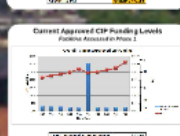
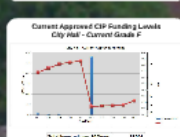
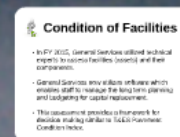
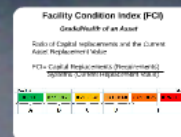
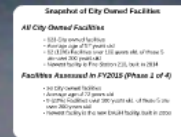
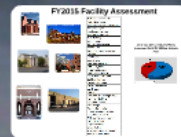
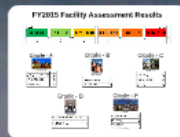


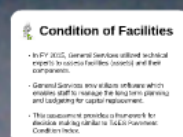
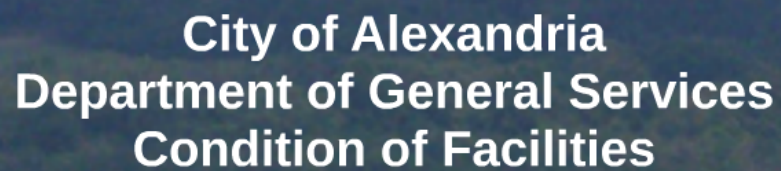


City of Alexandria

Department of General Services

Condition of Facilities







Condition of Facilities

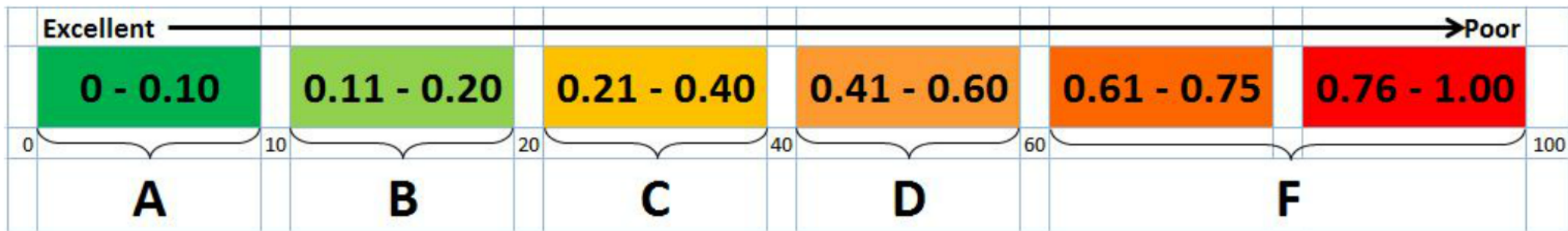
- In FY 2015, General Services utilized technical experts to assess facilities (assets) and their components.
- General Services now utilizes software which enables staff to manage the long term planning and budgeting for capital replacement.
- This assessment provides a framework for decision making similar to T&ES Pavement Condition Index.

Facility Condition Index (FCI)

Grade/Health of an Asset

Ratio of Capital replacements and the Current Asset Replacement Value

$$\text{FCI} = \frac{\text{Capital Replacements (Requirements)}}{\text{Systems (Current Replacement Value)}}$$



Snapshot of City Owned Facilities

All City Owned Facilities

- 123 City owned facilities
- Average age of 57 years old
- 12 (10%) Facilities over 100 years old, of those 5 are over 200 years old
- Newest facility is Fire Station 210, built in 2014

Facilities Assessed in FY2015 (Phase 1 of 4)

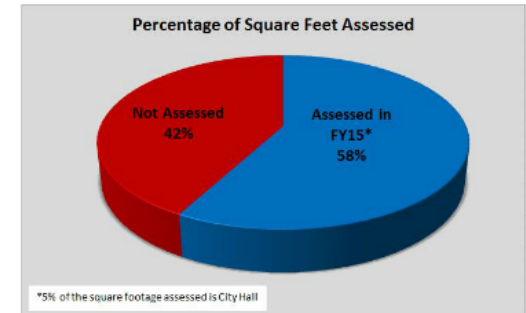
- 36 City owned facilities
- Average age of 72 years old
- 8 (22%) Facilities over 100 years old, of those 5 are over 200 years old
- Newest facility is the new DASH facility, built in 2008

FY2015 Facility Assessment



2900 Business Center Dr
Alexandria Community Shelter/Substance Abuse Facility
American Legion
Apothecary Museum
Archives and Records
Barrett Library
Beatley Library
Black History Museum
Burke Library
Charles Houston Recreation
City Hall
Courthouse
Duncan Library
Fleet Services Division
Flora Casey Clinic
Fort Ward Museum
Friendship Firehouse
Fuel Island - Duke Street
Gadsby's Museum
Gadsby's Restaurant
Health Department
Lloyd House
Lyceum
Market Square Parking Garage
New DASH Building
Old DASH Building
Pistol Range
Public Safety Center
Queen Lee Parking Garage
T&ES Impound Office
T&ES Maintenance Division
T&ES Traffic Shop
Torpedo Factory
Union Station
Vola Lawson Animal Shelter
Watson Reading Room

36 of 123 (29%) City Facilities Assessed for 1.27 Million Square Feet



Future Assessments

FY16 Assessments

Chinquapin Rec Center
Fire Station 201
Fire Station 202
Fire Station 204
Fire Station 205
Fire Station 206
Fire Station 207
Fire Station 208
Fire Station 209

FY17 Assessments

Adult Daycare
Buddy Ford Center
Charles Barrett Rec Center
Cora Kelly Rec Center
Courthouse Garage
Durant Recreation Center
Fire Training
Lee Center
Mount Vernon Rec Center
Nannie Lee Rec Center
Nick Colasanto Center
Old Animal Shelter
Ramsay House
Ramsay Rec Center
Thompson Alley Parking Garage

FY18-20 Assessments

FY18

APD
APD Garage
FS210

FY19

No Building Assessments
this Fiscal Year

Conducting feasibility study
for Courthouse and
Layout Study/Design for
T&ES Shop

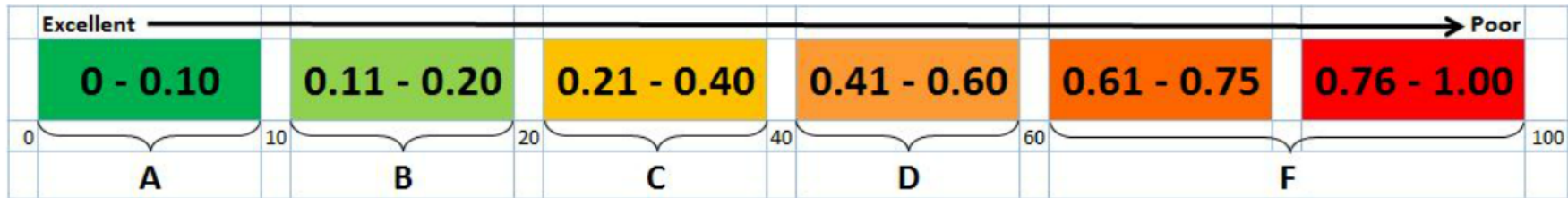
FY20

Start of the
new
assessment
cycle

NOT ASSESSING UNTIL NEW ASSESSMENT CYCLE STARTS IN FY20

Patrick Henry
FS203
Canine Facility

FY2015 Facility Assessment Results



Grade - A



Charles Houston

New DASH Building	0.00
Charles Houston Recreation Center	0.02
Business Center Drive	0.03
T&ES Maintenance Division	0.04
Queen Lee Parking Garage	0.06
Burke Library	0.08
Friendship Fire House	0.08
T&ES Impound Office	0.09

Grade - B



Beatley Library

Lyceum	0.11
Vola Lawson Animal Shelter	0.11
Union Station	0.12
Beatley Library (Central)	0.13
Duncan Library	0.14

Grade - C



Barrett Library

Barrett Library	0.27
Torpedo Factory	0.30
Watson Reading Room	0.31
Market Square Parking Garage	0.31
Public Safety Center (PSC)	0.32
Fort Ward Museum	0.32
Lloyd House	0.35
Apothecary Museum	0.39

Grade - D



Courthouse

Alexandria Community Shelter/Substance Abuse Facility	0.42
Pistol Range	0.44
Archives and Records Center	0.48
Fleet Services Division	0.49
Black History Resource Center	0.52
Courthouse	0.59
T&ES Traffic Shop	0.60

Grade - F



City Hall

City Hall	0.63
Fuel Island - Duke Street	0.66
Gadsby's Tavern Museum	0.70
Old DASH Building	0.71
Flora Casey Clinic	0.74
Health Department	0.75
American Legion	0.77
Gadsby's Tavern Restaurant	1.13

Grade - A



Charles Houston

New DASH Building	0.00
Charles Houston Recreation Center	0.02
Business Center Drive	0.03
T&ES Maintenance Division	0.04
Queen Lee Parking Garage	0.06
Burke Library	0.08
Friendship Fire House	0.08
T&ES Impound Office	0.09

Grade - B



Beatley Library

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Grade - F



City Hall

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Fuel Island - Duke Street	0.66
Gadsby's Tavern Museum	0.70
Old DASH Building	0.71
Flora Casey Clinic	0.74
Health Department	0.75
American Legion	0.77
Gadsby's Tavern Restaurant	1.13

FY 2015 Assessment Overview

Phase 1 (36 of 3 Facilities)

- \$136 million to get Grade A buildings today (FY 2017).
 - Current approved for FY 2017 - \$2.6 million
 - Additional needed - \$133.4 million
- \$272 million to get Grade A buildings at the end of ten years.
 - Current approved for 10 years - \$56 million
 - Additional needed - \$216 million
- \$157 million to get Grade C buildings at the of ten years.
 - Current approved for 10 years - \$56 million
 - Additional needed - \$101 million

Examples of Major Capital Replacements Identified

City Hall - 1873 (143 years old with major additions/renovations completed in 1940 and 1980)

Solid Brick Wall - 1873 mortar replacement
Estimated Cost - \$3.6 million



- Age - 143 years old
- Average life expectancy - 75 years

Boiler - Gas fired
Estimated Cost - \$200,000



- Age - 70 years old
- Average life expectancy - 30 years

Structural Capacity - Failing throughout building
Estimated Cost - \$2.9 million



Spanning between Iron Beams



Wood Truss in attic



Rafters at the exterior wall



Unsupported rafters in attic

Steel Windows Replacement - 1960 windows
Estimated Cost - \$470,000



- Age - 56 years old
- Average life expectancy - 30 years

Solid Brick Wall - 1873 mortar replacement

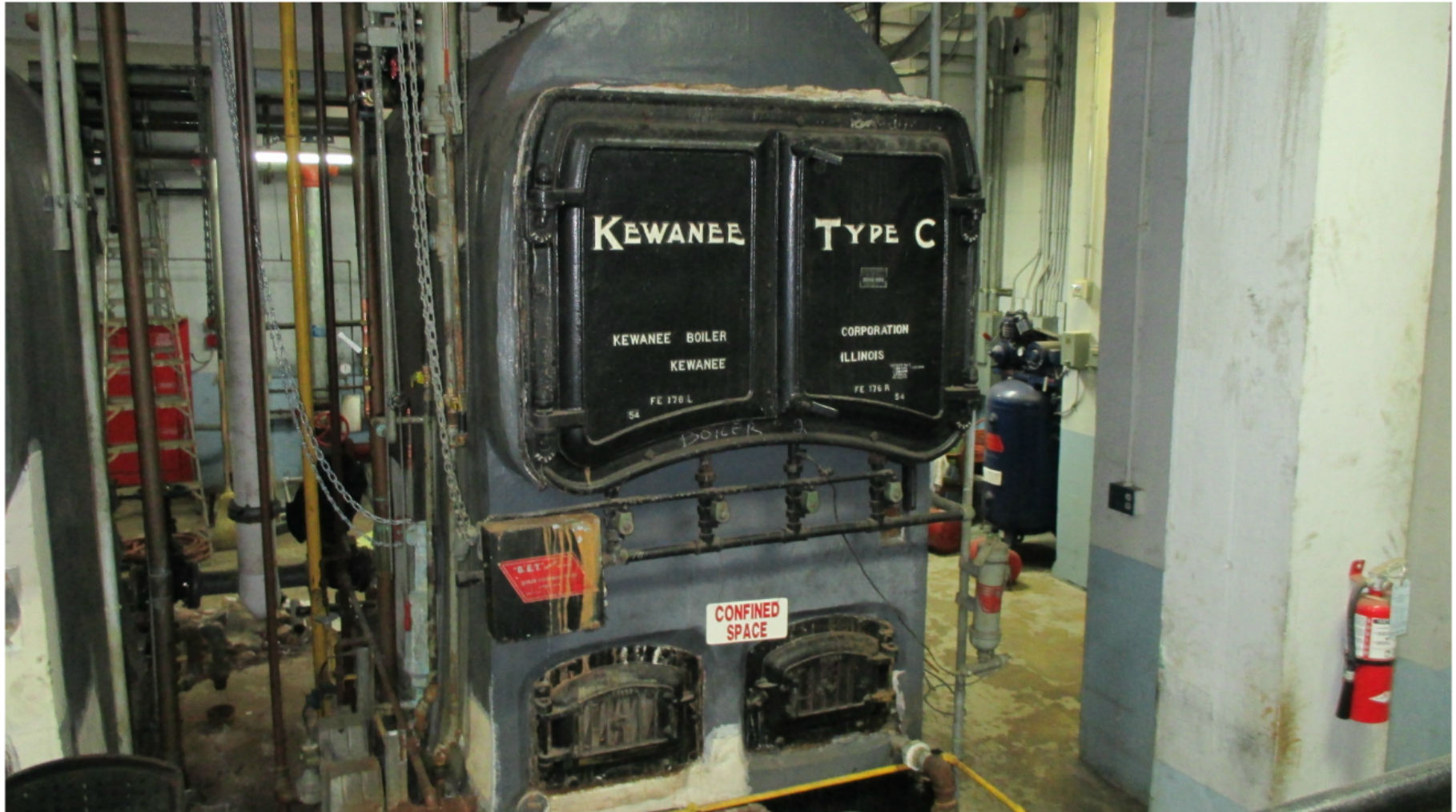
Estimated Cost - \$3.6 million



- Age - 143 years old
- Average life expectancy - 75 years

Boiler - Gas fired

Estimated Cost - \$200,000



- Age - 70 years old
- Average life expectancy - 30 years

Steel Windows Replacement - 1960 windows

Estimated Cost - \$470,000



- Age - 56 years old
- Average life expectancy - 30 years

Current Approved CIP Funding Levels

City Hall - Current Grade F



Total Invested over 10 Years

\$30M

Resulting FCI

Grade C - 0.23

Current Approved CIP Funding Levels

Facilities Assessed in Phase 1



Total Invested over 10 Years

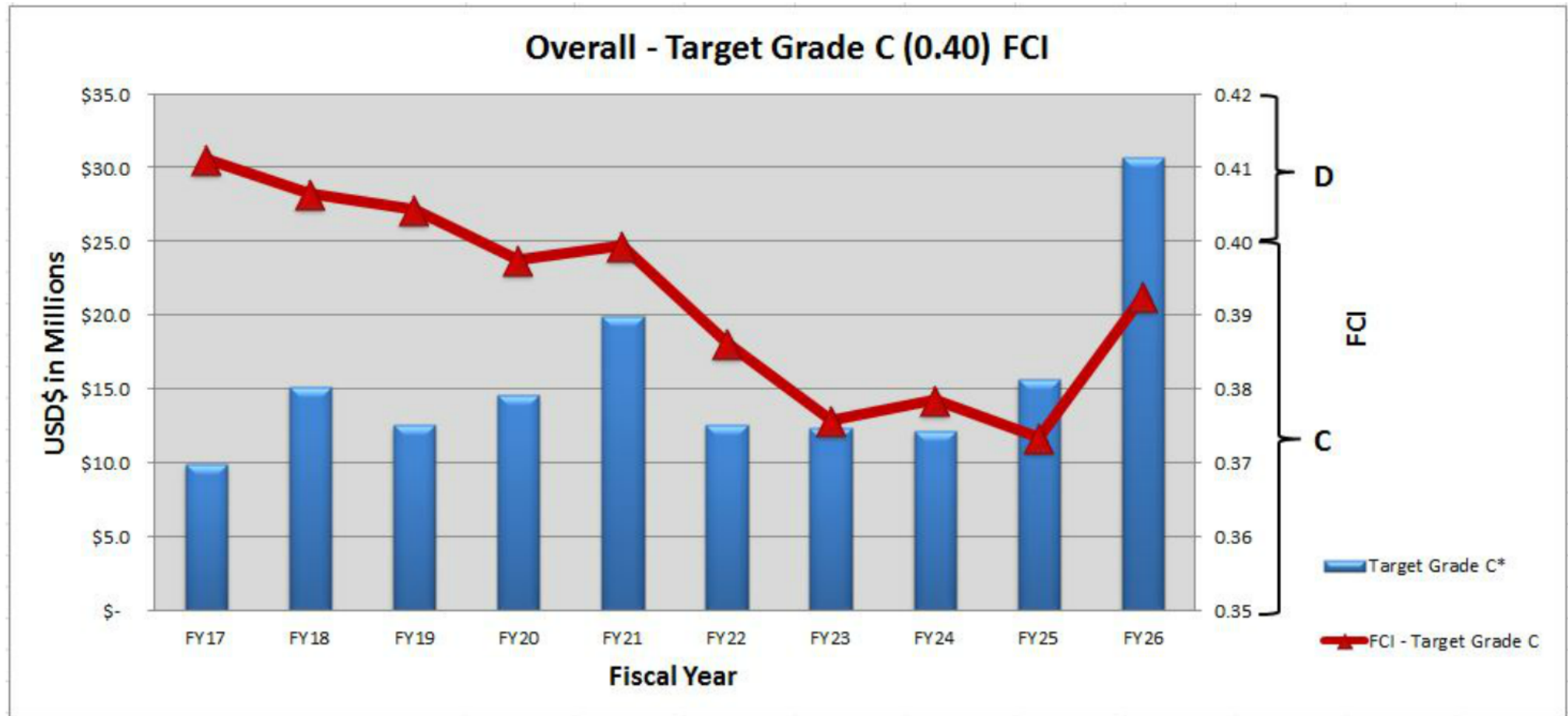
\$56M

Resulting FCI

Grade F - 0.63

Funding Needed for Grade C (0.40) FCI in 10 Years

Facilities Assessed in Phase 1



Total Invested over 10 Years

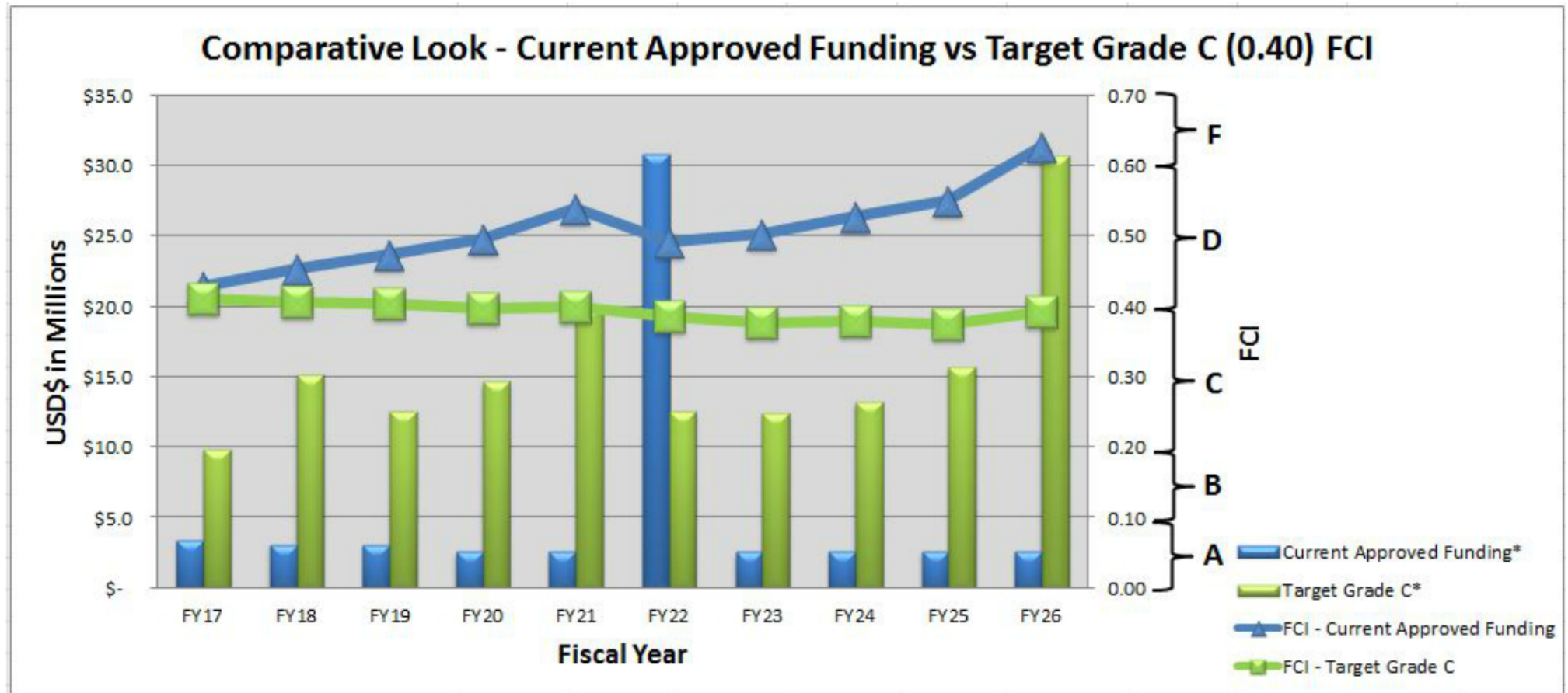
\$157M

Resulting FCI

Grade C - 0.40

Comparative Look - Current Approved Funding vs Funding to Target a Grade C (0.40) FCI at the end of 10 Years

Facilities Assessed in Phase 1



Total Invested over 10 Years (current)*	\$56M
Resulting FCI	Grade F - 0.63
Total Invested over 10 Years(target)*	\$157M
Resulting FCI	Grade C - 0.40
Additional Funding Needed*	\$101M

Summary

- Current 10 year approved FY 2016 CIP Budget is \$56M. The resulting FCI Grade at the end of 10 years will be an F.
- To achieve an overall Grade A (0.10) for Phase 1 (36 of 123) facilities at the end of 10 years, an additional \$216M is required.
- To achieve an overall Grade C (0.40) for Phase 1 (36 of 123) facilities at the end of 10 years, an additional \$101M is required.

