



April 29, 2019

City of Dallas

Dallas Love Field Airport

Proposed Passenger Facility Charge (PFC) 19-05-C-00-DAL to the Federal Aviation Administration to Impose and Use a PFC at Dallas Love Field Airport

NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT

The City of Dallas (the City) has determined the need to submit to the Federal Aviation Administration (FAA) an application to impose a passenger facility charge (PFC) at Dallas Love Field Airport (the Airport or DAL) and to concurrently use PFC revenue at DAL. The City has issued this public notice as part of the of the PFC application process as per Title 14 Code of Regulation (CFR) Part 158.24 *Notice and Opportunity for Public Comment*.

DATES: Comments must be received on or before Friday May 31, 2019.

ADDRESS: Comments may be mailed to Ms. Stephanie D. McHenry, Assistant Director of Aviation Capital Development, DoA, 7555 Lemmon Avenue, Dallas, TX 75209

The following information is provided in accordance with 14 CFR 158,24(b)(1):

Project Descriptions

Projects for which the City is seeking agreement for Impose and Use Authority:

1. Reconstruct Taxiway Bravo (B) – Phase I (from B1 to Connectors B3/B4 and Construction of Taxiway M3)

Project Description: This reimbursable project funded for design and construction for sections of Taxiways Bravo (B) and Mike (M) reconstruction, Taxiway M3 construction, and Taxiways B3/B4 removal at Dallas Love Field Airport (DAL or Airport). This project only reconstructed approximately 1,500 linear feet of Taxiway B and 1,200 linear feet of Taxiway M. New Taxiway M3 is 285 feet long, 75 feet wide, with 25-foot shoulders.

Taxiway B is considered a primary parallel taxiway for Runway 13L-31R which accommodates 58-percent of the Airport's operations. In total, Taxiway B is 7,752 feet long and 75 feet wide constructed with portland cement concrete (PCC) with 25-foot width asphalt-concrete (AC) and PCC shoulders. Taxiway M is located between Taxiway B and Runway 13L-31R and adjoins Taxiway B near Taxiway B3/B4 intersection.

Taxiway M only extends from Taxiway B1 to Taxiway B3/B4 intersection. Taxiway M is 3,000 feet long and 75 feet wide constructed with PCC with 25-foot AC and PCC shoulders. Taxiways B3/B4 were “Y” configured connectors from Taxiway M and provided angled access to Runway 13L-31R. Taxiways B3 and B4 were approximately 13,000 square yards constructed with PCC and 25- foot AC shoulders. New taxiway and taxiway shoulders were constructed with 44,000 square yards of 18-inch PCC, 7,000 square yards of 10-inch PCC, and 3,000 square yards of AC. This project also included the removal and installation of a drainage system, which includes pipes and inlets, electrical duct banks, cables, taxiway lights, guidance signs, and paint striping.

Project Justification: Taxiways B and M have experienced an increase in air carrier activity since the completion of the Love Field Modernization Program (LFMP). The Terminal’s new configuration locates six gates (Gates 1, 2, 3, 5, 7, and 9) adjacent to Taxiway B which placed more demand on pavements that were not designed to support the current aircraft loads and well beyond their useful life. Pavement conditions identified in the January 2015, Kimley-Horn & Associates Inc, Pavement Evaluation (2015 Pavement Evaluation) justify reconstruction.

The reconstruction of Taxiway B from B1 to connectors B3 and B4 will preserve capacity and enhance safety to ensure safe reliable aircraft operations on the airfield. The minimum useful life for pavement reconstruction is 20 years. This section of Taxiway B and Taxiway M were installed in 1946 and 1956 respectively. The removed sections of connectors B3 and B4 were both installed in 1956 with small sections reconstructed in 1988.

The 2015 Pavement Evaluation indicated that distresses on Taxiway B, B3, B4, and M were consistent with load-related distresses. These sections of Taxiway B, B3, B4, and M had pavement condition index (PCI) values of 44, 65, 66, and 63 respectively. It is recommended that the airfield PCI be maintained above 70 to maintain at a level sufficient to ensure safe and reliable aircraft operations. Once pavement surfaces reach a PCI of 70 the surface deterioration rate significantly increases.

In addition, this project will also modify the geometry of Taxiway B connectors B3 and B4. The demolition of Taxiway B3 and B4 and installation of new Taxiway M3 will alleviate the current “Y” configuration that allows angled approaches to Runway 13L-31R. The installation of new Taxiway M3 will create a 90-degree entrance to the runway.

2. Runway 18-36 Conversion Project (Taxiway E)

Project Description: This reimbursable project funded for design and construction activities related to Runway 18-36 conversion to Taxiway Echo (E). This project rehabilitated Runway 18-36 between Taxiways B and C and modified runway markings to comply with taxiway standards. Runway 18-36 was 6,747 feet long, 150 feet wide,

with 25-foot shoulders constructed with AC. This runway was closed in 2011 and decommissioned in February 2015.

Runway 18-36 conversion to Taxiway E rehabilitated 2,900 linear feet of pavement between Taxiways B and C and modified the runway pavement markings to comply with Airport Design, Taxiway Design Group (TDG) 6 standards. Accordingly, taxiway lighting and guide signs were reconfigured to comply with taxiway standards. New taxiway and taxiway shoulders were constructed with 7,000 square yards of 18-inch PCC and 28,000 square yards of AC and bituminous pavement. This project also included the removal and installation of electrical duct banks, cables, taxiway lights, guidance signs, and paint striping. Additionally, Runway 18-36 REIL and VASI systems were removed.

Project Justification: Runway 18-36 was closed in 2011 and never reopened for airfield standard noncompliance issues regarding runway safety areas, runway protection zones, runway object free areas, and usage. The closure and ultimate decommissioning of the runway was the most cost-effective method to comply with FAA airfield standards and allow more efficient use of the airfield. This project allowed the Airport to more effectively comply with Airport Design guidance and establish a nominal approach for creating a cross-field taxiway until the permanent cross-field taxiway is built in the future.

This section of Taxiway E was originally constructed in 1932. The last rehabilitation occurred in 1983. The age and severity of surface distress, identified in the 2015 Pavement Evaluation, which were caused by load and climate related conditions, validated rehabilitation of this pavement. The minimum useful life for pavement rehabilitation is 10 years. This section of pavement was over 35 years-old and beyond its useful life. The section of Taxiway E identified in this project had PCI values ranging from 50 to 57.

3. Runway 18-36 Runway Incursion Mitigation at Runway 13L-31R and Taxiways A/B

Project Description: This reimbursement project funded design and construction for Runway 18-36 Runway Incursion Mitigation (RIM) at Runway 13L-31R and Taxiways A and B. This project removed large, unused pavement sections on former Runway 18-36 and modified a runway hold-line of Taxiway A to reduce potential runway incursions.

Runway 18-36 was 6,147 feet long and 150 feet wide, with 25-foot shoulders constructed with AC, prior to decommissioning in 2015. Since 2011, a portion of this runway has been used as a taxiway. The section of Runway 18-36 between Taxiways B and C has been used as Taxiway E. The sections between Taxiways A and B had been abandoned in place and this project removed those sections of pavement.

This project also addressed a documented “Hot Spot” at Runway 13L approach and Taxiway A. This project replaced the irregular “L” shaped hold position marking with a new linear pavement marking and in-pavement lights. This project also included the removal and installation of a drainage system, which includes pipes and inlets, electrical duct banks, cables, taxiway lights, guidance signs, and paint striping.

Project Justification: RIM has been a priority for the Airport and the FAA. Runway 18-36 pavement removal between Taxiways A and B improved airfield safety by eliminating a confusing, expansive, non-standard pavement section near Runway 13L-31R. Additionally, the Runway 13L-31R, Taxiway A hold-line modification has significantly reduced runway incursions at the Airport.

This project removed three abandoned sections of Runway 18-36. The pavement section north of Taxiway A was originally constructed in 1990; the section between Taxiway A and Runway 13L-31R was originally constructed in 1964; section between Runway 13L-31R and Taxiway B was originally constructed in 1932. Prior to these pavements removal the last rehabilitation occurred in 2005. The surface distresses, identified in the 2015 Pavement Evaluation, were caused by climate related conditions, validated the rehabilitation or reconstruction of this pavement. This section of Runway 18-36 had PCI values ranging from 19 to 52.

4. Runway 18-36 (Taxiway E) Intersection Reconstruction at Taxiways D2 and C

Project Description: This reimbursable project funded for design and construction of Taxiway Charlie (C) and Delta (D)2 intersections reconstruction on Taxiway E, (formerly referred as Runway 18-36), and Taxiway Juliet (J) removal. This project was constructed concurrent with the Runway 18-36 RIM at Runway 13L-31R and Taxiways A/B project, that converted the runway to Taxiway E; as such, the reconstruction of the intersections was modified to 75-foot wide to comply with taxiway design standards.

Runway 18-36 was 6,747 feet long, 150 feet wide with 25-foot shoulders constructed with AC, prior to its closure in 2011 and decommissioning in February 2015. Taxiway intersections D2 and C reconstruction, and Taxiway J pavement removal, removed approximately 14,600 square yards of PCC panels and AC pavements. New taxiway and taxiway shoulders were constructed with 13,000 square yards of 18-inch PCC. This project also included the removal and installation of a drainage system, which includes pipes and inlets, electrical duct banks, cables, taxiway lights, guidance signs, and paint striping.

Project Justification: Taxiways E/D2 and E/C pavement sections were originally constructed in 1946 with AC overlays in 1991 and a slurry seal in 2005. The severity of surface distress, identified in the 2015 Pavement Evaluation, were caused by climate and load-related conditions, validated reconstruction. The minimum useful life for pavement reconstruction is 20 years. These pavements sections were technically over 27 years-old

and beyond their useful life. The slurry seals done in 2005 did not provide structural enhancements but helped preserve the underlying pavement structure and provided for a better taxiing surface. The sections of Taxiway E had PCI values ranging from 31 to 57.

5. Relocate Runway 31R Glideslope

Project Description: This project funded design and construction for Taxiway M rehabilitation and Runway 31R glideslope relocation. Taxiway M is 1,350 feet long, 75 feet wide constructed with PCC panels, with 25-foot AC shoulders. Taxiway M is located between Runway 13L-31R and Taxiway B. The Runway 31R glideslope is located on Taxiway M.

The Taxiway M section between Taxiway M1 and Taxiway B1 had not been operational for over 30-years since the glideslope installation. This project removed the glideslope tower and relocated the precision approach path indicator (PAPI), runway visual range (RVR) lighting system northwest to allow full usage of Taxiway M.

Taxiway M was originally constructed in 1946 with no major rehabilitation efforts since that time. Since this taxiway has experienced minimal usage over the last 30 years, this project reconstructed or rehabilitated the most critical areas of the PCC pavements and AC shoulders. New taxiway and taxiway shoulders were constructed with 1,000 square feet of 17-inch PCC and 300 square yards of six-inch PCC. This project also included the removal and installation of a drainage system, which includes pipes and inlets, electrical duct banks, cables, taxiway lights, guidance signs, and paint striping. Additionally, this project removed and installed a wind cone, Runway 13L-31R PAPI, Glideslope, and RVR equipment.

Project Justification: The Airport is scheduled to reconstruct Runway 13R-31L in FY 2020 requiring the use of Taxiway M to increase the Airport's operational efficiency during single-runway operations. The Runway 31R glideslope relocation from Taxiway M, allows full access of Taxiway M between Taxiways M1 and B2. This allows more efficient operational use of Taxiway B by removing the ILS hold line. Since Taxiway M had been closed since 1985, rehabilitation was necessary for operational use.

This sections of Taxiway M and Taxiway M shoulders were constructed in 1946 and 1965 respectively, with no reconstruction or major rehabilitation efforts since that time. The surface distresses, identified in the 2015 Pavement Evaluation, which were caused by load and climate related conditions, validated rehabilitation of these pavements. The minimum useful life for pavement reconstruction is 20 years. The sections of Taxiway M and Taxiway M shoulder pavements were over 70 and 50 years-old respectively and well beyond their functional life. The closure of Taxiway M for over 30 years did not justify total reconstruction. Also included in this project was Taxiway M shoulder rehabilitation. These sections of Taxiway M and Taxiway M shoulders had a PCI value of 65 and 47 respectively.

6. Reconstruct Taxiway Bravo (B) – Phase II (Runway 13L to Taxiway E)

Project Description: This project funds for design and construction for Taxiway B reconstruction from Runway 13L-31R to Taxiway E (former Runway 18-36). Taxiway B is the primary parallel taxiway for Runway 13L-31R which handles 58-percent of the Airport's operations. In total, Taxiway B is 7,752 feet long and 75 feet wide constructed with PCC with 25-foot width AC shoulders. This project reconstructs the north end of Taxiway B, which extends from Runway 13L-31R to Taxiway E.

This project also removes an abandoned taxiway, relocates navigational equipment located in the infield area between Runway 13L-31R and Taxiway B, and relocates the vehicle service road between Taxiways A and B. The road relocation installs a new gate and fence section near Gate 360 on Shorecrest Drive. While Taxiway B is under construction a new apron bypass taxiway will be installed from Reeves Apron to Taxiway E to allow aircraft access to the airfield. New taxiway and taxiway shoulders will be constructed with 23,500 square yards of 18-inch PCC, 15,000 square yards of 10-inch PCC, and 600 tons of AC. This project also includes the removal and installation of a drainage system, which includes pipes and inlets, electrical duct banks, cables, taxiway and runway lights, guidance signs, and paint striping. Additionally, this project installs and removes obstruction lights, blast wall, security fence, Runway 13L-31R glideslope and RVR, Surface Weather Systems (SWS), Low Level Windshear Alert System (LLWAS), and Automated Surface Observation System (ASOS) equipment.

Project Justification: The repeal of the Wright Amendment in October 2015 significantly increased activity at the Airport. In the 2014, the Airport reported 182,949 movements and by 2016 movements increased to 224,193. The increased activity as related to aircraft loading factors significantly impacted the pavements throughout the airfield. Taxiway B is the primary taxiway that runs parallel to Runway 13L-31R which accommodates 58-percent of the Airport's operations. Pavement conditions identified in the 2015 Pavement Evaluation and current usage justify reconstruction.

This section of Taxiway B was constructed in 1956 with no reconstruction or major rehabilitation efforts since that time. The severity of surface distress, identified in the 2015 Pavement Evaluation, which were caused by load and climate related conditions, validate reconstruction of this pavement. The minimum useful life for pavement reconstruction is 20 years. This section of pavement is over 60 years-old and well beyond its functional life. This section of Taxiway B has PCI values ranging from 45 to 69.

7. Reconstruct Taxiway Bravo (B) – Phase II (Taxiway M Extension)

Project Description: This project funds for design and construction for Taxiway M construction from Runway end 13L to Taxiway D. Currently Taxiway M is only 3,500 feet long and 75 feet wide constructed with PCC with 25-foot width AC shoulders. In its

current configuration Taxiway M extends from Taxiway M1 to Taxiway B4 but is closed between Taxiways M1 and B1. The Airport is scheduled to open this section of Taxiway M in the near future with the relocation of the Runway 31 glideslope located on Taxiway M. Taxiway M will eventually extend the full length of Runway 13L-31R.

The footprint of new Taxiway M from Runway end 13L to Taxiway D excavates approximately 21,000 cubic yards of soil for subgrade preparation for new Taxiway M. The new Taxiway M will be constructed with PCC and AC shoulders. New taxiway and taxiway shoulders will be constructed with 25,000 square yards of 18-inch PCC, 9,500 square yards of 10-inch PCC, and 12 tons of AC. This project also includes the installation of a drainage system, which includes pipes and inlets, electrical duct banks, cables, taxiway and runway lights, guidance signs, and paint striping.

Project Justification: Taxiway M construction is necessary to maintain capacity and maximize the throughput of the Airport during Runway 13R-31L reconstruction. Runway 13R-31L is scheduled for reconstruction in FY 2020 requiring all aircraft to operate on Runway 13L-31R. In August 2017, the Airport conducted Sensitivity Analysis to understand the impacts of a single-runway configuration and evaluate alternatives to maintain capacity. The Sensitivity Analysis was conducted based on the following conditions: current FAA standards; findings in the 2015 Master Plan Update (MPU); the 2015 Pavement Evaluation; January 2017 construction projects; and January 2017 design projects. Through qualitative and quantitative analyses, it was determined that in 2020 there is sufficient capacity during visual meteorological conditions (VMC) to accommodate anticipated demand, with minor delays on a single-runway airfield. However, during instrument meteorological conditions (IMC), there is insufficient capacity to accommodate anticipated demand, due to the additional spacing required for these conditions.

The improvements required to be completed to accommodate aircraft demand during the Runway 13R-31L reconstruction include Taxiways B, M, D as well as reconfigurations to runway and taxiway geometry. Taxiway M extension coupled with the use of Taxiway B will need to be fully operational to reduce congestion and allow tower personnel the ability to change the sequence of departure aircraft near the approach end of the departure runway (Runway 13L-31R) to maximize throughput during Runway 13R-31L reconstruction period.

8. Reconstruct Taxiway Bravo (B) – Phase III (Taxiway B1 to Runway 31R)

Project Description: This project funds the design and construction for sections of Taxiways B and M reconstruction, Taxiway M2 construction, and “Y” shaped taxiway connectors M2/B2 removal. Taxiway B is considered a primary parallel taxiway for Runway 13L-31R which accommodates 58-percent of the Airport’s operations. Taxiway B is 7,752 feet long, 75 feet wide constructed with PCC with 25-foot width PCC shoulders. Taxiway M is 3,500 feet long and 75 feet wide constructed with PCC with 25-

foot width AC shoulders. In its current configuration Taxiway M extends from Taxiway M1 to Taxiway B4 but is closed between Taxiways M1 and B1. The Airport is scheduled to open this section of Taxiway M in the near future with the relocation of the Runway 31 glideslope located on Taxiway M. Taxiway M will eventually extend the full length of Runway 13L-31R. New taxiway and taxiway shoulders will be constructed with 48,200 square yards of 18-inch PCC and 16,800 square yards of 10-inch PCC. Also included in this project is the realignment of a tenant ramp entry point and vehicle service road. This project also includes the installation of electrical duct banks, cables, taxiway lights, guidance signs, and paint striping.

Project Justification: Taxiways B and M have experienced an increase in air carrier activity since the completion of the LFMP. The new Terminal configuration places more demand on these pavements which were not designed for current aircraft load factors and well beyond their functional life. Taxiway B reconstruction from Taxiway M1 to Taxiway B2 is necessary to maintain safety and capacity on the airfield. In addition, the reconfiguration of the tenant ramp and road alignment are also necessary to prevent runway incursions in a congested section of the airfield.

The sections of Taxiways B and M were constructed in 1956 and 1946 respectively, with no reconstruction or major rehabilitation efforts since that time. The severity of surface distress, identified in the 2015 Pavement Evaluation, which were caused by load and climate related conditions, validate the reconstruction of this pavement. The minimum useful life for pavement reconstruction is 20 years. The sections of Taxiway B and M pavement is over 60 and 70 years-old and well beyond its functional life. These sections of Taxiways B and M have PCI values of 44 and 64 respectively.

Also included in this project is the Taxiway Connectors B2/M2 demolition and new Taxiway M2 construction. The Airport has made significant progress in improving airfield safety. The removal of angled Taxiway Connectors B2/M2 reduces the potential of runway incursion on Runway 13L-31R. Taxiways connecting with runways at an angle make it difficult for a pilot to see aircraft on approach or on the runway. Pilot's entering a runway at a 45-degree angle have a reduced or no visibility to the section of runway behind the aircraft. This project also removed old pavements in need of reconstruction.

Taxiways B2/M2 were originally constructed in 1956 with reconstruction on Taxiway B2 in 1998 and 2005 and reconstruction on Taxiway M2 in 1991 and 2005. The minimum useful life for pavement reconstruction is 20 years. Since these taxiways were both beyond their useful life, rehabilitation or reconstruction is justified. The 2015 Pavement Evaluation indicated the distresses on Taxiways B2/M2 were caused by load and climate related conditions. The PCI values for Taxiway B2 sample sections are 83 and 74, while the PCI values for Taxiway M2 sample sections are 82 and 74.

9. Reconstruct Taxiway Bravo (B) – Phase III (Taxiway B1 to Runway 31R)

Project Description: This project funds design and construction for Taxiway M extension from Taxiway D to Taxiway B4, Taxiways M5 and A5 construction, and Taxiways D and “Y” connector Taxiways B5/B6 removal. Taxiway M is 3,500 feet long and 75 feet wide constructed with PCC with 25-foot width AC shoulders. In its current configuration Taxiway M extends from Taxiway M1 to Taxiway B4 but is closed between Taxiways M1 and B1. The Airport is scheduled to open this section of Taxiway M in the near future with the relocation of the Runway 31 glideslope located on Taxiway M. Taxiway M will eventually extend the full length of Runway 13L-31R.

Taxiway M will extend 1,800 linear feet from Taxiway B4 to Taxiway D. Taxiway M will be constructed with 18-inch PCC and 25-foot AC shoulders. Taxiway M expansion, Taxiways B5, B6, and D removal, and Taxiway B reconstruction removes approximately 68,000 cubic yards of soil/subgrade and 37,720 square yards of PCC panels and AC pavements. New taxiway and taxiway shoulders will be constructed with 44,000 square yards of 18-inch PCC, 21,000 square yards of 10-inch PCC, 6,000 square yards of AC. This project also includes the installation of a drainage system, which includes pipes and inlets, electrical duct banks, cables, taxiway and runway lights, guidance signs, and paint striping.

Project Justification: Taxiway M extension will enhance capacity by extending Taxiway M an additional 1,800 linear feet from Taxiway B4 to Taxiway D. The additional capacity is needed for the Runway 13R-31L reconstruction project in 2020. Taxiways D and “Y” connectors B5/B6 removal support the Airport’s ongoing efforts to prevent runway incursions.

Taxiway M construction is necessary to maintain capacity and maximize the throughput of the Airport during Runway 13R-31L reconstruction. Runway 13R-31L is scheduled for reconstruction in FY 2020 requiring all aircraft to operate on Runway 13L-31R. In August 2017, the Airport conducted Sensitivity Analysis to understand the impacts of a single-runway configuration and evaluate alternatives to maintain capacity. The Sensitivity Analysis was conducted based on the following conditions: current FAA standards; findings in the 2015 MPU; the 2015 Pavement Evaluation; January 2017 construction projects; and January 2017 design projects. Through qualitative and quantitative analyses, it was determined that in 2020 there is sufficient capacity during VMC to accommodate anticipated demand, with minor delays on a single-runway airfield. However, during IMC, there is insufficient capacity to accommodate anticipated demand, due to the additional spacing required for these conditions.

The improvements requiring completion to accommodate aircraft demand during the Runway 13R-31L reconstruction include Taxiways B, M, D as well as reconfigurations to runway and taxiway geometry. Taxiway M extension coupled with the use of Taxiway B will need to be fully operational to reduce congestion and allow tower personnel the ability to change the sequence of departure aircraft near the approach end of the departure

runway (Runway 13L-31R) to maximize throughput during Runway 13R-31L reconstruction period.

A small section of Taxiway B was included in this project. This section of Taxiway B was constructed in 1956 with no reconstruction or major rehabilitation efforts since that time. The severity of surface distress, identified in the 2015 Pavement Evaluation, which include load and climate related conditions, validate the reconstruction of this pavement. The minimum useful life for pavement reconstruction is 20 years. This section of pavement is over 60 years-old and well beyond its functional life. This section of Taxiway B has a PCI value of 55.

This project also includes Taxiway Connectors B5/B6 and Taxiway D demolition and new Taxiways A5/M5 construction which increase airfield safety. The Airport has made significant progress in improving airfield safety. The removal of angled Taxiway connectors B5/B6 and Taxiway D reduce the potential of runway incursion on Runway 13L-31R. Taxiways connecting with runways at an angle make it difficult for a pilot to see aircraft on approach or on the runway. Pilot's entering a runway at a 45-degree angle have a reduced or no visibility to the section of runway behind the aircraft. This project also removes old pavements in need of reconstruction.

Taxiways B5/B6 were originally constructed in 1956 with PCC ranging in depth between 12 to 21-inches. The last rehabilitation efforts for Taxiway B5 were overlays in 1995 and 2005 while the last rehabilitation efforts for Taxiway B6 were overlays in 1991 and 2005. Taxiway D was originally constructed in 1956 with 13-inch depth PCC. The condition of Taxiway D varies greatly throughout its length. The last rehabilitation efforts, for the sections removed, occurred in 1991, 2000, and 2013. The sections of pavement rehabilitated in 2013 were part of a runway reconstruction project. The minimum useful life for pavement rehabilitation is 10 years. Since most of these pavements were last rehabilitated over 10 years ago, rehabilitation or reconstruction is justified.

The 2015 Pavement Evaluation indicated the distresses on Taxiways B5/B6 and D were caused by load and climate related conditions. The average PCI values for Taxiways B5/B6 and Taxiway D are 81, 82, and 68 respectively.

Taxiways A5 and M5 construction increase airfield safety. The construction of Taxiways A5 and M5 correct the taxiway geometry of Taxiways B5/B6 and reduce the potential of runway incursions on Runway 13L-31R. The construction of Taxiways A5/M5 create two 90-degree intersections at Runway 13L-31R that more effectively comply with AC 150/5300-13A, 401(b)(5)(e).

10. Reconstruct Runway 13R-31L

Project Description: This project funds for the design and construction of Runway 13R-31L reconstruction. Runway 13R-31L is 8,800 feet long, 150 feet wide constructed with

PCC panels, with 25-foot AC shoulders. This project also reconstructs sections of Taxiway C, removes Taxiways C1, C2, C3, C4, and C6 and replaces these taxiways with new taxiways better allocated along Runway 13R-31L to increase operational efficiency. This project also removes the southern end of Runway 18-36 to allow for a new partial parallel taxiway section and new perimeter road.

Project Justification: The repeal of the Wright Amendment in October 2015 significantly increased activity at the Airport. In the 2014, the Airport reported 182,949 movements and by 2016 movements increased to 224,193. The increased activity as related to aircraft loading factors significantly impacted the pavements conditions on Runway 13R-31L. Runway 13R-31L is a critical facility to the Airport's operations. This runway handles 42-percent of the Airport's operations and the longest runway at the Airport. Pavement conditions identified in the Supplemental Pavement Evaluation (2016 Supplemental Pavement Evaluation) completed in May 2016 and current usage justify reconstruction.

Runway 13R-31L was originally constructed in 1961 with 13-inch depth PCC. Since that time the runway has had PCC bonded overlays in 1970, 1990, and 1993 and localized joint-sealing efforts in 2003. The pavement surface distresses identified in the 2015 Pavement Evaluation and 2016 Supplemental Pavement Evaluation which were caused by load and climate related conditions validate the reconstruction of this pavement. The minimum useful life for pavement reconstruction is 20 years. The runway pavement is over 25 years-old and well beyond its functional life. The 2015 Pavement Evaluation for Runway 13R-31L had an average PCI rating of 81.

In 2016, the Airport requested a second pavement evaluation on Runway 13R-31L. The 2016 Supplemental Pavement Evaluation downgraded the PCI value from 81 to 69. The 2016 Supplemental Pavement Evaluation identified many of the same distresses observed in 2015, however the quantity and severity of the distresses had increased significantly. The amount of load-related distresses recorded in 2016 was significantly more than the previous report. To note, there were no documented shattered slabs in the 2015 Pavement Evaluation, however in 2016 Supplemental Pavement Evaluation, shattered slabs were present throughout the sample sections. The increase in surface distresses can be attributed to the loading impacts and operational changes from the repeal of the Wright Amendment.

The increased traffic at the Airport post repeal of the Wright Amendment, combined with continued deterioration of the pavements can be attributed to lesser value. Through further investigation the reason for the rapid degradation of these pavements can also be attributed to the fully bonded PCC Overlay in 1990. Runway 13R-31 consist of approximately 11-inches of PCC, 1.5 to 2-inches of AC, 13-inches of PCC over a variable depth cement treated based course. Although the overall pavement composition is thick, the top layer of PCC is relatively thin considering the aircraft type and volume is currently accommodating.

This project also removes Taxiway C1, C2, C3, C4, and C6. These taxiways were originally constructed in 1968 and last reconstructed in 1990 except for a section of Taxiway C1 in 2000. Overall, the taxiways identified as Taxiway C connectors have an area-weighted PCI of 80 although individual sections PCIs range from 40 to 100. Like Runway 13R-31L conditions identified in the 2016 Supplement Pavement Evaluation, these taxiway transitions PCI numbers have decreased as well. These taxiways will be replaced with new taxiways to provide more efficiency on Runway 13R-31L.

The structural integrity of airfield pavement is important to maintain airfield operations. The Airport's ongoing pavement management program was established to maintain all pavements at a minimum of "Satisfactory/Fair" condition. The 2015 Pavement Evaluation and 2016 Supplemental Pavement Evaluation established a critical PCI value of 70 for all primary pavements. The critical PCI value is defined as the point at which a pavement section begins to deteriorate rapidly, and preventive maintenance activities are no longer cost effective. Runway 13R-31L was below the critical PCI value and required reconstruction.

11. Airport Pavement Evaluation Study

Project Description: This project funds for the development of an Airfield Pavement Evaluation for the City of Dallas which include Dallas Love Field and Dallas Executive airports. The Airfield Pavement Evaluation is developed and evaluated in accordance with FAA AC 150/5380-7B, Airport Pavement Management Program, and AC 150/5335-C, Standardized Method of Reporting Airport Pavement Strength - PCN requirements. This project will fund for research of airfield pavement history, aircraft traffic data, fleet mix, and perform pavement condition surveys through pavement distress mapping to determine pavement condition index (PCI) values for all the Airport's pavements.

Project Justification: FAA Grant Assurances require the Airport to implement a pavement management program. A pavement management program provides a systematic approach to determining priorities, schedules, and resource allocation for pavement maintenance and rehabilitation. This program will analyze the existing and predicted pavement conditions and determine alternatives for maintenance and rehabilitation to reduce costs and maximize the life of pavement.

12. PFC Administrative Costs

Project Description: This project provides for the preparation and implementation of an application to "Impose and Use" a Passenger Facility Charge (PFC) at the Airport, which will be submitted to the FAA. Staff and consultants will gather the necessary project, financial, and statistical information; prepare the required public notice; prepare the required airline consultation notice; ensure that all procedural requirements are met the airline meeting; prepare the application; prepare the response to air carrier comments;

provide the completed application in a format ready for execution and submission; and prepare the airline notice upon FAA approval.

Project Justification: Retaining a PFC consultant helps ensure PFC applications are filed according to the rules and regulations determined by the FAA. Administrative costs for this PFC application are eligible in accordance with 14 CFR 158.3 PFC Administrative Support Cost.

The City will seek authority from the FAA to use PFCs with the following characteristics:

- **PFC level:** A four dollar and fifty cent (\$4.50) charge on passengers enplaned at the Airport.
- **Charge effective date:** February 1, 2025 (which reflects the charge expiration date for approved PFC Application No. 12-04-C-02-DAL).
- **Estimated charge expiration date:** June 1, 2027 (or until collected PFC revenue plus interest thereon equals the allowable cost of the approved projects, as permitted by regulation).
- **Estimated Total PFC Impose and Use Revenue:** \$142,552,322 based on 2.7 percent annual growth in enplanements beginning in 2018 and ending in 2023 and .45 percent annual growth rate from 2024 and ending in 2027 and an 86.6 percent collection rate on enplaned passengers.

| PROJECTS FOR PROPOSED PFC NO. 19-05-C-00-DAL | | PFC REVENUE REQUESTED | | |
|--|---|-----------------------|----------------|----------------|
| | | PFC Level | Pay-Go | Total PFC |
| Pro No. | Project Title | | | |
| 5.01 | Reconstruct Taxiway Bravo (B) - Phase I | \$4.50 | \$ 13,898,204 | \$ 13,898,204 |
| 5.02 | Runway 18-36 Conversion Project (Taxiway E) | \$4.50 | \$ 6,850,148 | \$ 6,850,148 |
| 5.03 | Runway 18-36 Runway Incursion Mitigation at Runway 13L-31R | \$4.50 | \$ 3,089,666 | \$ 3,089,666 |
| 5.04 | Runway 18-36 (Taxiway E) Intersection Reconstruction at Taxiways D2 and C | \$4.50 | \$ 4,318,616 | \$ 4,318,616 |
| 5.05 | Relocate Runway 31R Glideslope | \$4.50 | \$ 6,473,017 | \$ 6,473,017 |
| 5.06 | Reconstruct Taxiway B - Phase II (Rwy 13L to Twy E) | \$4.50 | \$ 5,745,592 | \$ 5,745,592 |
| 5.07 | Reconstruct Taxiway B - Phase II (Twy M Extension) | \$4.50 | \$ 7,003,222 | \$ 7,003,222 |
| 5.08 | Reconstruct Taxiway B - Phase III (Twy B1 to Rwy 31R) | \$4.50 | \$ 18,784,686 | \$ 18,784,686 |
| 5.09 | Reconstruct Taxiway B - Phase IV (Twy M Extension) | \$4.50 | \$ 13,116,555 | \$ 13,116,555 |
| 5.10 | Reconstruct Runway 13R-31L | \$4.50 | \$ 62,192,616 | \$ 62,192,616 |
| 5.11 | Airport Pavement Evaluation Study | \$3.00 | \$ 1,000,000 | \$ 1,000,000 |
| 5.12 | PFC Administrative Costs | \$3.00 | \$ 80,000 | \$ 80,000 |
| Total | | | \$ 142,552,322 | \$ 142,552,322 |

Source: City of Dallas, March 2019.

Prepared by: Ricondo & Associates, Inc., March 2019.

