
97-06-C-00-ORD	\$ 1,470,500	\$ 1,470,500
97-06-C-01-ORD	(\$ 1,470,500)	(\$ 1,470,500)
98-07-C-00-ORD	\$ 61,717,809	\$ 61,717,809
98-07-C-01-ORD	(\$ 8,814,528)	(\$ 8,814,528)
98-07-C-02-ORD	\$ 1,922,127	\$ 1,922,127
98-08-C-00-ORD	\$ 546,526,300	\$ 209,956,300
98-08-C-01-ORD	(\$ 546,526,300)	(\$ 209,956,300)
98-09-C-00-ORD	\$ 1,540,000	\$ 1,540,000
98-09-C-01-ORD	(\$ 1,540,000)	(\$ 1,540,000)
98-10-U-00-ORD	\$ 0	\$ 88,370,000
98-10-U-01-ORD	\$ 0	(\$ 88,370,000)
99-11-C-00-ORD	\$ 1,500,000	\$ 1,500,000
99-11-C-01-ORD	(\$ 1,500,000)	(\$ 1,500,000)
01-12-C-00-ORD	\$1,486,284,358	\$ 787,084,358
01-12-C-01-ORD	\$ 108,543,432	\$ 108,543,432
01-12-C-02-ORD	(\$ 279,500,000)	\$ 0
01-12-C-03-ORD	\$ 25,000,000	\$ 25,000,000
01-12-C-04-ORD	\$ 100,251,514	\$ 100,251,514
01-12-C-05-ORD	\$ 8,432,793	\$ 17,432,793
01-12-C-06-ORD	(\$ 366,700,000)	\$ 0
01-12-C-07-ORD	\$ 222,300,000	\$ 222,300,000
02-13-U-00-ORD	\$ 0	\$ 53,000,000
02-13-U-01-ORD	\$ 0	(\$ 9,000,000)

Totals	\$ 6,926,705,514	\$ 6,577,701,868
17-29-C-00-ORD	\$ 376,096,529	\$ 27,092,883
15-28-C-00-ORD	\$ 11,125,000	\$ 11,125,000
12-26-C-00-ORD	\$ 2,484,000	\$ 2,484,000
11-25-C-00-ORD	\$ 90,787,103	\$ 90,787,103
10-24-C-00-ORD	\$ 4,635,392	\$ 4,635,392
10-23-C-00-ORD	\$ 1,400,818,394	\$ 1,400,818,394
09-22-C-00-ORD	\$ 247,195,313	\$ 247,195,313
08-21-C-00-ORD	\$ 235,690,213	\$ 235,690,213
07-20-C-00-ORD 07-20-C-01-ORD	\$ 53,983,000 (\$ 53,983,000)	\$ 53,983,000 (\$ 53,983,000)
06-19-C-00-ORD 06-19-C-01-ORD 06-19-C-02-ORD	\$1,290,509,174 \$ 132,971,654 \$ 1,300,000	\$1,290,509,174 \$ 132,971,654 \$ 1,300,000
06-18-C-00-ORD 06-18-C-01-ORD	\$ 8,200,000 (\$ 8,200,000)	\$ 8,200,000 (\$ 8,200,000)
06-17-C-00-ORD 06-17-C-01-ORD	\$ 73,198,000 \$ 5,206,650	\$ 73,198,000 \$ 5,206,650
04-16-C-00-ORD	\$ 37,000,000	\$ 37,000,000
03-15-C-00-ORD	\$ 11,625,000	\$ 11,625,000
02-14-C-00-ORD 02-14-C-01-ORD	\$ 2,565,000 (\$ 2,565,000)	\$ 2,565,000 (\$ 2,565,000)

### **Project Approval Determinations**

For each project approved in this FAD and for the application as a whole, the FAA, based on its expertise with the PFC program and airport development, exercises its judgment, and based upon its expertise finds that the application and record thereof, contain substantial documentation to support its determinations. Based on its review and pursuant to 49 U.S.C. §40117, the FAA finds that:

• The amount and duration of the PFC will not result in revenue that exceeds the amount necessary to finance the specific project.

- Each project approved at a \$3 or lower level meets at least one of the objectives set forth in 14 CFR §158.15(a) (as set forth in the individual project determinations); is eligible in accordance with §158.15(b) (as set forth in the individual project determinations); and is adequately justified in accordance with §158.15(c) and paragraph 4-8 of FAA Order 5500.1, Passenger Facility Charge (August 9, 2001) (as set forth in the individual project determinations).
- Each project approved for collection at a PFC level above \$3, meets the
  requirements of 14 CFR §158.17(a) (2). The FAA has reviewed the City's
  funding proposals for each project. For each project, the FAA has determined
  that the Airport Improvement Program (AIP) funds are not expected to be
  available to fund the project in whole or in part.
- The collection process, including a request by the public agency not to require a class or classes of carrier to collect PFC, is reasonable, not arbitrary, nondiscriminatory, and otherwise in compliance with the law.
- The public agency has not been found to be in violation of §9304(e) or §9307
  of the Airport Noise and Capacity Act (ANCA) of 1990 (since codified at 49
  U.S.C. 47524 and 47526).
- The project-related requirements, concerning approval of the airport layout plan (ALP) and completion of airspace studies have been met.
- Environmental requirements (14 CFR §158.29(b) (1) (iv)) have been completed and are discussed under a separate heading below.

# <u>Projects Approved for Authority to Impose and Use the PFC at ORD at a \$4.50 Level</u>

Description:	• •	Approved <u>Amo</u> unt	
Terminal 5 Expansion - Design	<del></del>		
Pay-as-you-go⁴	\$	0	
Bond Capital <sup>5</sup>	\$ 13,54	6,441	
Bond Financing & Interest <sup>6</sup>	\$ 13,54	6,441	
Total	\$ 27,09	2,882	

The Terminal 5 Expansion (Design Project) includes design and planning efforts related to an expansion of, and set of modifications to, the International Terminal (Terminal 5 or T5) in order to increase gate capacity at ORD. The design project will be full services from programming and conceptual design through bidding,

<sup>5</sup> "Bond capital" refers to the proceeds of a bond or other debt instrument used to pay the capital costs of a project.

<sup>6</sup> "Financing and Interest" means the cost of financing a bond or other debt instrument, including debt service.

<sup>&</sup>lt;sup>4</sup> "Pay-as-you-go" refers to a method of financing a project where a public agency pays any outstanding project invoices as soon as PFC collections revenue permits.

anticipating a design/bid/build, a site and civil bid package, and a collaborative design and integrated project delivery building package.

The overall project will extend the M Concourse in Terminal 5 by approximately 279,000 square feet, construct new gates, reconfigure existing gates and facilities, and increase the number of gates in the terminal by 9. In addition, new loading bridges will be installed, new holdrooms, concession space, airline lounge(s) and operations space and ancillary spaces would be created. The terminal apron will be expanded by approximately 1.48 million square feet, and hydrant fueling, gate power, and preconditioned air will be provided. Certain facilities will be relocated or replaced, including the triturator building, perimeter fence and guard post, a blast fence, a snow melter area, cargo storage, hardstands and other associated elements.

#### **Determinations:**

Approved for collection and use.

**Significant contribution**: It has been determined that the expansion, reconfiguration and increase in the number of gates in Terminal 5 will enhance air carrier competition by increasing the number of non-exclusive use gates at ORD. In addition, the higher number of gates will assist in reducing taxi-in wait times, thereby improving capacity. Both of these impacts are considered significant contributions to these stated goals, as further discussed in the Attachment B-1 for the project.

**PFC Objective**: This project will result in increased competition by permitting greater access to non-exclusive gates for domestic and foreign air carriers, as further discussed in the Attachment B-1 for the project.

**Basis for eligibility**: Development that is eligible under AIP criteria (Table N-9 of Order 5100.38D, Terminal Project Requirements) pursuant to 49 U.S.C. 47101 et seq.

Adequate justification: This project will provide needed non-exclusive use gate capacity, contributing to improvements in competition and congestion, as further discussed in the Attachment B-1 for the project. The FAA has examined the proposed cost in relation to similar terminal projects and determined that the cost is reasonable.

Estimated total project cost: \$28,869,441.

Proposed sources of financing: PFC revenue: \$27,092,883; Local funds

(Airport discretionary funds): \$1,776,559.

Projects Approved for Authority to Impose the PFC at ORD at a \$4.50 Level

Description: Approved Amount

**Terminal 5 Expansion - Construction** 

Pay-as-you-go <sup>7</sup>	\$	0
Bond Capital <sup>8</sup>	\$174,501	,823
Bond Financing & Interest <sup>9</sup>	<u>\$174,501</u>	<u>,823</u>
Total	\$349,003	,646

The Terminal 5 Expansion (Construction Project) includes design and planning efforts related to an expansion of, and set of modifications to, the International Terminal (Terminal 5 or T5) in order to increase gate capacity at ORD. The construction project will include site and civil work as well as a full building package.

The project will extend the M Concourse in Terminal 5 by approximately 279,000 square feet, construct new gates, reconfigure existing gates and facilities, and increase the number of gates in the terminal by 9. In addition, new loading bridges will be installed, new holdrooms, concession space, airline lounge(s) and operations space and ancillary spaces would be created. The terminal apron will be expanded by approximately 1.48 million square feet, and hydrant fueling, gate power, and preconditioned air will be provided. Certain facilities will be relocated or replaced, including the triturator building, perimeter fence and guard post, a blast fence, a snow melter area, cargo storage, hardstands and other associated elements.

#### **Determinations:**

Approved for collection.

**Significant contribution**: It has been determined that the expansion, reconfiguration and increase in the number of gates in Terminal 5 will enhance air carrier competition by increasing the number of non-exclusive use gates at ORD. In addition, the higher number of gates will assist in reducing taxi-in wait times, thereby improving capacity. Both of these impacts are considered significant contributions to these stated goals, as further discussed in the Attachment B-2 for the project.

**PFC Objective**: This project will result in increased competition by permitting greater access to non-exclusive gates for domestic and foreign air carriers, as further discussed in the Attachment B-2 for the project.

**Basis for eligibility**: Development that is eligible under AIP criteria (Table N-9 of Order 5100.38D, Terminal Project Requirements) pursuant to 49 U.S.C. 47101 et seq.

<sup>b</sup> "Bond capital" refers to the proceeds of a bond or other debt instrument used to pay the capital costs of a project.

<sup>&</sup>lt;sup>7</sup> "Pay-as-you-go" refers to a method of financing a project where a public agency pays any outstanding project invoices as soon as PFC collections revenue permits.

<sup>&</sup>lt;sup>9</sup> "Financing and Interest" means the cost of financing a bond or other debt instrument, including debt service.

**Adequate justification**: This project will provide needed non-exclusive use gate capacity, contributing to improvements in competition and congestion, as further discussed in the Attachment B-2 for the project. The FAA has examined the proposed cost in relation to similar terminal projects and determined that the cost is reasonable.

Estimated total project cost: \$371,888,823.

Proposed sources of financing: PFC revenue: \$349,003,646; Local funds

(Airport discretionary funds): \$22,885,177.

#### **Environmental Requirements**

The Terminal 5 Expansion-Design project was analyzed and approved in a Categorical Exclusion issued on October 6, 2016, thus allowing the application to seek concurrent authority to impose and use the PFCs. The Categorical Exclusion was prepared pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality guidelines implementing NEPA and FAA Orders 1050.1.E and 5050.4B.

All applicable requirements pertaining to ALP approval, airspace and NEPA have been met with respect to the Terminal 5 Expansion-Design project.

#### Request Not to Require a Class or Classes of Carriers to Collect PFCs.

The City requests that the following class of air carriers be excluded from the requirement to collect PFCs: *Air taxi.* 

<u>Determination:</u> Approved pursuant to 14 CFR §158.11. Based on information contained in the City's application, the FAA has determined that the proposed class accounts for less than 1 percent of ORD's total annual enplanements. The City should confirm, on an annual basis using prior year enplanement data, that the approved class does not exceed 1 percent of the total enplanements at ORD. Upon completion of the annual review, should the approved class (Air taxi) no longer meet the requirement for exclusion; the City must initiate collection of PFCs from this class of carriers.

## Compliance with the Airport Noise and Capacity Act of 1990 (ANCA)

The FAA is not aware of any proposal at ORD which would be found to be in violation of the ANCA. The FAA herein provides notice to the City that a restriction on the operation of aircraft at ORD must comply with all applicable provisions of the ANCA and that failure to comply with the ANCA and Part 161 makes the City subject to provisions of Subpart F of that Part. Subpart F, "Failure to Comply With This Part," describes the procedures to terminate eligibility for AIP funds and authority to collect PFC revenues.

### Compliance with Subsection 47107(b) Governing Use of Airport Revenue

As of the date of this approval the City of Chicago, Department of Aviation has not been found to be in violation of 49 U.S.C. §47107(b) or in violation of grant assurances made under 49 U.S.C. §47107(b).

#### Compliance with Requirement to Submit a Competition Plan

As of the date of this approval, the City of Chicago Department of Aviation has complied with the requirement to submit a competition plan in accordance with §158.29(a)(1)(viii). Furthermore, by letter dated June 2, 2004, the FAA has determined that the plan is in accordance with 49 U.S.C. §47106(f).

#### Air Carrier Consultation and City's Public Notice

United Airlines certified agreement with the proposed projects before or following the July 28, 2016 air carrier consultation meeting. No carriers certified disagreement with the proposed projects.

No comments from the public were received from the City's public notice issued on July 28, 2016 prior to filing of the application.

#### **Legal Authority**

This decision is made under the authority of 49 U.S.C. §40117, as amended. This decision constitutes a final order to approve, in whole or in part, the City of Chicago Department of Aviation's application to impose a PFC on two projects and use PFC revenue on one projects at ORD. A person disclosing a substantial interest may apply for review of this decision to the courts of appeals for the United States or the United States Court of Appeals for the District of Columbia upon petition, pursuant to 49 U.S.C. §46110, filed within 60 days after issuance of this decision.

Concur _	Sylloweng-Schall_	3/23/2017
	Great Lak∉s Region	Date
	Airports Division Director	
Nonconcur _		
	Great Lakes Region	Date
	Airports Division Director	



# **Current FAA Advisory Circulars Required for Use in AIP Funded and PFC Approved Projects**

Updated: 1/24/2017

View the most current versions of these ACs and any associated changes at:

<a href="http://www.faa.gov/airports/resources/advisory\_circulars.and">http://www.faa.gov/airports/resources/advisory\_circulars.and</a>

<a href="http://www.faa.gov/regulations-policies/advisory\_circulars/">http://www.faa.gov/regulations-policies/advisory\_circulars/</a>

NUMBER	Tire =
70/7460-1L Change 1	Obstruction Marking and Lighting
150/5020-1	Noise Control and Compatibility Planning for Airports
150/5070-6B Changes 1 - 2	Airport Master Plans
150/5070-7 Change 1	The Airport System Planning Process
150/5100-13B	Development of State Standards for Nonprimary Airports
150/5200-28F	Notices to Airmen (NOTAMs) for Airport Operators
150/5200-30D	Airport Field Condition Assessments and Winter Operations Safety
150/5200-31C Changes 1 - 2	Airport Emergency Plan
150/5210-5D	Painting, Marking, and Lighting of Vehicles Used on an Airport
150/5210-7D	Aircraft Rescue and Fire Fighting Communications
150/5210-13C	Airport Water Rescue Plans and Equipment
150/5210-14B	Aircraft Rescue Fire Fighting Equipment, Tools and Clothing
150/5210-15A	Aircraft Rescue and Firefighting Station Building Design

NUMBER	TITLE
150/5210-18A	Systems for Interactive Training of Airport Personnel
150/5210-19A	Driver's Enhanced Vision System (DEVs)
150/5220-10E	Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles
150/5220-16D	Automated Weather Observing Systems (AWOS) for Non-Federal Applications
150/5220-17B	Aircraft Rescue and Fire Fighting (ARFF) Training Facilities
150/5220-18A	Buildings for Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials
150/5220-20A	Airport Snow and Ice Control Equipment
150/5220-21C	Aircraft Boarding Equipment
150/5220-22B	Engineered Materials Arresting Systems (EMAS) for Aircraft Overruns
150/5220-23	Frangible Connections
150/5220-24	Foreign Object Debris Detection Equipment
150/5220-25	Airport Avian Radar Systems
150/5220-26, Changes 1 - 2	Airport Ground Vehicle Automatic Dependent Surveillance - Broadcast (ADS-B) Out Squitter Equipment
150/5300-7B	FAA Policy on Facility Relocations Occasioned by Airport Improvements or Changes
150/5300-13A, Change 1	Airport Design
150/5300-14C	Design of Aircraft Deicing Facilities
150/5300-16A	General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey
150/5300-17C	Standards for Using Remote Sensing Technologies in Airport Surveys
150/5300-18B Change 1	Survey and Data Standards for Submission of Aeronautical Data Using Airports GIS
150/5320-5D	Airport Drainage Design
150/5320-6F	Airport Pavement Design and Evaluation

NUMBER	TITLE
150/5320-12C, Changes 1 - 8	Measurement, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces
150/5320-15A	Management of Airport Industrial Waste
150/5325-4B	Runway Length Requirements for Airport Design
150/5335-5C	Standardized Method of Reporting Airport Pavement Strength - PCN
150/5340-1L	Standards for Airport Markings
150/5340-5D	Segmented Circle Airport Marker System
150/5340-18F	Standards for Airport Sign Systems
150/5340-26C	Maintenance of Airport Visual Aid Facilities
150/5340-30H	Design and Installation Details for Airport Visual Aids
150/5345-3G	Specification for L-821, Panels for the Control of Airport Lighting
150/5345-5B	Circuit Selector Switch
150/5345-7F	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
150/5345-10H	Specification for Constant Current Regulators and Regulator Monitors
150/5345-12F	Specification for Airport and Heliport Beacons
150/5345-13B	Specification for L-841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits
150/5345-26D	FAA Specification For L-823 Plug and Receptacle, Cable Connectors
150/5345-27E	Specification for Wind Cone Assemblies
150/5345-28G	Precision Approach Path Indicator (PAPI) Systems
150/5345-39D	Specification for L-853, Runway and Taxiway Retroreflective Markers
150/5345-42H	Specification for Airport Light Bases, Transformer Housings, Junction Boxes, and Accessories
150/5345-43H	Specification for Obstruction Lighting Equipment
150/5345-44K	Specification for Runway and Taxiway Signs
150/5345-45C	Low-Impact Resistant (LIR) Structures

NUMBER	TIPLE	
150/5345-46E	Specification for Runway and Taxiway Light Fixtures	
150/5345-47C	Specification for Series to Series Isolation Transformers for Airport Lighting Systems	
150/5345-49C	Specification L-854, Radio Control Equipment	
150/5345-50B	Specification for Portable Runway and Taxiway Lights	
150/5345-51B	Specification for Discharge-Type Flashing Light Equipment	
150/5345-52A	Generic Visual Glideslope Indicators (GVGI)	
150/5345-53D	Airport Lighting Equipment Certification Program	
150/5345-54B	Specification for L-884, Power and Control Unit for Land and Hold Short Lighting Systems	
150/5345-55A	Specification for L-893, Lighted Visual Aid to Indicate Temporary Runway Closure	
150/5345-56B	Specification for L-890 Airport Lighting Control and Monitoring System (ALCMS)	
150/5360-12F	Airport Signing and Graphics	
150/5360-13 Change 1	Planning and Design Guidelines for Airport Terminal Facilities	
150/5360-14	Access to Airports By Individuals With Disabilities	
150/5370-2F	Operational Safety on Airports During Construction	
150/5370-10G	Standards for Specifying Construction of Airports	
150/5370-11B	Use of Nondestructive Testing in the Evaluation of Airport Pavements	
150/5370-13A	Off-Peak Construction of Airport Pavements Using Hot-Mix Asphalt	
150/5370-15B	Airside Applications for Artificial Turf	
150/5370-16	Rapid Construction of Rigid (Portland Cement Concrete) Airfield Pavements	
150/5370-17	Airside Use of Heated Pavement Systems	
150/5390-2C	Heliport Design	
150/5395-1A	Seaplane Bases	

# THE FOLLOWING ADDITIONAL APPLY TO AIP PROJECTS ONLY

Updated: 1/24/2017

NUMBER	TITLE
150/5100-14E, Change 1	Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects
150/5100-17, Changes 1 - 6	Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects
150/5300-15A	Use of Value Engineering for Engineering and Design of Airport Grant Projects
150/5320-17A	Airfield Pavement Surface Evaluation and Rating Manuals
150/5370-12B	Quality Management for Federally Funded Airport Construction Projects
150/5380-6C	Guidelines and Procedures for Maintenance of Airport Pavements
150/5380-7B	Airport Pavement Management Program
150/5380-9	Guidelines and Procedures for Measuring Airfield Pavement Roughness