Reno-Tahoe Airport Authority

Reno-Tahoe International Airport
MASTER PLAN

DECEMBER 2018

CHAPTER 5:
Financial Feasibility Analysis and Facilities Implementation Plan

FINANCIAL FEASIBILITY ANALYSIS AND FACILITIES IMPLEMENTATION PLAN

Introduction

The previous chapters of the Master Plan evaluated the Reno-Tahoe International Airport's (RNO) existing facilities, projected the future activity levels, identified potential facility needs, and detailed alternatives and recommendations for addressing those facility needs throughout the 20-year planning period. Regardless of the identified need for improvements, the ability to fund a project will ultimately determine when the project is implemented. This chapter addresses the financial implications of the proposed Master Plan improvements.

The process for preparing the Financial Feasibility Analysis and Facilities Implementation Plan included the following steps:

- Summarize the Reno-Tahoe Airport Authority's (RTAA) financial structure presenting current accounting practices, the financial operating environment, and key provisions of governing documents.
- Develop rough order of magnitude (ROM) cost estimates for each project in the preferred alternative and identify the proposed timing for the short-, mid-, and long-term development periods.
- Identify potential funding sources, including the Federal Aviation Administration's (FAA) Airport Improvement Program (AIP), Passenger Facility Charges (PFCs), rental car Customer Facility Charges (CFCs), and RTAA funds including both available cash and future airport revenue bond debt.
- Forecast the RTAA's financial operating results through fiscal year (FY)[1] 2036 to identify future revenues and expenses, and the ability of the RTAA to fund the costs of the Capital Improvement Program (CIP) through the short- and mid-term of the projection period. While longer-term CIP projects are presented in this chapter for an overview of potential ultimate development, the forecast financial analysis did not incorporate them primarily because of uncertainty in timing for such projects.

This chapter provides a full description of the RTAA's financial structure as follows:

- Financial Structure Overview
- Financial Policies and Standards
- Capital Improvement Program
- Funding Plan
- Debt Service
- Operation and Maintenance Expenses
- Non-Airline Revenue
- Airline Rates and Charges
- Financial Results
- Financial Benchmarks Comparison
- Spaghetti Bowl Impacts
- Summary

[1] The RTAA's fiscal year is the 12-month period starting on July 1st and ending June 30th.

Financial Structure Overview

This section discusses the RTAA's financial structure, including the cost center structure used for airline rate-setting purposes, the requirements and provisions of the existing bond resolution, and a summary of the airline use and lease agreement between the RTAA and the airlines.

RTAA Accounting

The Nevada State Legislature created RTAA as a quasi-municipal corporation in 1977 (enabling legislation) to acquire, operate, and finance the RNO and the Reno-Stead Airport (RTS) and related facilities (collectively known as "the Airports"). The RTAA operates financially as a proprietary enterprise fund, which means its method of accounting is similar to private business. An enterprise fund is an accounting method that uses a separate fund for a specific purpose, which in this case is operating an airport system. Enterprise funds are self-sufficient, with the enterprise's revenues paying the enterprise's expenses.

Basis of Accounting/Budgeting

Under generally accepted accounting principles, the RTAA's annual audited financial statement and budget are prepared on the accrual basis. Under this method, RTAA records revenues when earned and expenses at the time liabilities are incurred. The Bond Resolution (described later) prescribes the flow of the RTAA's revenues through the trust funds and prioritizes the use of revenues.

Legal Environment

Legal Requirements

The enabling legislation that created the RTAA requires that the budget process comply with the Local Government Budget Act and the Local Government Purchasing Act enacted by the Nevada State Legislature. The Local Government Purchasing Act (Act) significantly affects the RTAA's financial operation. This Act controls all local government purchasing in Nevada. Under the Act, the RTAA must formally bid any purchases exceeding $50,000 with notices published in local newspapers. The Act also defines certain exceptions to the required bidding requirement such as professional services, computer equipment, and insurance.

The RTAA is also subject to the Local Government Securities Law, which defines the process local Nevada governments must comply with when issuing short- and long-term debt.

Federal Grant Assurances

In addition to state and local legal requirements, the RTAA also must fulfill various federal legal obligations because it uses federal grant funds for airport purposes. All airport sponsors that receive federal grants must comply with certain grant assurances, legislation, orders, regulations, and circulars as part of their agreement to access those funds. The federal grant assurances are codified in Title 49, U.S.C. Subtitle VII, as amended. Two of the requirements among these grant assurances pertain to airport revenue use exclusively for airport-related purposes and for maintaining fee structures that make the airport as self-sustaining as possible. The next two subsections further describe these requirements.

Revenue Use

The grant assurances provide that a public airport will only expend the revenue it generates for its capital or operating costs, the local airport system, or other local facilities owned or operated by the airport owner. These other local facilities must be directly and substantially related to the air transportation of passengers or property. Any use of the revenue that does not conform to the permitted capital or operating costs above may be considered revenue diversion, which is prohibited.

Revenue diversion includes direct or indirect payments, other than payments reflecting the value of services and facilities provided to the airport; use of the airport revenues for general economic development, marketing, and promotional activities unrelated to airports; and payments in lieu of taxes that exceed the values of services provided. In addition, this grant assurance prohibits payments to compensate non-sponsoring governmental bodies for lost tax revenues exceeding stated tax rates.

An airport must conduct annual financial audits to prove its permissible use of airport revenue and to establish compliance with the prohibition on revenue diversion. The statutory penalties for diverting revenue are severe.

Self-Sufficiency

Airports must maintain a fee and rental structure that makes the airport as financially self-sustaining as possible under the circumstances at that airport. The requirement recognizes that individual airports will differ in their ability to be fully self-sustaining, given differences in conditions at each airport. The purpose of the self-sustaining rule is to maintain the utility of the federal investment in the airport.

To conform to this requirement, an airport owner must have undertaken reasonable efforts to maintain a fee and rental structure to sustain itself as much as possible under the circumstances existing at that airport. Fees for the use of the airfield generally may not exceed the airport's capital and operating costs of providing the airfield. Aeronautical fees for landside or airfield facilities (such as hangars and aviation offices) in non-movement areas may be at a fair market rate but are not required to be higher than a level that reflects the cost of services and facilities.

Rates charged for non-aeronautical use (such as concessions) of the airport must be based on fair market value (for example, lease of land at fair market rent subject to the specific exceptions). Fair market pricing of airport facilities can be determined by reference to negotiated fees charged for similar uses of the airport or by appraisal of comparable properties. However, in view of the various restrictions on use of property on an airport (limits on the use of airport property, height restrictions, etc.), appraisers will need to account for such restrictions when comparing on-airport with off-airport commercial non-aeronautical properties in making fair market value determinations.

All leases with a term exceeding five years shall provide for periodic review of the rates and charges to determine if any adjustments are necessary to reflect the then current values, based on either an appraisal or an acceptable index such as a change in the Consumer Price Index as published by the U.S. Department of Labor.

Governing Documents

Two primary documents that essentially set the financial framework for the RTAA's financial operations are the Bond Resolution and airline use and lease agreement. These documents describe the RTAA's obligations to its bondholders and to the airlines operating at RNO.

Bond Resolution

RTAA finances capital improvement projects and constructs new facilities by issuing Airport System Bonds. These bonds are special, limited obligations of the RTAA paid solely from and secured by net revenue (gross revenue minus operation and maintenance expenses) and other funds established by a Bond Resolution.

Under the Bond Resolution, the RTAA pledges to deposit its revenues and to fund its operations and required reserve accounts as established through a defined priority basis.

The RTAA has pledged that it will adopt and continue in effect a schedule of rentals, fees, and charges sufficient to generate revenues in an amount equal to or greater than the sum of 1.25 times the annual requirements on the Outstanding Bonds as required by the Bond Resolution.

The RTAA has several funds that accumulate cash and investments for specific and discretionary purposes. From a governmental accounting standpoint, the RTAA is an enterprise fund and the bond indenture documents create various fund accounts. The RTAA's funds are not those typical for governmental purposes, such as those seen in municipal government accounting. Instead, these funds are common in the airport industry's revenue bond resolutions. The revenue bond resolutions are, in effect, the RTAA's contract with the purchasers of the revenue bonds. This contract specifies how the RTAA will manage its money so that it will have sufficient funds to operate the airport system, and to pay the interest and principal due on the revenue bonds.

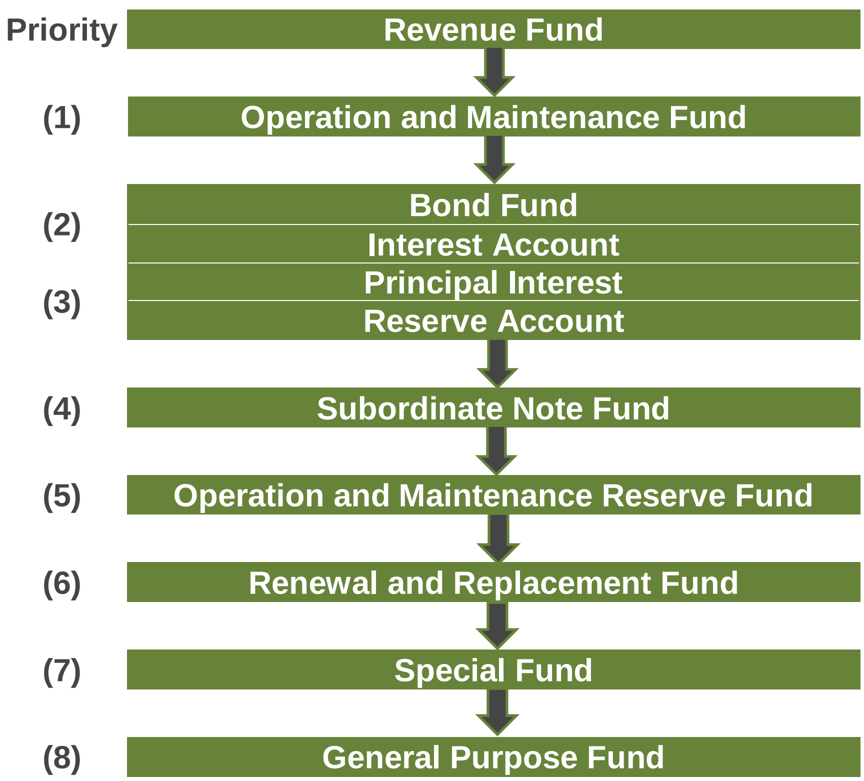
The funds with the most activity are the Revenue Fund and the Operation and Maintenance Fund, which are used to handle the daily receipts and disbursements. All revenues flow through the Revenue Fund and are distributed as needed to the other funds listed below in order of their priority. All these funds will remain in place until the RTAA's revenue bonds are repaid. **Figure 5-1** below further illustrates the priority of funds established by the Bond Resolution.

The Operation and Maintenance Fund is the highest priority. The expenses to operate the airport system are paid through this fund account before any other transfers to lower priority funds. The operating budget of the RTAA flows through this fund.

The next priority is the Bond Fund, with its subaccounts of Interest and Principal, which is used to accumulate funds for the semi-annual interest payments and the annual principal payments on the revenue bonds. The amounts in these funds vary depending on the amount of debt service to be paid during the year.

The Bond Reserve Fund is available to hold either a cash/investment deposit or a surety bond equal to the largest annual principal and interest payment. If some event reduced airport revenues and affected the RTAA's ability to pay its debt service, one year's debt service payment is available through the surety bond. This gives the RTAA one year to address whatever problem is affecting revenues.

Figure 5-1: Application of Revenues as Established by the Bond Resolution



Source: Bond Resolution

With the refunding of the Airport Revenue Refunding Bonds, Series 2005 (the “Series 2005 Bonds”) on September 30, 2015, the RTAA no longer has any debt funded through a sale to the public. The Series 2015 Bond is a direct loan of $20,690,000 with Compass Mortgage Corporation, an Alabama corporation and a subsidiary of BBVA Compass.

While the terms and conditions governing the Series 2015 Bond are substantially similar to those established under the Series 2005 Bonds, the RTAA is no longer required to deposit and has not deposited any cash/investment or surety bond into the Bond Reserve Fund for the Series 2015 Bond. However, the Bond Reserve Fund may be used for any parity debt issued in the future if required by a supplemental bond resolution.

The following are additional funds that RTAA also maintains pursuant to the Bond Resolution:

- **The Operation and Maintenance Reserve Fund** is a deposit equal to two months of the annual operation and maintenance expense budget. Pursuant to the Bond Resolution, payments will be made to this fund during the fiscal year, if necessary, to satisfy the required balance.
- **The Renewal and Replacement Fund** maintains a balance set by management of $780,000 for unexpected or emergency repairs. This balance is to be used to repair any damage and keep the airport system running if some major unforeseen event, not included in the annual budget, occurs.
- **The Special Fund** is the next priority and receives 35 percent of the gaming concession revenue. The RTAA has primarily used this fund account for CIP projects at RTS.
- **The General-Purpose Fund** is the last priority and receives all surplus remaining revenues after meeting the above obligations. RTAA can use amounts in this fund for any lawful airport system purpose.

Airline Use and Lease Agreement

An airline use and lease agreement is the contract between the airport operator and its tenant airlines that establishes the rights, privileges, and obligations for each party and defines how RNO is to be used by the airlines.

In addition, this agreement also:

- Establishes the business arrangement/rate-setting methodology with the airlines;
- Identifies the premises and facilities leased by the airlines and defines the degree of control by the lessee (e.g., exclusively-leased, preferentially-leased, leased in common, etc.);
- Defines the level of control over the expenses at the airport, if any (typically, capital improvement projects are those where the airlines may have some control through a majority-in-interest or similar type provision);
- Identifies general party responsibilities and obligations regarding indemnification, insurance, environmental issues, and other governmental inclusion; and
- Establishes six cost centers—Airfield, Terminal Building, Baggage Handling System (BHS), Parking and Ground Transportation, Other, and RTS.

In addition to the above, an agreement symbolizes that the airport operator and airlines have worked together to arrive at a common business relationship. The RTAA is currently operating under a five-year airline agreement and business arrangement (Agreement) that went into effect July 1, 2015. Airlines that executed the Agreement are defined as Signatory Airlines with all rights and responsibilities.

Currently, the RTAA has six signatory airlines: Alaska, American, Delta, JetBlue, Southwest, and United.

Cost Centers

Expenditures and revenues of the RTAA are categorized into cost centers. Cost centers include those areas or functional activities used for accounting for revenues, operating expenses, debt service, and required fund deposits. Direct cost centers have revenues as well as expenditures directly attributable to them. Additional indirect expenses are allocated to the direct cost centers. The Authority has the following direct cost centers:

- Airfield
  - This cost center includes RNO's landing areas and ramp areas, and other facilities supporting the aircraft operational activity of passenger airlines, cargo carriers, military, and general aviation (GA).
- Terminal
  - This cost center includes the airline passenger terminal facilities at RNO as they exist prior to and after completion of any improvements or expansion except the BHS as described below.
- Baggage Handling System (BHS)
  - This cost center includes the annual operating expenses and requirements associated with the operation of RNO's BHS.
  - Total costs less those recovered from the Transportation Security Administration (TSA), other tenants, or other users are charged directly to the airlines as a separate charge based on the number of baggage items.
- Landside (Parking and Ground Transportation)
  - This cost center includes RNO parking facilities, roads, terminal access roadways, and other areas and facilities accommodating ground transportation.
- Other
  - This cost center includes all other areas at RNO not described in the Airfield, Terminal, BHS, Landside and the indirect Administration Cost Center.
- Reno-Stead Airport (RTS)
  - This cost center includes all existing and future areas and facilities associated with RTS.

Rate Setting Methodology

The two-primary rate-setting approaches used in airport-airline business arrangements are the residual and compensatory approaches. A pure airport-wide residual methodology is where the airlines bear the overall financial risk for the airport operation, and, in turn, receive significant control over financial decisions. In addition, the airlines receive a significant portion of non-aeronautical revenue as a credit or reduction in rates and charges paid to an airport.

On the opposite end of the spectrum, a pure compensatory methodology represents where the airport operator assumes the overall financial risk for the airport operation. As such, the airport operator does not provide any non-aeronautical revenue credits towards the airline rate base, and the airlines have limited financial decision-making power.

There is also a third approach, generally called a hybrid methodology, that mixes or combines the two standard approaches and may include a "net revenue sharing" component of excess net revenues after debt service (airport system revenues less operating and maintenance costs less debt service) generated at the airport.

Federal law does not require any single approach to airline rate setting; however, it does require the methodology applied be consistent to similarly situated aeronautical users and conform to the Department of Transportation's Policy Regarding Airport Rates and Charges.

Landing Fee

The current agreement for the Airport is a hybrid with net airfield costs and associated landing fees established on a cost center residual methodology in which the signatory airlines bear 100 percent of the financial risk for the airfield. The expenditures in the Airfield cost center, which are primarily comprised of operating expenses, debt service and recovery of capital projects/equipment with unit costs of less than $300,000, are divided by estimated aircraft landed weight resulting in a landing fee rate.

Due to the administrative challenge of identifying and charging a landing fee to private aircraft (GA aircraft) using the airports, RTAA collects airfield revenues from GA aircraft in the form of fuel flowage fees.

Terminal Building Rental

In contrast, the terminal building rentals reflect a commercial compensatory rate setting formula that places the financial risk of funding terminal building costs with the RTAA. The expenditures in the Terminal Building cost center, which are primarily comprised of operating expenses, debt service, and recovery of capital project/equipment expenditures with unit costs of less than $300,000, are divided by a "rentable" space divisor (total terminal space available that is revenue producing and available for lease). The result of this approach is that the signatory airlines are only responsible for terminal building costs allocated to airline leased premises and the RTAA is financially responsible for any costs allocated to vacant, concession, or other rentable space.

Currently, the signatory airlines are leasing approximately 48 percent of the rentable space in the terminal building. The financial forecasts contained herein assumes this percentage will remain consistent as new terminal and concourse improvement are implemented over the planning period.

Baggage Handling System (BHS)

In addition, the signatory airlines agreed to bear 100 percent of the cost of operating and maintaining the BHS including payment of the maintenance agreement with an outside contractor, utilities, supplies, and other direct costs of operating the integrated explosive detection equipment system. Each passenger airline's share of costs is based on the number of baggage items processed through the BHS.

Extraordinary Coverage Protection

The RTAA is permitted to include Extraordinary Coverage Protection payments in the rates and charges at RNO in any fiscal year in which revenues less operating and maintenance expenses are projected to be less than one hundred twenty-five percent (125 percent) of the sum of debt service on indebtedness for the Airport System.

Any amounts collected for such Extraordinary Coverage Protection payments will be allocated to cost centers based on the net requirement of such cost centers. Should Extraordinary Coverage Protection payments be made, the RTAA will refund to the Signatory Airlines such payments made by each Signatory Airline as soon as uncommitted funds become available in the General Purpose Fund.

In return for the Signatory Airlines funding 100 percent of net airfield and BHS system costs and approximately 50 percent of terminal building costs, providing financial support through extraordinary coverage protection over a five-year term, the following financial rights are included in the Agreement: a revenue sharing credit to airline rates and charges and the ability to review and disapprove certain capital projects. These provisions are described below.

Revenue Sharing Credit

Net available revenues after the RTAA meets other financial obligations, such as debt service and capital asset recovery, are split equally (50 percent each) between the Signatory Airlines and the RTAA through a revenue sharing formula. Revenue sharing is derived by taking the sum of the RTAA's total revenues less total expenses posted to all costs centers less debt service and other identified requirements. A credit estimate offsets terminal building rents collected during the year with a final airline rates and charges reconciliation and settlement prepared based on audited year-end results.

In addition, the revenue sharing credit provides an incentive to the signatory airlines to increase air service and associated passengers by generating higher non-airline revenues, such as public parking and terminal and rental car concessions.

Majority-In-Interest (MII)

The Agreement also provides for an airline review of the budget and allows airlines to vote to deny cost recovery in the airline rates for large capital projects in the airline cost centers. The current agreement provides that the first $1 million of projects in the Airfield Cost Center, $2 million in the Terminal Building Cost Center, and $500,000 in the BHS Cost Center will not be subject to a denial vote. The airlines will review and vote on the projects over these thresholds. Capital projects over $300,000 must be amortized over the useful life of the asset and cannot be included in its entirety in the year it is placed in service.

An annual meeting is held with the Signatory Airlines to review the budget and further explain the capital projects. The airlines have 30 days after this budget review meeting to deny a capital project. An MII of the airlines must vote to deny a project as provided in the airline agreement.

The MII for an airfield project is 60 percent of the number of Signatory Airlines that landed at least 50 percent of the Signatory Airline landed weight during the immediate preceding fiscal year or 50 percent of the number of Signatory Airlines that landed at least 60 percent of the signatory landed weight for the same period.

The MII for a terminal building project is 60 percent of the Signatory Airlines that paid at least 50 percent of the total terminal rents during the immediate preceding fiscal year or 50 percent of the Signatory Airlines that paid at least 60 percent of the total terminal rents for the same period.

This type of formula is common in the airport industry to foster a democratic process for the large and small airlines that may have different capital project goals at the airports they serve.

The financial forecasts contained herein assume the current airline rate-setting approach throughout the planning horizon.

Financial Policies and Standards

The RTAA has established certain financial policies and standards for the operation of the airport system. In summary, these include policies and standards regarding liquidity, investments, debt management, and asset management for the airport system. Additional detail regarding these policies and standards is described in the next several subsections.

Liquidity, Working Capital, and Reserves

The bond rating agencies primarily measure an airport enterprise's ability to meet its on-going obligations and provide a buffer against unanticipated risks using a ratio called "days cash on hand." This ratio is calculated by identifying the sum of all unrestricted cash and investments and restricted cash and investments in the Operation and Maintenance Reserve Fund and the Renewal and Replacement Fund divided by the daily operating and maintenance expenditure budget (annual operating and maintenance budget divided by 365 days). The annual operating and maintenance budget used in the denominator excludes RTAA's annual depreciation expense due to the non-cash nature of the reduction in the value of an asset.

Airports primarily face the following two revenue risks: (1) Volume: Traffic Base and Carrier Diversity and (2) the Airline Contractual Framework for Cost Recovery. The Volume: Traffic Base and Carrier Diversity risk factor focuses on an airport's underlying market characteristics, such as the size of the enplanement base, origin and destination passenger mix, diversity of carriers and competition from other airports or modes of transportation. The Airline Contractual Framework for Cost Recovery risk factor largely focuses on the underlying use and rate-setting agreements between an airport and its airline carriers. See the "Airline Use and Lease Agreement" information previously described in this section.

Commercial agreements with other users, such as terminal concessionaires, rental car companies and air cargo carriers, may also be relevant if cost recovery is structurally dependent on cash flows covered by such agreements. Airports are typically in a stronger financial position if they possess the contractual ability to recover a large majority of operating costs through airline agreements. The RTAA has cost center residual provisions in its airline agreement for the airfield and baggage handling system costs.

Based on an evaluation of these revenue risk factors and the RTAA's cash cycle, expense volatility, and operating and capital needs, the RTAA has established its policy target to retain at least 365 days of cash on hand. In addition, the RTAA has established a minimum ratio of no less than 300 days based on the likelihood that a decrease below this threshold may be the basis for a rating downgrade by the credit rating agencies. The 2016 median average days cash on hand as compiled by Moody's Investor Services is 615 for all airports and 563 for small hub airports.

As of June 30, 2017, the RTAA's cash and liquidity position is solid with 483 days' worth of unrestricted cash on hand to meet operating and maintenance requirements.

In addition, the RTAA also monitors working capital (i.e. current assets less current liabilities) with a focus on accounts receivable collections and the investment in inventory and prepaid assets reasonably expected to be realized in cash or consumed within a year. An appropriate allowance for uncollectible receivables is established, and staff maintains an on-going and aggressive collection effort.

The RTAA has established an internal policy to maintain a minimum net working capital of 270 Days. This ratio is calculated by dividing current assets less current liabilities by the daily operating and maintenance expenditures (annual operating and maintenance expenses divided by 365 days). The annual operating and maintenance budget used in the denominator excludes RTAA's annual depreciation expense due to the non-cash nature of the reduction in the value of an asset.

Investments

The investment policy of the RTAA states that the primary objectives, in order of priority, shall be safety, liquidity, and yield. The standard of prudence to be used by investment officials shall be the "prudent person" standard and shall be applied in the context of managing an overall portfolio.

The "prudent person" standard states the following: "Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived."

Under authority delegated by the Board of Trustees of the RTAA, in accordance with chapter 474, Statutes of Nevada, Nevada Revised Statutes (NRS) 354.474 and 355.175, and Bond Resolution 526, the investment of RTAA funds is the responsibility of the President/Chief Executive Officer (CEO). All cash, including bond proceeds, received by the RTAA will be invested by the Chief Financial Officer (CFO).

The CFO will maintain a list of approved broker/dealers and financial institutions authorized to provide investment services to the RTAA. Authorized broker/dealers will be limited to "primary" dealers or other dealers that qualify under SEC Rule 15C3-1, the Uniform Net Capital Rule. Securities purchased by the RTAA shall be delivered against payment (delivery vs. payment) and held in a custodial safekeeping account with the trust department of a third-party bank insured by the Federal Deposit Insurance Corporation designated by the CFO for this purpose in accordance with NRS 355.172.

The CFO, in accordance with the provisions of NRS 355.170, 355.180, the current Bond Resolution, and this investment policy, is authorized to invest in the following: (1) United States Treasury Bills, Notes, Bonds, and Debentures of the United States; (2) United States Government Agency Securities; (3) Negotiable & Nonnegotiable Certificates of Deposit; (4) Bankers' Acceptances, (5) Commercial Paper; (6) Money Market Mutual Funds; (7) the Local Government Investment Pool (LGIP) as established by the Nevada State Treasurer under NRS 355.167; and (8) the Washoe County Pooled Investment Fund, as permitted under NRS 355.168 and 355.175.

The President/CEO reviews the investment policy every year and changes are presented to the Finance and Business Development Committee of the Board of Trustees as needed. When necessary, the RTAA contracts with a financial investment advisor for policy assistance.

Debt Management and Credit Rating

The debt policies of the RTAA are narrowly defined and used primarily for revenue bond debt to finance capital projects. The debt limit is established by guidelines outlined in the revenue Bond Resolution. The RTAA's Bond Resolution establishes various bond funds. The flow of revenues and expenses through these funds, and the maintenance of the balances in the funds, can affect the rate setting process and budget.

When the RTAA finances capital projects by issuing long-term debt, it will pay back the bonds within a period not to exceed the estimated useful life of the project. The RTAA will not use long-term debt for current operations. The RTAA will maintain good communications with its bond rating agency regarding its financial condition and will follow a policy of full disclosure in every financial report and offering prospectus.

As of October 2015, the RTAA refinanced its senior lien bonds and currently does not have any public debt. However, the RTAA will continue to maintain its financial position per the established criteria outlined by the major rating agencies to obtain a minimum investment grade rating of "A" with a stable outlook as such time the RTAA may decide to issue any future public debt.

RTAA is continually evaluating whether the refinancing of its outstanding debt to take advantage of lower interest rates is economically feasible. A net present value savings of 3 percent is necessary to justify such refinancing.

Plant, Property, and Equipment Funding

For illustrative purposes, the schedule following this narrative lists the approved Property, Plant and Equipment (PP&E) submittals from the RTAA's various departments/sections in the adopted FY 2018-19 Budget. A PP&E item is an asset with a useful life exceeding one year and a cost greater than $5,000.

The major PP&E requests in FY 2018-19 consist primarily of exercise equipment, six vehicles, a rotary mower, a paint striper, a scissor lift, and a truck mounted cold air blower.

The vehicles requested consist of a truck and sport utility vehicle that will be used by Airside Operations, two trucks for Airport Police and two trucks for Airfield Maintenance. All vehicles meet the replacement requirement set through the facilities vehicle replacement plan as listed below.

Vehicle and Equipment Acquisition and Rotation Policy Replacement Evaluation Criteria

Light Duty Vehicles

- Replacement evaluation after six years of service; or
- Replacement evaluation when vehicle exceeds 100,000 miles, or
- Replacement evaluation when maintenance cost to purchase ratio exceeds 35 percent.

Heavy Duty Vehicles and Equipment

- Replacement evaluation after 10-20 years depending on type of vehicle/equipment; or
- Replacement evaluation when vehicle/equipment exceeds 80,000 miles; or
- Replacement evaluation every 25,000 hours on Hobbs hour meter; or
- Replacement evaluation when maintenance cost to purchase ratio exceeds 30 percent.

For the financial forecast analysis, it was assumed that the RTAA would continue to invest in PP&E throughout the planning horizon. Annual growth in PP&E was assumed to continue within a range of 5 to 10 percent.

Existing Infrastructure Rehabilitation and Upkeep Plan

The RTAA maintains, improves, and expands the infrastructure and assets at both RNO and RTS as needed. Therefore, it is constantly evaluating capital needs to rehabilitate and maintain its infrastructure. The RTAA prioritizes and evaluates capital projects during the budget process based on the following five criteria:

1. Required for safety or security
2. Mandated by a regulatory agency
3. Prevents damage to or the maintenance of an existing facility
4. Generates a source of revenue or is fundamental to the basic operations of the airports
5. Impacts or improves any of the RTAA’s other areas

These capital projects are funded in several ways. Airline rates fund the smaller capital projects associated with the airline cost centers (Airfield, Terminal, and BHS) with non-airline revenues funding projects in the other cost center in the fiscal year. The General Purpose Fund, as described earlier, is used to finance the larger capital projects. Those projects, which are included in the airline cost centers, may be subject to MII approvals from the signatory airlines as described above.

Projects that are dependent upon the use of FAA AIP Grants or PFCs will not be implemented until a funding source is approved and awarded by the FAA. Additional information on the FAA AIP and PFC program is summarized below.

FAA Airport Improvement Program

FAA AIP grants are offered to the RTAA by the FAA to provide funding assistance to those eligible capital projects that meet the criteria of the federal program. The objective of this FAA program is to assist in the development of a nationwide system of public use airports, to ensure the safe and secure operation of the airport and airway system, and to meet the projected needs of the public. The program not only provides funding for development projects, but also airport planning and noise compatibility programs.

The program is funded by aviation use fees, which are collected and deposited into the Airport and Airway Trust Fund that generates the revenues in support of the AIP. The U.S. Congress authorizes expenditures from this dedicated fund on an annual basis. The AIP program includes entitlement and discretionary funding. Entitlement funds are awarded to eligible sponsors through a formula based on the number of passenger boarding's (enplaned passengers) and cargo tonnage. Discretionary funds are set aside to provide the FAA with flexibility to fund various high priority programs.

The AIP Program typically funds 93.75 percent of eligible projects at RNO and RTS. The RTAA's General Purpose and Special Funds are primarily used for the RTAA's (sponsor's) matching share of the FAA grants. However, PFC funds may be used subject to FAA approval.

Passenger Facility Charges

The Aviation Safety and Capacity Expansion Act of 1990 initially authorized PFCs. This act allowed public agencies, which manage commercial airports, to charge each enplaning passenger a facility charge in accordance with FAA requirements. The passenger facility charge is levied on the passenger tickets, collected by the airline, and forwarded to the airport (less a handling fee charged by the airlines). The revenues collected through PFCs are to preserve or enhance safety, security, and capacity, to reduce noise, or to enhance competition. The most significant differences between AIP grants and PFCs is that the PFC is a fee directly assessed to the passenger, administratively retained by the airport, and considered local funds versus federal funds.

In October 1993, the RTAA received approval from the FAA to impose a PFC of $3.00 per enplaned passenger. Collection began January 1, 1994. In May 2001, the PFC was increased to $4.50 per enplaned passenger with collection beginning August 1, 2001. PFC collections are funding several FAA-approved projects at the time of this writing.

Capital Improvement Program

RNO's CIP consists of both the existing CIP projects and those recommended by the Master Plan as the Preferred Alternative. Total existing and Master Plan CIP project costs are estimated to be $1.97 billion over the 20-year forecast period.[2] The Master Plan CIP projects are estimated to total approximately $1.636 billion, while the RTAA's existing CIP, which includes projects currently planned and programmed for the Airports, totals approximately $336.6 million of additional project costs through 2035-36. Note that the CIP cost estimates and timing developed for RNO are under this Master Plan are preliminary, reflecting a level of detail subject to refinement in subsequent implementation steps.

Existing Airport Capital Improvement Program

RTAA operates RNO and RTS, a GA reliever airport, as an airport system. Therefore, RTAA's financial resources must provide for the operation and maintenance of both airports.

For the six-year period of FY 2018-19 through FY 2023-24, RTAA's existing CIP, in escalated dollars, is estimated to be approximately $175.8 million and primarily consists of renewal and replacement projects to maintain airport system infrastructure, especially RNO's airside facilities.

Major projects included in RTAA's existing CIP for the Airports consist of the following and **Table 5-1** contains a summary of the CIP.

- Rehabilitation of Runway 16R/34L Phase 1 ($26.7 million),
- Rehabilitation of Runway 16R/34L Phase 2 ($31.9 million),
- Airfield Pavement Maintenance Program ($5.1 million),
- Technology and Information Systems Renewal Program ($4.5 million),
- Jet Bridge Replacement ($4.1 million),
- Rehabilitation of Runway 8/26 at RTS ($21.9 million), and
- Apron Rehabilitation at RTS, All Phases ($19.5 million).

The financial analysis assumed that the RTAA would continue to invest in the renewal and replacement of RTAA assets not included in the Master Plan CIP throughout the planning horizon. Starting in FY 2024-25, this CIP is estimated at approximately $11.5 million and is assumed to escalate at 3 percent per year through the planning horizon.

Additionally, for capital projects with unit costs less than $300,000, which can be expensed annually, the analysis assumed the RTAA would continue to spend at current levels of approximately $2.5 million per year. The analysis escalates these expenditures at 3 percent per year throughout the planning horizon.

[2] This amount includes the RTAA's existing CIP through FY 2035-36 and all three phases of development per the Master Plan. Only the Short-Term and Mid-Term CIP is assessed in the financial feasibility analysis.

Table 5-1: Existing RTAA CIP through FY 2023-24 (dollars in thousands)

Business Area	Total Project Cost	Annual Spending					
		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Airside	**$82,260**	$10,323	$30,674	$35,647	$1,156	$993	$3,466
Terminal	**14,484**	3,187	7,176	513	2,007	800	800
Security/BHS	**675**	100	175	100	100	100	100
Landside	**11,133**	5,383	1,150	1,150	1,150	1,150	1,150
Other	**9,853**	1,983	1,000	1,287	3,583	1,000	1,000
Administrative	**7,536**	3,615	921	750	750	750	750
Reno Stead	**49,858**	21,511	1,989	4,610	7,609	11,321	2,816
Total	**$175,798**	**$43,904**	**$43,085**	**$44,057**	**$16,355**	**$16,114**	**$10,082**
Source: RTAA management records, May 2018							

Note: Amounts may not total accurately because of rounding.

Master Plan Capital Improvement Program

Table 5-2 presents the Master Plan CIP project costs by major project and major category for the three development phases of the Master Plan. Note that, at the time of writing, the project costs are at the ROM level for planning purposes. Project costs and individual projects will be further refined and analyzed as each project moves forward into the programming and design phases. As presented, total project costs for the Master Plan CIP are estimated at approximately $1.6 billion. However, it is important to note that a significant portion of the projects within the Support category are anticipated to be funded by third-party tenants as demand warrants.

The major capital projects within the Master Plan's 20-year CIP for the short-, intermediate-, and long-term development periods are summarized below. Project costs include an escalation assumption of 3 percent for financial planning. The projects are graphically depicted in **Figure 5-2.**

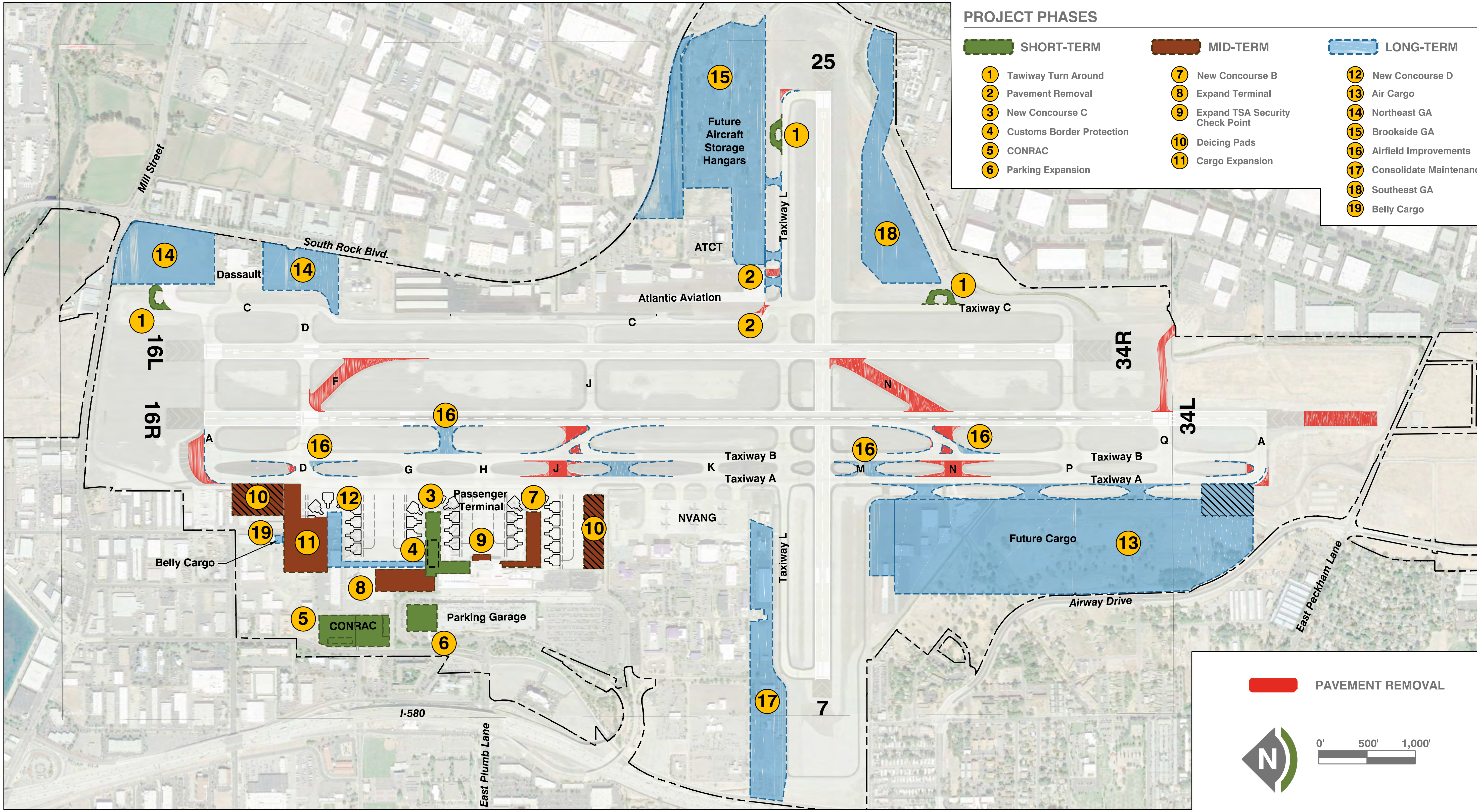


Figure 5-2
Recommended Capital Improvement Plan Projects

Table 5-2: Master Plan CIP (dollars in millions)

Category	Total Project Cost	Master Plan Development Phase		
		Short-Term	Mid-Term	Long-Term
New Concourse C (including new CBP facility, passenger loading bridges, and building demolition)	$159.9	$159.9		
New Concourse B (including passenger loading bridges and building demolition)	$143.6	$6.5	$137.1	
New Concourse D (including new CBP facility, passenger loading bridges, and building demolition)	$229.0			$229.0
New Admin., Counter, Bag Claim, Concessions	$33.8	$33.8		
Terminal Wayfinding & Signage, Ticket Hall, Restrooms, Escalators	$5.8	$5.8		
New & Remodeled SSCP Space	$42.6		$42.6	
Terminal Apron & Airfield Improvements	$59.0	$6.0	$30.1	$22.8
New CONRAC (including pedestrian bridge, new QTA, landscaping, and building demolition)	$110.0	$110.0		
Building Demolition (Prologis Building, air cargo, and Mini Storage Warehouse)	$49.3		$5.1	$44.3
Auto Parking Surface Lot	$0.4	$0.4		
Two-Level Parking Structure Expansion	$43.3			$43.3
Belly Cargo	$1.8			$1.8
Various GA Facility Improvements (as demand warrants)	$432.7	$38.6	$181.0	$213.0
Expand Cargo Apron	$103.6		$60.4	$43.1
Various Cargo, Operations, and Maintenance Facility Improvements (as demand warrants)	$220.9		$71.5	$149.4
Total	**$1,635.6**	**$361.0**	**$527.9**	**$746.7**

Source: Mead & Hunt, Inc., April 2018

Note: Amounts may not total accurately because of rounding.

Short-Term Master Plan Improvements

Within the short-term planning period (one to five years), RNO anticipates the need for a variety of existing and Master Plan CIP projects totaling an estimated $361.0 million. Major Master Plan projects in the short term include:

- Build new 11-gate Concourse C including new passenger boarding bridges,
- Build new Customs and Border Protection (CBP) facility within level 1 of Concourse C,
- Construct new administrative office space on level 3 at the northeast corner of terminal building,
- Improve the terminal ticket hall, baggage claim, concessions, restroom, and escalator,
- Improve passenger terminal wayfinding and signage,
- Improve the terminal apron, deice pad, and airfield pavement,
- Build new Consolidated Rental Car (CONRAC) facility, quick-turn-around (QTA), and pedestrian bridge,
- Build new automobile surface parking lot, and
- Improve various Brookside GA facilities as demand warrants.

Mid-Term Master Plan Improvements

The mid-term or intermediate capital projects planned for the next six to 10 years are currently estimated to total approximately $527.9 million. Major Master Plan projects in the mid-term include:

- Build new 11-gate Concourse B including new passenger boarding bridges,
- Expand terminal building to improve and remodel Security Screening Check Point (SSCP),
- Improve the terminal apron, deice pad, and airfield pavement,
- Expand the cargo apron,
- Improve various cargo, operations, and maintenance facilities as demand warrants, and
- Improve various Northeast GA facilities as demand warrants.

Long-Term Master Plan Improvements

Approximately $746.7 million of capital projects are forecasted in the long-term (10+ years). As discussed previously because of timing and uncertainty, the financial analysis for this Master Plan only includes projects expected within the next 10 years. Major Master Plan projects for the long-term include:

- Build third concourse pier including new passenger loading bridges,
- Improve the terminal apron, deice pad, and airfield pavement,
- Construct a two-level addition on the north end of the existing parking garage,
- Improve various cargo, operations, and maintenance facilities as demand warrants,
- Improve various Northeast GA facilities as demand warrants, and
- Build new belly cargo facility.

As discussed previously, this forecast financial analysis evaluated both the short-term and mid-term phases of the proposed Master Plan CIP. The total estimated project cost for these phases is approximately $888.90 million.

Funding Plan

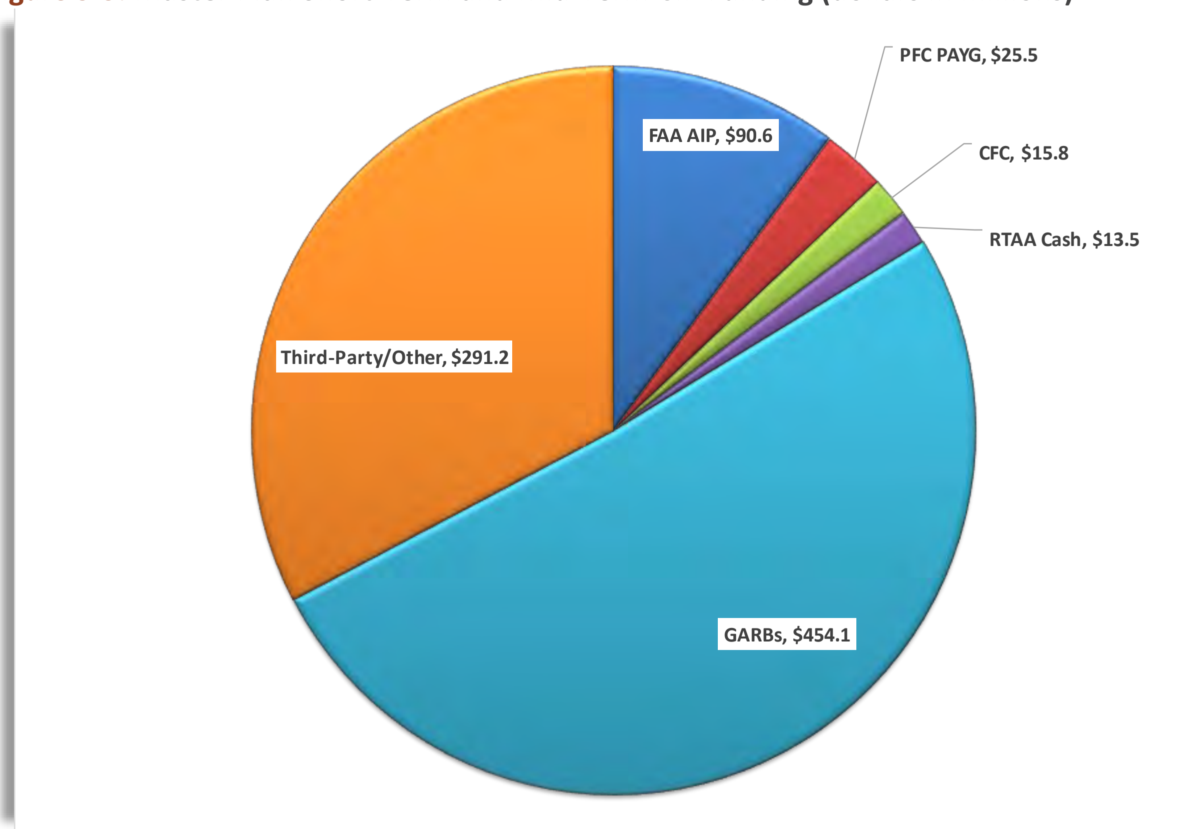
Based on the identified CIP projects and their associated costs, a proposed funding plan was developed for RNO's short-term and mid-term Master Plan CIP. In developing the funding plan, the overriding objective was to maximize the use of external resources and minimize the amount of funding from local sources. In the process, the Master Plan CIP is to be funded from a combination of these sources:

- FAA AIP Grants
- Local RTAA Funds (including PFCs, CFCs, RTAA cash, and airport revenue bonds)
- Third-Party Funds

As discussed above, a significant portion of capital projects included in the Support category are traditionally funded by private third-party operators such as cargo and GA. While these projects are included as part of the Master Plan, it is assumed that the RTAA would only undertake such projects as demand warrants and private equity is provided.

Figure 5-3 presents the proposed funding plan for the Short-Term and Mid-Term Master Plan CIP. Note that these estimates represent the amount of project costs eligible for federal, PFC and CFC funding. These levels of funding may not be attainable depending on actual federal funding appropriations made each year, competition with other airport funding needs, and prior commitments of PFCs and CFCs.

Figure 5-3: Master Plan Short-Term and Mid-Term CIP Funding (dollars in millions)



FAA AIP Grants

Federal participation in funding airport capital projects is through the AIP as reauthorized under the FAA Modernization and Reform Act of 2012. The FAA provides federal grants in the form of entitlement grants (based on annual enplaned passenger levels), discretionary grants, and letter-of-intent (LOI) grants. The FAA distributes AIP funds each year based on the appropriation received from Congress. If Congress authorizes AIP at a level above $3.2 billion, the current legislation provides eligible "Primary" airports with entitlement funds that are calculated based on RNO's number of annual enplaned passengers and cargo operations.

The FAA allocates funds from the FAA to the nation's airports based on various eligibility criteria. Allocation is tied to a priority system used to rank each request and determine which projects will occur during any given federal fiscal year. The priority system employed by the FAA has different criteria for different projects. Generally, projects that enhance the safety of aircraft operations and those that enhance capacity in the system are higher priority projects. The priority system also ranks projects based on the airport size and the number of aircraft and aircraft operations at the facility.

Each FAA region distributes discretionary and LOI grants based on availability and project priorities. Generally, the FAA makes discretionary grants immediately available to fund project costs, while LOI grants are distributed to RNO over a set schedule of years at defined annual funding levels.

FAA Order 5100.38D, *Airport Improvement Program Handbook* provides guidance on issues of eligibility. In general, only those projects related to non-revenue producing items, such as land acquisition, airfield construction, certain public areas of the terminal area building, and safety/security projects are eligible for FAA AIP funding.

For the RTAA, the FAA AIP Program typically funds 93.75 percent of eligible projects at both airports. RTAA uses its General Purpose and Special Funds primarily for the RTAA's (sponsor's) matching share of the FAA grants. However, RTAA may also use PFC funds subject to FAA approval. Complex issues associated with project eligibility often require close agency coordination. Additionally, it is reasonable to assume that there may be changes in eligibility criteria over the course of the planning period.

The RTAA in recent years has received more than $5 million in FAA AIP Entitlement grants. This amount is based on enplaned passenger levels at RNO and the number of cargo operations. The amount also includes $150,000 for its reliever RTS. During the federal fiscal year ended September 30, 2016, the RTAA received approximately $22.7 million of total FAA AIP grant funding including both Entitlement and Discretionary grants. For the forecast financial analysis, the assumption used in analysis was that the RTAA would continue to receive FAA AIP Entitlement grants based on the FAA's current formula. Additionally, based on a review of historical data, the assumption during analysis was that the RTAA would receive about $7 million of FAA AIP Discretionary grants per year.

As shown in **Figure 5-3** above, the funding plan assumes approximately $90.6 million of FAA AIP grants for airfield projects in the Master Plan CIP based on the RTAA generally receiving FAA AIP funding at current eligibility levels. As future FAA AIP grant funding is based on factors as described above, the RTAA could potentially receive less funding than assumed for this analysis. If future FAA AIP funding were not available at assumed levels, the RTAA would likely defer projects, reduce scope, evaluate the use of other funding sources, or pursue a combination of these strategies.

Local RTAA Funds

Local RTAA funds generally include PFCs, CFCs, internally generated cash from RTAA financial operations, and the issuance of airport revenue bonds. These local sources will be a primary funding instrument for RNO's Master Plan CIP. As presented in **Figure 5-3**, over $508 million of project costs are funded from local funds generated by the RTAA over the forecast period. The following sub-sections further describe each local funding source.

Passenger Facility Charges (PFC)

The RTAA collected approximately $7.4 million in PFC revenues in FY 2016-17 and is forecasting to collect over $7.6 million in FY 2017-18. Currently, a portion of the RNO's PFC collections pays for FAA approved capital projects on a "pay-as-you-go" (PAYGO) basis. Prior to FY 2017-18, the RTAA was also using available PFC revenue to pay approximately $1.8 million of annual debt service on the Subordinate Series 2011 Bonds. These bonds were paid in full during FY 2016-17. At the end of FY 2017-18, the RTAA is anticipated to have an unspent PFC revenue balance of approximately $15.2 million.

As presented in **Figure 5-3**, for this analysis the consultant assumed approximately $25.5 million of PFCs are to fund the Master Plan CIP on a PAYGO basis. The consultant also assumed additional PFCs are to fund the Master Plan CIP through the payment of annual debt service. Approximately $7 to $8 million of PFC revenue is forecast to fund new eligible debt service starting in FY 2023-24. Additional details regarding the assumption of the new debt service are described below in the Debt Service section.

Rental Car Customer Facility Charges (CFC)

The RTAA began collecting a rental car CFC at RNO in August 2012 to pay for property management, repairs, and improvements to RTAA-owned rental car facilities at RNO. The CFC is assessed at $1.25 per transaction-day for rental car patrons and remitted by the rental car companies monthly.

In FY 2017-18, the RTAA collected approximately $1.48 million in rental car CFCs at the $1.25 level. Future rental car projects included in the RNO's Master Plan CIP total approximately $110 million. For the financial forecast analysis, the consultant assumed that the RTAA would increase the current CFC rate to $3.50 per transaction-day in FY 2018-19, and then increase the rate again to $6.00 in FY 2019-20 to remain at that level throughout the planning horizon.

As presented in **Figure 5-3**, the RTAA is forecast to fund approximately $15.8 million on a PAYGO basis. The remaining $94.2 million of rental car project costs are forecast to be funded through the issuance of revenue bonds. The RTAA is forecast to pay the associated annual debt service of approximately $7 million through ongoing CFC collections at the $6.00 level.

RTAA Cash and Investments

The RTAA has historically used its internal cash from the operation of the airport system to fund certain projects in the CIP. Per the Bond Resolution, any revenues remaining in the General Purpose Fund, after all obligations have been satisfied, are available for use by the RTAA for any lawful airport system purpose. Also, per the airline agreement, the RTAA may include a cost for the use of RTAA funds (net of PFCs, CFCs, grants, and other funding sources), along with imputed interest, to deduct from revenues available for sharing with the airlines. The RTAA's 50 percent share of revenue as described above is available to be deposited into the General Purpose Fund each year to fund reserves, the CIP or other lawful airport system purposes.

For the financial forecast analysis, surplus cash in the General Purpose Fund not being used to fund existing CIP needs is available to fund the Master Plan CIP. However, as described above, the RTAA has a policy of retaining at least 365 days of cash on hand. Therefore, surplus cash available for the Master Plan CIP is only available to the extent the RTAA maintains the 365 days of cash on hand. As presented in **Figure 5-3**, approximately $13.5 million of internally generated RTAA cash funds the Master Plan CIP.

General Airport Revenue Bonds (GARBs)

Due to significant cash flow needs during the construction process, a significant portion of the terminal related projects are funded with proceeds of GARBs assumed to be issued in the future. As presented in **Figure 5-3**, approximately $454.1 million of the Master Plan CIP project costs are forecast to be funded by GARBs.

During the planning period, the following three bond issues are forecasted. The first is forecast to occur during FY 2019-20 to fund approximately $94.2 million of rental car projects discussed above. The next two bond issues are forecast during FY 2020-21 (2021 Bonds) to fund approximately $177.7 million of Master Plan CIP projects and the second in FY 2024-25 (2025 Bonds) to fund approximately $182.3 million. Debt service resulting from these two bond issues is repaid with airport revenues, including airline rates and charges, and available PFC revenues. The financial impact of this increase in annual debt service is discussed in additional detail below.

Third-Party Funds

Third-party funding may also be available for certain revenue-producing facilities at an airport, including RNO tenants such as fixed base operators (FBOs), hangar operators, aircraft maintenance operators, and/or cargo operators as demand warrants. While private funding comes in many different forms, a typical approach is for private parties to fund and construct the development of FBO facilities, cargo buildings, and maintenance hangars at an airport and pay ground rents to the RTAA. FBOs, maintenance facilities, cargo facilities, and hangars for aircraft typically are built as market demand warrants.

A growing trend in the airport industry, especially at large hub airports, is Public-Private Partnerships (P3s). In general, P3s are arrangements whereby some of the services that historically have been the responsibility of the public sector are now provided by the private sector. These are typically longer-term arrangements with an agreement on shared objectives for the delivery of public infrastructure including terminal buildings and parking facilities.

With airports being critical infrastructure assets within the U.S. transportation network, use of the private sector in developing, funding, and/or operating various airport assets may provide critically needed improvements outside of airport financial means to provide. P3 arrangement models come in various forms and generally include service contracts, management contracts, developer financing/operation, and long-term lease or sale. A land development P3 is in place for the development of RTS land between the master developer, Dermody Properties, and the RTAA.

The RTAA has not included use of any P3 arrangements for any of the projects on the Master Plan CIP; however, in efforts to continually seek competitive efficiencies and increase financial flexibility, P3s may be explored as an option in the future.

As presented in **Figure 5-3**, approximately $291.2 million of the Master Plan CIP is anticipated to be funded through third-party or other sources, as demand for such projects is required.

Tables 5-4 and **5-5** below present the forecast funding sources for major projects within the short- and mid-term development of the Master Plan. As discussed, previously, the financial analysis does not include the long-term development for the Master Plan.

Table 5-4: Short-Term Development Funding (dollars in millions)

Category	Total Project Cost	Funding Sources					
		FAA AIP	PFC (PAYG)	CFC (PAYG)	RTAA Funds	GARBs	3rd-Party
New Concourse C (including new CBP facility, passenger loading bridges, and miscellaneous building demolition)	**$159.9**	$0.0	$19.5	$0.0	$4.2	$136.3	$0.0
New Admin., Counter, Bag Claim, Concessions	**33.8**	0.0	4.1	0.0	0.9	28.7	0.0
Terminal Wayfinding & Signage, Ticket Hall, Restrooms, Escalators	**5.8**	0.0	0.7	0.0	0.2	4.9	0.0
Terminal Apron & Airfield Improvements	**6.0**	5.7	0.4	0.0	0.0	0.0	0.0
New CONRAC, Pedestrian Bridge, New QTA	**110.0**	0.0	0.0	15.8	0.0	94.2	0.0
Building Demolition: Old Concourse C	**6.5**	0.0	0.8	0.0	0.2	5.5	0.0
Auto Parking Surface Lot	**0.4**	0.0	0.0	0.0	0.0	0.4	0.0
Various GA Facility Improvements (as demand warrants)	**38.6**	0.0	0.0	0.0	0.0	0.0	38.6
Total	**$361.0**	**$5.7**	**$25.5**	**$15.8**	**$5.4**	**$270.1**	**$38.6**
Source: Mead & Hund, Inc., April 2018							

Note: Amounts may not total accurately because of rounding.

Table 5-5: Mid-Term Development Funding (dollars in millions)

Category	Total Project Cost	Funding Sources					
		FAA AIP	PFC (PAYG)	CFC (PAYG)	RTAA Funds	GARBs	3rd-Party
New Concourse B (including loading bridges and ultimate demo of old Concourse B)	**$137.1**	$0.0	$0.0	$0.0	$3.6	$133.5	$0.0
New and Remodeled SSCP Space	**42.6**	0.0	0.0	0.0	1.1	41.5	0.0
Terminal Apron & Airfield Improvements	**30.1**	28.2	0.0	0.0	0.2	1.7	0.0
Building Demolition: Prologis Building	**5.1**	0.0	0.0	0.0	1.8	3.2	0.0
Expand Cargo Apron	**60.4**	56.7	0.0	0.0	1.4	2.4	0.0
Various Cargo, Operations, and Maintenance Facility Improvements (as demand warrants)	**71.5**	0.0	0.0	0.0	0.0	0.0	71.5
Various GA Facility Improvements (as demand warrants)	**181.0**	0.0	0.0	0.0	0.0	0.0	181.0
Total	**$527.9**	**$84.9**	**$0.0**	**$0.0**	**$8.1**	**$182.3**	**$252.5**
Source: Mead & Hund, Inc., April 2018							

Note: Amounts may not total accurately because of rounding.

Debt Service

The RTAA has the ability to issue debt to finance capital improvements for the airport system. This is a typical approach used throughout the U.S. airport industry. Upon the issuance of debt, the RTAA has the obligation to pay the debt service per the terms and conditions set forth in the Bond Resolution. A description of current and future debt service of the RTAA is contained in the next sub-sections.

Senior Lien Bonds

On September 30, 2015, the RTAA issued its Series 2015 Bonds to refund its Series 2005 Bonds. The Series 2015 Bonds are a direct loan of $20.69 million with Compass Mortgage Corporation, an Alabama corporation and subsidiary of BBVA Compass. The Series 2015 Bonds reflect the remaining outstanding debt from the 1996 bonds issued to construct the parking garage, terminal access roadway to the parking garage, and a passenger skyway connecting the terminal to the parking garage.

The Series 2015 Bonds were issued pursuant to the terms and conditions of the Bond Resolution and are paid solely from and secured by a pledge of net revenues (gross revenues less operations and maintenance [O&M] expenses) of the RTAA. As with all Senior Lien Bonds pursuant to the Bond Resolution, RTAA's debt is limited by the requirement that net revenues must be at least 125 percent of annual debt service. Annual debt service for the Series 2015 Bonds is approximately $2.2 million through FY 2025-26. At the time of writing, the Series 2015 Bonds are the only debt outstanding for the RTAA.

As described above, to fund the future Master Plan CIP, the assumption for the forecast financial analysis is the issuance of future Senior Lien 2020 Bonds, 2021 Bonds, and 2025 Bonds. Future annual debt service associated with the 2020 Bonds is $6.9 million starting in FY 2020-21. For the 2021 Bonds, debt service is estimated at approximately $15.4 million starting in FY 2023-24, and future annual debt service associated with the 2025 Bonds is approximately $15.8 million starting in FY 2027-28. In the analysis, debt service is paid with RTAA net revenues, CFC revenues, and pledged PFC revenues.

Subordinate Lien Debt

The RTAA may also issue debt subordinate to the payment of Senior Lien Bonds. This is referred to as subordinate lien debt. Subordinate lien debt is limited by the requirement that pledged revenues, after the payment of O&M Expenses and Senior Lien Bonds, must be at least 110 percent of subordinate lien debt service. No subordinate lien debt has been assumed for the financial forecast analysis.

PFC Backed Bonds

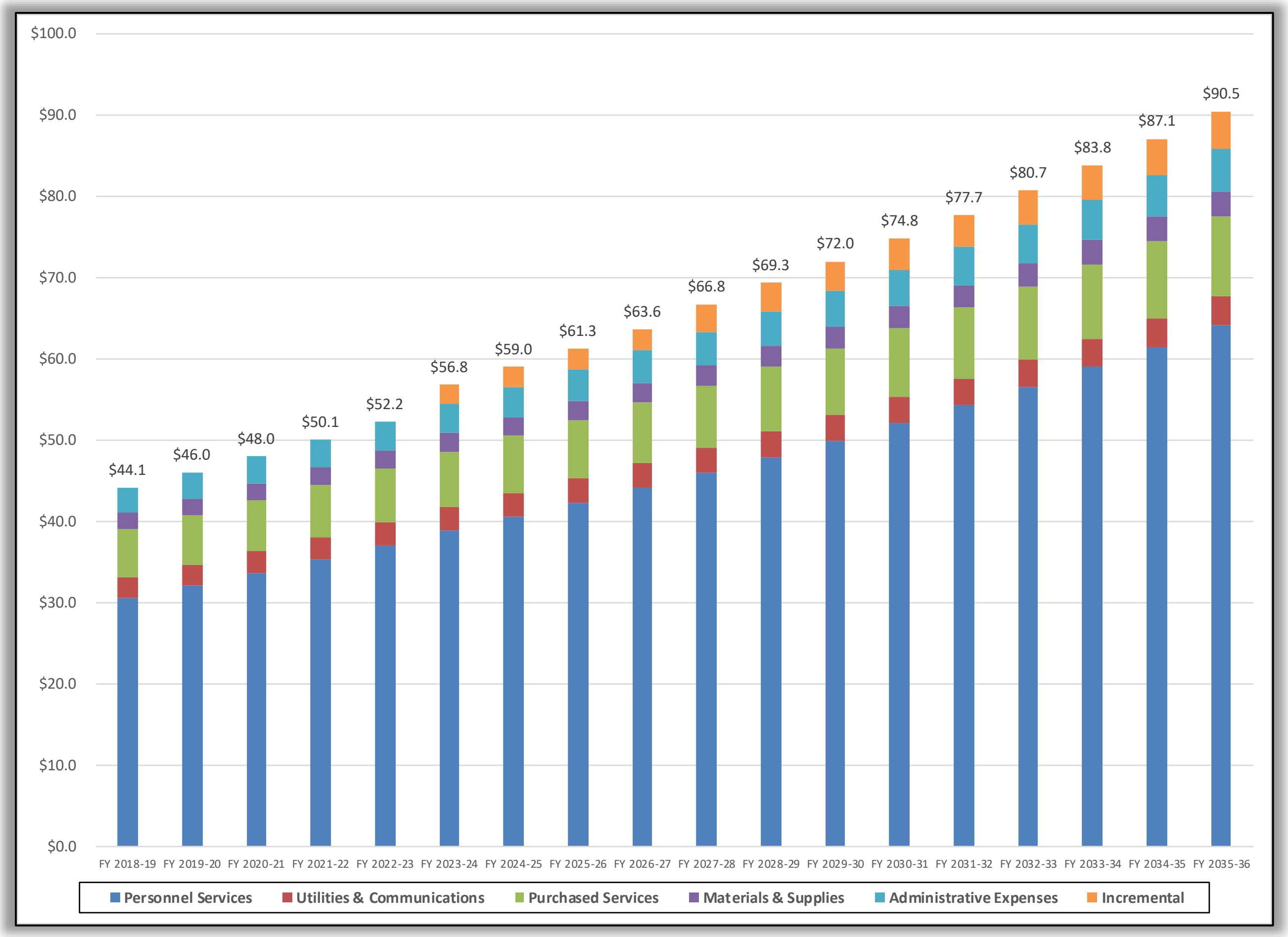
The RTAA may use PFCs to pay debt service associated with Senior Lien Bonds or subordinate lien debt used to fund PFC eligible projects. There are two primary approaches related to the use of PFCs to support the repayment of debt. One approach is through the issuance of PFC Revenue Bonds whereby PFCs are the sole source for payment. The second is through the issuance of GARBs where RTAA net revenues and pledged PFCs are both used for the payment of debt service. The second approach, with repayment secured by both the airport system net revenues and PFCs, has less risk from an investor's perspective and generally has more favorable terms such as bond interest costs. For this financial forecast analysis, the issuance of GARBs was assumed for the 2021 Bonds and 2025 Bonds.

Operation and Maintenance Expenses

O&M Expenses of the RTAA are classified in the following expense categories: (1) Personnel Services, (2) Utilities and Communication, (3) Purchased Services, (4) Materials and Supplies, and (5) Administrative Expenses. In addition, operating expenses are allocated to the various Airport cost centers for rate-setting purposes as previously described.

Figure 5-4 presents forecast operating expenses of the RTAA for budget FY 2018-19 through FY 2035-36. In general, the projections of future O&M Expenses provide a review of historical trends, the anticipated impacts of inflation, and impacts due to the RTAA's CIP projects. As shown, through FY 2035-36, O&M Expenses are estimated to increase from approximately $44.1 million in FY 2018-19 to approximately $90.5 million in FY 2035-36, representing a compound annual growth rate (CAGR) of 4.3 percent. A discussion of each of the primary categories of O&M Expenses follows Figure 5-4.

Figure 5-4: Forecast Operation and Maintenance Expenses (dollars in millions)



Personnel Services

The largest category of O&M Expenses of the RTAA is Personnel Services as it comprises approximately 69.0 percent of total O&M Expenses in the budget for FY 2018-19. Included in Personnel Services are salaries, employee benefits, and retirement contributions.

Utilities and Communication

The Utilities and Communications category includes electricity, water, natural gas, and telephone and data communication services for the airport system. For budgeted FY 2018-19, Utilities and Communications expenses are approximately $2.6 million or 5.8 percent of O&M Expenses.

Purchased Services

The Purchased Services category of O&M Expenses includes costs associated with legal and professional services needs of the RTAA, as well as maintenance and repair services for specialized systems and equipment. Equipment rental is also included in this category. For budgeted FY 2018-19, Purchased Services expenses are approximately $5.9 million or 13.4 percent of O&M Expenses.

Materials and Supplies

The Materials and Supplies category of O&M Expenses primarily includes the items needed to maintain the airport system, as well as office supplies used by the administrative staff. For budgeted FY 2018-19, Materials and Supplies expenses are approximately $2.0 million or 4.6 percent of O&M Expenses.

Administrative Expenses

Administrative Expenses are costs associated with staff training, conference sponsorship and registration fees, travel, air service development and route maintenance, airport economic development, and airport community relations. This category also includes the RTAA's property and liability insurance premiums and credit card processing fees. For budgeted FY 2018-19, Administrative Expenses are approximately $3.2 million or 7.1 percent of O&M Expenses.

Figure 5-4 also includes incremental O&M Expenses associated with the implementation of the Master Plan CIP. These incremental expenses relate to new facilities as they become operational, such as terminal area facilities associated with the new Concourse C and Concourse B planned to be operational by FY 2023-24 and FY 2027-28, respectively. In FY 2023-24, incremental O&M expenses are forecast at approximately $2.3 million, and in FY 2027-28, at approximately $3.4 million.

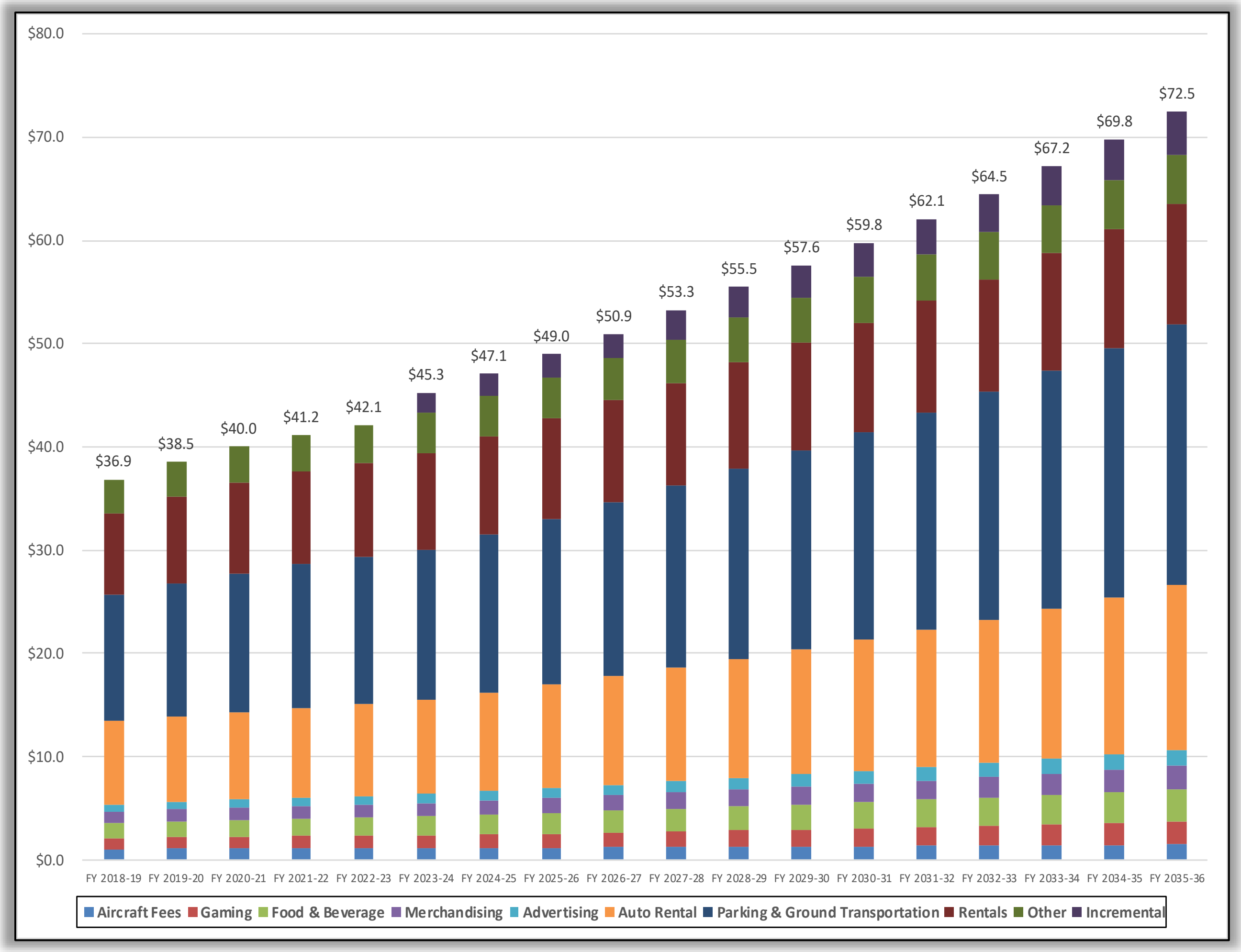
Non-Airline Revenue

All operating revenue of the RTAA except for airline landing fees and airline terminal rentals generally comprises non-airline operating revenue. Non-airline revenue is categorized into five areas: aircraft fees, concession revenues, parking and ground transportation, other rentals, and other. Except for aircraft fees at RNO credited directly to the airline landing fee calculation, non-airline revenue performance impacts the RTAA's ability to pay for operating costs and debt service not recovered from the airlines and to generate surplus internal funds to fund capital projects and maintain prudent reserves. **Figure 5-5** presents forecast non-airline operating revenues of the RTAA for budget FY 2018-19 through FY 2035-36.

In general, the financial analysis provides forecasts of future non-airline revenues including historical trends, passenger traffic growth, the anticipated impacts of inflation, and financial impact associated with RNO's Master Plan CIP projects. As shown, through FY 2035-36, non-airline revenues are estimated to increase from approximately $36.9 million in FY 2018-19 to approximately $72.5 million in FY 2035-36, representing a CAGR of 4.1 percent.

A discussion of the each of the primary categories of non-airline operating revenues follows **Figure 5-5**.

Figure 5-5: Forecast Non-Airline Operating Revenue (dollars in millions)



Aircraft Fees

Due to the administrative challenge of identifying and charging a landing fee to private aircraft (GA aircraft) using the Airports, RTAA collects airfield revenues from GA aircraft in the form of fuel flowage fees. The FBO collects the fuel flowage fee based on a per-gallon of fuel purchased by GA aircraft at both RNO and RTS. This fee is established annually by master fee resolution and ensures that GA aircraft pay a share of the expenses of maintaining and developing the airfield.

Fuel farm system revenue of $626,000 is paid by a consortium of Signatory Airlines for use of RTAA-owned fueling facilities, equipment, and associated land. Revenue was established based on a determination of fair market value as established by independent appraisals in July 2011. At five-year intervals starting on July 1, 2016, the revenue will either be adjusted based on cumulative percentage of change in the Consumer Price Index for All Urban Consumers (CPI-U) or an updated fair market appraisal of the system.

Concession Revenue

Concession revenue consists of the following: food and beverage, merchandise, gaming, rental cars, advertising, ground handling/support service providers and the RTS FBO. The largest contributor to concession revenues is the rental car industry. The concession agreements with these firms are responsible for more than 61 percent of total revenue from concession revenue. The next largest contributors are gaming, merchandise, food and beverage, and advertising. Combined, these five categories represent approximately 95 percent of concession revenues.

In addition, smaller concessions such as luggage carts, massage chairs, charging stations, self-service kiosks, and ground service providers also contribute a percentage of their gross revenues to the RTAA. The concession agreements are usually based on the greater of a minimum annual guarantee (MAG) or percentage of gross revenues being paid to the RTAA.

The following sub-sections provide additional information regarding the largest contributors to concession revenue.

Gaming

Gaming revenue is a unique source of revenue for Nevada airports. The gaming concession was awarded to International Game Technology (IGT) effective December 1, 2015, under a new five-year agreement, which expires on November 30, 2020.

Under this agreement, the RTAA receives 30 percent of Net Win under $125,000 per month, 43 percent of Net Win between $125,000 and $300,000 per month, and 75 percent of Net Win greater than $300,000 per month. The weighted average percentage that IGT pays to the RTAA is forecasted to be 35 percent of gross sales with no minimum annual guarantee.

Food and Beverage

Food and Beverage Revenue - Creative Host Services, Inc. (CHS) was awarded the food and beverage concessions effective October 2001. Effective June 19, 2008, Creative Host Services, Inc. changed its name to SSP America, Inc. (SSP). The concession agreement calls for SSP to pay the RTAA a percentage of gross revenues ranging from 8 percent to 16.5 percent depending on product type or a MAG, which is 85 percent of the previous year’s payments but not less than $885,800, whichever is greater.

Merchandising

The primary concession agreement for merchandise and news and gift services is with The Paradies Shops (Paradies). This agreement provides payment to the RTAA based on a percentage of revenues ranging from 12 percent to 23 percent depending on product type or a MAG, which is 85 percent of previous year’s payments but not less than $901,000, whichever is greater.

The four post security stores, branded as the High Mountain Market, include Brighton Collectibles, No Boundaries (an outdoor apparel store), In Motion (a high-tech electronics shop), and a CNBC (news and gifts). Concourse B includes Reno-Tahoe News and Gift and Forever Heather (boutique women's apparel). Concourse C includes the Reno-Tahoe Travel Mart (news and gifts). In pre-security locations, Paradies also operates Adventure News (news and gifts) and a PGA Tour shop.

Several of the concessions are in the midst of a refresh that includes remodeling and renaming. Upon completion of the refresh, Adventure News will be known as the Silver State Marketplace, TravelMart as Plane Provisions, and Traveler's Gifts as Summit Travel.

Advertising

Effective February 1, 2015, the RTAA executed a new five-year Nonexclusive Advertising Program Concession License for advertising services including two, two-year options with Clear Channel Airports. The terms of this agreement will compensate the RTAA with the greater of 55 percent of all display sales and 15 percent of Clear Vision (digital screens on the concourses) or a minimum annual guarantee of $660,000. The RTAA also receives approximately $5,900 in advertising revenue associated with bins used by passengers going through security screening.

Auto Rental

Auto Rental Revenue – The RTAA has five on-airport car rental company agreements with nine brands: (1) Avis/Budget Car Rental doing business as Avis and Budget; (2) DTG Operations doing business as Dollar and Thrifty; (3) Enterprise, (4) Hertz, and (5) Vanguard Car Rental doing business as Alamo and National. All these brands have check-in counters within the terminal building.

In addition, the RTAA also has one off-airport concession agreement with Payless Car Rental that provides a ticket counter in the terminal building; however, this company has no on-airport ready/return, QTA or service/storage facilities on RTAA property.

In 2007, Enterprise acquired Vanguard Car Rental, doing business as Alamo and National. In 2013, the Hertz Corporation acquired DTG Operations, doing business as Dollar and Thrifty and Avis/Budget acquired Payless Car Rental. Effectively, three rental car companies control the nine brands at RTAA.

All these companies, except for Payless, also qualified through their 2010 bid submissions to lease the following: (1) ready/return parking, (2) a lane in the QTA building and associated parking; and (3) a service facility and associated vehicle storage located away from the terminal on airport property.

The ready/return parking spaces (Ready/Return Premises) are currently located in the parking structure, across from the terminal; the QTA building and associated vehicle parking, which provides fueling and car wash services, are located immediately north of the parking structure; and the service/ storage facilities are located south of the terminal building.

Based on MAG bids, Payless continues to be a limited service operator with a check-in counter at RNO; however, all other facilities are located “off-airport” with their customers required to take a shuttle bus to an off-airport site for the rental and return of their vehicles.
The current auto rental agreements, which began on July 1, 2010, under a five-year term, were extended for three years through June 30, 2018.

In March 2018, the rental car agreements were amended and restated, effective July 1, 2018, to extend the term for an additional five years through June 30, 2023, or upon the opening of the CONRAC facility, whichever occurs earlier. The proposed business terms are materially the same as those agreed to in the current leases except some premises modifications among the companies.

As described previously, the Master Plan recommends the relocation of the existing rental car QTA facilities from the existing parking garage into a new CONRAC facility located north of the terminal roadway.

This concession represents approximately 21.0 percent of the RTAA’s total budgeted non-airline operating revenues.

Parking and Ground Transportation Revenue

Auto parking and ground transportation revenues represent approximately 33.2 percent of the RTAA’s total budgeted non-airline operating revenues. Auto parking is the largest single component of the RTAA’s non-airline operating revenue, which is typical within the airport industry. Ground transportation fees are those fees paid by transportation operators such as limousines, shuttle buses, and taxicabs.

The State of Nevada authorized Transportation Network Companies (TNC) such as Uber and Lyft to begin operations in May 2015. RTAA began discussions, implemented procedures and systems, and executed permits allowing TNC companies to operate at RNO starting in January 2016. The fees assessed to TNC companies are the same as those paid by taxis and pay limousines on a per trip basis.

With the relocation of rental car facilities from the parking garage, the RTAA will increase its public parking capacity at RNO. This increase is forecasted to contribute to additional parking revenue opportunity.

Other Rentals

The RTAA leases both terminal space and non-terminal buildings, hangars, and RTAA-owned ground to tenants other than the airlines. The RTAA also collects rents at RTS from aviation-related tenants. These rental rates are set based on market or appraised values. Many of these rental agreements specify annual rate increases based on the consumer price index or periodic reappraisal.

RTAA staff has been actively involved in marketing and developing both aviation and commercial development of the RTAA's land at both Airports during the past year. With land development activity continuing its recovery from the economic recession, RTAA has several new projects working towards completion that will be positive revenue contributors going forward. One primary example of this is the master development agreement with Dermody Properties at RTS. The RTAA executed a ground lease for Phase 1 of 90 acres with Dermody Properties in 2016.

In addition, the RTAA executed a ground lease with JMA Reno Holding, LLC (JMA) on February 28, 2017, for an Aloft Hotel at the Gateway Center located at the southwest corner of Plumb Lane and Terminal Way. The lease will be for fifty years for approximately 3.0 acres on the northern portion of the property and an exclusive three-year option to lease approximately 4.5 acres south of the Hyatt Place.

JMA is proposing to develop the vacant land with a two-phased, master plan approach. JMA believes a "Master Planned Center" is critical for the success of the entire Gateway Center, including the existing Hyatt Place Hotel. JMA's vision includes a mixture of hotels, Class A office space, and the right mix of restaurant(s) that create an energy and vitality to stand-alone.

Other Operating Revenue

This category comprises reimbursement from the airlines, tenants, and TSA for services provided by the RTAA in support of their daily operations including maintenance of the BHS, trash disposal, utilities, ID badges, law enforcement at the security checkpoint and canine explosive detection teams.

Non-Operating Revenue

This category primarily consists of CFC revenues, aviation fuel taxes, and interest earnings on funds the RTAA has available for investment. CFCs are discussed in more detail later in this chapter and are intended to be the primary source of revenue for rental car projects recommended in the Master Plan.

The RTAA's Bond Resolution, state laws, and the RTAA investment policy limit the types of investments permitted for use by the RTAA. In priority order, the primary objectives of investment activities are safety, liquidity, and yield with most securities or deposits having federal government guarantees.

The use of Aviation Fuel Tax revenue is restricted to funding transportation projects related to airports including ground transportation improvements and promoting the use of RNO including efforts to increase the number and availability of flights.

Airline Rates and Charges

Airline rates and charges at RNO include landing fees and terminal rentals. To forecast future airline rates and charges revenue, the rate-setting formulas for landing fees and terminal rentals are consistent with those described earlier in the RTAA's airline use and lease agreement.

Landing Fees

Landing fees are charged to passenger and cargo carriers for each aircraft landing based on the aircraft's Maximum Gross Landed Weight. The Landing Fee Rate is calculated by dividing (1) the total cost of the Airfield as a whole (O&M Expenses, Debt Service Requirements, amortization charges and other funding requirements of Bond Ordinance) less the Airfield non-airline revenues by (2) the total landed weight of aircraft arrivals.

In the current airline agreement, no premium is charged for landing fees assessed to non-signatory airlines as compared to Signatory Airlines.

Terminal Rentals

Airline terminal rentals reflect cost recovery of terminal costs allocated to airline occupied facilities (commercial compensatory basis) with total facility costs divided by rentable, terminal square footage. The airlines "pay only for what they use," and the RTAA is at financial risk if vacant facilities exist.
The terminal rental rate is calculated by dividing (1) the total cost of the terminal as a whole (O&M Expenses, Debt Service Requirements attributable to the terminal, amortization charges and other funding requirements of Bond Ordinance) less airline reimbursement for disposal fees and less the Revenue Sharing Credit by (2) rentable terminal square footage. Rentable terminal space is the total area of the terminal building available for lease and dedicated to the sole use of the airlines, rental car companies, concessions, aviation service providers, various government agencies, and the RTAA to generate revenue and support operations.

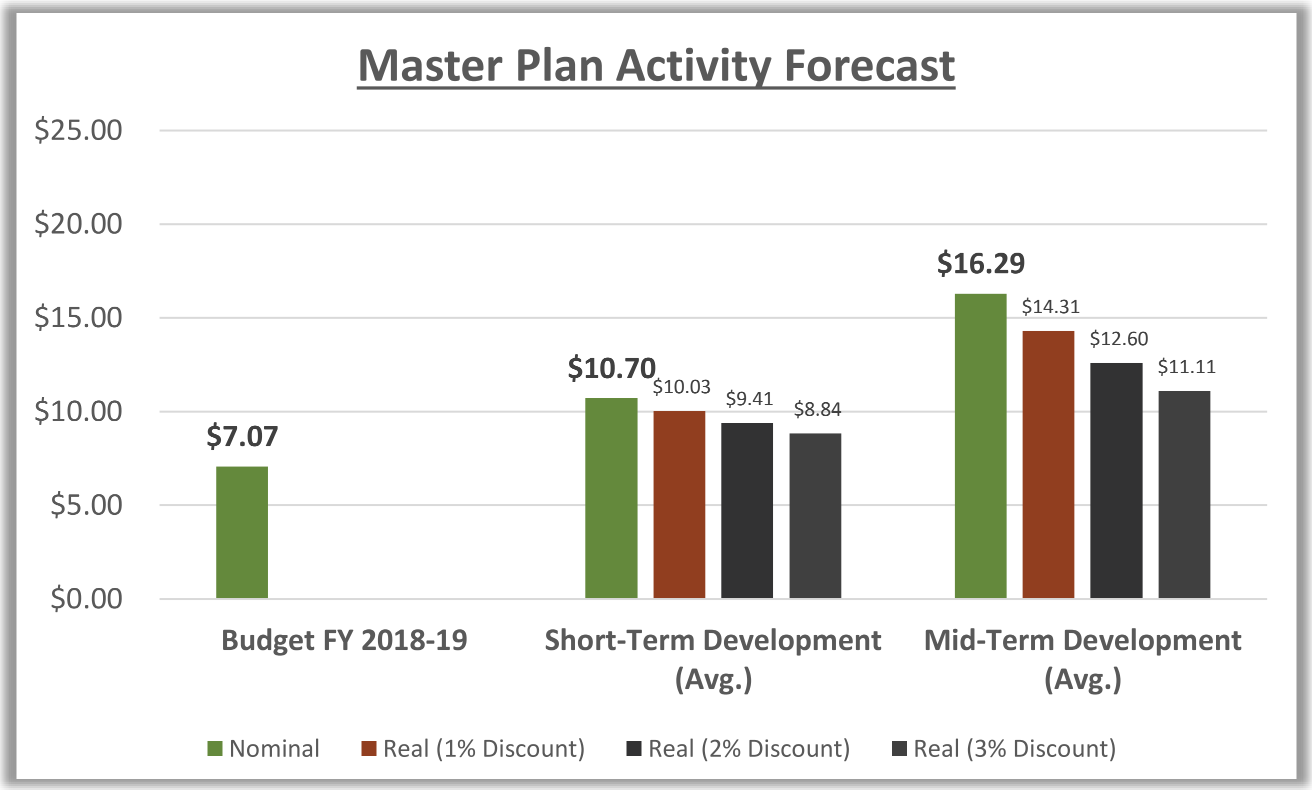
The Revenue Sharing Credit is calculated as 50 percent of the Gross Revenues less O&M Expenses, Debt Service Requirements, Bond Ordinance Reserve Requirements, and Repayment of Loans to the Capital Account. The Revenue Sharing Credit is applied to reduce Signatory Airline terminal rental rates in the current FY, and the remaining 50 percent of the Airports' net revenues are transferred to the RTAA's General Purpose Fund.

Cost per Enplaned Passenger

A key performance measure within the airport industry for airline costs at an airport is the cost per enplaned passenger (CPE). At RNO, the CPE incudes the costs to the signatory passenger airlines for landing fees and terminal rentals less the revenue sharing credit and dividing that total by Signatory Airline enplaned passengers.

Figure 5-6 below presents average CPE by Master Plan development phase. The average CPE is presented in both nominal dollars and real dollars assuming various discount rates from 3 percent to 1 percent. As shown, CPE is forecast to increase from $7.07 in FY 2018-19 to a level of $10.70 upon completion of the Short-Term CIP. The CPE is forecasted to increase further to $16.29 upon completion of the Mid-Term CIP. As presented in real dollars, the average CPE for the Short-Term development phase ranges from approximately $10 to $9, and it ranges from approximately $14 to $11 for the Mid-Term development phase.

Figure 5-6: Average Airline Cost Per Enplaned Passenger (CPE) by Development Phase



To test the relative sensitivity of results, the financial analysis was also prepared under both the low-growth and high-growth enplaned passenger forecasts developed as part of this Master Plan. As expected, future enplaned passenger levels have a significant impact on future financial results.

As **Figures 5-7** and **5-8** show, the financial analysis assuming the low-growth enplaned passenger forecast has higher CPE levels as compared to the Master Plan forecast and the high-growth enplaned passenger forecast would produce lower CPE levels.

Future enplaned passenger growth significantly impacts financial results as passenger traffic impacts key revenue items such as auto parking, rental cars, and terminal concessions. Enplaned passengers are also key in driving future PFC and CFC revenues, which are key funding sources for the Master Plan CIP. It is likely that a low-growth activity outcome would require a re-evaluation of the timing for the Master Plan CIP, and that projects may need to be deferred into the future.

Figure 5-7: Average Airline Cost Per Enplaned Passenger (CPE) by Development Phase – Low-Growth Sensitivity Analysis

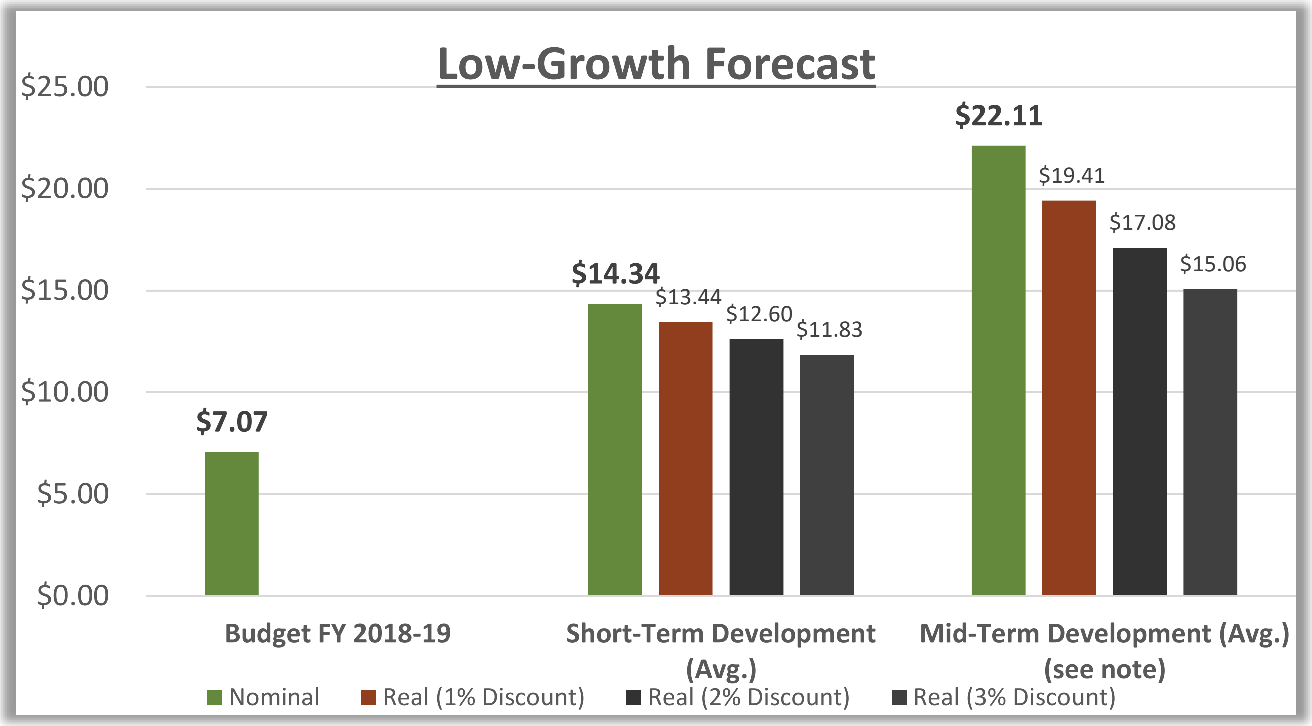
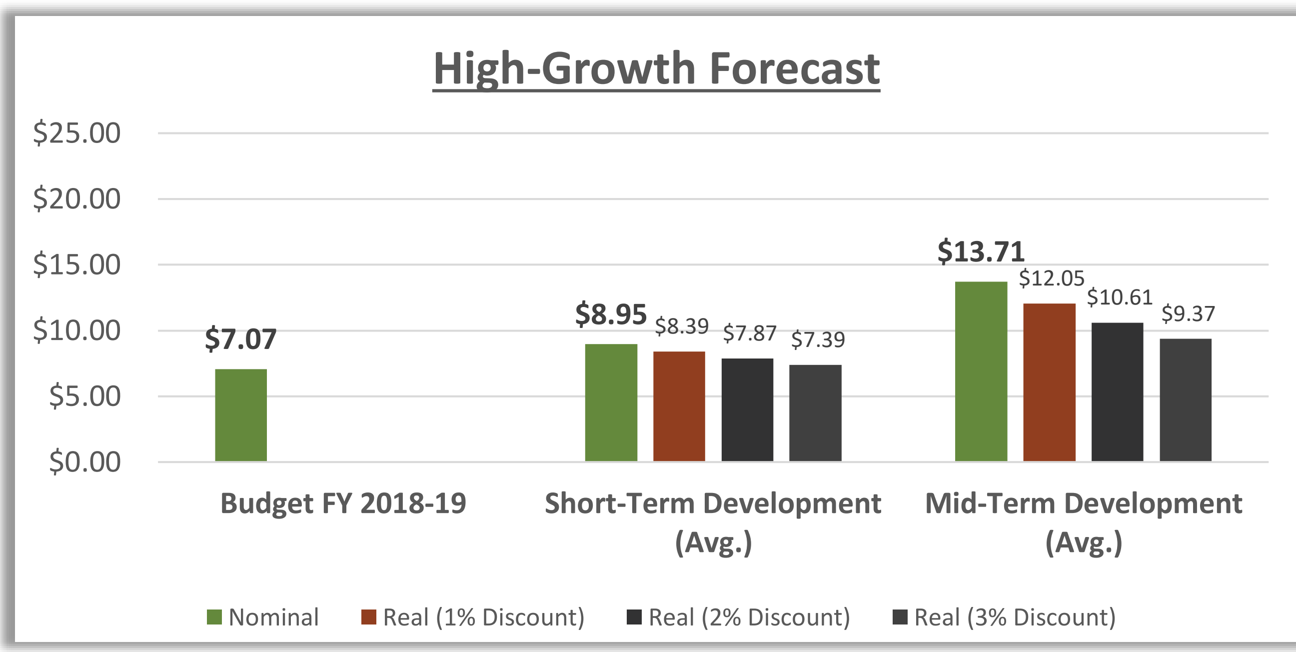


Figure 5-8: Average Airline Cost Per Enplaned Passenger (CPE) by Development Phase – High-Growth Sensitivity Analysis



Financial Results

Tables 5-6 and **5-7** show the results of the forecast financial analysis. As shown, CPE, debt service coverage, days cash on hand, and debt per enplaned passenger (DPE) are presented for the budget FY 2018-19 and averages for the Short-Term and Mid-Term development periods. The results are presented for the Master Plan enplaned passenger forecast as well as the sensitivity analyses for the high-growth and low-growth activity forecasts. A summary of the key financial measures resulting from the analysis is as follows:

- CPE forecasts, as also discussed above, increase as compared to current levels. CPE levels for the Short-Term development phase increase modestly with the Master Plan enplaned passenger forecast. CPE levels increase more substantially for the Mid-Term development phase. CPE increases are more dramatic assuming the low-growth enplaned passenger forecast.
- Debt service coverage remains above the Senior Lien requirement of 1.25 times as established in the Bond Resolution for the Master Plan and high-growth enplaned passenger forecasts. Debt service coverage is forecast to be more marginal under the low-growth scenario and is forecast to be below Bond Resolution requirements for the Mid-Term development.
- Days of cash on hand are forecasted to be at least 365 days through the forecast period as directed per the RTAA policy for both the Master Plan and high-growth enplaned passenger forecasts. Under the low-growth sensitivity analysis, days of cash on hand is forecast to be below this target. Surplus RTAA cash not used to fund the existing CIP and in excess of 365 days is used to fund the Master Plan CIP. Days of cash on hand is forecast to return to levels above 365 days towards the end of the forecast period for the Master Plan and high-growth passenger forecasts.
- Outstanding DPE is forecast to increase substantially for all scenarios as GARBs are forecast to be a significant source of funding for the Master Plan CIP. Under the Master Plan growth scenario, DPE is forecast to increase to an average of $152 for the Short-Term development phase and increase again to an average of $191 after completion of the Mid-Term development phase. These amounts are forecast to increase further under the low-growth scenario and decrease some under the high-growth scenario as compared to the Master Plan growth forecast.

Table 5-6: Summary of Key Financial Measures for Short-Term Development Phase

Key Financial Measure	Short-Term Development			
	FY 2018-19 Budget	Master Plan Forecast (Average)	High-Growth (Average)	Low-Growth (Average)
CPE (2019$ assuming 2% discount)[1]	$7.07	$9.41	$7.87	$12.60
Debt service coverage[1]	7.63x	1.67x	1.86x	1.37x[3]
Days cash on hand[1]	449	365	368	316[4]
Debt per enplaned passenger [2]	$8	$152	$140	$175
Sources: Trillion Aviation (forecast)				

[1] Averages are based on model results for FY 2023-24 through FY 2026-27.
[2] Averages are based on model results for FY 2020-21 through FY 2023-24.
[3] Forecast minimum is 1.32x, which is below RTAA's target of 1.50x debt service coverage; however, remains above 1.25x requirement.
[4] Below RTAA's target of 365 days of cash on hand.

Table 5-7: Summary of Key Financial Measures for Mid-Term Development Phase

Key Financial Measure	Mid-Term Development			
	FY 2018-19 Budget	Master Plan Forecast (Average)	High-Growth (Average)	Low-Growth (Average)
CPE (2019$ assuming 2% discount)[1]	$7.07	$12.60	$10.61	$17.08
Debt service coverage[1]	7.63x	1.50x[3]	1.68x	1.20x[4]
Days cash on hand[1]	449	386	431	240[5]
Debt per enplaned passenger [2]	$8	$191	$177	$235
Sources: Trillion Aviation (forecast)				

[1] Averages are based on model results for FY 2027-28 through FY 2035-36.
[2] Averages are based on model results for FY 2024-25 through FY 2035-36.
[3] Certain forecast years are below RTAA's target of 1.50x debt service coverage; however, remain above the 1.25x requirement.
[4] Many forecast years are below RTAA's debt service requirement of 1.25x.
[5] Below RTAA's target of 365 days of cash on hand.

Financial Benchmarks Comparison

To provide some context and comparison, the financial analysis also includes comparisons between the results of the financial forecast analysis and various information contained in Moody's Investors Service U.S. Airport Medians for FY 2016. Moody's provides financial median data each year for all the airport operators for whom it provides bond rating services. Data for FY 2016 was published in October 2017 and is the latest data available.

Table 5-8 below presents the key financial measures from Moody's as well as the average from the financial forecast analysis for the RTAA in undertaking the Master Plan CIP. Financial results for the Short-Term and Mid-Term development phases are shown assuming the Master Plan enplaned passenger growth forecast.

Moody's provides its data for many airport categories. For this comparison, categories related to RNO were chosen and include: A1 rated airports, origin-destination (O&D) airports, other Small Hubs, other Medium Hubs (due to the Airport being one of the largest Small Hubs), and other airports with a compensatory/hybrid airline rate-making methodology.

Table 5-8: Financial Benchmark Comparisons

Key Financial Measure	Moody's U.S. Airport Medians					Master Plan Forecast (Average)	
	A1 Rated	O&D	Small Hub	Med Hub	Comp/Hybrid	Short-Term	Mid-Term
CPE (2019$ assuming 2% rate)	$9.26	$8.87	$8.71	$8.89	$8.19	**$9.41**	**$12.60**
Debt service coverage	1.91x	2.01x	2.07x	2.08x	2.05x	**1.67x**	**1.50x**
Days cash on hand	564	615	563	716	619	**365**	**386**
DPE (2019$ assuming 2% rate) [1]	$82	$73	$67	$64	$60	**$152**	**$191**

Sources: RTAA management data and information; Moody's Investors Service, "US Airport Medians for FY 2016," October 27, 2017; Trillion Aviation (forecast and escalation of Moody's data to FY 2018-19 dollars)
[1] Medians for DPE are presented in FY 2019 dollars assuming a 2% annual escalation rate. Amounts for Master Plan average are in nominal dollars.

As discussed above, to implement the Master Plan CIP, the RTAA is forecast to issue future debt and use its internally generated cash for funding.

In general, the resulting RNO forecast averages compares well with U.S. medians in the airport category of CPE for the Short-Term development phase. CPE for the Mid-Term development phase increases above U.S. airport median comparisons.

With airport revenue bonds forecast to be a significant source of funding for the Master Plan CIP, key financial metrics are not as favorable as current conditions. Three areas of note include the comparison of debt service coverage, days cash on hand, and DPE. With the debt and use of RTAA cash and investments, the other airports fare somewhat better for these measures. However, debt service coverage and days of cash on hand are within prudent limits. The forecast DPE ratio is well above the other median comparisons but is also what is expected for an airport issuing a significant amount of debt to fund its capital program. These key financial forecast metrics should not result in the bond rating agencies establishing a credit rating for RTAA below investment grade. However, the rating may be lower than the "A" rating with a stable outlook enjoyed by the RTAA in 2015 prior to debt issuance necessary to fund the Master Plan improvements.

Spaghetti Bowl Impacts

In 2017, the Nevada Department of Transportation (NDOT) initiated environmental efforts for the Spaghetti Bowl project, which will reconstruct the Interstate 80 / Interstate 580 system-to-system interchange. Some of NDOT's alternatives remove the airport direct connect ramps. Removal of the direct connect ramps negatively impacts airport connectivity to off-airport ground transportation infrastructure and ease of access into RNO. In 2018, the RTAA contracted with Kittelson & Associates, a transportation engineering and planning firm, to develop alternatives to NDOT's alternatives that maintain ground access connectivity for airport users and work with the landside development alternatives. NDOT and the local metropolitan planning organization, the Regional Transportation Commission of Washoe County, have indicated that financial participation by the RTAA may be requested based on the resultant alternative.

The potential financial impacts of RTAA funding participation have been analyzed on a preliminary basis using the following assumptions for the project:

- Total RTAA cost of $100 million in 2018 dollars
  - Costs estimates for the current NDOT alternatives have not been provided by NDOT. As a result, the $100 million project estimate is a placeholder to analyze potential impacts to the RNO Master Plan CIP projects.
- Funding required during the mid-term development phase
  - With a 3 percent escalation rate, the project cost increases to approximately $112 million.
- Use of the Baseline Master Plan enplanement forecast

- Project not eligible for FAA AIP or PFC funding
  - FAA AIP and PFC funding for ground transportation infrastructure between the terminal facilities and the closest freeway is an eligible expense, if and only if, all investment is made on airport-owned property. Additionally, the eligible portion is restricted to the pro-rated share used by dedicated airport traffic.
  - Usage of FAA AIP and/or PFC funding typically only occurs at airports owned by cities, counties, or states that also maintain other public roadway infrastructure.
  - Most likely funding sources limited to airport revenue bonds and a minimal amount of RTAA cash.
- No ongoing operations and maintenance funding required

The results of the preliminary analysis are as follows:

- When the project is included into the Master Plan CIP without any other changes:
  - Total airport revenue bond funding requirements increase by more than $100 million.
  - Total annual debt service increases by an estimated $10 million. Debt service coverage ratios drop below the minimum requirement of 1.25x to a low of 1.11x.
  - Airline CPE levels increase to over $18. DPE peaks at just under $300.
  - Days of cash on hand drop below 365 days to a low in the range of 220 days.
  - As a result, the Master Plan CIP would become unaffordable at the mid-term development phase without the elimination of some of the recommended Master Plan CIP projects.
- When the project is included into the Master Plan CIP and the New Concourse B development is eliminated:
  - Total airport revenue bond funding requirements decrease by approximately $30 million.
  - Total annual debt service increases by an estimated $3 million. Debt service coverage ratios decrease to just above 1.25x. Coverage ratios continue to decrease under this example, because there are increased airline terminal rates and charges that would pay for increased debt service costs with the elimination of New Concourse B.
  - Airline CPE levels increase to between $14-$15. DPE increases minimally.
  - Days of cash on hand drop below 365 days to a low in the range of 330 days.
  - As a result, the Master Plan CIP with the elimination of New Concourse B would be in the upper range of affordability; however, debt service coverage ratios would fall below the 1.50x target levels. New Concourse B would remain beyond available revenue bond capacity for the long-term, and RNO would end up with a New Concourse C and an old Concourse B, creating a disparity in the level of facilities for its airlines, tenants, and customers.

Summary

Implementing and funding the Master Plan CIP for RNO will largely be a function of federal, third party, and RTAA local funding sources (PFCs, CFCs, and RTAA cash and investments) available at the time of specific project implementation. Due to the conceptual nature of a master plan, implementation of most of these capital projects should occur only after further refinement of their costs and timing.

The financial feasibility of the Master Plan CIP is based on several factors, most notable is the level of external funding sources the RTAA is able to secure to fund the various CIP projects. While the previous sections identified the eligibility levels available for certain CIP projects from the FAA, PFCs, and other potential sources, there is no guarantee that these funds will be made available in any given year, or if they are, that they will be funded at the full eligibility levels.

As indicated in the previous sections, given the size and scope of the RNO Master Plan CIP, it appears likely that the RTAA will need to issue some form of long-term debt to fully implement the projects, particularly over the next five to ten years. Given forecast funding needs, there are many approaches that the RTAA can use to undertake the CIP projects and ensure their financial feasibility, including:

- Defer or delay capital project cost expenditures
  - The actual implementation schedule for certain capital projects identified in the Master Plan will be defined by development triggers and demand growth rather than by specific years. If certain funding sources are not available or that financial feasibility cannot be achieved when a project is needed, the RTAA may need to defer certain projects until appropriate funding sources can be obtained.
  - In addition, rather than deferring whole projects, in some cases, projects can be completed in smaller phases over several years to help increase the participation from other funding sources and spread out local funding requirements. Constant monitoring and updating of the RTAA's capital needs and available funding sources will be critical to successful implementation of the Master Plan CIP.
- Seek FAA Discretionary Grant Funds
  - As discussed previously, based on the RTAA's annual FAA entitlement grant collections and the estimated level of eligible project costs, the RTAA will likely need additional discretionary funding from the FAA to fund all its AIP eligible project costs. If these additional FAA discretionary funds are not successfully secured, the RTAA will need to either defer projects, reduce scope, evaluate the use of other funding sources, or pursue a combination of these strategies.
- Prioritize third-party tenant projects
  - As identified in the Master Plan CIP, certain projects, primarily to support categories of GA, cargo, and maintenance tenants, are forecast to require some form of third-party funding participation. These are demand-driven projects that should only be undertaken when demand warrants and the project can be as self-supporting as possible.
  - In addition, ideally these projects could generate additional net revenues that could help the RTAA's financial operation. As such, it will be important for the RTAA to thoroughly review each third-party tenant project to ensure it will be supported by anticipated demand and generate sufficient cash flow for the RTAA.

- Issue Airport Bonds
  - As discussed earlier, to fund a significant portion of large capital projects, airports typically issue long-term debt to help defray upfront expenditures and mitigate the impacts to its available cash balances. In addition, special facility debt can be issued for certain revenue-producing projects that are secured by a pledge of the revenues to be produced by the proposed facility.
  - While issuing long-term debt can be an effective approach for implementing certain projects and minimizing up-front cash expenditures, it is important to ensure that the RTAA's expected net revenues not only pay for the expected annual debt service, but also generate the required minimum debt service coverage ratio of 1.25X. With the volatility experienced in the national and regional economy and its impact on passenger traffic, the debt service coverage ratio should be established at 1.5X under a low-growth traffic scenario, which would most likely require deferment and/or a re-evaluation of the Master Plan CIP.
- Evaluate P3 Arrangements
  - With airports being critical infrastructure assets within the U.S. transportation network, private sector participation in developing, funding, and/or operating various airport assets is a growing trend. The RTAA should explore potential P3 opportunities when the need for capital development becomes a higher priority than financial viability under traditional methods. There are tradeoffs with entering into a P3 approach and significant variation in the structure of these business arrangements. Therefore, the RTAA should evaluate each opportunity closely to ensure it meets its goals and objectives.

Note that any changes to the assumptions contained herein, especially those related to forecasts of enplaned passengers, could materially impact the financial viability of the Master Plan CIP for the RTAA. While RTAA staff and the Consulting team believe the approach and assumptions used are reasonable, achievement of forecast results described in this analysis are dependent on future events, the outcome of which could differ materially from the assumptions presented herein. Also, as previously mentioned, due to the conceptual nature of a master plan, implementation of these capital projects should occur only after further refinement of their costs. As a result, the project capital costs developed must be viewed as preliminary, reflecting a master plan level of detail subject to refinement in subsequent implementation steps.