

Project Overview & Objectives

- Massachusetts Climate Goals:**
- Reduce emissions by 50% by 2030
 - Achieve Net Zero Greenhouse Gas Emissions by 2050
 - Increased municipal energy efficiency and renewable energy adoption
 - Improve municipal energy efficiency and resilience

- Why Berlin?:**
- Limited staff capacity to manage multiple sustainability initiatives
 - Project information distributed across departments and spreadsheets
 - Increasing availability of state and federal grants requires better project readiness and documentation
 - Growing need for data-driven planning and reporting

- Opportunity:**
- Develop a centralized sustainability and capital planning platform
 - Track and prioritize sustainability projects across municipal departments
 - Identify and monitor relevant grant and funding opportunities
 - Support grant applications through organized project data and readiness assessments
 - Improve transparency, reporting, and long-term decision-making



Approach and Methods

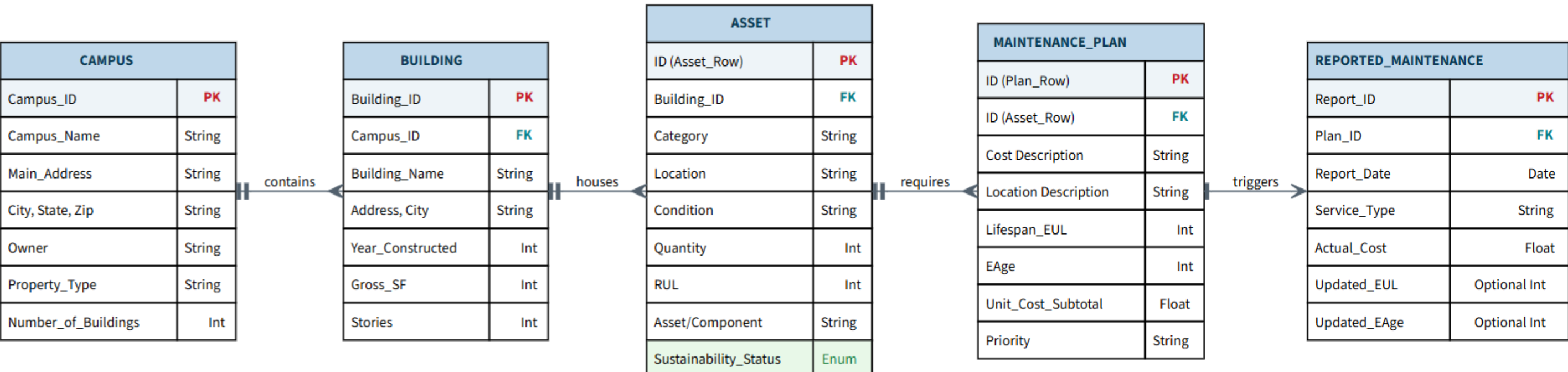


A data-driven approach to support sustainability, funding readiness, and informed decision-making for a stronger, more resilient community.

Deliverables and Findings

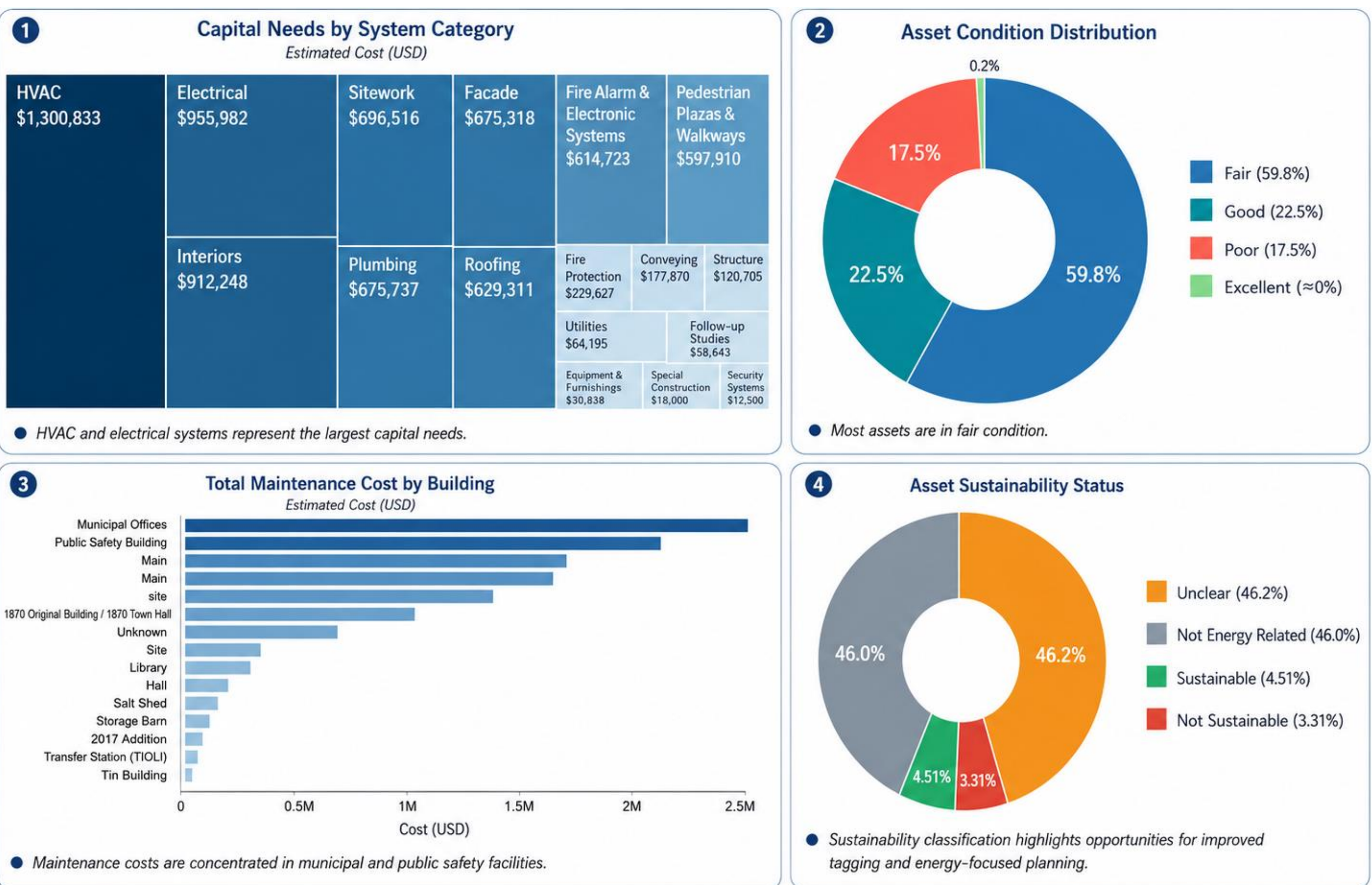
A. Asset Database & Data Model

Developed a standardized Excel-based database and ERD connecting buildings, assets, maintenance plans, costs, remaining useful life, and sustainability status.



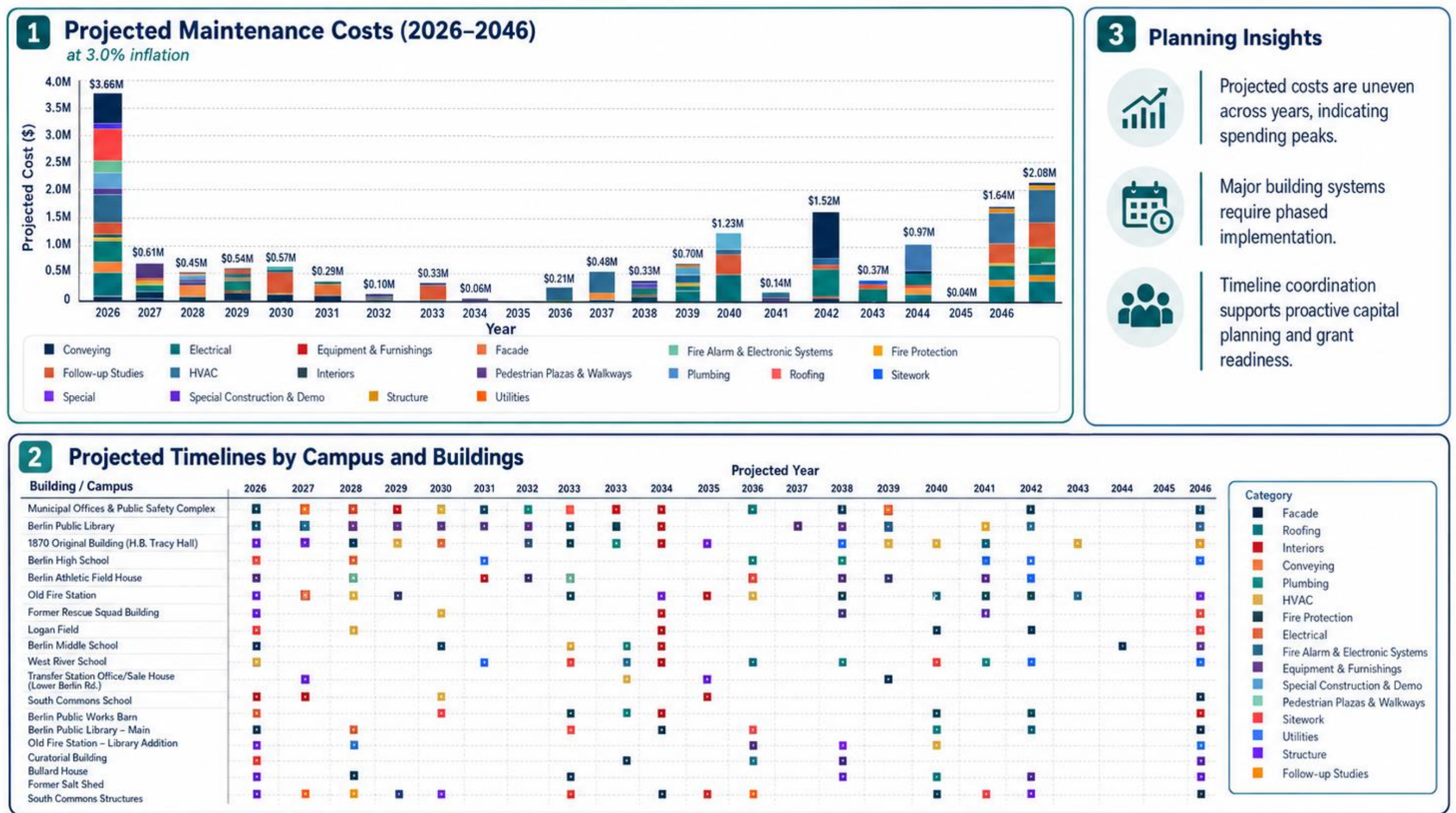
B. Interactive Capital Planning Dashboard

Built a dashboard to visualize capital needs, asset condition, maintenance costs by building, remaining useful life, and sustainability status.



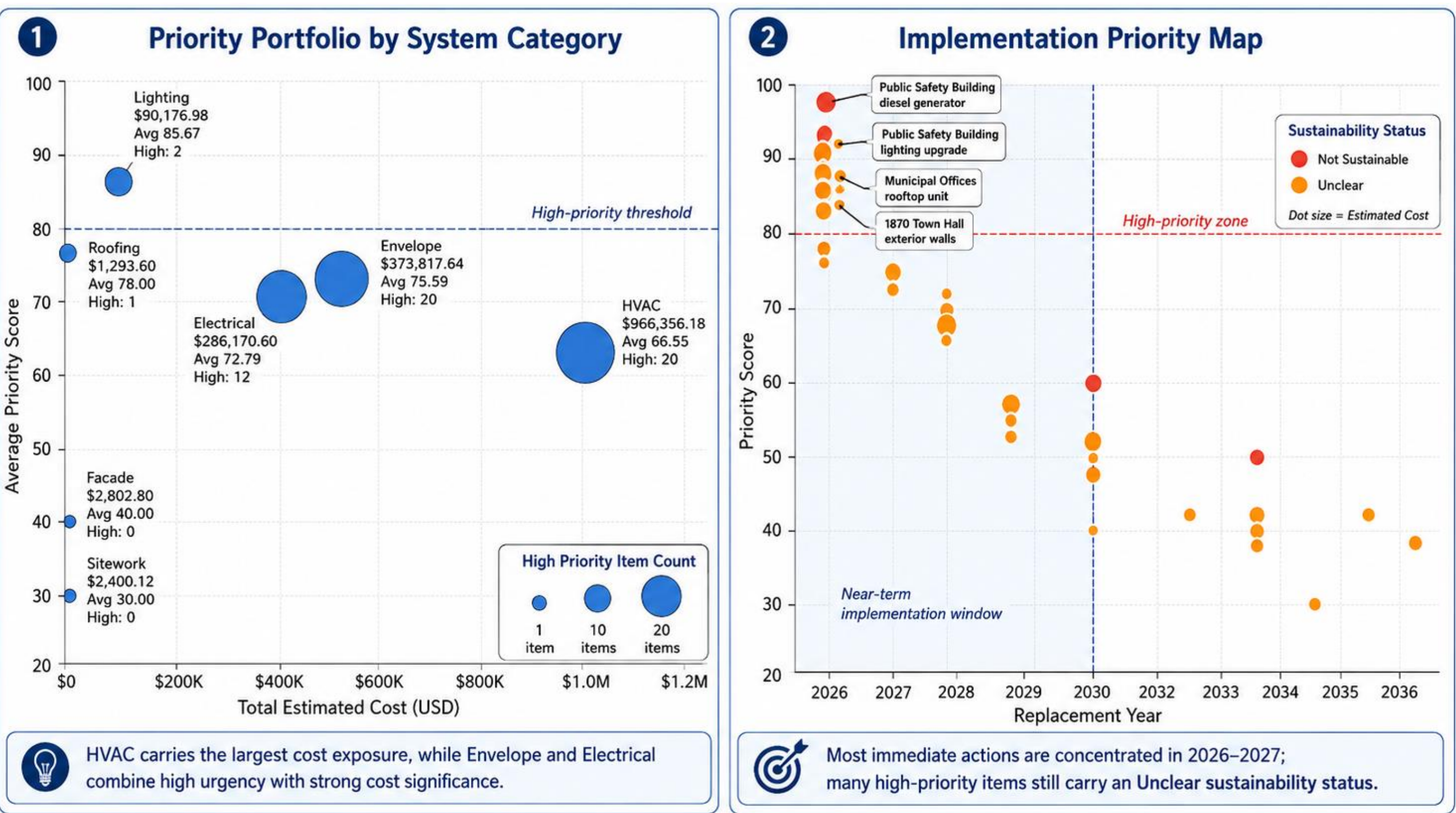
C. Capital Planning and Maintenance Cost Forecasting Tool

Created a maintenance cost forecast with inflation adjustment to support long term budgeting and phased project planning



D. Grant Alignment and Decision-Support Framework

Linked priority maintenance and sustainability needs with relevant funding opportunities to support grant readiness and capital investment decisions.



Main Takeaways

- Immediate:**
- Apply for Green Communities Grant to support priority energy and sustainability upgrades.
 - Apply for Municipal Energy Technical Assistance (META) Grant to fund feasibility studies and technical assessments.
- Near-term:**
- Sequence high-priority HVAC, Envelope, Electrical, and Lighting projects based on priority score, replacement year, cost, and grant eligibility.
 - Improve sustainability tagging to identify which maintenance items can become energy-efficiency or decarbonization projects.
- Long-term:**
- Use the dashboard annually for capital planning, maintenance forecasting, and grant readiness.
 - Position Berlin for future Climate Leader Communities, utility incentives, and state and federal sustainability funding.

Key Takeaway

The project provides Berlin with a practical decision-support system for prioritizing capital investments, identifying sustainability opportunities, and aligning high-priority assets with grants and long-term climate goals. This helps the Town make more transparent, data-driven, and sustainability-focused infrastructure decisions.

Acknowledgements

- **Tim Wysocki**, Chair, Berlin Energy Committee
- **William Lefebvre**, Environmental Scientist and Member, Berlin Energy Committee
- **Town of Berlin Office Members**
- **CELT Fellowship Coordinators**

