



Chapter Six

Financial Implementation Plan

CHAPTER 6 -

FINANCIAL IMPLEMENTATION PLAN

INTRODUCTION

The long-term development program or Capital Improvement Program (CIP) for Ryan Airfield (RYN) is intended to establish a strategy to fund airport improvements and maximize the potential to receive federal and state grant funds, while also establishing a financially prudent plan for improvement funding on a local level. From the Federal Aviation Administration's (FAA) perspective, the CIP provides a detailed listing of projects and costs that are critical for their use in establishing priorities and budgeting expenditures at RYN when compared with the needs of other airports. From the local sponsor's perspective, the CIP identifies improvement needs and allows budgeting or financial decisions to be made with a comprehensive understanding of financial implications.

The overall concept is to maximize the opportunities to receive FAA Airport Improvement Program (AIP) and Arizona Department of Transportation – Aeronautics Division (ADOT) grants within the context of, and in recognition of, the amount of local funds that are available for capital needs. Although the CIP will be used for programming by the FAA, there is no financial commitment for the federal government or the Tucson Airport Authority (TAA) to provide funding for the CIP. If federal matching funds are unavailable for a certain project during the specified timeframe, the project will almost certainly be unaffordable using only local funds, and the improvement project will not go forward until appropriate funding is available. The basic structure of the Development Program or CIP is established in this chapter, with a detailed financial analysis being provided in the subsequent **Financial Feasibility Plan Chapter**.

IMPLEMENTATION SCHEDULE AND PROJECT LIST

Using the anticipated facility demands along with preliminary engineering analysis focusing on additional pavement rehabilitation needs, a list of capital improvement projects has been assembled. The potential improvements have been placed into four phases: Phase-I (0-5 years), Phase-II (6-10 years), Phase-III (11 to 20 years), and Phase-IV (20+ years). The proposed CIP for the phasing of these projects is provided in **Table 6-1: Phase-I (0-5 Years)**, **Table 6-2: Phase-II (6-10 Years)**, **Table 6-3: Phase-III (11-20 Years)**, and **Table 6-4: Phase-IV (20+ Years Post Planning Period)**.

The projects for the first five years are listed in priority. The second (6-10 years), third (11-20 years), and fourth phases (20+ years) consist of known projects based on long-term demand at RYN. Post planning period projects, or those for which forecast demand does not dictate a need during the 20-year planning period, are listed in **Table 6-4: Phase-IV (20+ Years) Post Planning Period Project Costs**. It is anticipated that the project phasing will invariably be altered as local and federal priorities evolve over the coming months and years.

The details of the CIP (including a capital improvement project list, project cost estimates, phasing recommendations, and a financial feasibility analysis) have been formulated in consideration of comments received from airport staff, the TAA, the Technical Advisory Committee, and Stakeholder Working Group.

COST ESTIMATES

Cost estimates based on current year construction costs have been prepared in 2020 dollars for the improvement projects identified as potentially needed during the 20-year planning period and beyond. TAA provided project descriptions and order priority. These estimates are intended to be used for planning purposes only and should not be construed as construction cost estimates. Construction cost estimates can only be generated following the preparation of detailed engineering design documents. Escalation factors have been included in the project cost estimates in the **Financial Feasibility Plan Chapter**.

Table 6-1: Phase-I (0-5 Years) Development Program Project Costs

MP Project Number	Airport Project Number	Project Title	Estimated Total Project Cost 2020 Dollars
Proposed FY 2021 to 2025 CIP Projects (0-5 years)			
A1	20117966	Install (3) PAPIs to the approach to Runway 6L, 6R, and 24R. Project includes FAA flight check.	\$567,190
A2	20119088	Phase 1 - Upgrade/replacement of Air Traffic Control Tower (ATCT) equipment. Work will include purchase of equipment, installation, and training.	\$362,130
A3	20119088	Phase 2 - Upgrade/replacement of ATCT equipment. Work will include purchase of equipment, installation, and training.	\$164,727
P1	20120303	Conduct environmental assessment for the 800' extension of Runway 6R/24L with supporting taxiway connectors and taxiway F. Includes A2, A4, A5, B2, B4 and B5.	\$425,000
I1	20314554	Loader with Attachments	\$246,577
I2	20319100	2018 Cyclone CY 5500 (RYN)	\$140,000
I3	20219035	B-11 Admin Building Upgrades	\$120,000
I4	20219019	Ryan Maintenance - Bathroom and Water Heaters	\$85,000
L1	20210109	Continental Road Pavement Maintenance	\$12,629
I5	20219174	Herbicide Shed & Spill Containment	\$100,000
I6	20112225	Install CCTV cameras throughout Ryan Airfield complex	\$150,000
L2	20112202A	Extend RYN sewer 1,700 feet along Aviator Lane. Includes connecting all tenants to sewer along Aviator Lane. Mill and overlay Aviator Lane (approximately 43,700 sf). Project includes pavement, markings, and restriping. Overall PCI is 50. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	\$455,780
L3	20112202B	Reconstruct Aviator Lane parking lot (approximately 12,750 sf) and Gate 3. Project includes pavement, markings, and restriping. Overall PCI is 33.	\$118,219
L4	20120331	Extend main trunk of RYN sewer west for 1,300 feet from Airfield Drive to Aviator Lane. Connect TAA administration building and restaurant to sewer line. Project also includes reconstruct connector roadway between Aviator Lane and Airfield Drive (approximately 34,000 sf). Project includes pavement, markings, and restriping. Roadway is called C Road - 02 and overall PCI is 54. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	\$351,896
A4	20116872	APMS-Taxiway A (TWARY 10) - PCI 94 (2017)	\$28,624
I7	20120349 (801)	Design access control at RYN	\$260,000
I8	20120349 (802)	Construct access control at RYN	\$550,000
I9	20120350	Replace airfield lighting control computers (3)	\$310,000
L5	20120326	Extend RYN sewer 1,400 feet along Airfield Drive. Includes connecting all tenants to sewer along Airfield Drive. Project includes a sealcoat of the entire length of Airfield Drive. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	\$240,235
A5	20120300 (801)	Design a 4,000' asphalt mill and overlay for Runway 15/33. Project includes supporting taxiway connectors. ADOT PMMP RW1533RY-10 PCI 64 (2017).	\$220,200
A6	20120300 (802)	Construct a 4,000' asphalt mill and overlay for Runway 15/33. Project includes supporting taxiway connectors.	\$2,750,000
A7	20120351	Acquire 2.81 acres of land on the westside of the Airport (ROFA/RPZ).	\$54,183
A8	20120304 (801)	Design Runway 6R/24L Extension Phase I - Extend Runway 6R/24L in asphalt by 800', Taxiway B by 800', and new Taxiway F. Relocate associated aircraft run-up areas, and the FAA glideslope 800' to the east. Project includes grading, drainage, utilities, lighting, and markings. Includes the design of the supporting taxiway systems and A2, A4, A5, B2, B4 and B5.	\$373,800
P2	20120297	Conduct Air Traffic Control Tower (ATCT) siting study. Includes evaluating the use of a remote tower option.	\$175,000
Total Phase-1 (0-5 Years) Development Program Project Costs			\$8,261,190

Table 6-2: Phase-II (6-10 Years) Development Program Project Costs

MP Project Number	Airport Project Number	Project Title	Estimated Total Project Cost 2020 Dollars
Proposed FY 2026 to 2030 CIP Projects (6-10 years)			
A9	20120304 (802)	Construct Runway 6R/24L Extension Phase I - Extend Runway 6R/24L in asphalt by 800', Taxiway B by 800', and new Taxiway F. Relocate associated aircraft run-up areas, and the FAA glideslope 800' to the east. Project includes grading, drainage, utilities, lighting, and markings. Includes the design of the supporting taxiway systems and A2, A4, A5, B2, B4 and B5.	\$4,720,000
A10	20120304 (803)	Construct the relocation of Taxiway Connector B5 to the east by 100' and construct new B5 and A5 to the approach end of Runway 24R.	\$1,310,000
A11	20120304 (804)	Construct the removal of Taxiway Connectors A2, A4, B2, and B4.	\$420,000
P3	20120352	Conduct Instrument Approach Procedure Feasibility Study.	\$450,000
P4	20120327	Conduct new Airport Master Plan Study.	\$800,000
P5	20120353	Conduct environmental assessment to acquire 39.5 acres (North Quadrant - future development).	\$200,000
A12	20109023	Acquire 39.5 acres of land north of Runway 6L/24R, which is between two TAA parcels of land on the east and west.	\$761,653
L6	20120333	Extend main trunk of RYN sewer 5,300 feet east of Airfield Drive to boundary of east quadrant. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	\$802,821
L7	20120334	Extend main trunk of RYN sewer 9,000 feet west of Aviator Lane to boundary of west quadrant. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	\$1,341,565
A13	20109017	Construct airside service road (approximately 3,400 sy) and parking in front of the wash rack and along the southern edge of the tower apron. Project includes pavement, markings, striping and signage.	\$236,960
A14	20120328	Realign and relocate fence along northern perimeter road to match the northern property line of RYN.	\$590,000
A15	20120296 (801)	Design a new asphalt helicopter parking apron capable of supporting eight new 100' x 80' parking positions north of the existing tower apron, south of Taxiway B, east of Taxiway D, and west of Taxiway B2.	\$125,000
A16	20120296 (802)	Construct a new asphalt helicopter parking apron capable of supporting eight new 100' x 80' parking positions north of the existing tower apron, south of Taxiway B, east of Taxiway D, and west of Taxiway B2.	\$1,275,000
P6	20120298	Conduct environmental assessment to relocate RYN Air Traffic Control Tower (ATCT)	\$250,000
I10	20109030 (801)	Design the RYN ATCT to increase the height of the cab or to use a remote tower.	\$2,450,000
I11	20109030 (802)	Construct the RYN ATCT to increase the height of the cab or to use a remote tower.	\$7,000,000
A17	20120312	Acquire land (2.83 acres) for remaining Runway 6L approach RPZ	\$54,569
I12	20120316 (801)	Design a new 2,000 sf building to support TAA Administration stationed at RYN. Project includes grading, drainage, asphalt parking lot, access road, and associated utilities.	\$297,500
I13	20120316 (802)	Construct a new 2,000 sf building to support TAA Administration stationed at RYN. Project includes grading, drainage, asphalt parking lot, access road, and associated utilities.	\$850,000
L8	20120318 (801)	Design a new 5,000', two lane, bi-directional asphalt frontage road parallel to W. Ajo Highway to provide access to the East Quadrant of the Airport.	\$127,885
L9	20120318 (802)	Construct a new 5,000', two lane, bi-directional asphalt frontage road parallel to W. Ajo Highway to provide access to the East Quadrant of the Airport.	\$1,593,000
L10	20120319 (801)	Design the minor interior roadway network in the East Quadrant of the Airport.	\$375,181
L11	20120319 (802)	Construct the minor interior roadway network in the East Quadrant of the Airport.	\$4,673,447
L12	20120322	Design and construct a full signalized intersection on W. Ajo Highway to access East Quadrant of the Airport.	\$435,978
Total Phase-II (6-10 Years) Development Program Project Costs			\$31,140,599

Table 6-3: Phase-III (11-20 Years) Development Program Project Costs

MP Project Number	Airport Project Number	Project Title	Estimated Total Project Cost 2020 Dollars
Proposed FY 2031 to 2041 CIP Projects (11-20 years)			
L13	20120335	Connect South Quadrant to sewer line. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	\$6,228
L14	20120336	Connect North Quadrant to sewer line. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	\$763,583
L15	20112263	Realign perimeter road along boundary of North Quadrant.	\$7,174,870
P7	20120299	Conduct environmental assessment for the relocation of Runway 15/33 550' to the north. Includes all connecting taxiways and geometry.	\$425,000
A18	20120301 (801)	Design the relocation of Runway 15/33 550' to the north, eliminating pavement on the south and new asphalt pavement to the north. Includes the design of taxiway D1, D2, and connecting taxiways D and E. Eliminate 185' of Taxiway Connector D1 to the approach end of Runway 33. Construct new segment of Taxiway D to connect to the approach end of Runway 15. Relocate the aircraft runup areas and compass rose.	\$247,700
A19	20120301 (802)	Construct the relocation of Runway 15/33 550' to the north, eliminating pavement on the south and new asphalt pavement to the north. Eliminate 185' of Taxiway Connector D1 to the approach end of Runway 33. Construct new segment of Taxiway D to connect to the approach end of Runway 15. Relocate the aircraft runup areas and compass rose.	\$2,308,300
A20	20120301 (803)	Construct the relocation of the D1 Taxiway connector north to connect Taxiway D, E to the new approach end of Runway 15/33. Remove two taxiway connectors east of Taxiway D providing access to the FAR Part 61 existing apron.	\$310,000
A21	20120301 (804)	Construct the relocation of Taxiway D2 to the north by 185' connecting Taxiway D, E and Runway 15/33.	\$520,000
A22	20100918	Construct new apron at the end of Airfield Drive (44,700 SY).	\$4,800,000
A23	20120302 (801)	Design a 5,500' asphalt mill and overlay for Runway 6R/24L. Project includes supporting taxiway connectors. ADOT PMMP RW6R24LRY-10 PCI 77 (2017) and RW6R24LRY-20 PCI 78 (2017).	\$250,000
A24	20120302 (802)	Construct a 5,500' asphalt mill and overlay for Runway 6R/24L. Project includes supporting taxiway connectors.	\$2,750,000
P8	20120309	Conduct environmental assessment new 4,900 asphalt taxiway parallel to Runway 6L/24R, including 4 new taxiway connectors and supporting taxiways.	\$350,000
A25	20120310 (801)	Design a new 4,900' asphalt taxiway parallel to Runway 6L/24R, including 4 new taxiway connectors. Includes the design for the taxiway connector between Runway 6L/24R and Taxiway Alpha and the removal of 1,370' of asphalt on Taxiway A, west of Taxiway D to the approach end of Runway 6L.	\$450,000
A26	20120310 (802)	Construct a new 4,900' asphalt taxiway parallel to Runway 6L/24R, including 4 new taxiway connectors.	\$3,400,000
A27	20120310 (803)	Construct a new asphalt taxiway connector between Runway 6L/24R and Taxiway Alpha.	\$1,500,000
A28	20120310 (804)	Construct the removal of 1,370' of asphalt on Taxiway A west of Taxiway D to the approach end of Runway 6L, including the aircraft runup apron bump out. Includes removal of taxiway lighting and associated infrastructure.	\$350,000
I14	20120314	Design and replace two underground fuel storage tanks.	\$387,800
I15	20120317 (801)	Design a new 7,700 sf joint-use fire-fighting station to support RYN and local emergencies. Project includes grading, drainage, asphalt parking lot, access road, and associated utilities.	\$1,505,000
I16	20120317 (802)	Construct a new 7,700 sf joint-use fire-fighting station to support RYN and local emergencies. Project includes grading, drainage, asphalt parking lot, access road, and associated utilities.	\$4,300,000
I17	20120320 (801)	Design a new 8,997', two lane, bi-directional asphalt frontage road parallel to W. Ajo Highway to provide access to the West Quadrant of the Airport.	\$230,116
L16	20120320 (802)	Construct a new 8,997', two lane, bi-directional asphalt frontage road parallel to W. Ajo Highway to provide access to the West Quadrant of the Airport.	\$2,866,443
L17	20120323	Design and construct 3 full signalized intersection on W. Ajo Highway to access West Quadrant of the Airport.	\$1,307,933
Total Phase-III (11-20 Years) Development Program Project Costs			\$36,202,973

Table 6-4: Phase-IV (20+ Years) Post Planning Period Project Costs

MP Project Number	Airport Project Number	Project Title	Estimated Total Project Cost 2020 Dollars
Proposed CIP Projects Beyond FY 2042 (20+ years)			
A29	20120306 (801)	Design Runway 6R/24L Extension Phase II - Extend runway 6R/24L in asphalt by 1,997' and widen the entire runway by 25' to a full width of 100', Taxiway B by 1,997' with supporting connector taxiway. Relocate aircraft run-up areas, and the FAA glideslope 1,997' to the east. Project includes grading, drainage, utilities, lighting, and markings.	\$1,000,200
P9	20120305	Conduct environmental assessment for the 1,997' extension of Runway 6R/24L with supporting taxiway connectors.	\$350,000
A30	20120306 (802)	Construct Runway 6R/24L Extension Phase II - Extend runway 6R/24L in asphalt by 1,997' and widen the entire runway by 25' to a full width of 100', Taxiway B by 1,997' with supporting connector taxiway. Relocate aircraft run-up areas, and the FAA glideslope 1,997' to the east. Project includes grading, drainage, utilities, lighting, and markings.	\$11,344,800
L18	20120321 (801)	Design minor interior roadway network in the West Quadrant of the Airport.	\$926,494
L19	20120321 (802)	Construct minor interior roadway network in the West Quadrant of the Airport.	\$11,540,877
L20	20120324	Design and construct 3 new full turn entrances on W. Ajo Highway to access East Quadrant of the Airport.	\$1,009,238
L21	20120325	Design and construct 2 new full turn entrances on W. Ajo Highway to access West Quadrant of the Airport.	\$672,825
Total Phase-IV (20+ Years, Post Planning Period) Development Program Project Costs			\$26,844,434

CAPITAL IMPROVEMENT PROGRAM (CIP)

To assist in preparation of the FAA's effort to provide grant funding to the most needed projects, airport staff keeps an Airport Capital Improvement Program (ACIP) on file and up to date with the FAA. The ACIP is similar in format to the CIP tables presented previously. The purpose of the proposed project list, phasing, and costs is to provide a progressive projection of capital needs for RYN to then utilize in local and federal financing programming. Since this is a long-range planning document, it could differ to some degree with the Airport's CIP on file with the FAA based on changed conditions or priorities.

PHASING PLAN

To supplement the information provided by the project list and project cost estimates, a phasing plan figure has been prepared. **Figure 6-1** visually depicts the suggested phasing for the proposed improvement projects through the 20-year planning period.

The greatest attention has been given to the first five years because the projects outlined in this timeframe include many critical improvements. Variance from the plan may be necessary, especially during the latter time periods. The demand for certain facilities and the economic feasibility of their development are to be the prime factors influencing the timing of individual project construction. Care must be taken to provide adequate lead-time for detailed planning and construction of facilities to meet aviation demands and to prevent additional costs incurred from improper scheduling.

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SOURCES OF CAPITAL FUNDING

Funding from several sources is anticipated. These sources include FAA AIP discretionary grants, ADOT state aviation grants, ADOT Highway Funds, local, and other funding sources. Each of these sources of funds is described in detail the **Financial Feasibility Chapter**.

SUMMARY – MASTER PLAN CAPITAL IMPROVEMENT PROGRAM

If aviation demands continue to indicate that improvements are needed, and if the proposed improvements prove to be environmentally acceptable, the financial implications discussed earlier in this chapter and in **Financial Feasibility Chapter** are likely to be acceptable for the FAA, ADOT, and the TAA. However, note that this chapter is only a programming analysis and not a commitment on the part of the FAA or the Airport. If the cost of an improvement project is not financially feasible, it will not be initiated.

ENVIRONMENTAL ACTION PLAN

This section provides recommendations for the anticipated level of environmental documentation that would be required prior to implementing the development actions identified in the Ryan Airfield Airport Master Plan and as part of RYN's CIP.

The list below includes Master Plan CIP projects that would occur during the 20-year planning period. For each of these actions, the anticipated level of documentation required for compliance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.) is identified based on the guidelines provided in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* (Order 1050.1F) (effective July 16, 2015).

Per FAA Order 1050.1F, three levels of NEPA documentation could be required for a proposed action. These include:

- ▶ **Categorical Exclusion (CATEX):** This category typically includes actions that the FAA has found do not individually or cumulatively have a significant effect on the human environment. The responsible FAA official must determine whether a proposed action is within the scope of a CATEX, but if the FAA official determines that extraordinary circumstances exist, an Environmental Assessment (EA) or Environmental Impact Statement (EIS) must be prepared. A CATEX should not be used for segmentation or an interdependent part of a larger proposed action. Actions that fall within the CATEX category can include, but are not limited to, the following:
 - ✓ Administrative or general actions
 - ✓ Issuance of certificates or compliance with certification programs
 - ✓ Actions involving installation, repair, or upgrade of equipment or instruments necessary for operations and safety
 - ✓ Acquisition, repair, replacement, maintenance, or upgrading of grounds infrastructure, buildings, structures, or facilities that are generally minor in nature
 - ✓ Procedural actions related to airspace and air traffic

- ▶ Actions involving establishment of, compliance with, or exemptions to regulatory programs or requirements.
EA: The purpose of an EA is to determine whether an action has the potential to significantly affect the human environment. An EA provides sufficient evidence for determining whether a Finding of No Significant Impact (FONSI) or an EIS (discussed below) should be prepared. To determine the scope of an EA or an EIS, the responsible FAA official must consider whether actions are connected; whether, when viewed with other proposed actions, the action under consideration would have cumulatively significant impacts; and whether similar actions, either in timing or geography, should be considered in the same environmental document. Actions that typically require an EA include, but are not limited to the following:
 - ✓ Acquisition of land greater than 3 acres for construction of new office buildings, similar FAA facilities, or as a result of the following actions
 - ✓ Establishment of FAA housing, sanitation systems, fuel storage and distribution systems, and power source and distribution systems
 - ✓ Unconditional Airport Layout Plan (ALP) approval of, or federal financial participation in, a new runway at an existing airport not located in a Metropolitan Statistical Area (MSA)
 - ✓ Runway strengthening having the potential to significantly increase off-airport noise impacts
 - ✓ Construction or relocation of entrance or service road connections to public roads that substantially reduce the level of service rating to such public roads below the acceptable level determined by the appropriate transportation agency.
- ▶ EIS: An EIS must be prepared for actions that would significantly affect the quality of the human environment. The considerations listed above regarding connected actions, cumulatively significant impacts, and actions that would be similar in timing or geography must also be taken into account when determining the scope of an EIS. Direct, indirect, and cumulative impacts must be considered when determining significance. Actions for which an EIS is typically required include, but are not limited to, the following:
 - ✓ Unconditional ALP approval, or federal financial participation in, the location of a new commercial service airport in an MSA
 - ✓ A new runway to accommodate air carrier aircraft at a commercial service airport in an MSA and major runway extension.

For some environmental resource impact categories, the FAA has identified significance thresholds (including for air quality, federally threatened or endangered species, Section 4(f) resources, and noise and noise-compatible land uses). For other environmental resource impact categories, the FAA has identified factors to consider when determining whether an action would have a significant impact.

The schedule of capital projects is based upon the forecasts presented in the **Aviation Demand Forecasts Chapter**. However, the NEPA process must be completed prior to the FAA allocating grant funds for design or construction. Depending upon the project, the NEPA process can take from a few months to several years. If FAA grant funds will be used to prepare the NEPA documents, lead times for the normal grant processes will also need to be factored in.

It is possible that projected activity levels or changes in critical aircraft will differ from the forecasts in this plan. Airport staff should monitor these factors and maintain regular communication with airlines and major users regarding potential changes in their needs. The timing and sequence of projects may need to be modified if:

- ▶ Activity levels are higher or lower than forecast.



- ▶ The fleet mix changes from what was expected.
- ▶ More distant destinations are added by airlines.
- ▶ Schedules are modified in a way that would increase or shift peak demand.

Table 6-5 identifies the Master Plan and five-year CIP actions in the 2021 to 2025 timeframe, the anticipated level of NEPA documentation, and environmental and coordination considerations that could affect the overall level of effort associated with documentation of each anticipated action. Some actions could be documented in combination with other actions in a single environmental document based on their level of connectedness; these combined documentation recommendations are also included in the table.

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Table 6-5: Anticipated NEPA Actions

MP Project Number	Airport Project Number	Project Name	Project Initiation Date	Anticipated Level of NEPA Documentation	Environmental Considerations
A1	20117966	Install (3) PAPIs to the approach to Runway 6L, 6R, and 24R. Project includes FAA flight check.	0-5 Years	CATEX	Assumes that field studies will not be required and facilities will be constructed in previously disturbed area.
A2	20119088	Phase 1 - Upgrade/replacement of Air Traffic Control Tower (ATCT) equipment. Work will include purchase or equipment, installation and training.	0-5 Years	Not Applicable	Assumes that all work is interior to structure and no federal funds will be used.
A3	20119088	Phase 2 - Upgrade/replacement of ATCT equipment. Work will include purchase or equipment, installation and training.	0-5 Years	Not Applicable	Assumes that all work is interior to structure and no federal funds will be used.
P1	20120303	Conduct environmental assessment for the 800' extension of Runway 6R/24L with supporting taxiway connectors and taxiway F. Includes A2, A4, A5, B2, B4 and B5.	0-5 Years	EA	Project connected to A8, A9, A10, A11. EA will require field studies and public outreach.
I1	20314554	Loader with Attachments	0-5 Years	Not Applicable	Not applicable.
I2	20319100	2018 Cyclone CY 5500 (RYN)	0-5 Years	Not Applicable	Not applicable.
I3	20219035	B-11 Admin Building Upgrades	0-5 Years	Not Applicable	Assumes that all work is interior to structure and no federal funds will be used.
I4	20219019	Ryan Maintenance - Bathroom and Water Heaters	0-5 Years	Not Applicable	Assumes that all work is interior to structure and no federal funds will be used.
L1	20210109	Continental Road Pavement Maintenance	0-5 Years	CATEX	On site roadway improvements may be eligible for a categorical exclusion under FAA Order 1050.1f, Paragraph 5.6-4(a). Does not included field studies or permitting if jurisdictional resources occur within the project site.
I5	20219174	Herbicide Shed & Spill Containment	0-5 Years	CATEX	May be considered minor construction eligible for CATEX under FAA Order 1050.1f, Paragraph 5-6.4 (f), provided it is not constructed in an area containing environmental resources or within a designated floodplain. CATEX does not include field studies if deemed necessary.
I6	20112225	Install CCTV cameras throughout Ryan Airfield complex	0-5 Years	CATEX	May be eligible for a CATEX under FAA Order 1050.1f, Paragraph 5-6.3 (h), "equipment required for the safety or security of personnel or property." Assumes cameras will be affixed to existing equipment or structures, and no additional field studies will be required.
L2	20112202A	Extend RYN sewer 1,700 feet along Aviator Lane. Includes connecting all tenants to sewer along Aviator Lane. Mill and overlay Aviator Lane (approximately 43,700 sf). Project includes pavement, markings, and restriping. Overall PCI is 50. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	0-5 Years	Road: CATEX Conduit: CATEX Sewer: EA (see note)	Note - Projects L2, L4, and L5 appear to be related, though construction is staged within one year of each other. All three projects and their components (road, sewer, and conduit) should be combined for the purpose of NEPA. Milling and overlay eligible for CATEX, FAA Order 1050.1f, Paragraph 5-6.4 (a), -and conduit may be eligible for CATEX, FAA Order 1050.1f, Paragraph 5-6.4(n) in absence of sewer project. Sewer is not eligible for CAT EX, and appears to be connected to Projects L5 and L6. Suggest addressing all three near-term sewer projects and their associated roadway and telecommunications components be considered under a single EA. FAA consultation necessary to determine if the proposed sewer upgrade could be considered a minor improvement and therefore eligible for a CATEX.
L3	20112202B	Reconstruct Aviator Lane parking lot (approximately 12,750 sf) and Gate 3. Project includes pavement, markings, and restriping. Overall PCI is 33.	0-5 Years	CATEX	Reconstruction in same footprint be eligible for CATEX, FAA Order 1050.1f, Paragraph 5.6-4(a). If no new gates or change to fence, no ALP change is anticipated.
L4	20120331	Extend main trunk of RYN sewer west for 1,300 feet from Airfield Drive to Aviator Lane. Connect TAA administration building and restaurant to sewer line. Project also includes reconstruct connector roadway between Aviator Lane and Airfield Drive (approximately 34,000 sf). Project includes pavement, markings, and restriping. Roadway is called C Road - 02 and overall PCI is 54. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	0-5 Years	Road: CATEX Conduit: CATEX Sewer: EA (See L3 Note Above)	Projects L2, L4, and L5 appear to be related, though construction is staged within one year of each other. All three projects and their components (road, sewer, and conduit) should be combined for the purpose of NEPA. Milling and overlay eligible for CATEX, FAA Order 1050.1f, Paragraph 5.6-4(a), and conduit may be eligible for CATEX, FAA Order 1050.1f, Paragraph 5-6.4(n) in absence of sewer project. Sewer is not eligible for CATEX, and appears to be connected to Projects L5 and L6. Suggest addressing all three near-term sewer projects and their associated roadway and telecommunications components be considered under a single EA. FAA consultation necessary to determine if the proposed sewer upgrade could be considered a minor improvement and therefore eligible for a CATEX.
A4	20116872	APMS-Taxiway A (TWARY 10) - PCI 94 (2017)	0-5 Years	Not Applicable	ADOT will be funding maintenance, so no federal funds will be used. Footprint will not change, as this is a maintenance project, and no ALP change will be required. May not require NEPA. If so, eligible for CATEX under FAA Order 1050.1f, Paragraph 5-6.4e.
I7	20120349 (801)	Design access control at RYN	0-5 Years	CATEX	Eligible for CAT EX as either minor improvement FAA Order 1050.1f, Paragraph 5-6.4(f) or security improvement FAA Order 1050.1f, Paragraph 5-6.3(h).
I8	20120349 (802)	Construct access control at RYN	0-5 Years	Not Applicable	Included with I7.
I9	20120350	Replace airfield lighting control computers (3)	0-5 Years	CATEX	If airfield work, trenching, etc. is required, a CATEX may be required. If this is interior to an existing structure, not applicable.

MP Project Number	Airport Project Number	Project Name	Project Initiation Date	Anticipated Level of NEPA Documentation	Environmental Considerations
L5	20120326	Extend RYN sewer 1,400 feet along Airfield Drive. Includes connecting all tenants to sewer along Airfield Drive. Project includes a sealcoat of the entire length of Airfield Drive. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	0-5 Years	Road: CATEX Conduit: CATEX Sewer: EA (See L3 Note Above)	Projects L3, L4, and L5 appear to be related, though construction is staged within one year of each other. All three projects and their components (road, sewer, and conduit) should be combined for the purpose of NEPA. Milling and overlay eligible for CATEX, FAA Order 1050.1f, Paragraph 5-6.4(a), and conduit may be eligible for CATEX, FAA Order 1050.1f, Paragraph 5-6.4(n) in absence of sewer project. Sewer is not eligible for CATEX, and appears to be connected to Projects L5 and L6. Suggest addressing all three near-term sewer projects and their associated roadway and telecommunications components be considered under a single EA. FAA consultation necessary to determine if the proposed sewer upgrade could be considered a minor improvement and therefore eligible for a CATEX.
A5	20120300 (801)	Design a 4,000' asphalt mill and overlay for Runway 15/33. Project includes supporting taxiway connectors. ADOT PMMP RW1533RY-10 PCI 64 (2017).	0-5 Years	CATEX	May be eligible for CATEX pursuant to FAA Order 1050.1f, Paragraph 5-6.4(e). Assumes this is rehab of existing pavements only.
A6	20120300 (802)	Construct a 4,000' asphalt mill and overlay for Runway 15/33. Project includes supporting taxiway connectors.	0-5 Years	Not Applicable	NEPA will be conducted under item A5.
A7	20120351	Acquire 2.81 acres of land on the westside of the Airport (ROFA/RPZ).	0-5 Years	CATEX	
A8	20120304 (801)	Design Runway 6R/24L Extension Phase I - Extend Runway 6R/24L in asphalt by 800', Taxiway B by 800', and new Taxiway F. Relocate associated aircraft run-up areas, and the FAA glideslope 800' to the east. Project includes grading, drainage, utilities, lighting, and markings. Includes the design of the supporting taxiway systems and A2, A4, A5, B2, B4 and B5.	0-5 Years	Not Applicable	Project connected to P1.
P2	20120297	Conduct ATCT siting study. Includes evaluating a using a remote tower option for RYN.	0-5 Years	Not Applicable	Environmental evaluation not required simply to perform study.
A9	20120304 (802)	Construct Runway 6R/24L Extension Phase I - Extend Runway 6R/24L in asphalt by 800', Taxiway B by 800', and new Taxiway F. Relocate associated aircraft run-up areas, and the FAA glideslope 800' to the east. Project includes grading, drainage, utilities, lighting, and markings. Includes the design of the supporting taxiway systems and A2, A4, A5, B2, B4 and B5.	6-10 Years	Not Applicable	Project connected to P1.
A10	20120304 (803)	Construct the relocation of Taxiway Connector B5 to the east by 100' and construct new B5 and A5 to the approach end of Runway 24R.	6-10 Years	Not Applicable	Project connected to P1.
A11	20120304 (804)	Construct the removal of Taxiway Connectors A2, A4, B2, and B4.	6-10 Years	Not Applicable	Project connected to P1.
P3	20120352	Conduct Instrument Approach Procedure Feasibility Study	6-10 Years	Not Applicable	Environmental evaluation not required simply to perform study.
P4	20120327	Conduct new Airport Master Plan Study.	6-10 Years	Not Applicable	Environmental evaluation not required to perform study. (Near-term projects will require environmental evaluation.)
P5	20120353	Conduct environmental assessment to acquire 39.5 acres (North Quadrant - future development).	6-10 Years	Not Applicable	Project connected to A12.
A12	20100923	Acquire 39.5 acres of land north of Runway 6L/24R, which is between two TAA parcels of land on the east and west.	6-10 Years	EA	Requires environmental assessment because parcel is greater than 3 acres.
L6	20120333	Extend main trunk of RYN sewer 5,300 feet east of Airfield Drive to boundary of east quadrant. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	6-10 Years	EA	Projects L6 and L7 appear to be related. Suggest a single EA to address both of these projects because they will be constructed in similar timeframe. Pulling the TAA communications conduit should be included as part of the project description. These sewer projects should be separate from L3, L5 and L6 because they will go through undeveloped portions of the airfield and are likely to require greater environmental review, and their timeframe is not the same. Permitting likely to be required following completion of EA.
L7	20120334	Extend main trunk of RYN sewer 9,000 feet west of Aviator Lane to boundary of west quadrant. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	6-10 Years	EA	Projects L6 and L7 appear to be related. Suggest a single EA to address both of these projects because they will be constructed in similar timeframe. Pulling the TAA communications conduit should be included as part of the project description. These sewer projects should be separate from L3, L5 and L6 because they will go through undeveloped portions of the airfield and are likely to require greater environmental review, and their timeframe is not the same. Permitting likely to be required following completion of EA.
A13	20109017	Construct airside service road (approximately 3,400 sy) and parking in front of the wash rack and along the southern edge of the tower apron. Project includes pavement, markings, striping and signage.	6-10 Years	CATEX	May be eligible under FAA Order 1050.1f, Paragraph 5-6.4(a). Assumes that road will be constructed in previously disturbed area. Field studies not included.
A14	20120328	Realign and relocate fence along northern perimeter road to match the northern property line of RYN.	6-10 Years	EA	This EA should remain separate from the Sewer EA. Likely to go through previously undisturbed areas and require field studies.
A15	20120296 (801)	Design a new asphalt helicopter parking apron capable of supporting eight new 100' x 80' parking positions north of the existing tower apron, south of Taxiway B, east of Taxiway D, and west of Taxiway B2.	6-10 Years	CATEX	May be considered minor development under FAA Order 1050.1f, Paragraph 5-6.4e unless noise effects exceed thresholds.
A16	20120296 (802)	Construct a new asphalt helicopter parking apron capable of supporting eight new 100' x 80' parking positions north of the existing tower apron, south of Taxiway B, east of Taxiway D, and west of Taxiway B2.	6-10 Years	CATEX	May be considered minor development under FAA Order 1050.1f, Paragraph 5-6.4e unless noise effects exceed thresholds.
P6	20120298	Conduct environmental assessment to relocate RYN ATCT	6-10 Years	EA	Project connected to I10, I11.
I10	20109030 (801)	Design the RYN ATCT to increase the height of the cab or to use a remote tower.	6-10 Years	Not Applicable	Project connected to P6.
I11	20109030 (802)	Construct the RYN ATCT to increase the height of the cab or to use a remote tower.	6-10 Years	Not Applicable	Project connected to P6.
A17	20120312	Acquire land (2.83 acres) for remaining Runway 6L approach RPZ	6-10 Years	EA	Assumes that this is a standalone project and will require an EA because >3 acres. Field studies will be required.

MP Project Number	Airport Project Number	Project Name	Project Initiation Date	Anticipated Level of NEPA Documentation	Environmental Considerations
I12	20120316 (801)	Design a new 2,000 sf building to support TAA Administration stationed at RYN. Project includes grading, drainage, asphalt parking lot, access road, and associated utilities.	6-10 Years	CATEX	May be considered a minor development item and eligible under FAA Order 1050.1f, Paragraph 5-6.4 (f).
I13	20120316 (802)	Construct a new 2,000 sf building to support TAA Administration stationed at RYN. Project includes grading, drainage, asphalt parking lot, access road, and associated utilities.	6-10 Years	Not Applicable	Included with I12.
L8	20120318 (801)	Design a new 5,000', two lane, bi-directional asphalt frontage road parallel to W. Ajo Highway to provide access to the East Quadrant of the Airport.	6-10 Years	CATEX	NEPA will be required in accordance with ADOT requirements, but is not included here for the purpose of the Master Plan and CIP. After ADOT work is completed, NEPA will be required to address entrances from the frontage road to the airport. Therefore, only a CATEX pursuant to FAA Order 1050.1f, Paragraph 5-6.4(a) is included in the review.
L9	20120318 (802)	Construct a new 5,000', two lane, bi-directional asphalt frontage road parallel to W. Ajo Highway to provide access to the East Quadrant of the Airport.	6-10 Years	Not Applicable	Included with L7.
L10	20120319 (801)	Design the minor interior roadway network in the East Quadrant of the Airport.	6-10 Years	CATEX (standalone) EA (see L6)	May be eligible for CATEX under FAA Order 1050.1f, Paragraph 5-6.4(a) or as minor improvement under FAA Order 1050.1f, Paragraph 5-6.4(f). However, to qualify as a CATEX, the project would need to occur after Project L6, which would provide the environmental studies to support the CATEX. Otherwise, environmental studies would also be required. Suggest combining with sewer project (see L6 and L7) so that road and sewer could be constructed simultaneously.
L11	20120319 (802)	Construct the minor interior roadway network in the East Quadrant of the Airport.	6-10 Years	Not Applicable	Included with L10.
L12	20120322	Design and construct a full signalized intersection on W. Ajo Highway to access East Quadrant of the Airport.	6-10 Years	Not Applicable	Project would be performed by/in consultation with ADOT. FAA funding would not be provided for this effort. In conjunction with the project, an ALP revision would be required to include the new access point to the airport. Following completion ADOT work (and necessary FAA coordination), the new entrance may be eligible for a CATEX under FAA Order 1050.1f, Paragraph 5-6.4(a).
L13	20120335	Connect South Quadrant to sewer line. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	11-20 Years	EA	Suggest EA to address sewer and conduit for both L12 and L13 because they will be constructed during same timeframe. Permitting likely to be required following completion of EA.
L14	20120336	Connect North Quadrant to sewer line. Establish a new TAA telecommunications conduit and pullboxes along the entire length of the sewer line.	11-20 Years	EA	Suggest EA to address sewer and conduit for both L12 and L13 because they will be constructed during same timeframe. Significant field studies required for North Quadrant. Permitting likely to be required following completion of EA.
L15	20112263	Realign perimeter road along boundary of North Quadrant.	11-20 Years	Not Applicable	Project is connected action to P1. Included with work for that project.
P7	20120299	Conduct environmental assessment for the relocation of Runway 15/33 550' to the north. Includes all connecting taxiways and geometry.	11-20 Years	EA	Project connected to A18, A19, A20, A21.
A18	20120301 (801)	Design the relocation of Runway 15/33 550' to the north, eliminating pavement on the south and new asphalt pavement to the north. Includes the design of taxiway D1, D2, and connecting taxiways D and E. Eliminate 185' of Taxiway Connector D1 to the approach end of Runway 33. Construct new segment of Taxiway D to connect to the approach end of Runway 15. Relocate the aircraft runup areas and compass rose.	11-20 Years	Not Applicable	Project connected to P1 and will be addressed in that EA.
A19	20120301 (802)	Construct the relocation of Runway 15/33 550' to the north, eliminating pavement on the south and new asphalt pavement to the north. Eliminate 185' of Taxiway Connector D1 to the approach end of Runway 33. Construct new segment of Taxiway D to connect to the approach end of Runway 15. Relocate the aircraft runup areas and compass rose.	11-20 Years	Not Applicable	Project connected to P1 and will be addressed in that EA.
A20	20120301 (803)	Construct the relocation of the D1 Taxiway connector north to connect Taxiway D, E to the new approach end of Runway 15/33. Remove two taxilane connectors east of Taxiway D providing access to the FAR Part 61 existing apron.	11-20 Years	Not Applicable	Project connected to P1 and will be addressed in that EA.
A21	20120301 (804)	Construct the relocation of Taxiway D2 to the north by 185' connecting Taxiway D, E and Runway 15/33.	11-20 Years	Not Applicable	Project connected to P1 and will be addressed in that EA.
A22	20100918	Construct new apron at the end of Airfield Drive (44,700 SY)	11-20 Years	CATEX	May be eligible for CATEX under FAA Order 1050.1f, Paragraph 5.6-4 (e).
A23	20120302 (801)	Design a 5,500' asphalt mill and overlay for Runway 6R/24L. Project includes supporting taxiway connectors. ADOT PMMP RW6R24LRY-10 PCI 77 (2017) and RW6R24LRY-20 PCI 78 (2017).	11-20 Years	CATEX	Maintenance eligible for CAT EX in FAA Order 1050.1f, Paragraph 5.6-4e.
A24	20120302 (802)	Construct a 5,500' asphalt mill and overlay for Runway 6R/24L. Project includes supporting taxiway connectors.	11-20 Years	Not Applicable	Covered in A23.
P8	20120309	Conduct environmental assessment new 4,900 asphalt taxiway parallel to Runway 6L/24R, including 4 new taxiway connectors and supporting taxiways.	11-20 Years	EA	Unclear whether this is a standalone project or related to other improvements. Considered a standalone project for purpose of this estimate.
A25	201020310 (801)	Design a new 4,900' asphalt taxiway parallel to Runway 6L/24R, including 4 new taxiway connectors. Includes the design for the taxiway connector between Runway 6L/24R and Taxiway Alpha and the removal of 1,370' of asphalt on Taxiway A, west of Taxiway D to the approach end of Runway 6L.	11-20 Years	Not Applicable	Project connected to P8.
A26	201020310 (802)	Construct a new 4,900' asphalt taxiway parallel to Runway 6L/24R, including 4 new taxiway connectors.	11-20 Years	Not Applicable	Project connected to P8.
A27	201020310 (803)	Construct a new asphalt taxiway connector between Runway 6L/24R and Taxiway Alpha.	11-20 Years	Not Applicable	Project connected to P8.
A28	201020310 (804)	Construct the removal of 1,370' of asphalt on Taxiway A west of Taxiway D to the approach end of Runway 6L, including the aircraft runup apron bump out. Includes removal of taxiway lighting and associated infrastructure.	11-20 Years	Not Applicable	Connected to Project P8.

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I14	20120314	Design and replace two underground fuel storage tanks.	11-20 Years	CATEX	May be eligible for CATEX under FAA Order 1050.1f, Paragraph 5-6.4(u). Field studies may be necessary.
I15	20120317 (801)	Design a new 7,700 sf joint-use fire-fighting station to support RYN and local emergencies. Project includes grading, drainage, asphalt parking lot, access road, and associated utilities.	11-20 Years	CATEX	May be eligible for CATEX under FAA Order 1050.1f, Paragraph 5-6.4(f). Assumes no impacts identified.
I16	20120317 (802)	Construct a new 7,700 sf joint-use fire-fighting station to support RYN and local emergencies. Project includes grading, drainage, asphalt parking lot, access road, and associated utilities.	11-20 Years	Not Applicable	Included with I15.
I17	20120320 (801)	Design a new 8,997', two lane, bi-directional asphalt frontage road parallel to W. Ajo Highway to provide access to the West Quadrant of the Airport.	11-20 Years	EA	This project may require an EA because it is enabling development in previously undeveloped areas of the airport. Connected action to project I17.
L16	20120320 (802)	Construct a new 8,997', two lane, bi-directional asphalt frontage road parallel to W. Ajo Highway to provide access to the West Quadrant of the Airport.	11-20 Years	Not Applicable	Included with I17.
L17	20120323	Design and construct 3 full signalized intersection on W. Ajo Highway to access West Quadrant of the Airport.	11-20 Years	Not Applicable	Connected action to Project I17 and L16.
A29	20120305	Design Runway 6R/24L Extension Phase II - Extend runway 6R/24L in asphalt by 1,997' and widen the entire runway by 25' to a full width of 100', Taxiway B by 1,997' with supporting connector taxiway. Relocate aircraft runup areas, and the FAA glideslope 1,997' to the east. Project includes grading, drainage, utilities, lighting, and markings.	20+ Years	EIS	This project will change the airport fleet mix and design group, require substantial environmental analysis, and substantial public outreach.
P9	20120306 (801)	Conduct environmental assessment for the 1,997' extension of Runway 6R/24L with supporting taxiway connectors.	20+ Years	Not Applicable	Connected action with P9.
A30	20120306 (802)	Construct Runway 6R/24L Extension Phase II - Extend runway 6R/24L in asphalt by 1,997' and widen the entire runway by 25' to a full width of 100', Taxiway B by 1,997' with supporting connector taxiway. Relocate aircraft run-up areas, and the FAA glideslope 1,997' to the east. Project includes grading, drainage, utilities, lighting, and markings.	20+ Years	Not Applicable	Connected action with P9.
L18	20120321 (801)	Design minor interior roadway network in the West Quadrant of the Airport.	20+ Years	Not Applicable	Connected action with P9.
L19	20120321 (802)	Construct minor interior roadway network in the West Quadrant of the Airport.	20+ Years	Not Applicable	Connected action with P9.
L20	20120324	Design and construct 3 new full turn entrances on W. Ajo Highway to access East Quadrant of the Airport.	20+ Years	CATEX	Determination per FAA Order 1050.1f, Paragraph 5.6-4(a). Traffic studies may be required. Coordination with ADOT necessary as it is State Highway.
L21	20120325	Design and construct 2 new full turn entrances on W. Ajo Highway to access West Quadrant of the Airport.	20+ Years	CATEX	Determination per FAA Order 1050.1f, Paragraph 5.6-4(a). Traffic studies may be required. Coordination with ADOT necessary as it is State Highway.

