

## AIRPORT PROGRAM

The Airport Program is administered by the Airport Department. Manassas Regional Airport staff continues to undertake projects that ensure that the airport maintains safe, modern facilities that incorporate the latest in aviation technology which are within its available resources. The primary types of projects that the Airport undertakes are planning, safety and capacity, rehabilitation, and revenue generation.

Serving the Washington, D.C. Region for more than 50 years, Manassas Regional Airport is the largest executive regional airport in Virginia.



The airport continues to maximize federal and state participation in funding its capital projects. The Federal Aviation Administration (FAA) funds ninety percent (90%) of eligible airport capital projects.

### FY 2018 CAPITAL PROJECTS

#### North End West Apron Rehabilitation (A-040)

Anticipate grant funding to begin design work

#### Mid-Field West Apron Rehabilitation (A-067)

Anticipate grant funding to begin the rehabilitation of the runway. Planning grants have already been received.

#### Installation of Security Fiberline (A-080)

Anticipate grant funding to move forward with the installation of fiber lines throughout the airport.

The timing of these projects depends on the receipt of grant awards from the State and/or Federal government.



### PRIOR YEAR ACCOMPLISHMENTS

#### Mid-Field West Apron Rehabilitation (A-067)

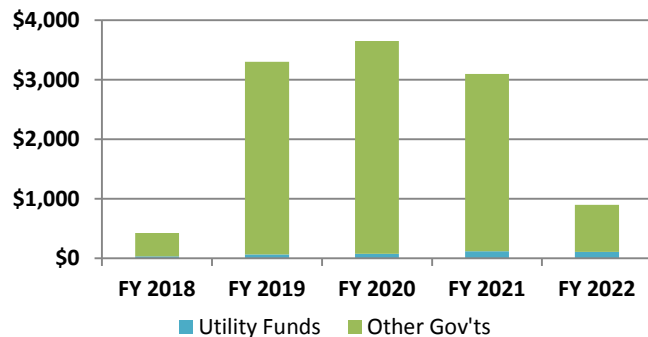
Design work has been completed.

### THE FIVE-YEAR PLAN (FY 2018 – FY 2022)

The FY 2018 Adopted Five-Year Capital Improvement Program (CIP) includes

- \$397,000 Airport Fund
- \$1,572,000 State Aid
- \$9,405,000 Federal Aid

In FY 2018 funding consists of a \$34,000 transfer from the Airport Fund; \$120,000 in State Grants; and \$270,000 in Federal Grants.



(Dollars in Thousands)

### FY 2018 CAPITAL MAINTENANCE PROJECTS

Airport Paving Program (outside airfield)  
Update Airfield Regulators  
Replace Tower Rooftop A/C Unit  
Installation of Additional Perimeter Security Gates  
Airfield Paving Program

The timing of these projects depends on the receipt of grant awards from the State and/or Federal government.

### NEW CAPITAL PROJECTS

Installation of Security Fiberline (A-080)  
Midfield Ditch Restoration (A-082)

### NEW MAINTENANCE CAPITAL PROJECTS

Replace Tower Rooftop A/C Unit  
Installation of Additional Perimeter Security Gates  
Airfield Paving Program

## SUMMARY OF AIRPORT CAPITAL PROJECTS

(\$ in Thousands)

| <b>Cost Estimates:</b>    | <b>Prior<br/>Years</b> | <b>FY 2018</b> | <b>FY 2019</b> | <b>FY 2020</b> | <b>FY 2021</b> | <b>FY 2022</b> | <b>Future</b> | <b>Total<br/>Project</b> | <b>5-Year<br/>CIP</b> |
|---------------------------|------------------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------------|-----------------------|
| Planning                  | 200                    | 300            | 300            | 250            | 50             | 400            | 1,000         | 2,500                    | 1,300                 |
| Land                      | -                      | -              | -              | -              | -              | -              | 3,000         | 3,000                    | -                     |
| Construction              | 2,496                  | 124            | 3,000          | 3,400          | 3,050          | 500            | 15,500        | 28,070                   | 10,074                |
| <b>Total Cost</b>         | <b>2,696</b>           | <b>424</b>     | <b>3,300</b>   | <b>3,650</b>   | <b>3,100</b>   | <b>900</b>     | <b>19,500</b> | <b>33,570</b>            | <b>11,374</b>         |
| <b>Funding Sources:</b>   |                        |                |                |                |                |                |               |                          |                       |
| General Fund              | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| Sewer Fund                | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| Water Fund                | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| Electric Fund             | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| Stormwater Fund           | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| Airport Fund              | 50                     | 34             | 66             | 73             | 116            | 108            | 800           | 1,247                    | 397                   |
| School Fund               | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| Bonds                     | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| State                     | 216                    | 120            | 264            | 292            | 464            | 432            | 1,765         | 3,553                    | 1,572                 |
| Federal                   | 2,430                  | 270            | 2,970          | 3,285          | 2,520          | 360            | 16,935        | 28,770                   | 9,405                 |
| NVTA                      | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| Other Sources             | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| <b>Total Funding</b>      | <b>2,696</b>           | <b>424</b>     | <b>3,300</b>   | <b>3,650</b>   | <b>3,100</b>   | <b>900</b>     | <b>19,500</b> | <b>33,570</b>            | <b>11,374</b>         |
| <b>Operating Impacts:</b> |                        |                |                |                |                |                |               |                          |                       |
| Revenue                   | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| Staffing (Costs) Savings  | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| Facility (Costs) Savings  | -                      | -              | -              | -              | -              | 1              | -             | 1                        | 1                     |
| Program (Costs) Saving    | -                      | -              | -              | -              | -              | 1              | -             | 1                        | 1                     |
| Debt Service              | -                      | -              | -              | -              | -              | -              | -             | -                        | -                     |
| <b>Net Revenue</b>        | <b>-</b>               | <b>-</b>       | <b>-</b>       | <b>-</b>       | <b>-</b>       | <b>2</b>       | <b>-</b>      | <b>2</b>                 | <b>2</b>              |

### Program Highlights:

The FY 2018 Adopted Five-Year CIP includes \$11,374,000 for the Airport Program, which reflects a decrease of \$1,838,000 or 13.9% from the FY 2017 Adopted Five-Year CIP. This decrease is a result of the timing of projects based on funding availability from the FAA and the VA Department of Aviation. While funding was included in prior years, construction for Mid-Field West Apron Rehabilitation is planned for FY 2018.

# AIRPORT CAPITAL PROJECT LISTING

(\$ in Thousands)

| Project Name                | Prior Years  | FY 2018    | FY 2019      | FY 2020      | FY 2021      | FY 2022    | Future        | Total Project | 5-Year CIP    |
|-----------------------------|--------------|------------|--------------|--------------|--------------|------------|---------------|---------------|---------------|
| Air Traffic Control Tower   | -            | -          | -            | -            | -            | -          | 7,600         | 7,600         | -             |
| Upgrade Runway 16R/3        | -            | -          | -            | 400          | -            | -          | -             | 400           | 400           |
| Realignment of Wakema       | -            | -          | -            | -            | -            | -          | 3,850         | 3,850         | -             |
| Land Acquisition Southw     | -            | -          | -            | -            | -            | -          | 3,000         | 3,000         | -             |
| North End West Apron R      | -            | 300        | 3,000        | -            | -            | -          | -             | 3,300         | 3,300         |
| Fuel Farm Update            | -            | -          | -            | -            | -            | -          | 550           | 550           | -             |
| Mid-field West Apron Re     | 2,696        | 4          | -            | -            | -            | -          | -             | 2,700         | 4             |
| Taxiway A Rehabilitation    | -            | -          | -            | 250          | 2,250        | -          | -             | 2,500         | 2,500         |
| Runway 16R/34L Rehabi       | -            | -          | 300          | 3,000        | -            | -          | -             | 3,300         | 3,300         |
| North East Apron Expan      | -            | -          | -            | -            | -            | 100        | 1,200         | 1,300         | 100           |
| Rehabilitate and Widen      | -            | -          | -            | -            | -            | 300        | 3,000         | 3,300         | 300           |
| Terminal Parking Lot Ex     | -            | -          | -            | -            | 50           | 500        | -             | 550           | 550           |
| Upgrade Taxiway A Ligh      | -            | -          | -            | -            | 300          | -          | -             | 300           | 300           |
| Installation of Security Fi | -            | 120        | -            | -            | -            | -          | -             | 120           | 120           |
| Midfield Ditch Restoratio   | -            | -          | -            | -            | 250          | -          | -             | 250           | 250           |
| Installation of Backup G    | -            | -          | -            | -            | 250          | -          | 300           | 550           | 250           |
| <b>Total</b>                | <b>2,696</b> | <b>424</b> | <b>3,300</b> | <b>3,650</b> | <b>3,100</b> | <b>900</b> | <b>19,500</b> | <b>33,570</b> | <b>11,374</b> |

# A-032 Upgrade Runway 16R/34L Lighting System and PAPIs

**Year Introduced:** 2003  
**Change:** No change  
**Associated Proj:** A-070  
**Program Area:** Airport  
**Managing Dept:** Airport  
**Manager:** J. Rivera

**Plan Conformance:**  
 Comprehensive Plan 6.1.4  
 Airport Master Plan

**Est. Start:** 7/31/2019  
**Est. Complete:** 12/30/2019



## Description:

Replace the Precision Approach Path Indicators (PAPIs) for Runway 16R-34L during the next major rehabilitation of the runway. Over time, the PAPIs are exposed to harsh weather conditions and their reliability is reduced. As part of this project the runway lighting system will be upgraded to LED lights. This would include replacing the regulators and light fixtures. The transformers would no longer be needed.

| <b>Cost Estimate:</b> (\$ in 1,000s) | <b>Prior Years</b> | <b>FY 2018</b> | <b>FY 2019</b> | <b>FY 2020</b> | <b>FY 2021</b> | <b>FY 2022</b> | <b>Future</b> | <b>Total Project</b> |
|--------------------------------------|--------------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------------|
| Planning                             | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Land                                 | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Construction                         | -                  | -              | -              | 400            | -              | -              | -             | 400                  |
| <b>Total Cost</b>                    | -                  | -              | -              | <b>400</b>     | -              | -              | -             | <b>400</b>           |

## Funding Sources: (\$ in 1,000s)

|                      |   |   |   |            |   |   |   |            |
|----------------------|---|---|---|------------|---|---|---|------------|
| General Fund         | - | - | - | -          | - | - | - | -          |
| Sewer Fund           | - | - | - | -          | - | - | - | -          |
| Water Fund           | - | - | - | -          | - | - | - | -          |
| Electric Fund        | - | - | - | -          | - | - | - | -          |
| Stormwater Fund      | - | - | - | -          | - | - | - | -          |
| Airport Fund         | - | - | - | 8          | - | - | - | 8          |
| School Fund          | - | - | - | -          | - | - | - | -          |
| Bonds                | - | - | - | -          | - | - | - | -          |
| State                | - | - | - | 32         | - | - | - | 32         |
| Federal              | - | - | - | 360        | - | - | - | 360        |
| NVTA                 | - | - | - | -          | - | - | - | -          |
| Other Sources        | - | - | - | -          | - | - | - | -          |
| <b>Total Funding</b> | - | - | - | <b>400</b> | - | - | - | <b>400</b> |

## Operating Impacts: (\$ in 1,000s)

|                          |   |   |   |   |   |          |   |          |
|--------------------------|---|---|---|---|---|----------|---|----------|
| Revenue                  | - | - | - | - | - | -        | - | -        |
| Staffing (Costs) Savings | - | - | - | - | - | -        | - | -        |
| Facility (Costs) Savings | - | - | - | - | - | 1        | - | 1        |
| Program (Costs) Savings  | - | - | - | - | - | -        | - | -        |
| Debt Service             | - | - | - | - | - | -        | - | -        |
| <b>Net Revenue</b>       | - | - | - | - | - | <b>1</b> | - | <b>1</b> |

















# A-079 Upgrade Taxiway A Lighting System

**Year Introduced:** 2017  
**Change:** No change  
**Associated Proj:** A-069  
**Program Area:** Airport  
**Managing Dept:** Airport  
**Manager:** J. Rivera

**Plan Conformance:**  
 Comprehensive Plan 6.1.4  
 Airport Master Plan  
 Airport Strategic Plan

**Est. Start:** 10/4/2021  
**Est. Complete:** 6/30/2022



## Description:

The taxiway lighting system and airfield signs for Taxiway A have reached their useful life and need to be replaced. The current system will be replaced with LED lights and regulators that are more energy efficient and will save the airport money over the long term. The FAA has approved the use of LED lights for general aviation airport taxiways.

| <b>Cost Estimate:</b> (\$ in 1,000s)     | <b>Prior Years</b> | <b>FY 2018</b> | <b>FY 2019</b> | <b>FY 2020</b> | <b>FY 2021</b> | <b>FY 2022</b> | <b>Future</b> | <b>Total Project</b> |
|--|--------------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------------|
| Planning                                 | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Land                                     | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Construction                             | -                  | -              | -              | -              | 300            | -              | -             | 300                  |
| <b>Total Cost</b>                        | -                  | -              | -              | -              | <b>300</b>     | -              | -             | <b>300</b>           |
| <b>Funding Sources:</b> (\$ in 1,000s)   |                    |                |                |                |                |                |               |                      |
| General Fund                             | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Sewer Fund                               | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Water Fund                               | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Electric Fund                            | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Stormwater Fund                          | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Airport Fund                             | -                  | -              | -              | -              | 6              | -              | -             | 6                    |
| School Fund                              | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Bonds                                    | -                  | -              | -              | -              | -              | -              | -             | -                    |
| State                                    | -                  | -              | -              | -              | 24             | -              | -             | 24                   |
| Federal                                  | -                  | -              | -              | -              | 270            | -              | -             | 270                  |
| NVTA                                     | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Other Sources                            | -                  | -              | -              | -              | -              | -              | -             | -                    |
| <b>Total Funding</b>                     | -                  | -              | -              | -              | <b>300</b>     | -              | -             | <b>300</b>           |
| <b>Operating Impacts:</b> (\$ in 1,000s) |                    |                |                |                |                |                |               |                      |
| Revenue                                  | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Staffing (Costs) Savings                 | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Facility (Costs) Savings                 | -                  | -              | -              | -              | -              | -              | -             | -                    |
| Program (Costs) Savings                  | -                  | -              | -              | -              | -              | 1              | -             | 1                    |
| Debt Service                             | -                  | -              | -              | -              | -              | -              | -             | -                    |
| <b>Net Revenue</b>                       | -                  | -              | -              | -              | -              | <b>1</b>       | -             | <b>1</b>             |







**AIRPORT FUTURE YEARS PROJECTS SUMMARY**

(\$ in Thousands)

| <b>Project #</b> | <b>Project Name and Description</b>  | <b>COST</b> | <b>SOURCE</b>               |
|------------------|--|-------------|-----------------------------|
| A-030            | <p><b>Air Traffic Control Tower</b><br/>Design/construct Airport Traffic Control Tower to be located west of the existing site. Options: 1.) FAA builds and maintains; 2.) City builds, FAA leases for bond/interest payments; 3.) City builds and FAA leases for bond interest payments and operating costs. The tower is at the end of its useful life and the maintenance cost is steadily increasing.<br/>(Project II-12 of Airport Layout Plan)</p> | \$ 7,600    | Airport / State/<br>Federal |
| A-033            | <p><b>Realignment of Wakeman Drive &amp; Observation Road</b><br/>Design and relocate Wakeman Drive and parts of Observation Road to capture more usable airside land. The road has been deeded to the City as surplus property, so the project will be coordinated with Public Works. With the increase in the amount of usable airside land, the airport could build hangars, ramps, etc.<br/>(Project III-10 of Airport Layout Plan)</p>              | \$ 3,850    | Airport / State/<br>Federal |
| A-034            | <p><b>Land Acquisition Southwest Side of Airport</b><br/>Purchase property located on the southwest side of the airport, south of Broad Run. The land would serve as a buffer for the airport. It could allow development of an Airport Business Park and expansion on the southwest side, allowing the airport to expand its infrastructure or to add hangars/ramps, thereby increasing revenue.</p>  | \$ 3,000    | Airport / State/<br>Federal |
| A-045            | <p><b>Fuel Farm Update</b><br/>The fuel farm is approaching 25 years of age. There are approximately 3 million gallons of fuel that flow through the farm annually. As the fuel farm ages, the airport will need to upgrade and repair the facility. This may include expansion of the containment area and possible environmental regulation upgrades. This project is not on the Airport Layout Plan.</p>  | \$ 550      | Airport / State             |



# AIRPORT MAINTENANCE CAPITAL PROJECT LISTING

(\$ in Thousands)

The City identifies Capital Projects as projects with a cost greater than \$100,000 **and** a useful life of 10+ years. The City recognizes that there are additional projects/needs that are capital in nature but do not meet the requirement set forth for a capital project. These additional projects/needs are considered Maintenance Capital Projects, a list of which is provided below for the Airport Program.

| Project Name               | Prior Years | FY 2018    | FY 2019    | FY 2020    | FY 2021    | FY 2022   | Future   | Total Project | 5-Year CIP   |
|----------------------------|-------------|------------|------------|------------|------------|-----------|----------|---------------|--------------|
| Airport Paving Program (   | 196         | 175        | 100        | 120        | -          | -         | -        | 591           | 395          |
| Master Plan Study          | -           | -          | -          | -          | 600        | -         | -        | 600           | 600          |
| Environmental Assessm      | 257         | -          | -          | -          | -          | -         | -        | 257           | -            |
| Replace Terminal Buildi    | 58          | -          | -          | -          | -          | -         | -        | 58            | -            |
| Update Airfield Regulato   | 27          | 33         | -          | -          | -          | -         | -        | 60            | 33           |
| Terminal Building Upgra    | -           | -          | -          | -          | -          | 35        | -        | 35            | 35           |
| Airport Alternative Energ  | -           | -          | -          | -          | -          | 35        | -        | 35            | 35           |
| Replace Tower Rooftop      | -           | 35         | -          | -          | -          | -         | -        | 35            | 35           |
| Installation of Additional | -           | 35         | -          | -          | -          | -         | -        | 35            | 35           |
| Airfield Paving Program    | -           | 100        | 100        | 100        | -          | -         | -        | 300           | 300          |
| <b>Total Cost</b>          | <b>538</b>  | <b>378</b> | <b>200</b> | <b>220</b> | <b>600</b> | <b>70</b> | <b>-</b> | <b>2,006</b>  | <b>1,468</b> |

## Funding Sources

|                      |            |            |            |            |            |           |          |              |              |
|----------------------|------------|------------|------------|------------|------------|-----------|----------|--------------|--------------|
| General Fund         | -          | -          | -          | -          | -          | -         | -        | -            | -            |
| Sewer Fund           | -          | -          | -          | -          | -          | -         | -        | -            | -            |
| Water Fund           | -          | -          | -          | -          | -          | -         | -        | -            | -            |
| Electric Fund        | -          | -          | -          | -          | -          | -         | -        | -            | -            |
| Stormwater Fund      | -          | -          | -          | -          | -          | -         | -        | -            | -            |
| Airport Fund         | 111        | 69         | 40         | 44         | 12         | 14        | -        | 290          | 179          |
| School Fund          | -          | -          | -          | -          | -          | -         | -        | -            | -            |
| Bonds                | -          | -          | -          | -          | -          | -         | -        | -            | -            |
| State                | 197        | 276        | 160        | 176        | 48         | 56        | -        | 913          | 716          |
| Federal              | 230        | 33         | -          | -          | 540        | -         | -        | 803          | 573          |
| NVTA                 | -          | -          | -          | -          | -          | -         | -        | -            | -            |
| Other Sources        | -          | -          | -          | -          | -          | -         | -        | -            | -            |
| <b>Total Funding</b> | <b>538</b> | <b>378</b> | <b>200</b> | <b>220</b> | <b>600</b> | <b>70</b> | <b>-</b> | <b>2,006</b> | <b>1,468</b> |

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