ENTERPRISE REAL PROPERTY
FACILITY CONDITION ASSESSMENT (FCA) REPORT

2026

DEPARTMENT OF ADMINISTRATION
ENTERPRISE REAL PROPERTY

9/1/2026

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ABSTRACT:

The Minnesota Enterprise Real Property Facility Condition Assessment Report is a comprehensive report depicting the conditions of all of Minnesota State's owned buildings using standardized, objective methods. This report is intended to be used to compare agency buildings side-by-side, provide insights into how well or not-so-well Minnesota is at maintaining buildings, and support decisions for bonding projects and asset preservation funding.

The data for this report comes from a single enterprise database and application (Archibus). This data was collected using the standardized Minnesota Facility Condition Assessment (FCA) Process. This process was a combined effort developed by the Enterprise Real Property Program (ERPP), Facility Engineering Associates (FEA), and a steering team led by key agency representatives in 2013.

MINNESOTA FCA PROCESS:

(FCA) Facility Condition Assessment: Is an industry term that describes the process of professionally analyzing the condition of present systems of a building that may vary in terms of age, design, construction methods, and materials, to determine the overall condition of the building.

The standardized Minnesota FCA Process is based on a well-established NASA methodology from the 1990s called the Backlog of Maintenance and Repair (BMAR) FCA Process.

All costs generated by the Minnesota FCA Process and Archibus application are derived from up-to-date RSMeans Construction Costs. RSMeans (Robert Snow Means) is an industry standard database used for estimating up-to-date construction labor, materials, and equipment costs.

The BMAR approach required the following to be developed to implement the standardized Minnesota FCA process:

- **23 Cost Models** covering Minnesota building types;
- A method for calculating **Current Replacement Value (CRV)**;
- A **1-5 Condition Rating Method**;
- A method for calculating **Deferred Maintenance (DM)**;
- A method for calculating **Adjusted Deferred Maintenance (ADM)**;
- A **Facility Condition Index (FCI)** rating scale;
- A standardized **Reference Field Guide**.

23 Cost Models:

To cover the wide range of different agency building types, 23 standardized cost models (M01–M23) were developed based on various building construction types and building uses. Each model contains a set of building systems classified using Level 3 UniFormat II classifications. Each building system draws on RS-Means construction cost data, applied through "cost model matrix IDs" (also called system unit costs) to assign a cost to each building system. These unit costs form the basis for all CRV, DM, and FCI calculations.

Current Replacement Value (CRV):

CRV is the dollar amount that represents the estimated cost to replace a building. It is the collective sum of system CRVs. System CRVs are derived from RSMeans construction costs for standard labor, materials, and equipment. (CRV costs are estimates of original construction and design and DO NOT depict actual construction project costs. Insured values and actual replacement projects will be higher because replacement projects rarely replace systems with existing identical systems or construction, and include project overhead, fees, demolition, etc. that CRV costs do not.) A system quantity is needed from the building being assessed to be applied as a multiplying factor to the system unit cost to obtain the CRV. CRV is calculated as…

BUILDING CRV = (SUM OF SYSTEMS CRV)

SYSTEM CRV = (SYSTEM UNIT COST * SYSTEM QUANTITY)

1-5 Condition Rating Method:

Each building system is scored 1 (worst) to 5 (best), based on rule-based deficiency criteria as defined in the MN Field Reference Guide:

Condition rating 1 = Crisis
Condition rating 2 = Poor
Condition rating 3 = Fair
Condition rating 4 = Good
Condition rating 5 = Excellent

Deferred Maintenance (DM):

DM costs represent maintenance that was needed to be performed to keep the system in optimal condition but was not completed. The DM dollar amounts are derived from a "best practice" algorithm that applies a percentage of the system CRV as the DM determined by the system's condition rating. (DM costs are estimates and DO NOT depict actual construction project costs, but rather routine maintenance costs at the time they were needed.) DM is calculated as…

BUILDING DM = (SUM OF SYSTEMS DM)

SYSTEM DM = (SYSTEM CRV * %DM)

Condition rating 1 = 100% DM
Condition rating 2 = 75% DM
Condition rating 3 = 33% DM
Condition rating 4 = 10% DM
Condition rating 5 = 2% DM

Adjusted Deferred Maintenance (ADM):

The ADM is a lower and more reasonable value than the DM value. It is intended to emphasize Crisis and Poor rated systems by extracting only the local condition rating 1 and 2 items (Crisis and Poor) from all systems regardless of the system rating. The ADM value is perceived as the backlog that needs to be addressed to bring a building's overall condition rating to an acceptable Fair rating or better. (ADM costs are estimates and DO NOT depict actual construction project costs.) ADM is calculated as…

BUILDING ADM = (SUM OF SYSTEMS ADM)

SYSTEMS ADM = (SYSTEM CRV * %CRV)

Condition rating 1 = 100% CRV
Condition rating 2 = 100% CRV
Condition rating 3 = 3.75% CRV
Condition rating 4 = 1.00% CRV
Condition rating 5 = 0.25% CRV

Facility Condition Index (FCI) calculation and ratings:

The industry standard FCI is the condition metric calculated for each building. The FCI provides an excellent means for maintenance prioritization based on overall building conditions, and provides insight into problem areas, neglected building systems, or where the focus for maintenance should be applied based on limited available funds. FCI is calculated as…

BUILDING FCI = (SUM OF BUILDING DM) / (SUM OF BUILDING CRV)

Rating Scale:

Excellent = Building FCI < 0.05
Good = 0.05 < Building FCI < 0.15
Fair = 0.15 < Building FCI < 0.30
Poor = 0.30 < Building FCI < 0.50
Crisis = Building FCI > 0.50

Reference Field Guide:

Each assessor receives a Reference Field Guide in which they are trained to use throughout the entire assessment process. The Reference Field Guide along with calibration training and an exam to certify assessors, maintains objectivity for the FCA process and reliability in the FCA data. The guide contains all CSI UniFormat II systems that should be evaluated for all buildings with clear and thorough criteria for rating the condition of each system; criteria such as but not limited to the system performance, visual defects, age of system, observed safety issues and/or hazards.

SUMMARY

MINNESOTA OWNED BUILDINGS:

- 19 State Agencies with custodial control
- 4,879 buildings
- 34,415,070 square feet

(Totals exclude Department of Military Affairs federally funded 1,259 buildings – 2,963,288 square feet)

(Totals exclude Department of Natural Resources Fort Snelling Upper Post 30 buildings – 324,853 square feet. These buildings are leased to other entities for 99 years, with the tenants assuming all responsibility for maintenance, repair, and capital improvements.)

(Totals exclude Direct Care and Treatment Cambridge Campus 16 buildings – 167,754 square feet. These buildings have been decommissioned and in process of sale.)

(Totals exclude Department of Transportation radio tower equipment facilities.)

FCA DATA:

- 99.8% of MN owned buildings assessed
- $11,866,343,642 Current Replacement Value
- $2,275,992,754 Deferred Maintenance Value
- $934,768,888 Adjusted Deferred Maintenance Value
- 45 years of age (average age of buildings)
- 48% of buildings are over the age of 40 years

Number of Owned Buildings by Agency

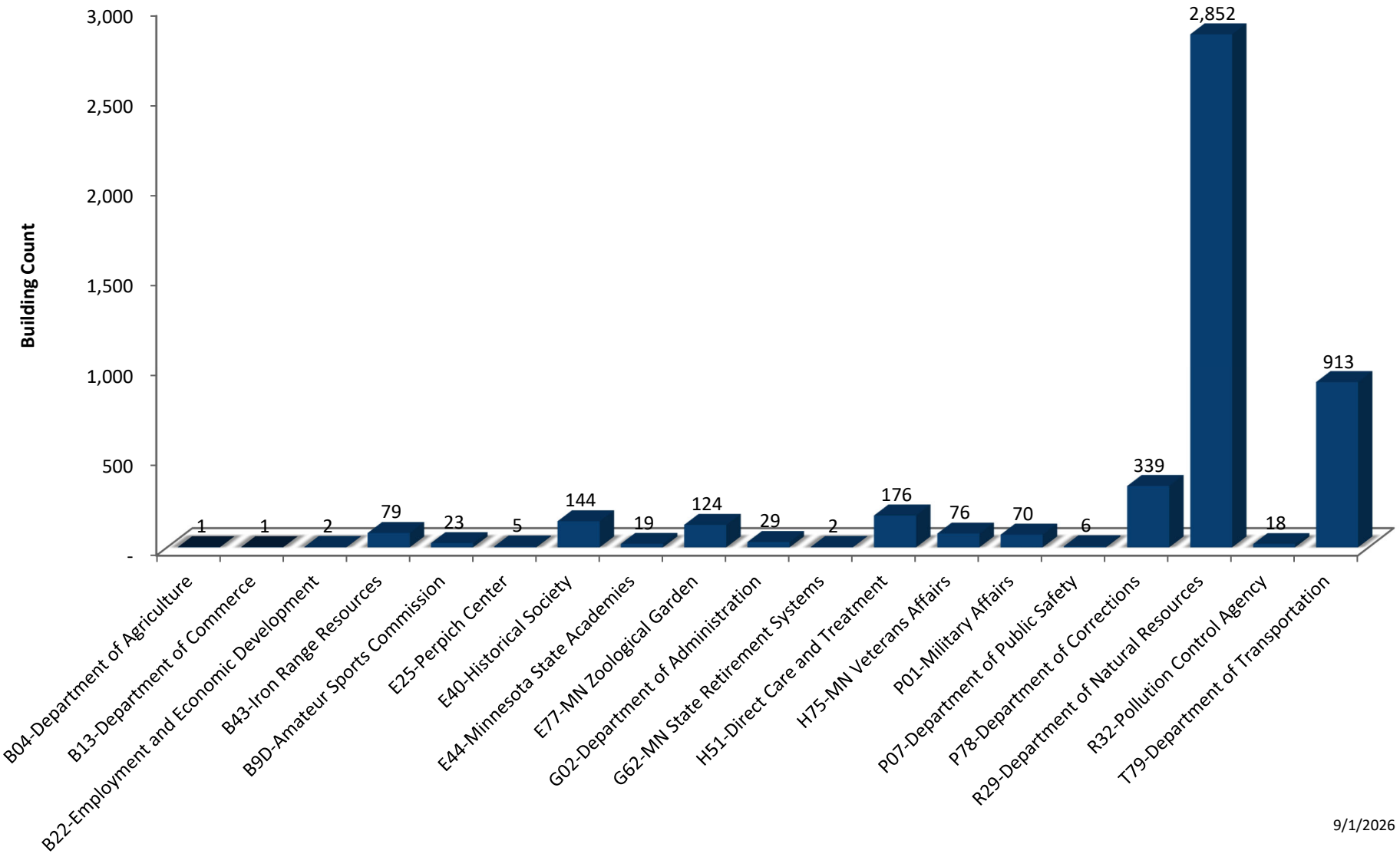


Chart Description: The highest concentration of owned buildings lies with R29-Department of Natural Resources with a couple other notably high building counts (339 - 913) for P78-Department of Corrections and T79-Department of Transportation.

Square Footage of Assessed Buildings by Agency

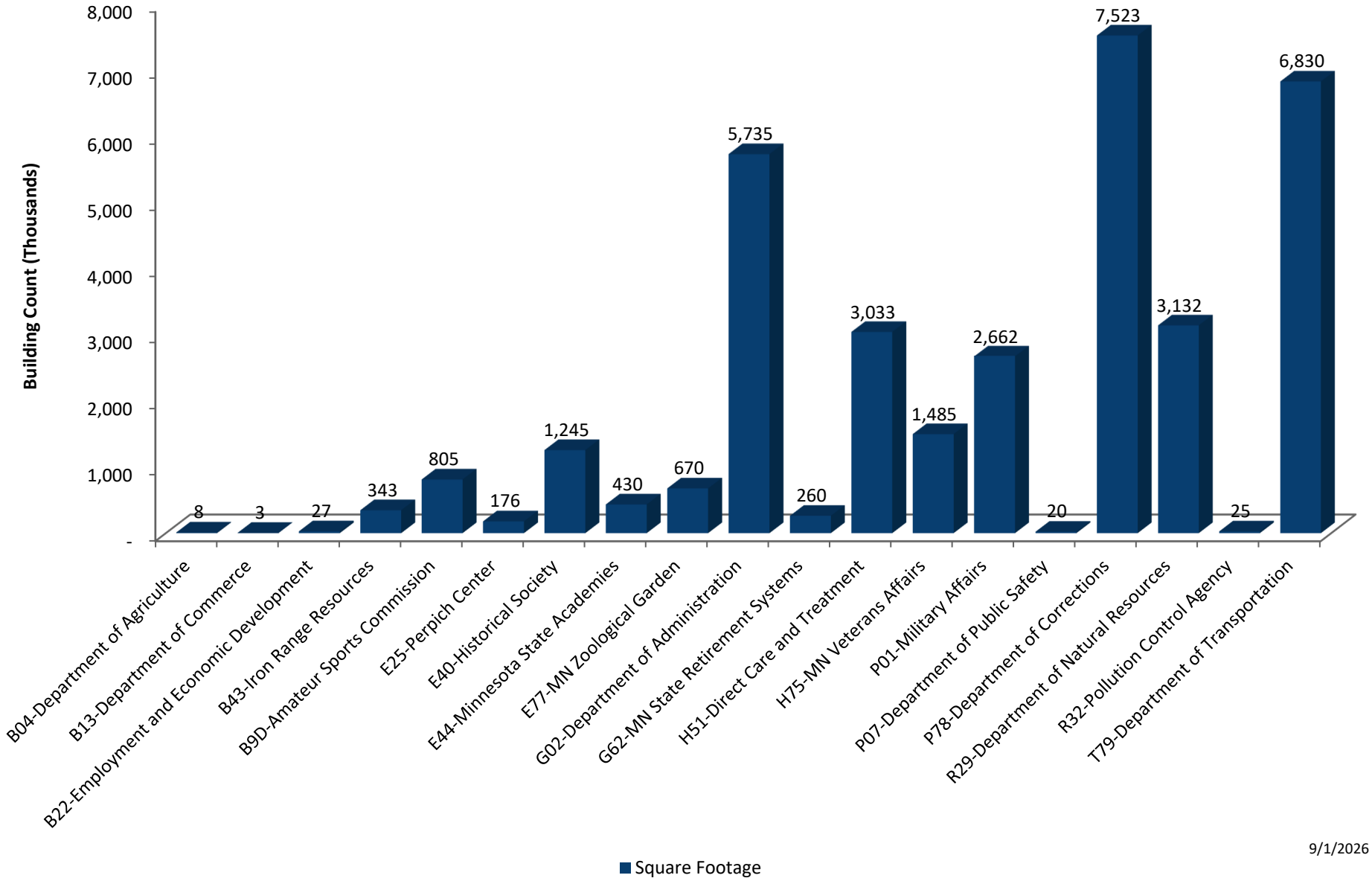


Chart Description: The highest concentration of square footage lies with P78-Department of Corrections with other notably high square footages (1.2 – 6.8 Million) of 7 other agencies.

Replacement Value by Agency

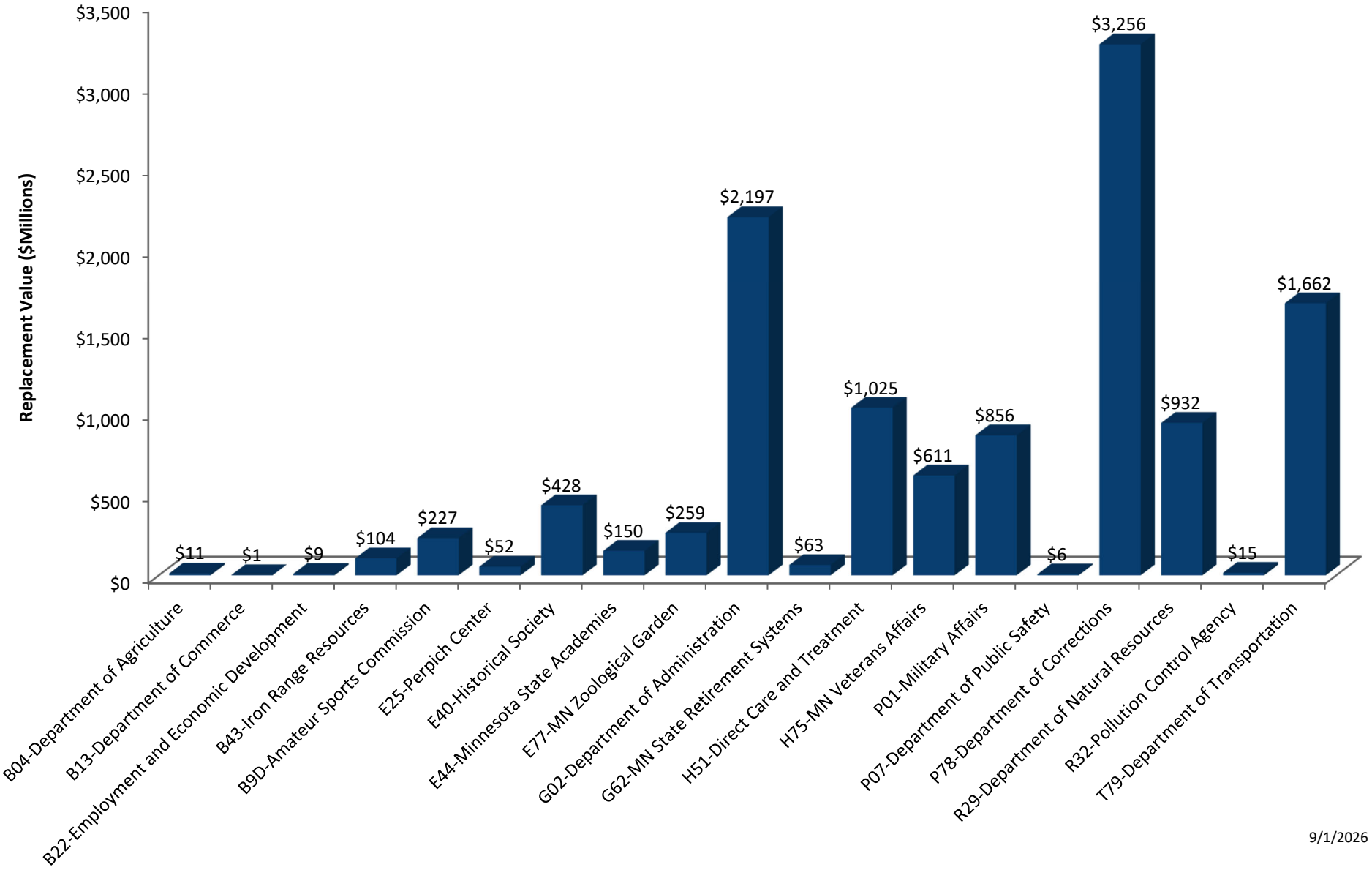


Chart Description: The highest concentration of Replacement Value lies with P78-Department of Corrections with other notably high Replacement Values ($611 - $2,197 Million) of 6 other agencies.

Deferred Maintenance by Agency

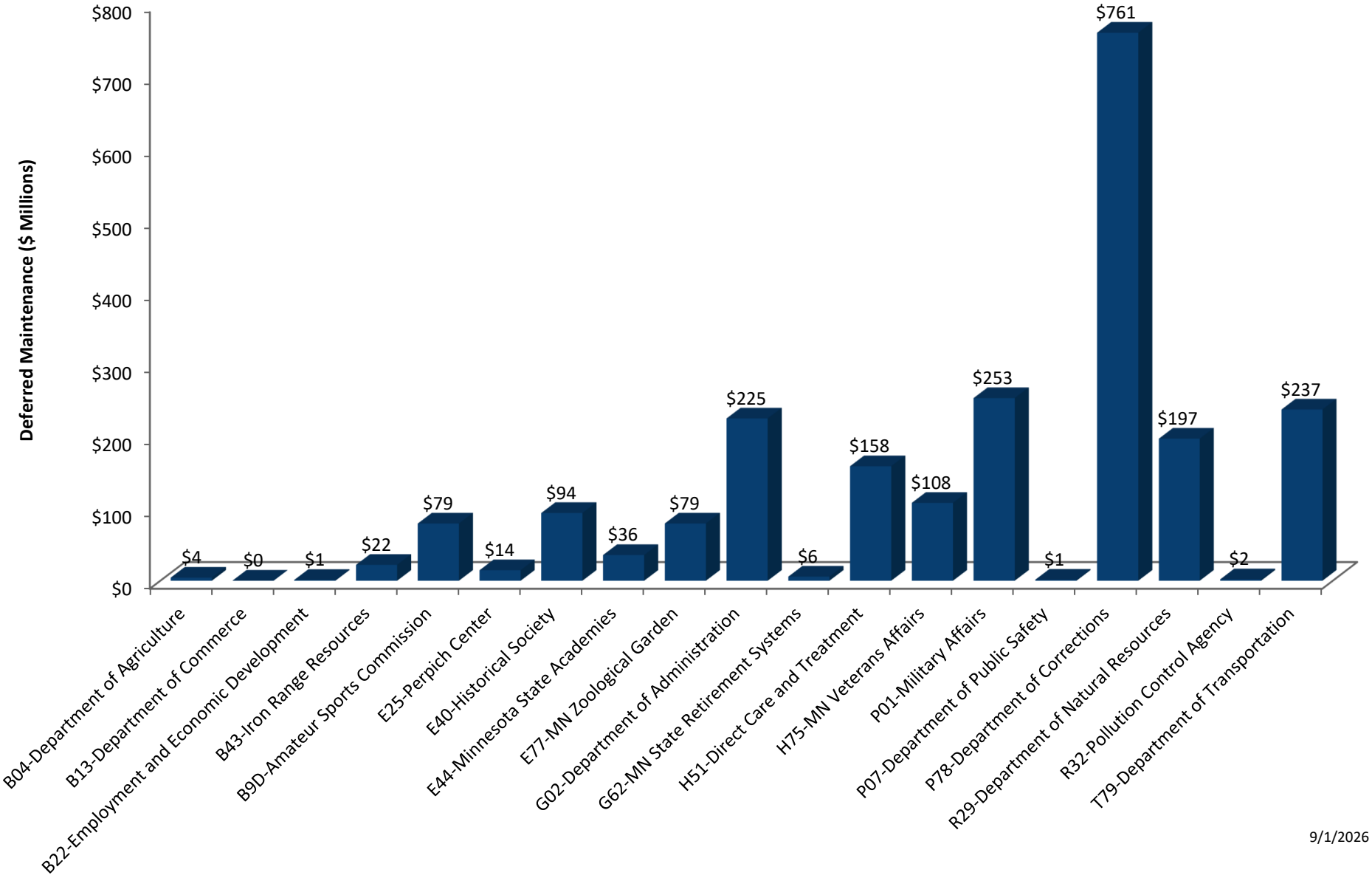


Chart Description: The highest concentration of Deferred Maintenance lies with P78-Department of Corrections with other notably high Deferred Maintenance ($108 - $253 Million) of 6 other agencies.

Deferred Maintenance Percentage of Replacement Value by Agency (AKA: FCI x 100%)

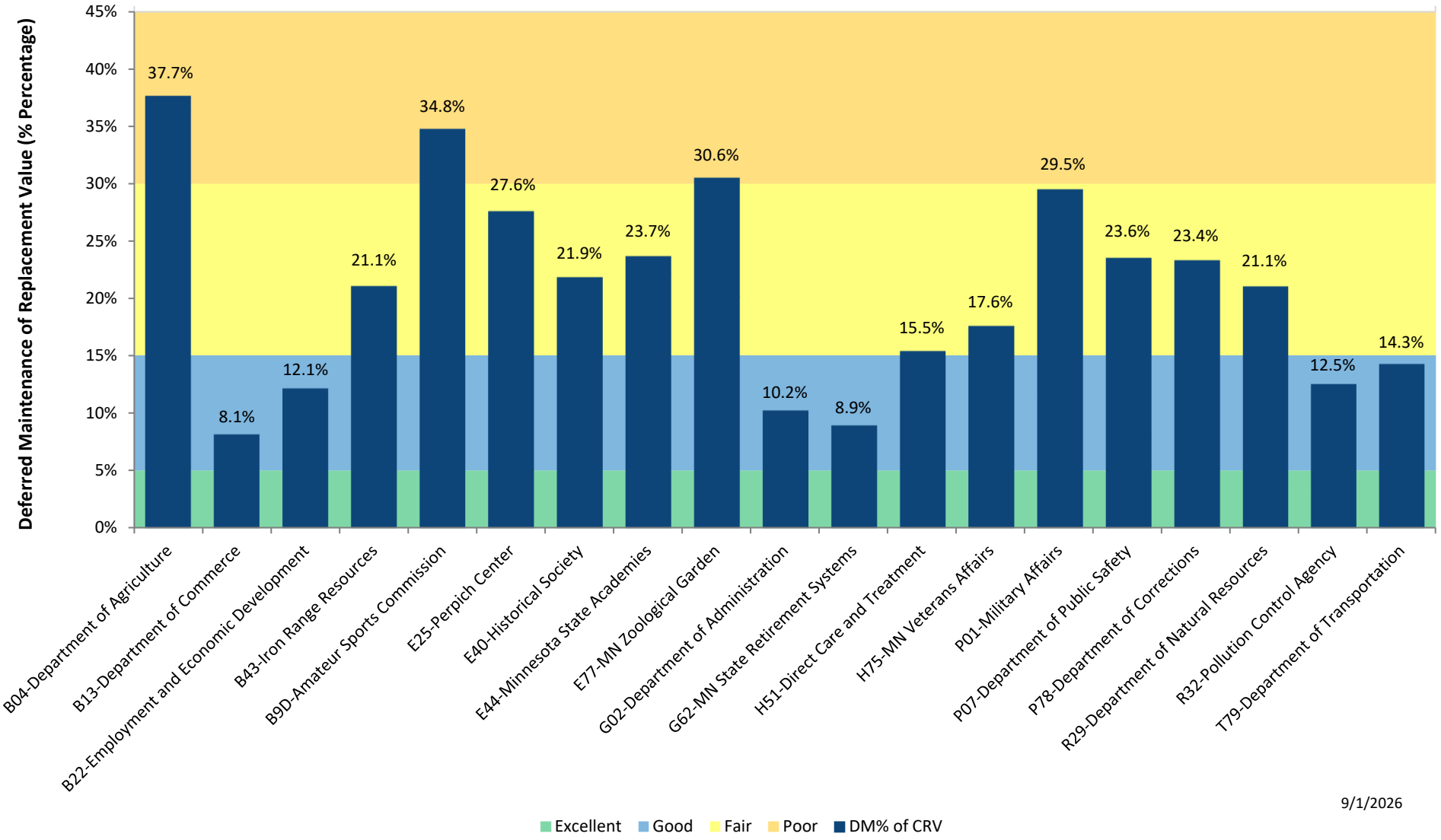
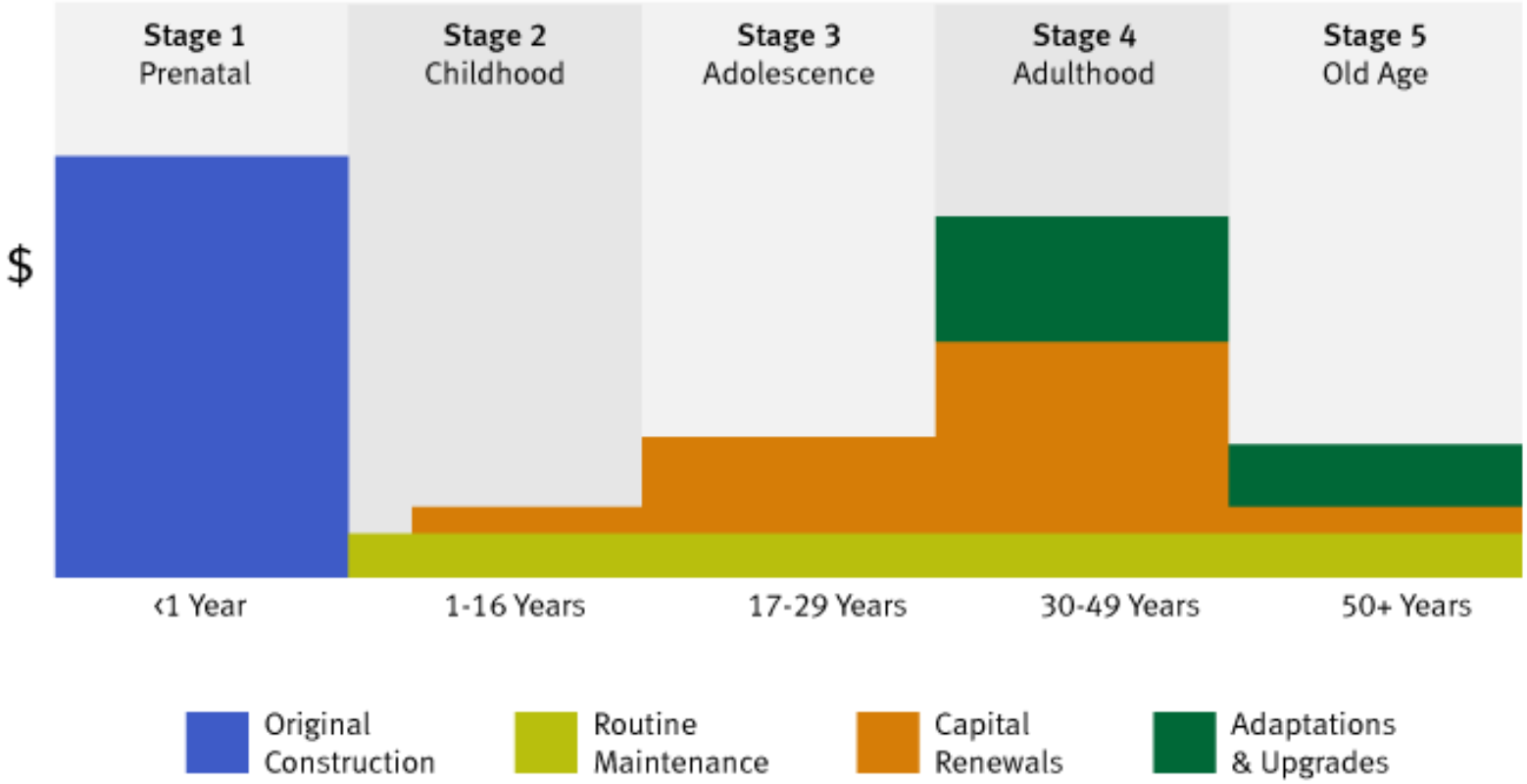


Chart Description: The DM% of CRV is also known as FCI and is the industry standard for measuring condition (see page 6 for more details). This chart shows the FCI condition of each agency's overall building portfolio. Most agency's building inventory falls within the Fair FCI condition rating category with 3 agencies (B04-Department of Agriculture, B9D-Amateur Sports Commission, and E77-MN Zoological Garden) in the Poor category and 6 agencies in the Good category.

The State of Minnesota currently has a building portfolio with an **average age of 45 years**.

"The largest and most expensive of all asset renewal projects tend to occur during the 4th life stage. As a result, significant funds will need to be reinvested in the building, and the standard operating and maintenance budgets will need to be revisited. Some of the assets have been replaced over the preceding 30-40 years and the owners and managers are now operating a building with assets at a variety of different ages. There is no longer a single baseline, and the facility managers are tasked with tracking the different assets." (https://www.rdh.com/long-buildings-last/)

Building Life Cycle



Number of Owned Buildings by Age

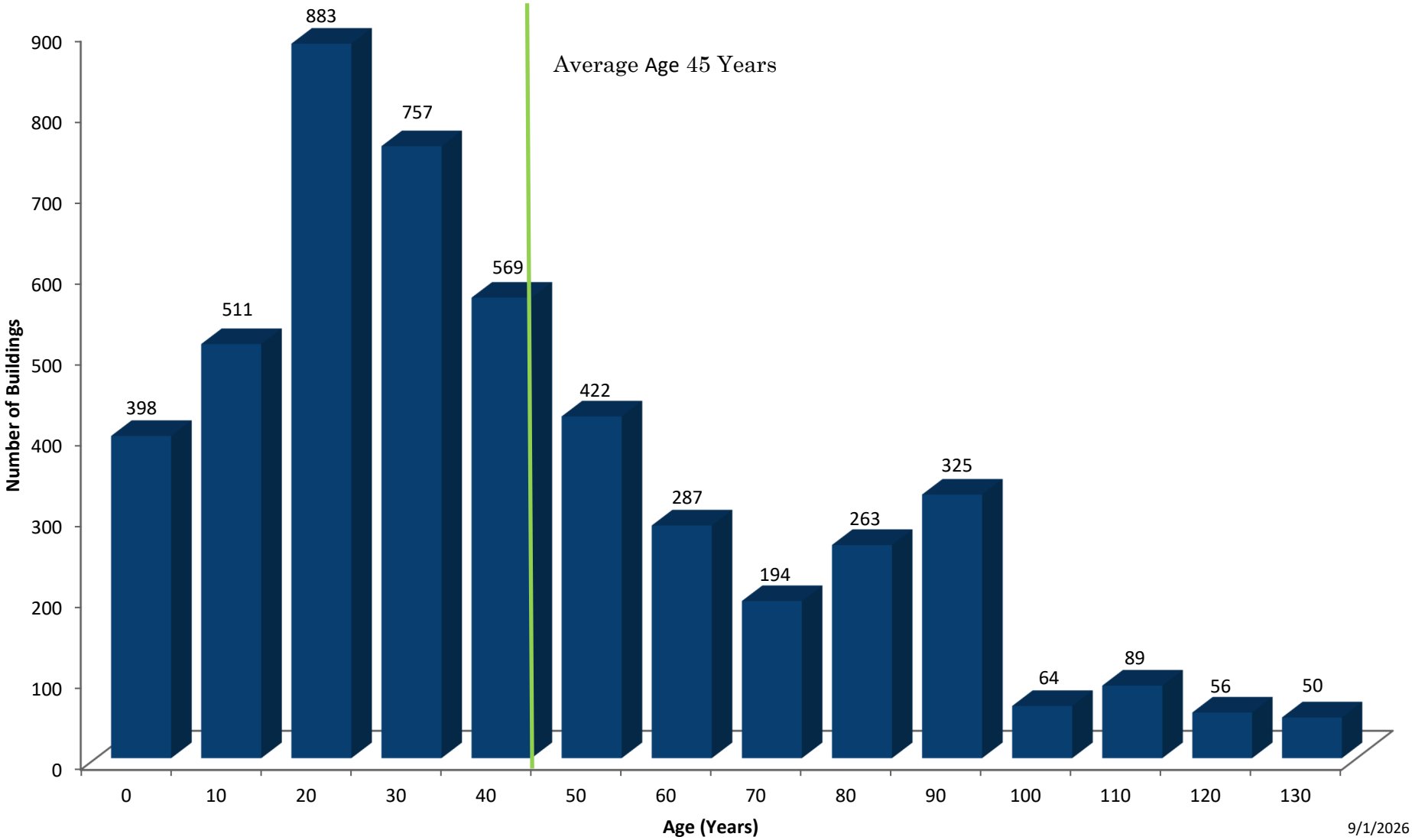


Chart Description: The average age of buildings is 45 years old with the highest concentration of buildings at 20-40 years of age (45% of inventory). With stage 4 (about 40 years of age) of a building's life cycle being the costliest stage of reinvestment, the State of MN will need to prepare for a large amount asset renewal, adaptation, and upgrade projects for the next 20 years.

Not all buildings are represented on this graph due to not all buildings having a recorded date built.

Number of Buildings by FCI Rating

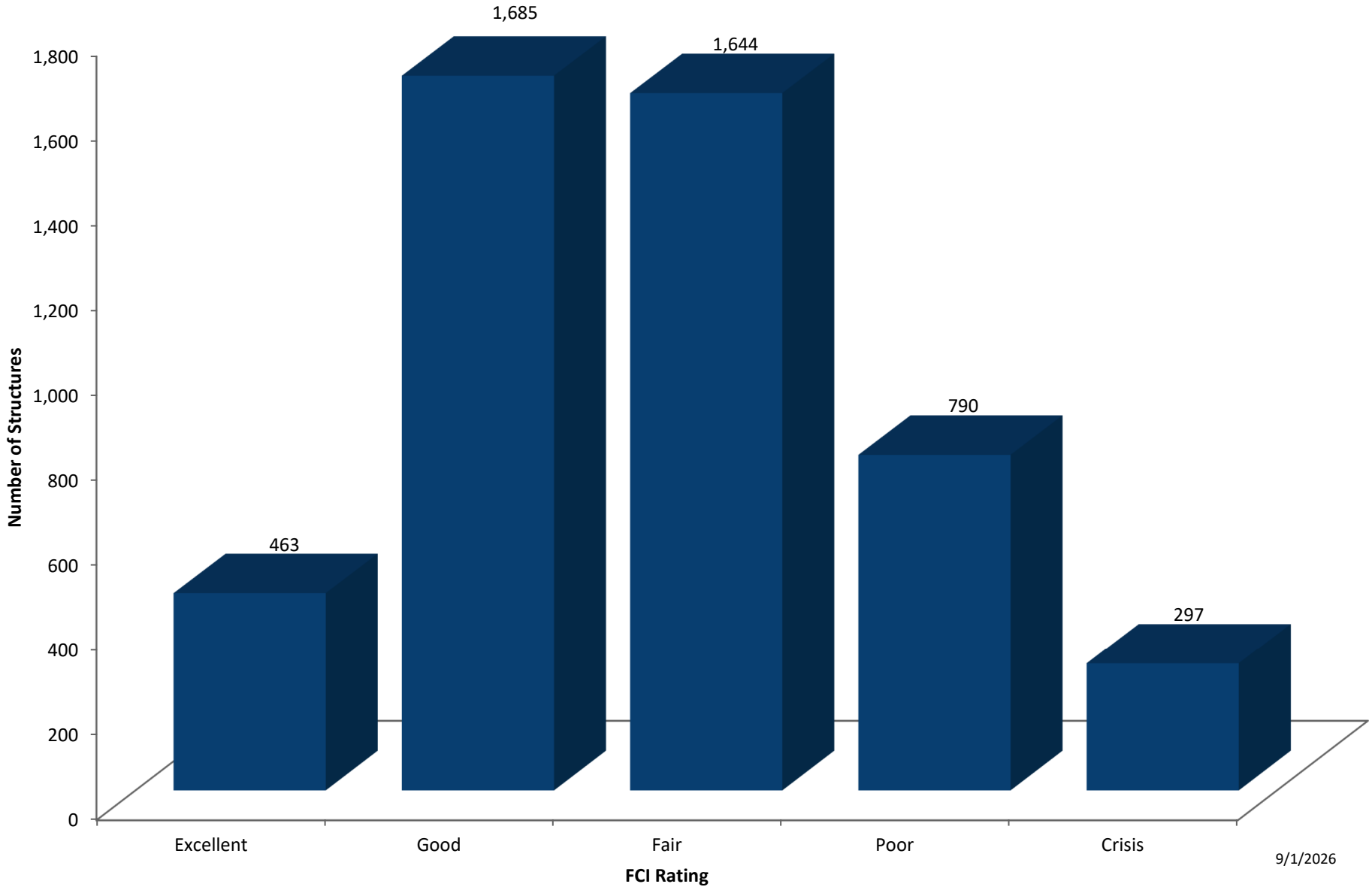


Chart Description: Building counts peak at the Good FCI rating category and therefore leaning more heavily to Excellent-Good side of Fair.

LOCATION OF 297 CRISIS CONDITION BUILDINGS

LEGEND

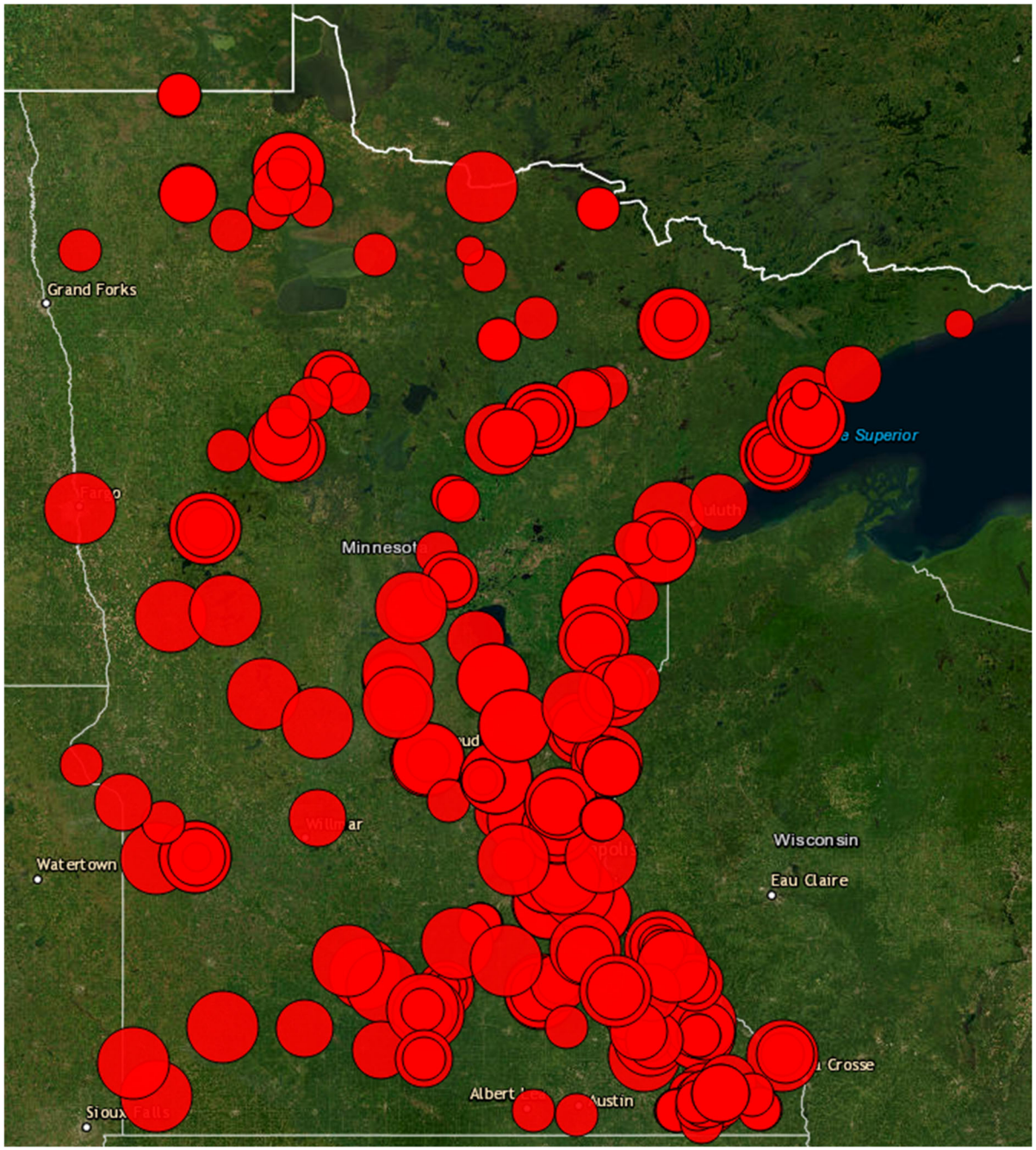
: <= $1,800 DM

: > $1,800 DM
& <= $7,000 DM

: > $7,000 DM
& <= $30,000 DM

: > $30,000 DM
& <= $110,000 DM

: > $110,000 DM



LOCATION OF 790 POOR CONDITION BUILDINGS

LEGEND

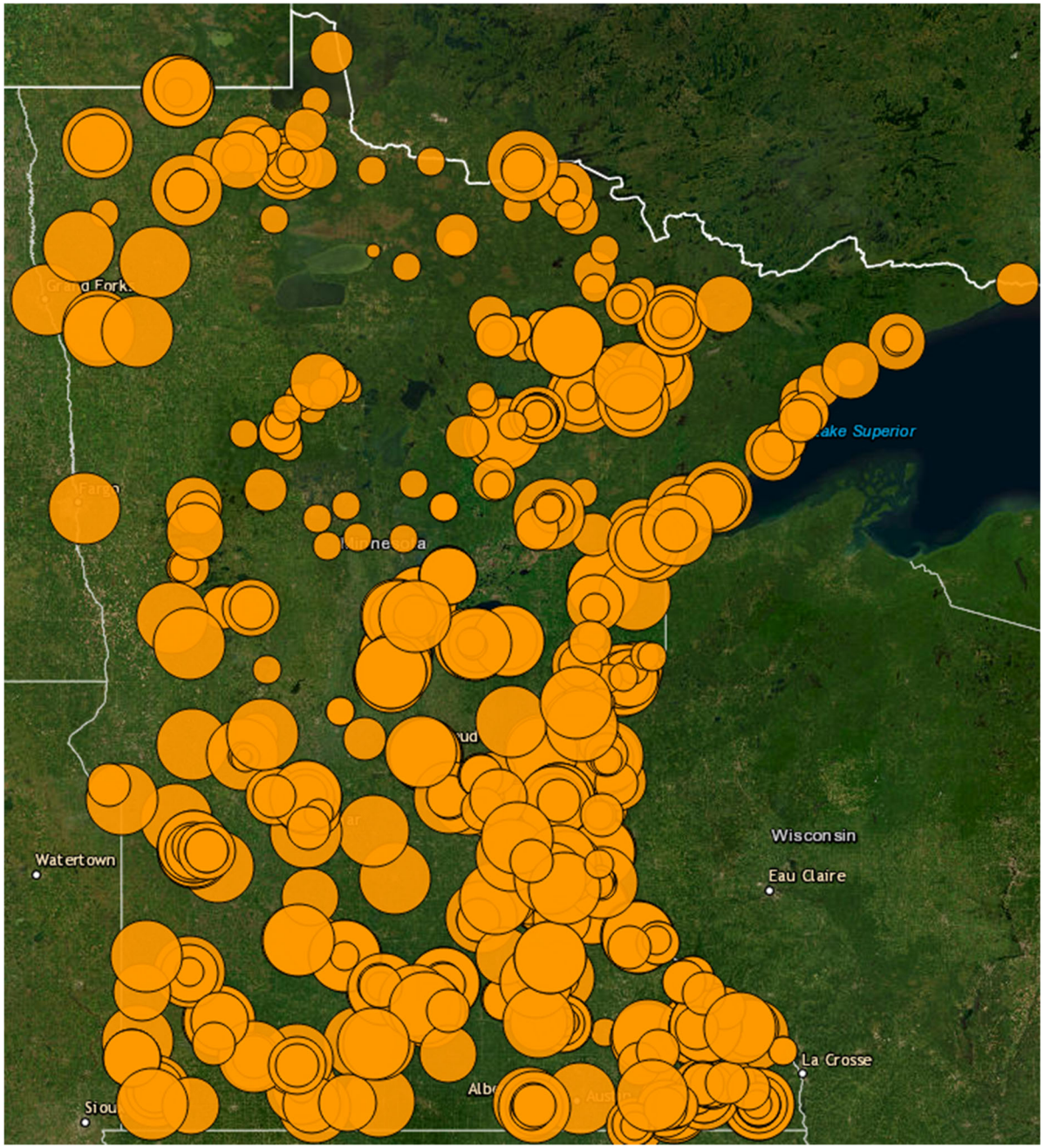
: <= $1,800 DM

: > $1,800 DM
& <= $7,000 DM

: > $7,000 DM
& <= $30,000 DM

: > $30,000 DM
& <= $110,000 DM

: > $110,000 DM



Deferred Maintenance by Year

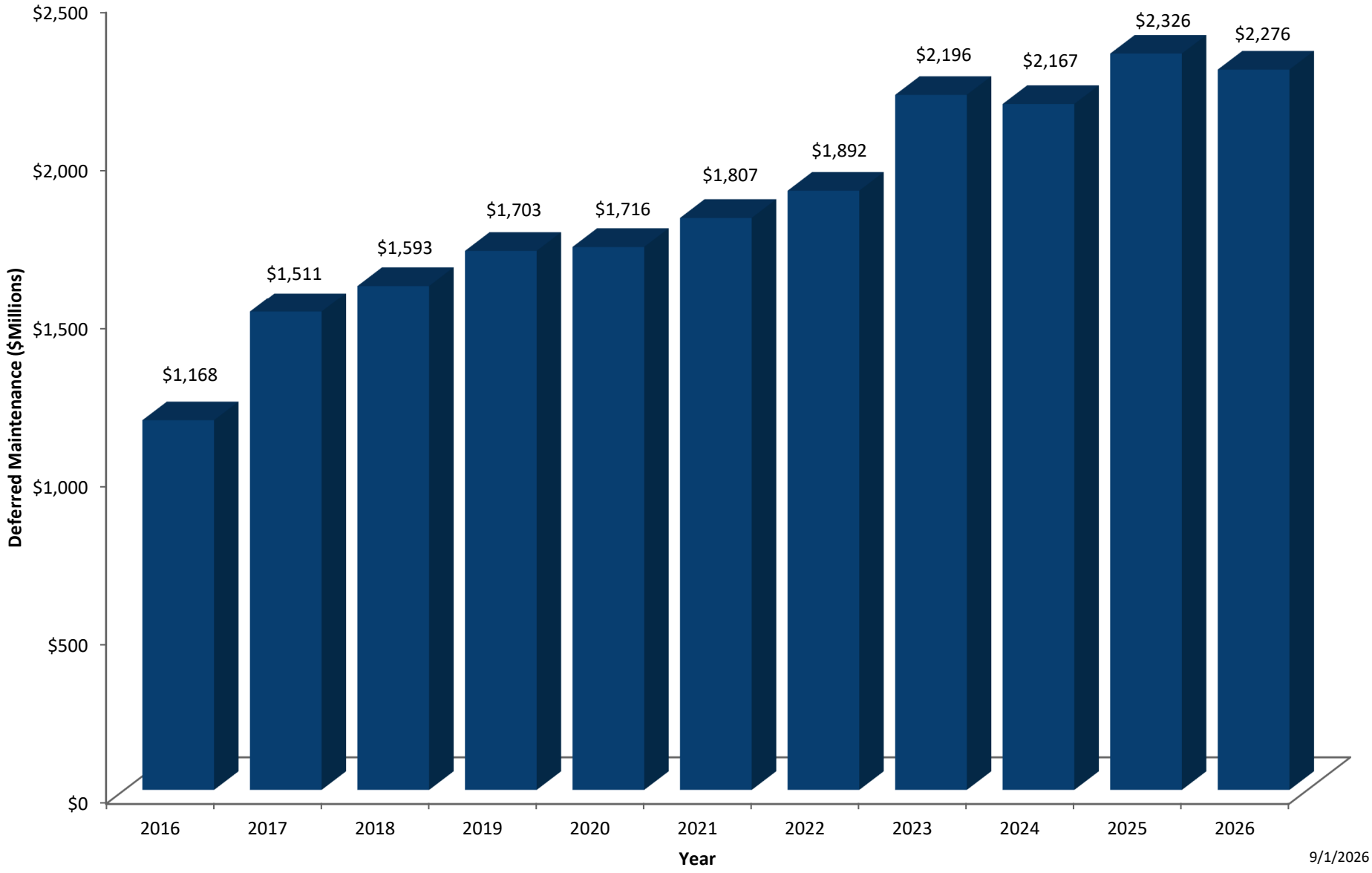


Chart Description: Deferred Maintenance has been steadily increasing but showing signs of improvement recently in years 2024 and 2026.

Value of Deferred Maintenance by FCI Rating

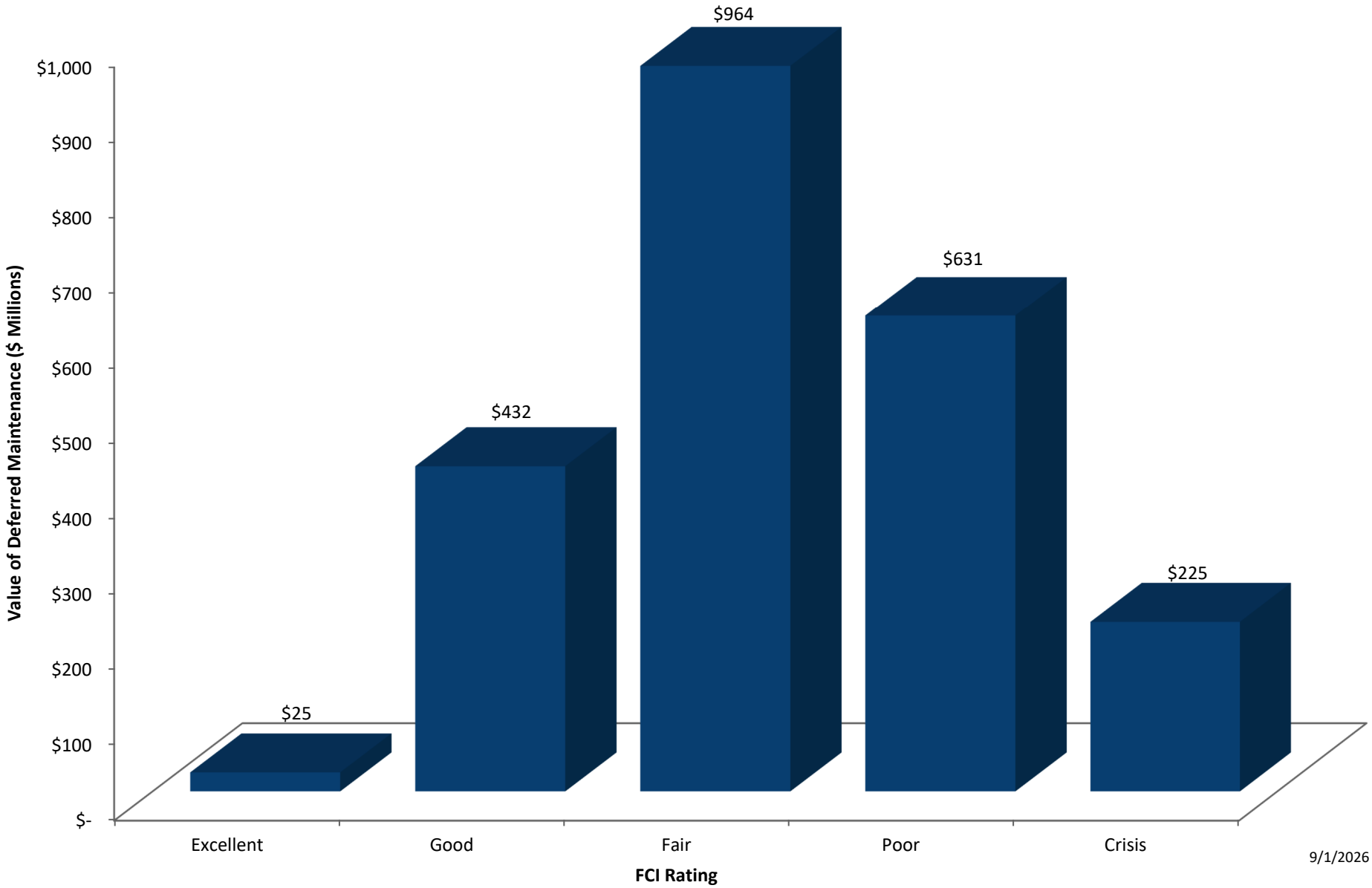


Chart Description: Deferred Maintenance peaks at the Fair FCI rating category but leaning more heavily to Poor-Crisis side of Fair.

Number of Buildings and Value of Deferred Maintenance by FCI Rating

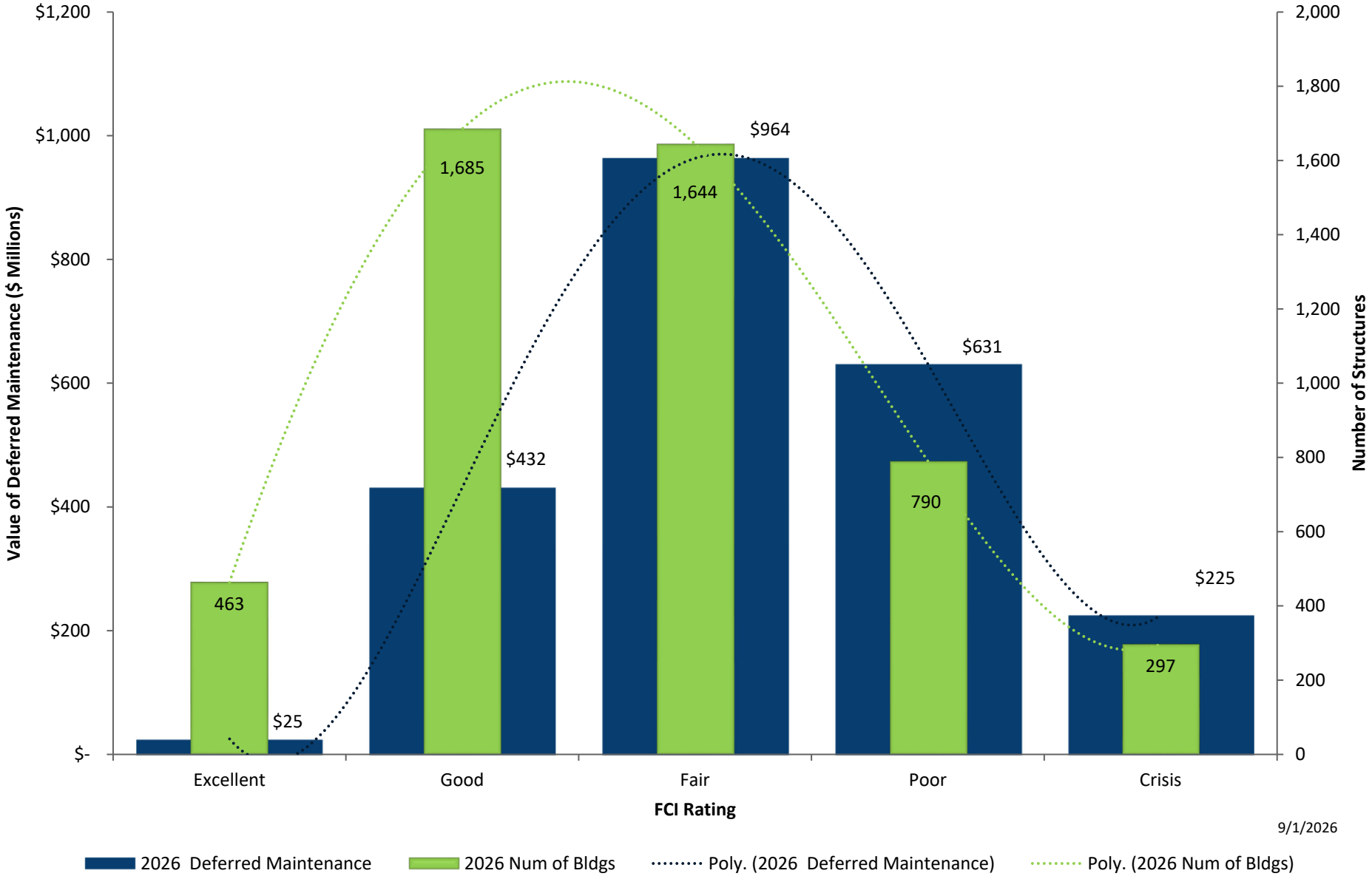


Chart Description: Building count and Deferred Maintenance peak at the same FCI rating category, but though there are more buildings on the Excellent-Good side of Fair, the Deferred Maintenance is higher on the Poor-Crisis side of Fair, affirming cost intensity of Deferred Maintenance as buildings deteriorate.

Number of Buildings by FCI Rating 2022-2026

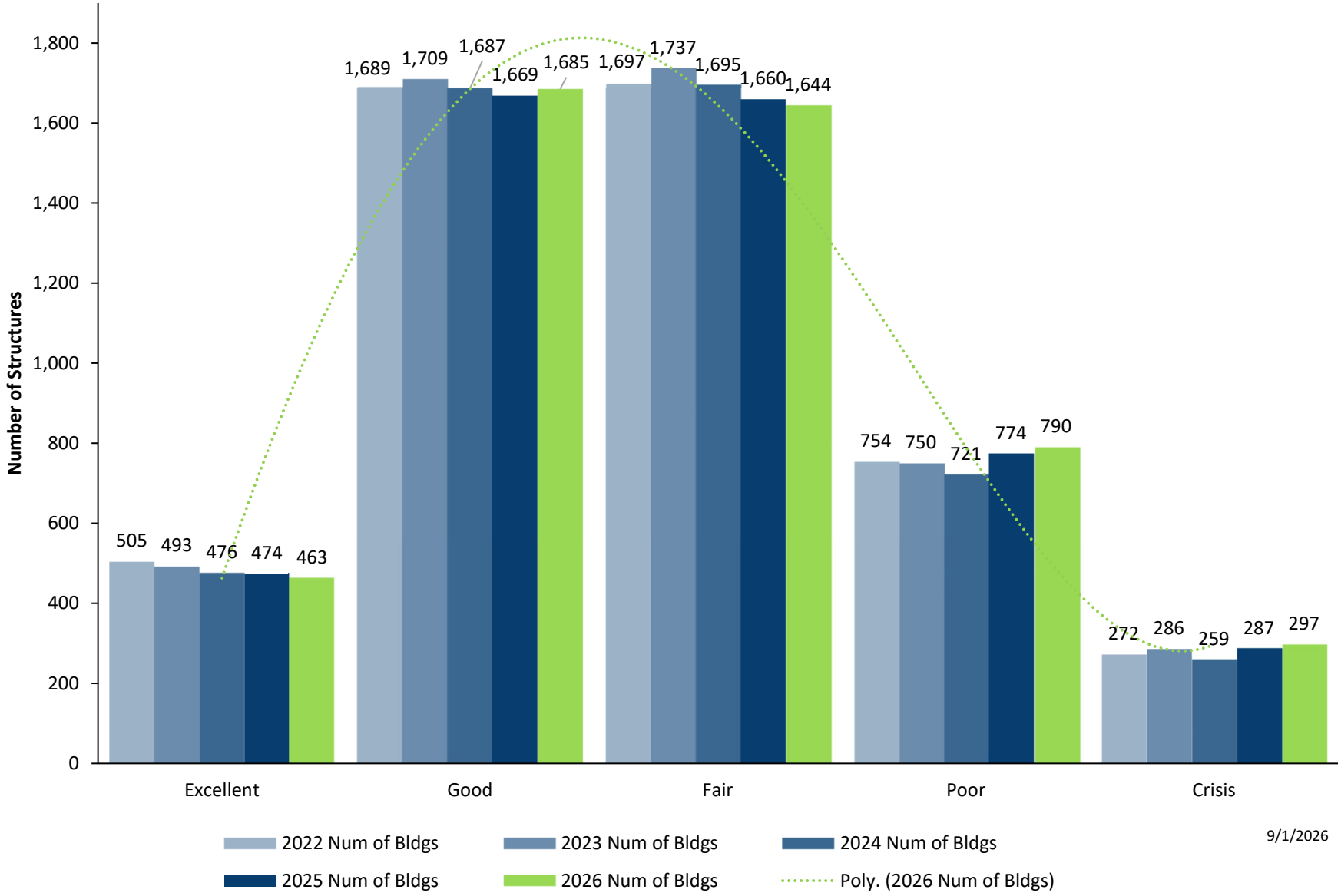


Chart Description: Buildings are heavily concentrated in the middle (Good-to-Fair) FCI rating categories. 2026 shows that the building count for Excellent buildings is quietly shrinking while Poor and Crisis are slightly increasing.

Square Footage by FCI Rating 2022-2026

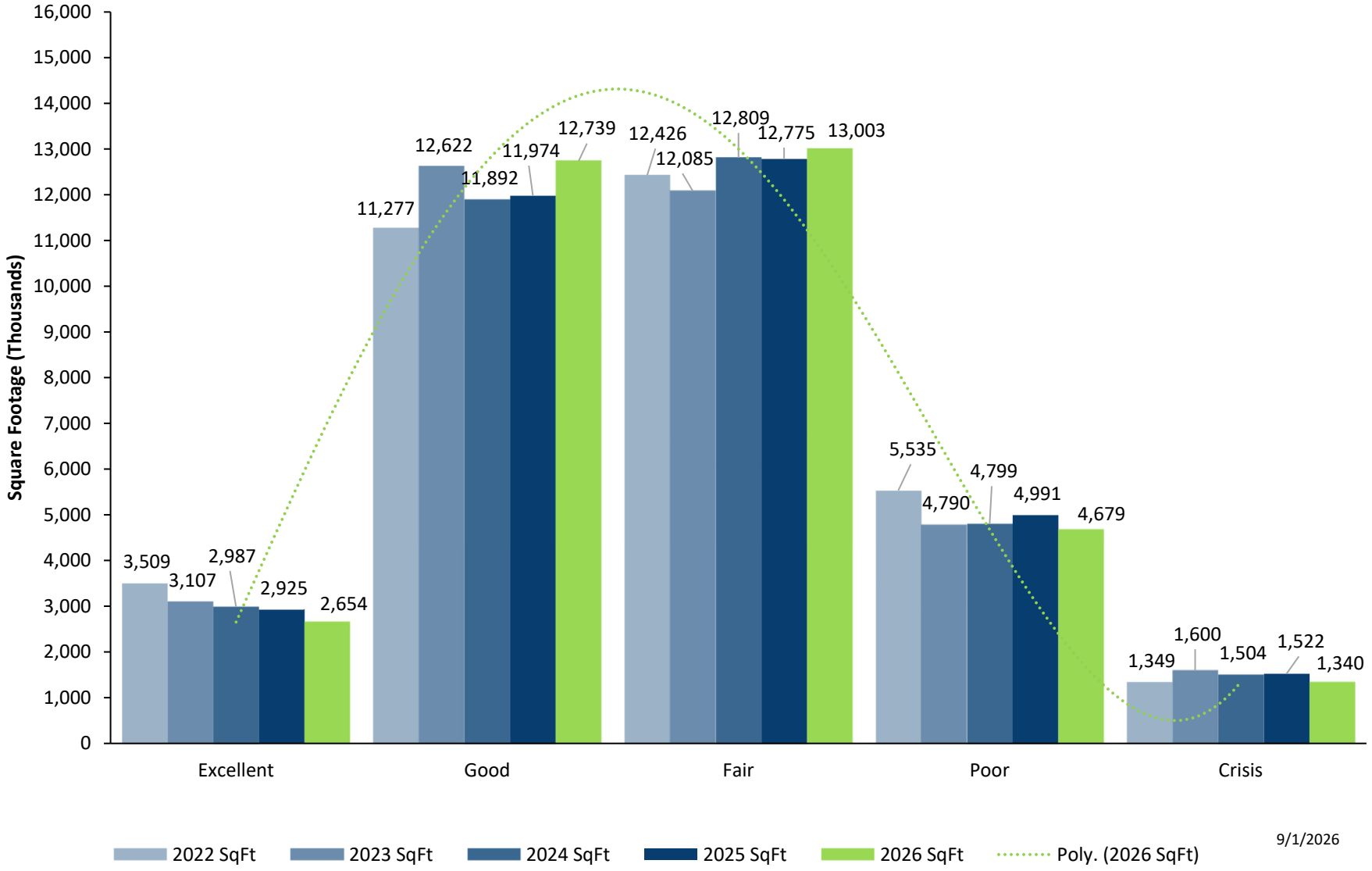


Chart Description: Square Footage of buildings is heavily concentrated in the middle (Good-to-Fair) FCI rating categories. 2026 shows that the Square Footage of buildings in Good and Fair FCI rating categories are dominating and increasing, whereas Excellent, Poor, and Crisis are starting to decrease.

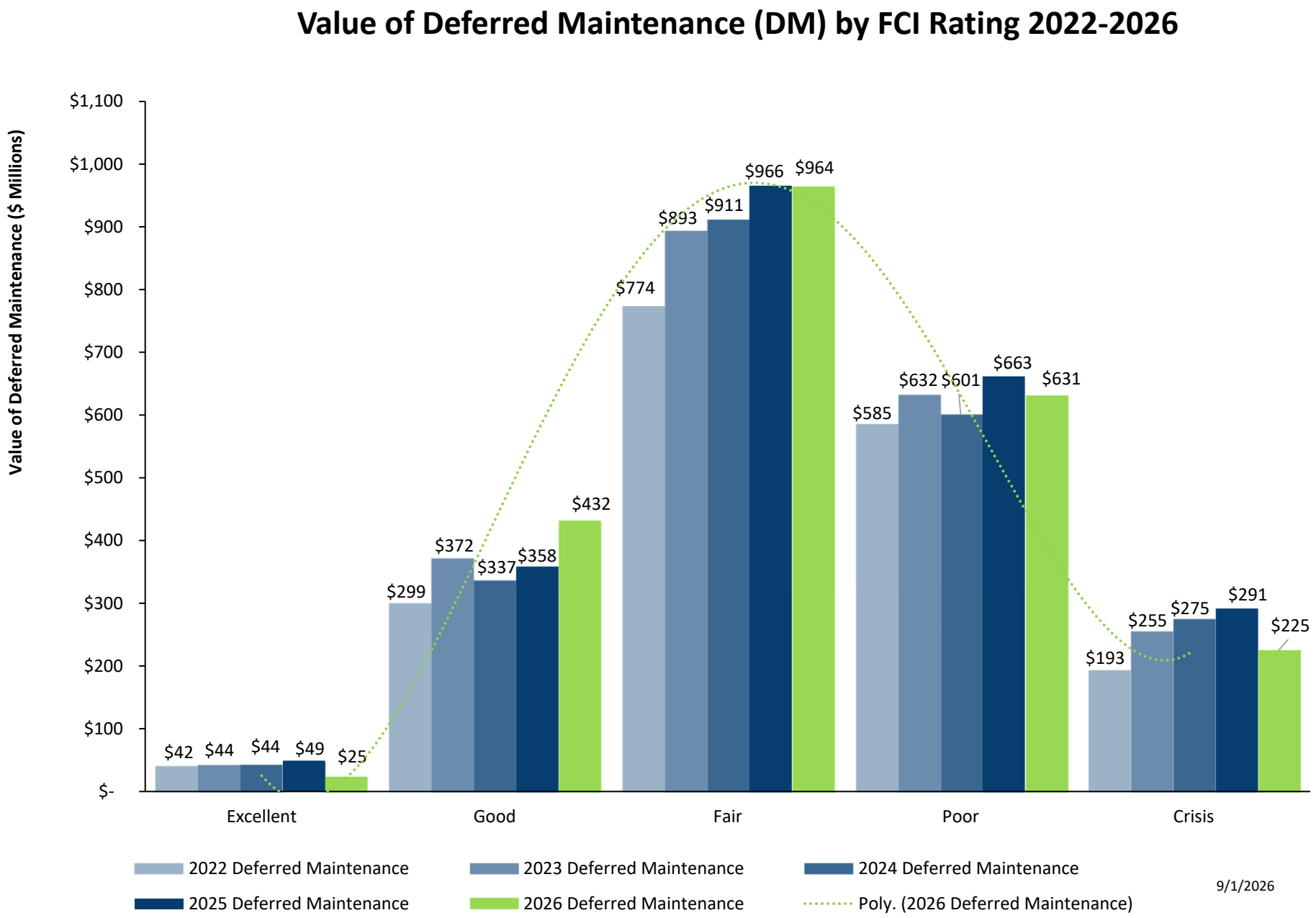
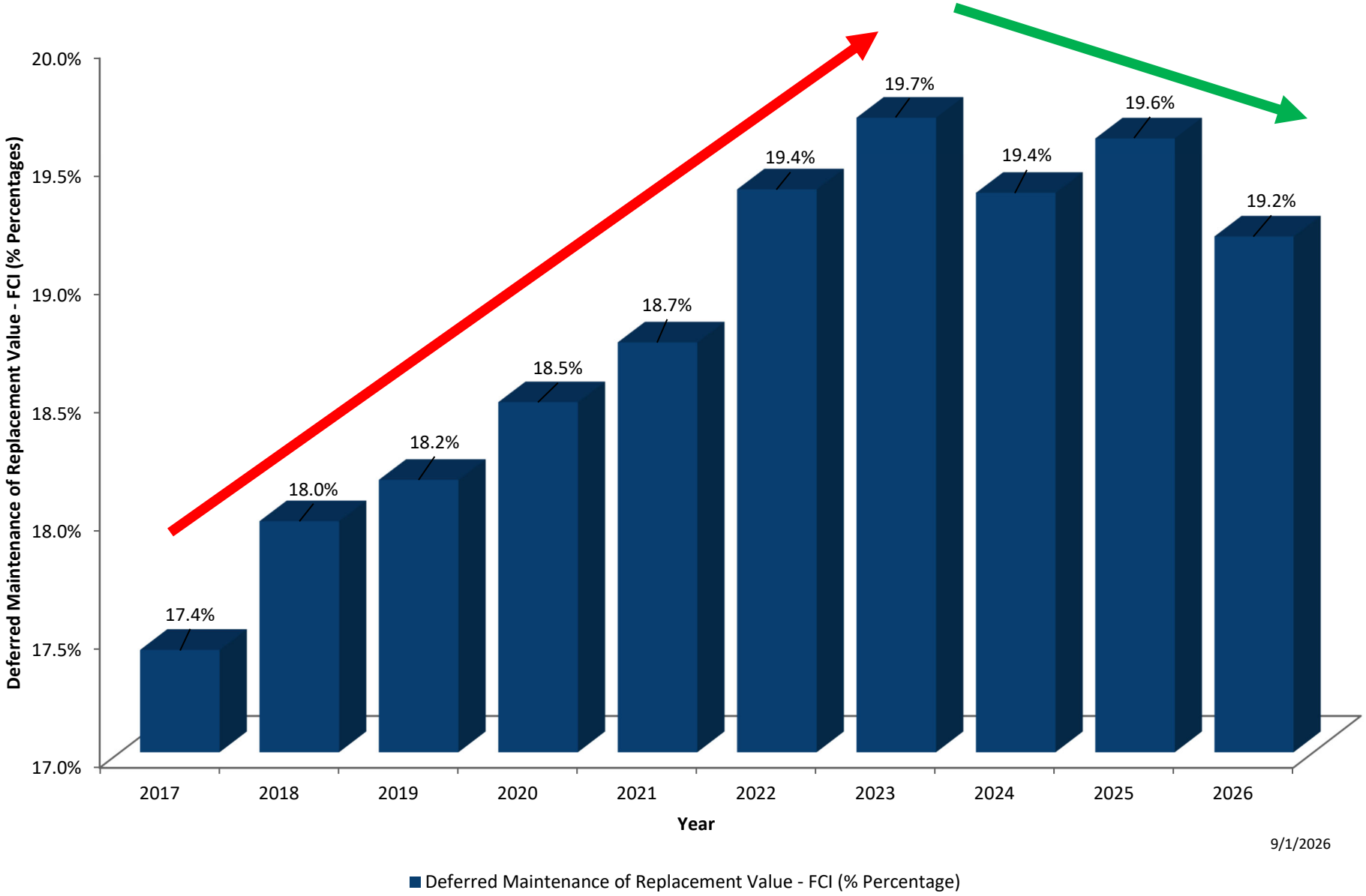
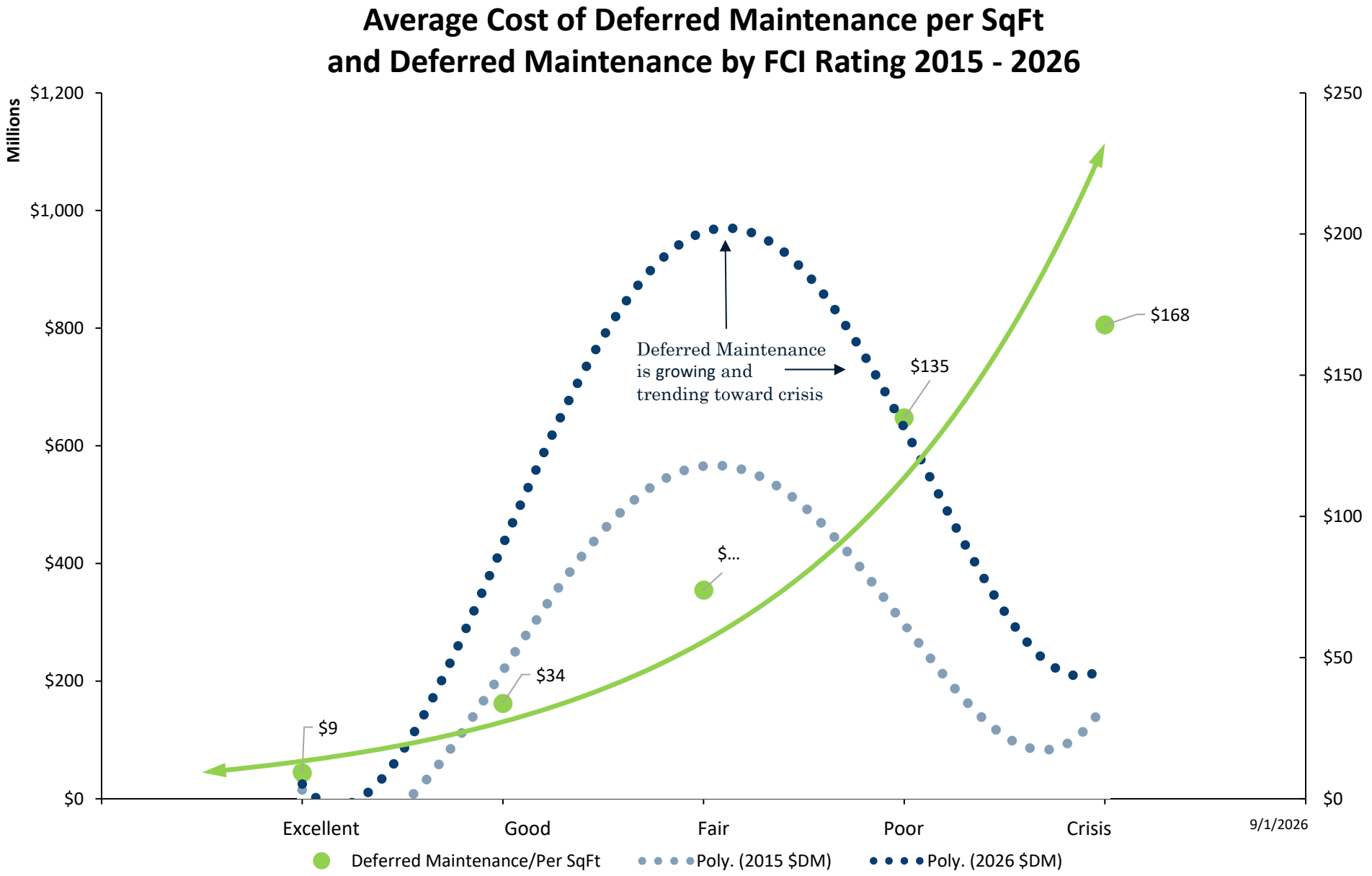


Chart Description: Deferred Maintenance is heavily concentrated in the middle (Fair-to-Poor) FCI rating categories. 2026 stands out as the only year where most FCI rating categories (Crisis, Poor, Fair, and Excellent) have slightly decreased.

Deferred Maintenance Percentage of Replacement Value by Year (AKA: FCI x 100%)

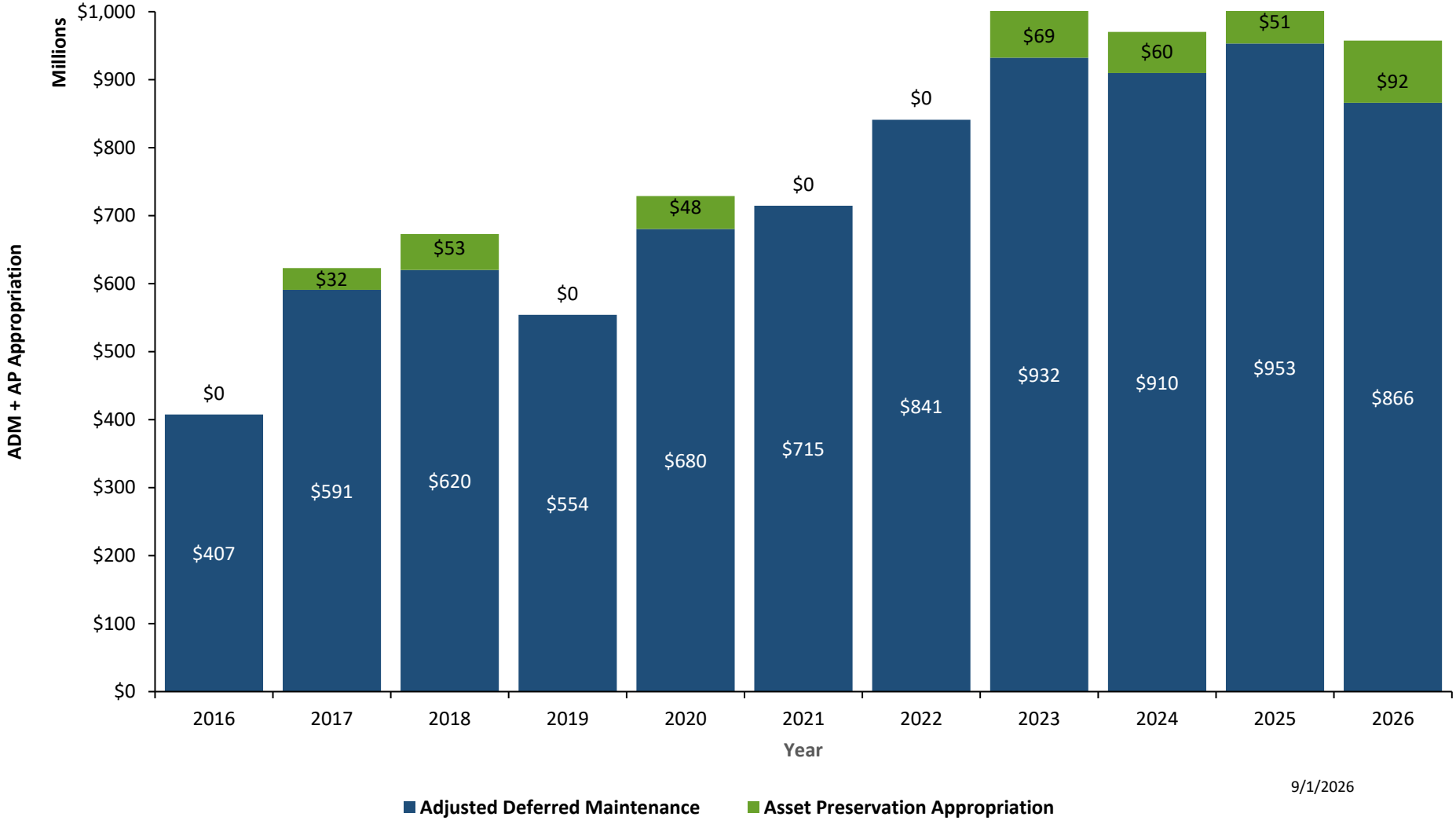


Improving FCI: FCI has been growing steadily up until 2023. From 2023 to current, FCI is starting to show improvement as a slight down trend.



Cheaper to maintain than to fix: The average cost of deferred maintenance per square foot is $9 for buildings in excellent condition, versus $168 per square foot for buildings in crisis condition. From 2015 to 2026 the deferred maintenance has been increasing and trending toward crisis rather than the desired excellent condition.

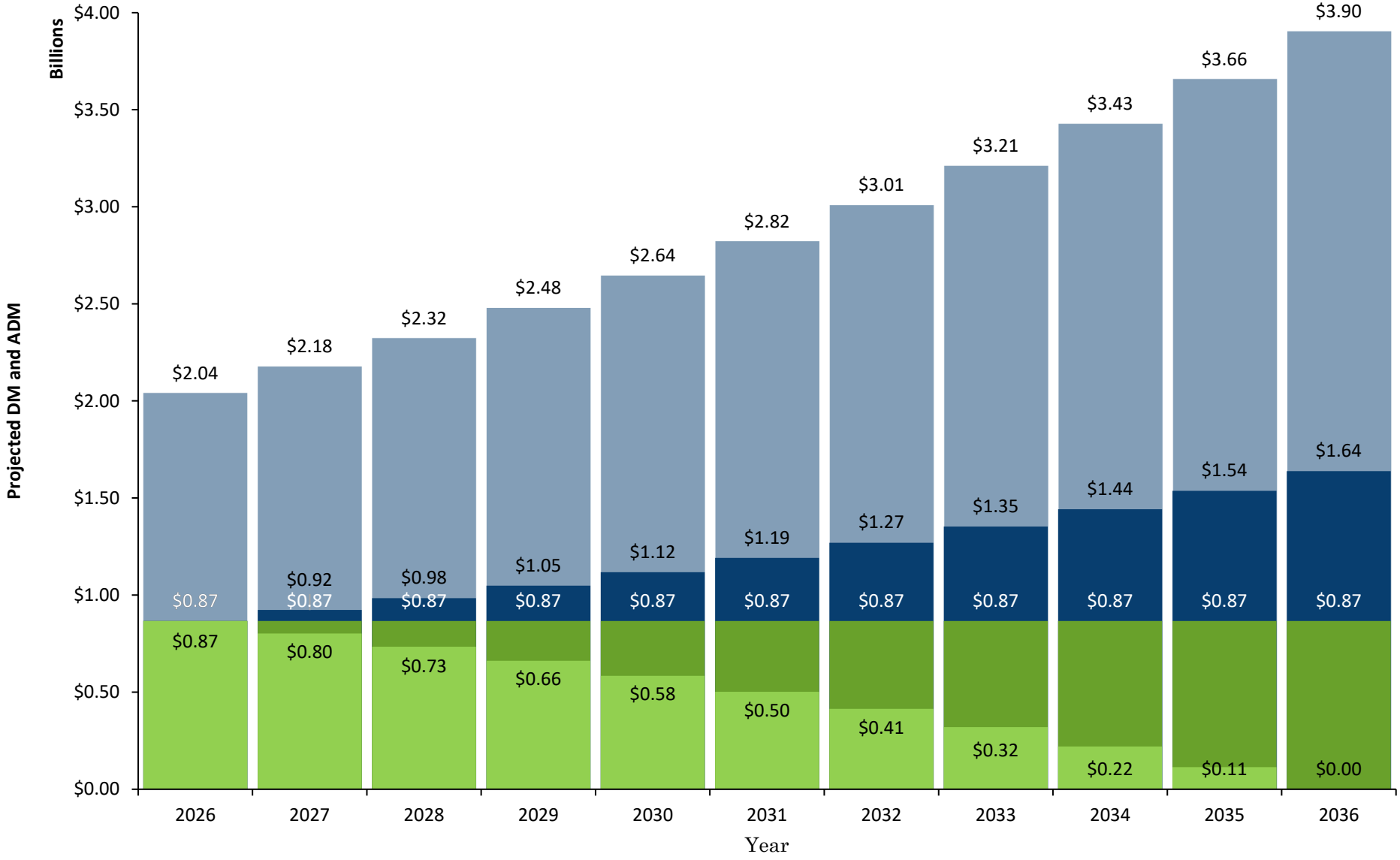
Stacked ADM (Adjusted Deferred Maintenance) and AP (Asset Preservation) Appropriation by Year



Need for more: Asset Preservation (AP) spending successfully reduces Adjusted Deferred Maintenance (ADM) where applied, but more AP is required to eliminate the ADM. The years that follow a year where no AP is appropriated show significant increases in ADM, affirming the need of consistent AP appropriation.

AP (Asset Preservation) Appropriation includes CAPRA Appropriations and excludes Bonding Projects, and HEAPR funds.

10 Year Projection of DM (Deferred Maintenance) and ADM (Adjusted Deferred Maintenance)



9/1/2026

10 YEAR PROJECTION CHART DESCRIPTION:

This chart shows the projected Deferred Maintenance (DM)-light blue and Adjusted Deferred Maintenance (ADM)-dark blue for the next 10 years if no Asset Preservation (AP) is appropriated. It also shows at different funding levels how annual AP appropriations can affect the ADM-green.

Need for consistency: At the right consistent annual funding level, the ADM can be suppressed from growing or significantly reduced, possibly eliminated. If DM and ADM are left unaddressed, they will continue to grow beyond a feasible level to fund.

10 YEAR PROJECTION SUMMARY:

- Compound Annual Growth Rate (CAGR) of Adjusted Deferred Maintenance (ADM): 5.48%
- Current construction inflation rate based on Mortenson's Cost Index (https://www.mortenson.com/cost-index/minneapolis): 1.04%
- Proposed annual funding level to keep Adjusted Deferred Maintenance (ADM) from growing: $56,998,215
- Proposed annual funding level to eliminate Adjusted Deferred Maintenance (ADM) backlog over 10 years: $120,915,673

10 YEAR PROJECTION ASSUMPTIONS:

- Funded Asset Preservation (AP) has a direct correlation to Deferred Maintenance (DM) and Adjusted Deferred Maintenance (ADM) ($1 of AP reduces DM or ADM by $1)
- Asset Preservation is only used for building maintenance to reduce Deferred Maintenance (DM) and Adjusted Deferred Maintenance (ADM) backlog
- Building asset inventory does not change from year to year (no addition or removal of buildings from the asset inventory)
- Bonding Projects, and HEAPR do not affect Deferred Maintenance (DM) and Adjusted Deferred Maintenance (ADM) and excluded for this exercise
- A 10-year plan will suffice to reduce Deferred Maintenance (DM) and Adjusted Deferred Maintenance (ADM) backlog
- There are enough current FTEs to carry out maintenance/projects when funded at the projected funding levels
- Annual construction inflation rate for the next 10 years stays at the current 1.04%
- Annual Adjusted Deferred Maintenance (ADM) Compound Annual Growth Rate (CAGR) for the next 10 years will stay at the current 5.48%

10 YEAR PROJECTION EXCLUSIONS:

- MnDOT FCA data is not included in any of the projections used since they do not receive asset preservation
- Renewal and Replacement needs are not considered for reasons other than to correct deficiencies