

# MAINE STATE LEGISLATURE

The following document is provided by the  
**LAW AND LEGISLATIVE DIGITAL LIBRARY**  
at the Maine State Law and Legislative Reference Library  
<http://legislature.maine.gov/lawlib>



Reproduced from electronic originals  
(may include minor formatting differences from printed original)





State of Maine

# Augusta Area State Facilities Master Plan

May 2023

Part 1

SMRT



Malcolm L. Collins AIA, LEED AP  
Architectural, Historic Preservation  
& Planning Concepts

 **DLR**GROUP





# AUGUSTA AREA STATE FACILITIES MASTER PLAN

May 2023

Part 1

---









# TABLE OF CONTENTS

## Part 1

<b>FOREWORD</b>	<b>  7</b>
<b>ACKNOWLEDGMENTS</b>	<b>  8</b>
<b>EXECUTIVE SUMMARY</b>	<b>  9</b>
<b>1. INTRODUCTION</b>	<b>  29</b>
AUGUSTA AREA FACILITIES OVERVIEW	
PLAN, PURPOSE, GOALS, AND PLANNING PROCESS	
MAINE WON'T WAIT - CLIMATE ACTION PLAN	
MAJOR MASTER PLAN THEMES	
<b>2. VISION AND MASTER PLAN FRAMEWORK</b>	<b>  41</b>
2030 VISION	
GUIDING PRINCIPLES	
PLANNING & DESIGN PRINCIPLES	
<b>3. RECOMMENDATIONS</b>	<b>  47</b>
ENERGY, SUSTAINABILITY, AND RESILIENCY	
HISTORIC PRESERVATION	
WORKPLACE	
MULTI-MODAL CIRCULATION AND PARKING	
EAST AND WEST CAMPUS	
PHASING AND IMPLEMENTATION FRAMEWORK	

## Part 2

<b>4. AUGUSTA AREA FACILITIES CONTEXT</b>	<b>  81</b>
REGIONAL CONTEXT	
AUGUSTA DOWNTOWN CONTEXT	
EXISTING REGULATORY FRAMEWORK	
RELEVANT PLANS, INITIATIVES, AND PRIOR STUDIES	
<b>5. EXISTING CONDITIONS CAPITOL PLANNING DISTRICT EVOLUTION</b>	<b>  93</b>
CAPITOL PLANNING DISTRICT EVOLUTION	
OPEN SPACE AND NATURAL RESOURCES	
VIEW CORRIDORS	
HISTORIC DISTRICTS AND BUILDINGS	
EXISTING MULTI-MODAL CIRCULATION AND PARKING	
ENERGY, SUSTAINABILITY AND RESILIENCY	
FACILITY CONDITIONS	
INFRASTRUCTURE, TELECOMMUNICATIONS, AND INFORMATION TECHNOLOGY	
OPPORTUNITIES AND CONSTRAINTS	
<b>6. WORKPLACE: CURRENT AND FUTURE SPACE NEEDS</b>	<b>  141</b>
WORKPLACE EXISTING CONDITIONS	
DEPARTMENT SPACE NEEDS	
EXISTING SPACE UTILIZATION	
WORKPLACE TRENDS	
<b>7. APPENDIX</b>	
APPENDIX A - HISTORIC PRESERVATION DATA SHEETS	
APPENDIX B - DEPARTMENT WORKPLACE INDEXES	









# FOREWORD

## Message From Commissioner Kirsten LC Figueroa, Department of Administrative and Financial Services



**Kirsten LC Figueroa**  
*Commissioner  
Department of Administrative  
and Financial Services*

It is my pleasure to introduce the State's 2023 Master Plan for Augusta Area Facilities. A primary responsibility of the Department of Administrative and Financial Services is to ensure safe and healthy environments for state employees, legislators, government officials, those participating in state government proceedings, and the thousands of visitors who frequent our facilities. The buildings house a vast array of functions, from administrative to scientific to cultural.

Our responsibility is not only to provide appropriate facilities for current needs, but also to embed flexibility for future adaptations and growth, all the while addressing climate change by reducing greenhouse gas emissions from our buildings and fleet and developing resilient responses to the effects of climate change.

This master plan not only provides state government with facilities to serve its many and varied programs, but hand in hand seeks to reduce energy consumption and increase use of cleaner, lower carbon energy. The plan strives to promote sustainability in facility construction, maintenance, and operations.

The dual goals of historic preservation and sustainability are on a parallel path in this master plan, as the State's facilities in greater Augusta are on average more than 100 years old. By renovating for adaptive reuse, both history and the inherent green value of recycling existing buildings are honored while providing functionality for current needs.

The Master Plan emphasizes respect for the natural environment, enhancing connections between state government activities and important landscape features such as the beautiful Kennebec River, parks, trails and preserved green space. It reflects our effort to synchronize the State's built and natural environments.



# ACKNOWLEDGMENTS

Throughout the process the planning team met regularly with the Augusta Master Planning Steering Committee comprised of:

**Elaine Clark**, Deputy Commissioner, Department of Administrative and Financial Services (DAFS)

**Earle Shettleworth**, Maine Historian and Capitol Planning Commission Chair

**Hannah Pingree**, Director, Governor's Office of Policy Innovation and the Future (GOPIF)

**Jessica Scott**, Senior Climate Advisor, Governor's Office of Policy Innovation and the Future (GOPIF)

**William Longfellow**, Bureau Director, Bureau of General Services (DAFS/BGS)

**Joe Ostwald**, Director of the Division of Planning, Design, and Construction, DAFS/Bureau of General Services (DAFS/BGS)

**Bill Bridgeo**, Retired Augusta City Manager

**Dan Burgess**, Director of the Governor's Energy Office

**David Madore**, Deputy Commissioner of Maine Department of Environmental Protection (DEP)

**Kirk Mohney**, Director of the Maine Historic Preservation Commission and State Historic Preservation Officer

**Matt Nazar**, Augusta Director of Development Services

**Randy Charette**, Deputy Commissioner Department of Agriculture Conservation and Forestry

**Ross Anthony**, Buildings and Efficiency Analyst at Governor's Energy Office

This committee was instrumental in establishing the guiding principles for the plan and offering critical insights and feedback during the development process. Special thanks: Elaine Clark and Earle Shettleworth deserve special thanks for supporting the planning team on an ongoing and consistent basis. Throughout the process they offered their perspective, wisdom and guidance on critical issues.

## MASTER PLAN TEAM

SMRT served as prime consultant for the 2023 Augusta Area Master Plan. Collaborating consultants included: The DLR Group (Planning and Urban Design, Energy, Workplace), VHB (Transportation), Malcolm Collins, AIA (Historic Preservation) and Wright Ryan Construction (Cost Analysis).

# EXECUTIVE SUMMARY

Maine enjoys a state capital area located in a magnificent setting along both sides of the Kennebec River, with a rich cultural history, an intact fabric of historic structures, office, and workplace buildings proximate to the capitol, and ample open space in walking distance to the Augusta downtown area. This 2023 Augusta Area Master Plan presents a vision where these resources are celebrated, connected, restored, and improved. The planning team, working closely with a steering committee and leadership from the Bureau of General Services, shaped a 20-year vision specifically developed to meet the objective of the State's 2020 Climate Action Plan Maine Won't Wait. Building environmentally sustainable practices into the future development of State facilities and campus infrastructure is fundamental to implementing this master plan.

## Current Context

The planning team started work in the fall of 2021, 18 months into the COVID-19 pandemic which seriously impacted the planning process and the availability of reliable data relative to work patterns, space needs assessments and parking demand. A significant number of Augusta area state employees continued to work remotely during the course of the planning process and remain remote to this day. Return to work patterns remain uncertain at the time of this report issuance. Given these circumstances, flexibility is key. The phasing and sequencing of projects will depend on volume of employees returning to Augusta, which will evolve and change over time.

## Planning Process

The planning team organized the process into five phases:

- Phase I: Data Collection and Existing Conditions Analysis
- Phase II: Master Plan Vision, Guiding Principles and Trends
- Phase III: Alternatives and Strategies Evaluation
- Phase IV: Master Plan Development
- Phase V: Final Plan and Adoption

The planning team met with key stakeholders who provided critical feedback to the planning team including:

- City of Augusta
- DAFS/BGS Property Management
- Capitol Security
- Capitol Planning Commission
- Blaine House
- GOPIF
- DAFS/BGS (multiple meetings)
- DOT
- MHPC



# GUIDING PRINCIPLES

With thoughtful input from the Steering Committee, the team established guiding principles for the 2023 Augusta master plan as follows:

## ▪ Reduce State's Operational Carbon Footprint

- Pursue building energy optimization
- Reduce vehicle miles traveled
- Create Incentives: EVs, Ride-share, Transit, Ped/bike etc.
- Adopt alternate fuel sources (solar farms etc.)



## ▪ Contribute to the Economic Vitality of Augusta

- Partner with the City of Augusta to build the context for increased economic vitality in Augusta.
- Develop live/work culture
- Shape open space/recreation opportunities
- Develop magnet amenities
- Enhance city and downtown connections



## ▪ Increase Workplace Flexibility

- Determine best practices for hybrid working model.
- Determine assigned/non assigned ratios, department by department



### ▪ Attract “Next Generation” State Employees

- Improve the workplace
- Create magnet amenities
- Promote wellness/healthy lifestyle
- Incentivized attractive housing & communities in walkable distance
- Provide attractive benefits (including convenient access to childcare)
- Offer rewarding work, opportunity for advancement



### ▪ Revitalize Historic Fabric of Augusta area State Facilities

- Consider the important role of the existing historic fabric on both the east and west campuses.
- Continue to invest in restoration and repurposing these structures when feasible.
- Shape open space and amenity space on the state campuses to re-invigorate these historic places.
- Leverage the embodied carbon benefit of historic buildings to reduce negative climate change impacts



▲ Source: State of Maine Bureau of General Services



## 2030 Vision

### Commitment to Climate Action Plan

- **Embrace Maine's Commitment to Climate Action** by reducing energy demand (transportation and operations) and developing efficient infrastructure
- **Create vibrant**, walkable campuses with inviting outdoor spaces, enjoyable workplace environments, easy access to magnet amenities and convenient connections to downtown and trails.
- **Shape flexible and adaptable** workplaces to meet the needs of agencies as they evolve and change over time.
- **Celebrate Maine's historic campus infrastructure** - Restore, repurpose, renew.

### Commitments to Energy Sustainability and Resilience

- **Lead the way with best practice energy solutions** that not only meet the climate action goals but put buildings on a road to decarbonization through elimination of fossil fuels and adoption of net zero practices.
- **Make data driven decisions** relative to investments in energy retrofits, energy purchase agreements and renewable energy use.
- **Provide dedicated staff** to manage energy use in state facilities and actively pursue energy optimization in new and existing construction.
- **Preserve and re-use existing historic building stock** while optimizing energy efficiency

### Enhancing the Public Realm

- **Shape inviting and attractive historic campus environments** that build on current infrastructure and offer additional enhancements and convenience.
- **Shape active outdoor spaces** on both East and West Campuses that create a sense of place and reflect the importance of governance.
- **Promote active ground level uses** on key streets proximate to the Capitol campus. Provide retail/restaurant/service venues proximate to campuses.

### Improving the Stakeholder Experience

- **Inspire visitors** to Maine's Capitol District with our rich cultural heritage and history. Our campuses and buildings will present an inviting, inclusive, convenient visitor experience.
- **Provide state employees** an enjoyable workplace that offers flexibility, choice and amenities that enhance the work experience, promote health and wellness and draw them to Capitol District.
- **Offer the Public** access to State services in welcoming and convenient environments that support agency functions and provide ease of access and efficient delivery of state services.

## Strategically address transportation and parking issues

- **Enhance street corridors to activate the pedestrian experience.** Calm traffic in key locations, improve street crossings and intersections.
- **Enhance trail connections** on both East and West Campuses to river and downtown Augusta.
- **Promote sustainable transportation** with carpool matching, cycling amenities, EV charging, and improved transit connections.
- **Strategically manage parking resources** to meet demand. Where structured parking is required include ground level occupied space to shape a vibrant campus experience.

## Optimize the Workplace

- **Enhance the quality of workspace for state employees.** Provide amenities with a focus on health & wellness to attract and retain staff.
- **Develop optimal adjacencies** between state agencies to promote collaboration and efficient delivery of services.
- **Develop flexible and adaptable** workplaces to meet the needs of agencies as they evolve and change over time.
- **Increase use of state-owned facilities** obviating the need to continue long term leases remote to state campuses.

## Celebrate Historic Preservation Opportunities

- **Repurpose and re-use** historic buildings to achieve their highest and best use, thereby efficiently serving customers, inspiring visitors, and empowering employees.
- **Upgrade** historic building systems and performance to contribute to and demonstrate Maine's commitment to Climate Action.
- **Restore and enhance** integrity of historic campus environments and landscapes, especially the Capitol Park area, Capitol Complex grounds, and original East Campus landscapes.
- **Evaluate** post-1950s buildings for their future contribution.



▲ Maine State House-Capitol Building





FIGURE 1. EXISTING CAMPUS AERIAL





# EXISTING CONDITIONS ASSESSMENTS

The planning team conducted assessments of State-owned infrastructure in Augusta on the east and west campuses and immediately surrounding parcels. The scope of work did not extend to State holdings in Vassalboro or Hallowell. The planning team evaluated building energy use, overall building condition, historic preservation opportunities and constraints, and the condition of the open space and public realm in and around the campuses. The team also evaluated the workplace, including location, quality, capacity, adjacencies, availability of amenities, future space needs, and unique programmatic requirements. Transportation assessments were based on pre-COVID data and included a study of commuting patterns, inter-campus trips counts, and parking demand. Assessments were conducted through on-site observation and monitoring in collaboration with review of past assessment reports performed within the last five years and provided to the team by DAFS/BGS.

## Existing Conditions Key Findings

### ▪ **Energy, Sustainability and Resilience**

- On-site generation is a key way for the State facilities to meet power needs with renewables. The DOT solar project will supply 70-75% of current needs when completed.
- DAFS/BGS should engage an energy procurement consultant to assess alternative sources of renewable power to meet current and future electric needs.
- Increased demand on the grid is expected due to electric vehicle charging, electrification of building heat, and on-site generation. Infrastructure improvements such as additional electrical feeds, an improved substation, and battery storage will likely become necessary.
- Solar generation projects should be made in partnership with private companies to maximize eligibility for federal tax incentives and advanced depreciation schedules.

### ▪ **Urban Context/Public Realm:** The existing urban context and public realm conditions review included an analysis of the existing built and pedestrian environment around the Augusta Area State Facilities for the east and west campuses. It identified the following needs:

- Shape active outdoor spaces on both East and West campuses that create a sense of place and reflect the importance of governance.

- Promote active ground-level uses on key streets proximate to the Capitol and Union Streets on the west campus and key facilities within the East campus.
- Manage the parking resources strategically to meet future demand and the need for ground-level occupied space to shape a vibrant campus experience.
- Calm traffic in key locations and improve street crossings and intersections for pedestrians' and bicyclists' safety.
- Further explore enhanced trail connections on both east and west campuses to the river and downtown Augusta.

**Workplace:** The review of existing workplace and space need conditions and agency surveys of the departments included in the Master Plan highlighted the following key takeaways:

- **Focus on Health and Wellness:** State employees would benefit from having areas to get outside for walks and meetings during the day along with access to locker rooms. Departments also wanted a fitness area and healthy food options available on campus.
- **Hybrid Work Environment:** The State's teleworker policy must be updated to clarify its influence on agencies and how existing and future space planning.
- **Recruiting/Retention:** Recruiting new staff is a concern with the competition from the private sector. Providing additional perks,



i.e., a hybrid work environment, gym membership reimbursement, etc., would be seen as a positive. Additional clarity on the State's teleworker policy may factor in this equation.

- Technology: There is a general need to improve conference room technology for facilities and spaces. Some existing buildings have issues with internet connection due to the building envelope.
- Space Utilization: Need for a better location for conference rooms and more daylight in office work environments. Additional spaces like mother's rooms, huddle rooms, collaboration spaces, and hoteling stations would benefit the employees.

The Master Plan evaluated potential scenarios for teleworking so that its implication on current and future space needs can be assessed. The Plan also included a range of space standards that address the existing facilities and their use. Existing and future space needs were reviewed based on quantitative needs and addressing the needs of changing demographics to attract and retain employees, including technology, conference spaces, flexibility, and wellness.



▲ Existing office space in Burton M. Cross State Office Building.



▲ Maine DOT solar installation along I-95.



▲ EV chargers at MeDOT powering electric vehicle fleet.

### ▪ Multi-modal Circulation and Parking

- The West Campus has 1992 parking spaces, all free and the majority unrestricted. Occupancy can be high during legislative sessions, but otherwise, parking is ample. Replacement of the State Garage is an opportunity to add more spaces convenient to the State House and Cross Building.
- The East Campus has 1359 spaces, which is currently adequate. More parking will likely be needed as staff consolidates to the East Campus from more remote facilities and/or an Innovation District is opened. Teleworker options and carpool/transit incentives can blunt the additional parking demand and may avoid the need for new spaces.

- EV charging is available on both campuses (six spaces on West Campus and four on East Campus). All chargers are Level 2 chargers with longer charge times than DC fast chargers. Their use should be monitored so more of those chargers can be added as demand grows. An on-going EV charging station master plan is currently underway.
- Transit service is currently inadequate due to limited hours (8:30-3:30) and one-hour headways. The State should subsidize fares but also partner with KVCAP to make routing and service more convenient for State employees.
- Most of the State workforce lives outside Augusta, with 45% living 20 miles or farther. For these workers, carpool matching is the most realistic alternative to self-driving and should be supported with a carpool matching program by filling gaps in the park and ride network. Go Maine ([gomaine.org](http://gomaine.org)) continues to be active post-pandemic and presents an option to increase carpooling.

### ▪ Historic Preservation

- Buildings currently identified as historical (pre-1950 based on the 2001 master plan) have been successfully rehabilitated as a result of the emphasis of the 2001 plan on making good use of the State's existing building inventory.
- Exceptions to #1 are the Stone Building, Central Building, and CETA Building on the East Campus. Stone Building roof and building envelope project was in design during master planning work, and proper mothballing of CETA was funded and planned, to protect the building pending a reuse decision.



- Buildings now 50 years old (built prior to 1972) and, as of 2023, not designated as historic (221 and 242 State Street, 21 Union Street) present some renovation/expansion or replacement options.
- Buildings that have been rehabilitated since 2001 represent significant improvements in energy efficiency, but although all but the most recently done require updates/upgrades.
- Good building sites are available on both campuses if needed.
- The grounds of both the East and West Campuses require historical analysis and landscape plans in order to enhance the historic resources of each and develop amenities for future employees and visitors.
- Pedestrian environments suffer due to existing conditions (tunnels and parking areas on the East Campus; parking areas, pedestrian circulation, and vehicular access on the West Campus).
- Streetscapes and riverfronts on both campuses have been neglected and unrecognized for the historic and environmental resources and amenities they represent.
- Capitol Park and the former AMHI campus open spaces have been treated haphazardly over the past decades and require a campus planning approach for future development that respects their historic importance and the resources they represent.



▲ Blaine House, 1919



▲ Smith and Merrill buildings recently undergoing repairs.





FIGURE 2. ILLUSTRATIVE WEST CAMPUS MASTER PLAN VIEW





# PLAN SUMMARY

The driving force behind the 2023 Augusta area master plan is Maine's commitment to implement energy optimization and climate action initiatives in future capital projects. Within this context, the plan anticipates significant investments in historic facilities on both the East and West campuses, proposes increased density in State-owned facilities by reducing leases in more remote buildings, creates amenity spaces on both campuses, introduces an "Innovation Zone" on the East Campus and strengthens connections to downtown Augusta on both sides of the river. The plan can be implemented sequentially as demand and needs evolve and change.





FIGURE 3. ILLUSTRATIVE WEST CAMPUS MASTER PLAN VIEW





## Key Components of the West Campus Plan

The West Campus, anchored by the Capitol Building, the Cross Office Building, and the Cultural Building, is the centerpiece of the State capital area. There is enormous potential to improve the public realm of this campus by enhancing existing open space, providing additional green space, redesigning parking, and creating an inviting, pedestrian-friendly, walkable campus. The plan includes the introduction of green space to the west of the Cross Office Building allocated for monuments; a new accessible visitor entrance to the Cross Building (including a location for security screening); new vehicular drop-off at the Cultural building, and improved pedestrian walkways, plantings, and hardscape. To satisfy parking demands, the plan includes developing a new parking structure across Capitol Street from the Cross Office Building.

To further enhance the quality of the public realm, the planning team recommends traffic calming along State Street, providing a safer more approachable connection between the West Campus and Capitol Park as well as improvements to key intersections adjacent to the campus. Additional multi-modal improvements include the introduction of a trail starting at the east end of Capitol Park connecting to the existing rail/trail corridor along the Kennebec River. This trail will provide pedestrian/bike access to downtown Augusta, reinforcing the State's important commitment to improve and enhance the vitality of the downtown area.

Space needs and agency relocations will drive building development. The planning team identified several recommendations for building projects, including:

- 221 State Street (renovation or replacement)
- Capitol and Sewall Street Office Building and Parking Garage
- Office building adjacent to MeDOT along Capitol Park (if needed)
- 242 State Street (future use determination)

Finally, to provide an optimal visitor experience and ease of access to all users, the planning team recommends improved wayfinding and signage throughout the West Campus area.





FIGURE 4. ILLUSTRATIVE EAST CAMPUS MASTER PLAN VIEW





## Key Components of the East Campus Plan

The revitalization of the East Campus has been underway for over 20 years. The State has already restored, renovated, and re-occupied many of the original hospital buildings, including Tyson, Harlow, Deering, Ray, Marquardt, and Greenlaw.

The Stone Building was occupied by hospital administration and patients until it was replaced in 2004 and has remained unoccupied since. The restoration of the Stone Building is a signature feature of the East Campus Plan with the capability of providing over 200,000 GSF of contemporary workspace. Supporting the expanded employee occupancy on the East Campus, the planning team is recommending the addition of modern campus amenities that include a cafeteria and conference center. The proposed new building on the footprint of the former Sanborn Building and the Central Building have been identified as key opportunities to expand campus capacity while providing modern amenities to State employees.

The Plan includes the introduction of an innovation zone centered around the restoration of the CETA building. To bring vibrancy to this campus area, the planning team recommends the addition of new buildings (oriented north/south to reinforce the original hospital campus planning principles) structured for mixed-use occupancy developed with ground lease arrangements through public and private partnerships. Occupancies may include mixed uses, including housing, education, research &

development, and other compatible programs.

The planning team is recommending major improvements to the public realm, including introducing a pedestrian plaza running north/south between Harlow/Ray and Marquardt/Deering, continuing to the new innovation zone anchored by the CETA Building. In addition to the pedestrian plaza, the plan includes a large open green space and amphitheater with views across the river to the Capitol Building and enhanced trail connections down to the river.

New parking will be distributed in key locations to support demand as occupancy increases over time. In support of these improvements, the planning team recommends a comprehensive infrastructure plan identifying best practice energy solutions that meet the climate action goals and decarbonize the campus through the elimination of fossil fuel use and adoption of net zero practices.

The open space improvements are contingent on removal of the utility tunnel system that supported the original hospital. These tunnels currently encumber the campus as they emerge above grade in multiple locations, interrupting circulation routes and views.

Finally, to provide an optimal visitor experience and ease of access to all users, the planning team recommends improved way-finding and signage throughout the East Campus area.







## Phasing and Implementation

Successful implementation of the proposed plan requires rigorous commitment to the following framework:

- Implement energy and climate action plan projects / initiatives in each phase and as part of each capital project.
- Prioritize adaptive reuse of historic buildings while incorporating innovative solutions to reduce climate impacts.
- Review all projects currently funded and/or in the design / planning and implementation pipeline by DAFS/BGS for opportunities to reduce climate impacts.
- Pursue a methodical implementation process from vision to construction including due diligence, feasibility, budgeting, requests for legislative funding and approval, planning, design and construction.
- Allow flexibility to accommodate future workplace scenarios including the goal of balancing leased space with state-owned space, considering the impact of teleworking has on space needs.
- Embed placemaking, landscaping, and multi-modal circulation enhancements in each facility and/or major capital project.

The planning team developed a three phase implementation plan:

- Phase 1: Near Term 0-5 years
- Phase 2: Mid Term 5-10 years
- Phase 3: Long Term 10-15 years.

Details of the phasing plan are included in section "Phasing and Implementation Framework" on page 67.

## Next Steps

Under 5 MRS §302, the Master Plan approved by the Capitol Planning Commission is submitted to the Legislature. To that effect, a Resolve has been introduced in the 131st Maine Legislature (but not printed as of the date of this document) for approval of the 2023 master plan concepts. When passed, this master plan will supersede the previous plan adopted by the 120th Maine Legislature, Resolves 2001, Ch. 34.

This master plan is a comprehensive and strategic document that outlines a vision for the development of the Augusta State facilities East and West campuses over the next 20 years. The master plan acts as a road map for planning and development, providing a framework for decision-making and guiding the long-term development of the State campuses. Good planning requires thorough consideration of long-term effects over short-term solutions, taking into account factors such as physical constraints, environmental considerations, and the needs and goals of the State and Augusta community.

Utilizing this Plan will provide numerous benefits, including a clear understanding of the existing conditions and potential future development opportunities, as well as considerations for prioritizing investments and guiding decision-making. By creating this shared vision, the master plan can also help to build consensus and support among stakeholders, as well as communicate the organization's goals and objectives to the broader community.

While this Plan is comprehensive, further planning will be required for each of the recommendations. Although master planning does provide a framework, each individual project will have its own challenges that will not be revealed until a more focused study can be performed.









01 /

# INTRODUCTION

**Augusta Area Facilities Overview**

**Plan, Purpose, Goals, and Planning Process**

**Maine Won't Wait - Climate Action Plan**

**Major Master Plan Themes**





FIGURE 6. EXISTING AUGUSTA AREA FACILITIES MAP (EAST AND WEST CAMPUSES)



# AUGUSTA AREA FACILITIES OVERVIEW

The State of Maine - Department of Administrative and Financial Services (DAFS) through the Bureau of General Services (DAFS/BGS) is required to prepare a master plan for the Augusta Area State Facilities. DAFS/BGS is responsible for close to 2 million square feet of facilities in Augusta, Hallowell, and Vassalboro, ME. The previous Augusta State Facilities Master Plan was prepared in 2001. The previous plan required an update to anticipate the State's facility needs through 2040, focusing on sustainability and resiliency in the face of climate change.

The 2023 Augusta Area State Facilities Master Plan (the Master Plan) will align the State's real estate (approx. 1.6 million SF of owned and 1.7 million SF of leased space) with the priorities and actions of the statewide Climate Action Plan (Maine Won't Wait: A Four-Year Plan for Climate Action) (CAP). The State of Maine occupies two campuses in Augusta on each side of the Kennebec River. The East Campus has approximately 1 million gross square feet of space in 24 buildings on approximately 155 acres. The West Campus has approximately 751,700 gross square feet of space in 18 buildings on approximately 47 acres, including the State House. The Master Plan also includes facilities in Vassalboro and Hallowell. The Maine Criminal Justice Academy is located in Vassalboro. The State also owns a building at 10 Water Street in Hallowell. The East and West Campuses are part of the "Capitol Area District" which is governed by the Capitol Planning Commission established by the State of Maine in 1967.



▲ West Campus Aerial



▲ East Campus Aerial



# PLAN, PURPOSE, GOALS, AND PLANNING PROCESS



▲ View overlooking Capitol Park from Maine State House balcony

The goal of the Facilities Master Plan is to develop an environmentally sustainable master plan for the years 2023-2040 that: reduces energy consumption; increases the use of cleaner, low-carbon energy, preferably generated in Maine, reduces greenhouse gas emissions in all state facilities and generally achieves the objectives of the State's 2020 Climate Action Plan. The CAP focuses on reducing Maine's Greenhouse Gas Emissions to meet the state's 2030 and 2050 targets. The master plan goals include the following:

- **Advance the objectives of the State's 2020 Climate Action Plan** and EO#13 including reducing energy consumption, increasing use of cleaner, low-carbon energy generated in Maine, and reducing greenhouse gas emissions in all state facilities
- **Promote sustainability in all aspects** of facility construction, maintenance, and use by state agencies
- Create a **blueprint for development of state buildings** and related infrastructure resources through 2040
- Assure a **healthy work environment** for state employees and enhancing the **stewardship** of state-owned facilities
- Create **appropriate places for public business**
- Consolidate or co-locate state agency functions as appropriate to **optimize efficiencies including balancing leased and owned spaces**
- Coordinate with the **City of Augusta**
- Establish **boundaries for development**
- **Restore and reuse historic buildings**
- **Create or preserve green space**



## Planning Process

The master planning process was organized into five phases:

- Phase I: Data Collection and Existing Conditions Analysis
- Phase II: Master Plan Vision, Guiding Principles, and Market Trends
- Phase III: Alternatives and Strategies Evaluation
- Phase IV: Master Plan Development
- Phase V: Final Plan and Adoption

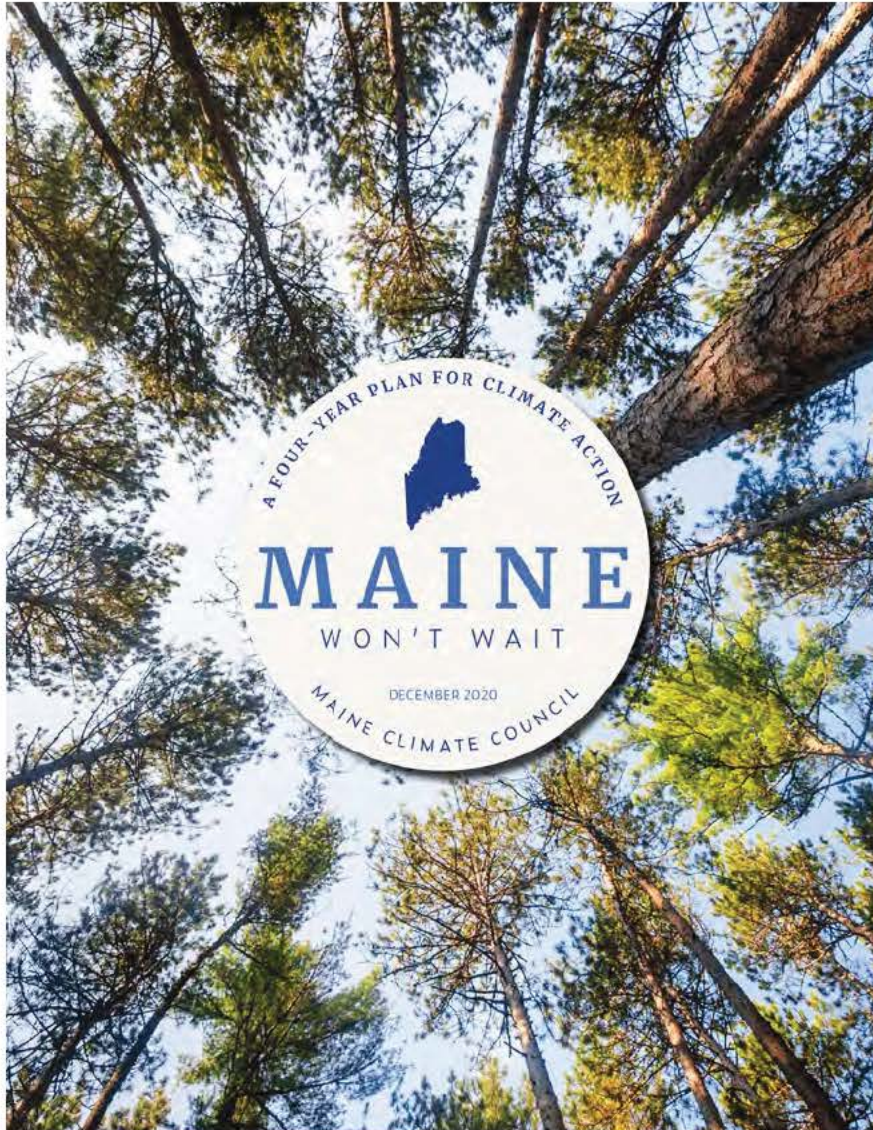
The master plan process included feedback from the Bureau of General Services leadership and staff. The planning process also included regular feedback and review from the Steering Committee constituted for the Plan. The Steering Committee included representatives from the City of Augusta, the Capitol Planning Commission, the State Historic Preservation Office, the Governor's Office of Policy Innovation and the Future, the Governor's Energy Office, and some representatives from State departments. This Committee was instrumental in establishing the guiding principles for the plan and offering critical insights and feedback during the development process. Interviews and online surveys related to the workplace were also conducted with the departments included in the master plan.

Stakeholders included:

- City of Augusta
- DAFS/BGS Property Management
- Capitol Security
- Capitol Planning Commission
- Blaine House
- GOPIF
- DAFS/BGS (multiple meetings)
- DOT
- MHPC
- Workplace interviews with multiple agencies



# MAINE WON'T WAIT - CLIMATE ACTION PLAN



▲ *Maine Won't Wait: Climate Action Plan*

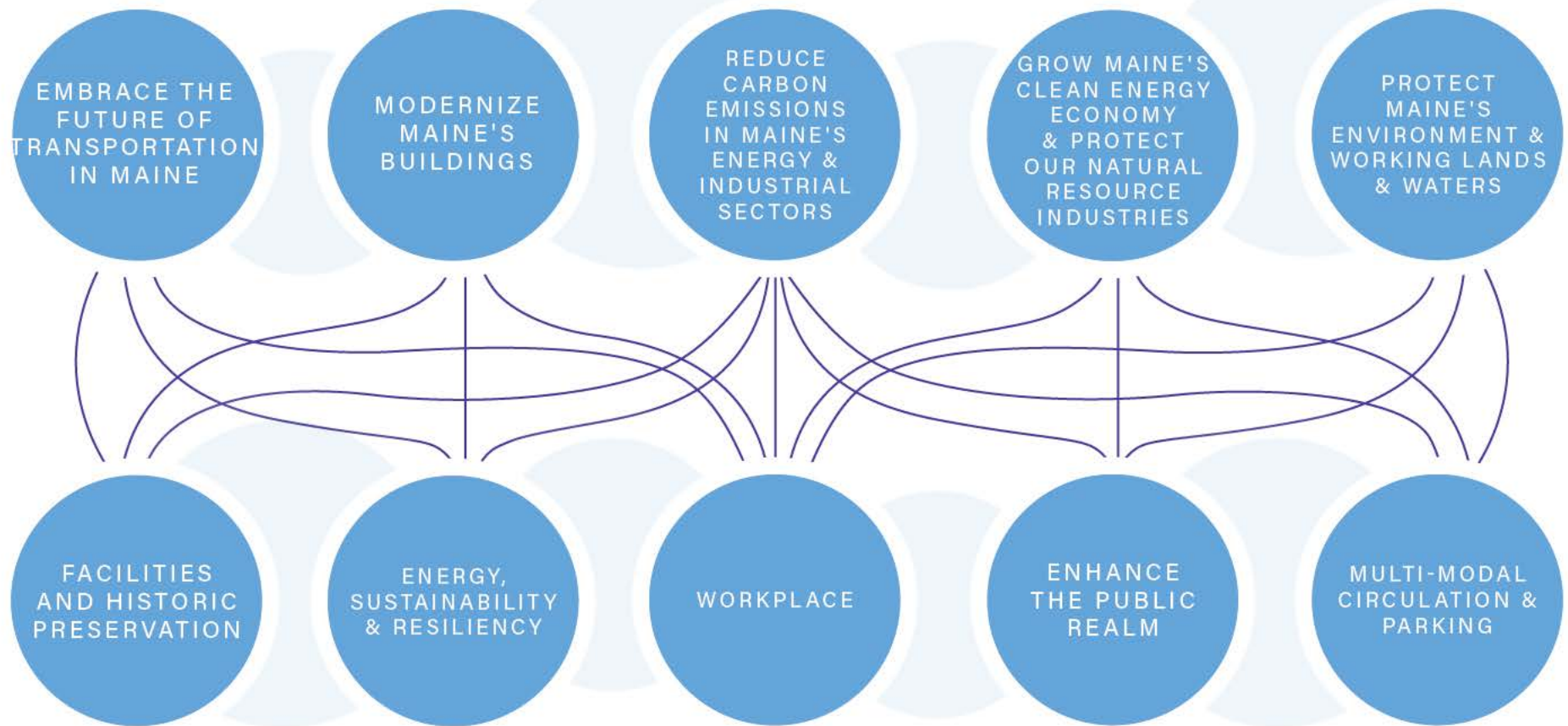
The 2023 Augusta Area Facilities Master Plan is an update to the 2001 master plan for Augusta Area Facilities. This 20-year plan will focus on sustainability and resiliency in the face of climate change. The 2023 Augusta Area Facilities Master Plan will reflect current conditions and provide a framework to achieve the objectives of the Governor's Executive Order 13 FY 19/20 and the goals and strategies described in the State's 2020 Climate Action Plan (Maine Won't Wait: A Four-Year Plan for Climate Action) (CAP).

This Master Plan has the opportunity to support a broad range of strategies identified in the CAP, including:

- **Strategy A:** Embrace the Future of Transportation in Maine, specifically by looking into planning for increased electric vehicle use and reducing overall vehicle miles traveled by building on mass transportation opportunities, identifying what roles can be filled through Work from Home policies, and promoting and incentivize commuter pools.
- **Strategy B:** Modernize Maine's Buildings: Energy-Efficient, Smart and Cost-Effective Homes and Businesses, by evaluating building systems, recommending energy improvements to existing buildings, and recommending advanced/ high performance building systems and sustainability sourced building materials for new construction. Special attention will be put on recommendations to support the local timber industry and accelerate its growth into the burgeoning mass timber market – a win for Maine's industry and climate.
- **Strategy G:** Invest in Climate-Ready Infrastructure, by specifically addressing the climate vulnerability of our local and statewide infrastructure and the impact on State facilities and campuses of a



## MAINE WON'T WAIT: CLIMATE ACTION PLAN



## 2023 AUGUSTA AREA FACILITIES MASTER PLAN

Restore and reuse historic buildings  
Create and preserve open space

Advance the objectives of the state's 2020 Climate Action Plan  
Promote sustainability in construction, C&M, and use

Develop healthy workplace environments for employees  
Balance leased and owned space and create efficiencies of space and stewardship

Provide framework for development for state buildings and infrastructure  
Create an inviting place for business and public realm

Focus on reducing transportation GHG emissions  
Walkable and pedestrian friendly East and West Campuses





▲ Lead by Example Starting Point Cover Page

"State Infrastructure Adaptations Fund."

- **Strategy H:** Engage with Maine People and Communities about Climate Impacts and Program Opportunities, by raising awareness through the master planning public engagement process and by supporting Maine-based climate leadership contributions in the Augusta/Capitol Region.

## Lead by Example Starting Point (2021)

The Master Plan also reviewed various ongoing actions undertaken by the DAFS/BGS in the last few years. These actions are highlighted in the annual Lead by Example reports. The Facilities Master Plan will be guided by the State's climate and efficiency goals. From clean energy generation to electrifying transportation, the State is placing emphasis on piloting emerging technologies. When it comes to buildings, improving the efficiency of existing state buildings, producing healthier workplaces, and utilizing best practices in design and construction are key actions highlighted in the Lead by Example reports by the DAFS/BGS.

The Facilities Master Plan is also guided by these goals.

- **Action 2:** In addition to procuring clean energy, the state will consider opportunities to use state buildings and lands for **clean energy generation**, where practicable.
- **Action 3:** Improve the **efficiency of existing state buildings**.
- **Action 4:** Reduce emissions from the buildings sector by requiring **best practices in design and construction**, including building



materials selection; heating, cooling, and lighting systems; and enhanced efficiency and weatherization, as well as renewable generation where applicable.

- **Action 6:** The state will develop a policy on **teleworking** that allows for teleworking options where feasible.
- **Action 7:** The state will continue to **electrify transportation**, by transitioning its fleet to EVs and PHEVs where appropriate and by **piloting emerging technologies where practicable**.
- **Action 11:** By 2023, the state will set targets that lead to **healthier workplaces** and that reduce solid waste from government facilities.



▲ Turbines from Fox Island Wind generate power for the neighboring island communities of Vinalhaven and North Haven. Photo from "Maine Won't Wait" Climate Action Plan, courtesy of Tom Groening, Island Institute.



# MAJOR MASTER PLAN THEMES

The Facilities Master Plan organized the planning process into the following major themes to align with the goals of the Master Plan, the Climate Action Plan, and the various Lead by Example initiatives. The planning process and the Master Plan recommendations are focused on each of the following themes.

## Energy, Sustainability, & Resiliency

- Advance the objectives of the State's 2020 Climate Action Plan
- Promote sustainability in construction, O&M, and use

## Planning & Urban Design

- Provide framework for development for State buildings and infrastructure
- Create an inviting place for business and public realm

## Transportation

- Focus on reducing transportation GHG emissions
- Walkable and pedestrian friendly East and West campuses

## Workplace

- Develop healthy workplace environments for employees
- Balance leased and owned space and create efficiencies of space and stewardship

## Historic Preservation

- Restore and reuse historic buildings













02 /

# VISION AND MASTER PLAN FRAMEWORK

**2030 Vision**

**Guiding Principles**

**Planning And Design Principles**





▲ *Maine State House, present day*

## 2030 VISION

- 1) Embrace Maine's Commitment to Climate Action by reducing energy demand (transportation and operations) and developing efficient infrastructure.
- 2) Create vibrant, walkable campuses with inviting outdoor spaces, easy access to magnet amenities, convenient connections to downtown and trails.
- 3) Shape flexible and adaptable workplaces to meet the needs of agencies as they evolve and change over time.
- 4) Celebrate Maine's historic campus infrastructure - Restore, repurpose, renew.



# GUIDING PRINCIPLES

## ATTRACT "NEXT GENERATION" STATE EMPLOYEES

- Workplace improvements
- Magnet amenities
- Promote wellness/healthy lifestyle
- Attractive housing & communities in walkable distance
- Attractive benefits (including convenient access to childcare)
- Rewarding work, opportunity for advancement

## REDUCE STATE'S OPERATIONAL CARBON FOOTPRINT

- Building energy optimization
- Reduce vehicle miles traveled
- Incentives: EVs, Ride-share, Transit, Ped/bike etc.
- Alternate fuel sources (solar farms etc.)

## INCREASE WORKPLACE FLEXIBILITY (TELEWORKER AND/OR REGIONAL OFFICES)

- State to determine best practices for hybrid working model.
- Determine assigned/non assigned ratios, department by department
- Consider regional office hubs

## CONTRIBUTE TO ECONOMIC VITALITY OF AUGUSTA

- Partner with the City of Augusta to build context for increased economic vitality in Augusta.
- Develop Live/Work culture
- Shape open space/recreation opportunities
- Develop magnet amenities
- Enhance city and downtown connections

## REVITALIZE HISTORIC FABRIC OF AUGUSTA AREA STATE FACILITIES

- Consider the important role of the existing historic fabric on both the east and west campuses.
- Continue to invest in restoration and repurposing these structures when feasible.
- Shape open space and amenity space on the state campuses to re-invigorate these historic places.
- Leverage the embodied carbon benefit of historic buildings for climate change.



# PLANNING & DESIGN PRINCIPLES



## Stakeholder Experience

- **Visitors** to Maine's Capitol District will be inspired by our rich cultural heritage and history. Our campuses and buildings will present an inviting, inclusive, convenient visitor experience.
- **State** employees will enjoy a workplace that offers flexibility, choice and amenities that enhance the work experience, promote health and wellness and draw them to Capitol District.
- **The Public** will access State services in a welcoming and convenient environment that supports agency functions and provides ease of access and efficient delivery of state services.



## Energy, Sustainability and Resilience

- Lead the way with best practice energy solutions that not only meet the climate action goals but put buildings on a road to decarbonization through elimination of fossil fuels and adoption of net zero practices.
- Make data driven decisions relative to investments in energy retrofits, energy purchase agreements and renewable energy use.
- Provide dedicated staff to manage energy use in state facilities and actively pursue energy optimization in new and existing construction.



## Enhance Public Realm

- Shape inviting and attractive historic campus environments that build on current infrastructure and offer additional enhancements and convenience.
- Shape active outdoor spaces on both East and West Campuses that create a sense of place and reflect the importance of governance.
- Promote active ground-level uses on key streets proximate to the Capitol campus. Provide retail/restaurant/service venues proximate to campuses.





## Multi-modal Circulation and Parking

- Strategically manage parking resources to meet demand. Where structured parking is required include ground level occupied space to shape a vibrant campus experience.
- Enhance street corridors to activate the pedestrian experience. Calm traffic in key locations, improve street crossings and intersections.
- Enhance trail connections on both East and West Campuses to river and downtown Augusta.
- Promote sustainable transportation with carpool matching, EV charging, and improved transit connections.



## Workplace

- Enhance the quality of workspace for state employees. Provide amenities with a focus on health & wellness to attract and retain staff.
- Develop optimal adjacencies between state agencies to promote collaboration and efficient delivery of services.
- Develop flexible and adaptable workplaces to meet the needs of agencies as they evolve and change over time.
- Increase use of state-owned facilities obviating the need to continue long term leases remote to state campuses.



## Historic Preservation

- Repurpose and re-use historic buildings to achieve their highest and best use, thereby efficiently serving customers, inspiring visitors, and empowering employees.
- Upgrade historic building systems and performance to contribute to and demonstrate Maine's commitment to Climate Action.
- Restore and enhance integrity of historic campus environments and landscapes, especially the Capitol Park area, Capitol Complex grounds, and original East Campus landscapes.
- Evaluate post-1950s buildings for their future contribution.









03 /

# RECOMMENDATIONS

Energy, Sustainability, And Resiliency

Historic Preservation

Workplace

Multi-Modal Circulation And Parking

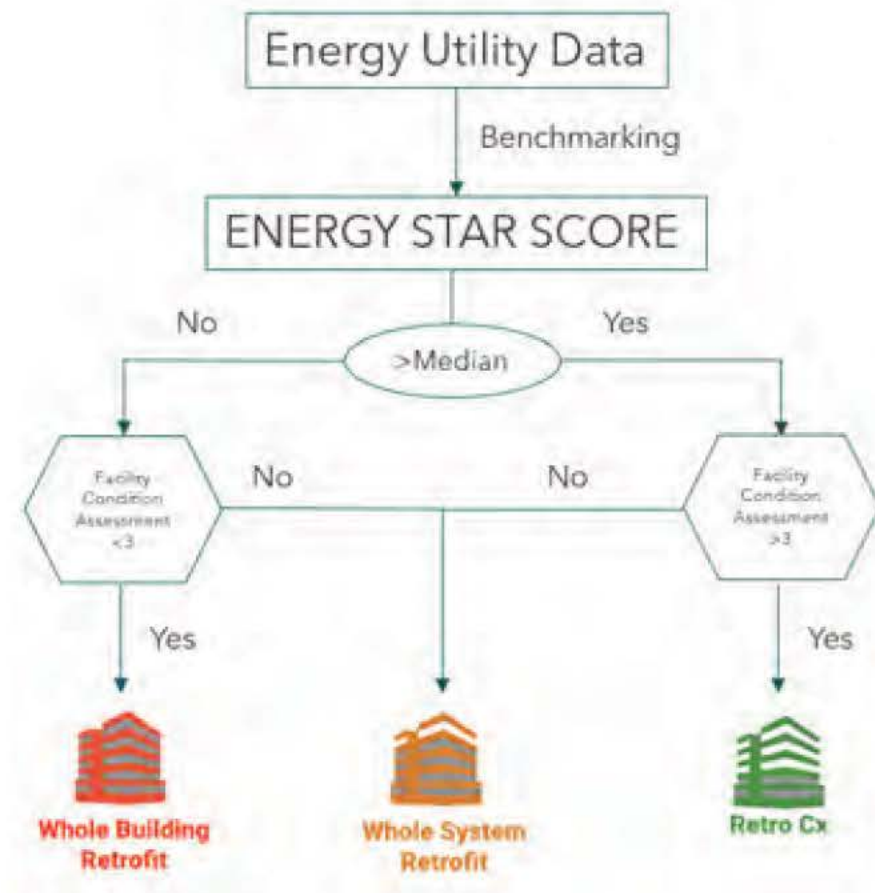
East And West Campus

Phasing And Implementation Framework



# ENERGY, SUSTAINABILITY, AND RESILIENCY

Energy Conservation Scope Type	Annual % Target Reduction
Whole-Building Retrofit	75
Whole-System Retrofit	50
Retro-Commissioning	20



▲ Energy Recommendations – Decision Tree

Based on the information gathered from the existing building energy use operation, the buildings were bucketed into three energy conservation scope buckets. When developing energy conservation scope measures, primary considerations included:

- Capital versus operational focus: almost all buildings can benefit from capital investment and operational improvement, but at differing levels of intensity. Capital investment is driven by deferred maintenance. A building with brand new systems will likely not receive another upgrade specifically to address energy considerations and thus will benefit from operational tuning first, to bring out the best version of an existing building's performance.
- Energy savings target: every investment, no matter the scale, must have a targeted outcome. Capital intensive projects should be tied to the greatest potential savings, while operational investments can drive significant savings with a rapid return on investment.

Three energy conservation scope buckets defined for the facilities:

- Whole-Building Retrofit: These projects are comprehensive in nature and impact all systems of a building. These projects may impact the programmatic nature of a facility and often incorporate elements of new construction. Projects represent opportunities for the deepest energy savings to net zero energy ready levels of performance. These projects require deep upgrades to building enclosure systems to allow the benefits of reduced capital investment across other building system types. The best candidates for these projects include ones with significant deferred maintenance and functional obsolescence considerations.



- Whole-System Retrofit: These projects impact the entirety of one or more building systems, most commonly HVAC. These projects present opportunities to improve indoor environmental quality, including elements of thermal comfort and ventilation. HVAC upgrade approaches should consider modularity in sizing, to align with future additional approaches that help to reduce peak cooling and heating demand.
- Retro-Commissioning: These projects address buildings recently modernized within the last ten years and have had modern interventions driven by a relatively stringent energy code and regular use of the LEED rating system framework. These projects have complex systems that may not be performed optimally due to changes made since construction completion or small component failure, such as valves, damper actuators, or sensors.

Energy target reduction goals were set for each of the different energy conservation scope types. These targets aligned with the amount of capital investment that was being made in each of the scope types.

## HISTORIC PRESERVATION

The original Augusta State Facilities Master Plan established a strong framework for the application of best historic practices to the stewardship of State of Maine – owned buildings and grounds, in part based on the high percentage of historic buildings under the State's charge. Sustainability was not an emphasis in 2001, but the green value of existing buildings was starting to be quantified and blended with the cultural values of institutional-scaled historic buildings.

The following are general recommendations reflecting the final plan for both East and West campuses with regard to historic preservation resources and issues:

- Continue to use the foundation provided by the 2001 Augusta State Facilities Master Plan to make the highest and best use of existing Augusta area properties owned by the State of Maine, and in so doing, efficiently serve customers, inspire visitors, and empower employees.
- Prepare a feasibility study/re-use plan for buildings constructed since 1952 and thus newly eligible for listing in the National Register of Historic Places.
- Use the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating and Restoring Historic Buildings to guide development projects, and specifically the Secretary of the Interior's Standards for Rehabilitation & Guidelines on Sustainability for Rehabilitating Historic Buildings, by applying the Design Guidelines of the Capitol Planning Commission at the planning and construction stages.
- Apply these same guidelines and standards to the maintenance of structures and landscapes designated and repurposed since the 2001 plan was put in place.
- Upgrade historic building systems and performance to contribute to and demonstrate Maine's Commitment to Climate Action.
- Prepare a preservation plan for open spaces within the Capitol Planning Commission District to promote and guide the restoration and enhancement of East and West campus open spaces, particularly Capitol Park, the State House and Blaine House grounds, and former AMHI landscapes.





▲ Aerial photo of the historic east campus

- Utilize historic resources to connect the East and West campuses to each other, to the Kennebec River, and to downtown Augusta.
- Update Capitol Planning Commission Rules to reflect changes in applicable planning goals and standards; sustainability issues related to building and site design and construction; and boundary changes that may arise from implementation of other recommendations of this plan.

## EAST CAMPUS RECOMMENDATIONS

The following structures listed as noncontributing in the AMHI District as amended should now be subject to determinations of eligibility for contributing status since all have reached the age of 50 or more years since construction and all were built during the active use of AMHI as a mental health treatment facility, contributing to the areas of significance assigned to the district :

- Laundry
- Greenlaw Building
- Marquardt Building
- Deering Building

The following structures within the Capitol Planning District but outside of the AMHI District should be subject to preliminary determinations of eligibility to see whether standards and guidelines should be applied to their maintenance and alteration when they reach 50 years of age to maintain their physical integrity:

- Bureau of Motor Vehicles (Consolidated Motor Vehicle Facility)
- Public Safety Group



- State Police Headquarters
- State Police Garage
- State Crime Lab
- Medical Examiner's Facility

Contributing buildings that are candidates for rehabilitation:

- Engineering Building (including Boiler House, Coal Pocket, DEP)

Contributing buildings that require stabilization in preparation for rehabilitation and development:

- Stone Building complex (AMHI district)
- CETA Building (Nurses Home) (AMHI district)
- Large Powder Magazine (Kennebec Arsenal National Historic Landmark)

Hospital grounds are listed as a contributing resource in the AMHI district. To date, as changes in use have occurred on the former AMHI campus, little attention has been paid to the historic character-defining features of the campus landscape as it relates to past layout and features. Best practices for the preservation of historic landscapes suggest that a Cultural Landscape Plan for the Hospital grounds would be useful and appropriate to guide site development on the East Campus.

The 2001 plan called for the thoughtful development of the original main campus grounds, and of the open areas located between the core campus and the Kennebec Arsenal boundary. Various suggestions have been made for memorials and park features in these areas; and parts of them have been developed as parking areas. This

plan provides guidance for needed vehicular circulation and parking, enhanced pedestrian circulation, recreational features; and reminders of the original uses of these lands for agricultural and health activities related to the mission of AMHI.

## WEST CAMPUS RECOMMENDATIONS

Depending on findings with regard to eligibility of currently not designated buildings on the West Campus, an expansion of the Capitol Complex Historic District may be considered. Such an expansion could include the following buildings:

- 221 State Street (DHHS Building, original and addition)
- 19 Union Street (Department of Labor Building)
- Burton Cross Office Building (listed and described in the Capitol Complex district documentation as a non-contributing building due to its age at the time of designation – it now meets the age criteria and should be studied for compliance with other applicable criteria)

There are four other existing buildings that should be subject to further study to decide if determinations of eligibility should be done:

- State Data Center (former Maine State Employees Credit Union)
- Cultural Building
- Bureau of Property Management Service Building
- West Campus Switch Gear Building

The Cultural Building has already been determined ineligible for listing because of significant alterations that compromised the integrity of the original design. The State Data Center has not been reviewed.





▲ Capitol Complex - Cultural Building, Burton Cross Office Building, State House



▲ Main entrance to the Cultural Building - State Library, Museum, and Archives

Although its original design would be worth of consideration, it has been subject to extensive modifications that may have compromised its integrity. The DAFS/BGS Property Management Garage does not likely have a level of architectural or historical significance that would merit listing. The Switch Gear Building is a utilitarian structure but it does have architectural features that were meant to tie it to the historic buildings nearby. Each of these buildings should be looked at with an eye to contribution to the CCHD should the district be expanded.

Other West Campus buildings which should figure into further historic resources analyses:

- The Staff House and Garages adjacent to the Blaine House are mentioned in Blaine House National Register and National Historic Landmark documentation but are not specifically included in either listing as contributing buildings. These buildings need to be further evaluated.
- The Guy P. Gannett House is listed as a contributing building in the CCHD. At the time of the nomination, the house was owned by the State and used for offices. The property includes a contributing carriage house. The property is now in private hands. This should likely not have any impact on its historic designation. However, it is mentioned here because it is the only property in the CCHD that is not State-owned. Proximity to the Blaine House has been mentioned during the planning process as a concern.

The four other houses listed as contributing to the CCHD are all



used as state government offices. The question arose as to whether it would be more cost effective, if space is available in other, larger state buildings, to relocate state offices in order to reduce operational costs for occupying agencies. This is a common issue for institutional owners of historic residences, and if the state workforce can be housed in more efficient and appropriate buildings, then such moves may be desirable. If this course of action is considered, it is recommended that the State of Maine retain ownership of these properties, in order to protect the security, privacy, and context of Blaine House.

Three significant open spaces are resources of great significance located on the West Campus. The grandest of them is Capitol Park, which is both listed as a contributing resource in the CCHD and entered as an individual site in the National Register. It has been thoroughly researched, but more information is available in the Olmsted Archives National Historic Site in Brookline, Massachusetts.

The second significant landscape is the Capitol Grounds, about which relatively little is known at present. The third is the Blaine House site, which has some resource material available. The planning team recommends a Cultural Landscape Report to include all three CCHD landscapes with a comprehensive scope, echoing the approach of the Olmsted Brothers in their work on these three landscapes in the 1920's.

## WORKPLACE

Based on all the data and information presented in this section and feedback from the steering committee the master plan team recommends the following:

- The State of Maine should develop space standards to guide departments through future renovations/adjustment of department space. These standards could include:
  - Workplace Space types – Standards for types of office space to be included in an office suite i.e. private phone rooms/focus spaces, collaboration spaces, break spaces, and other space types discussed in "Department Space Needs" on page 143 of Part 2.
  - Amenity Space types – Standards for ancillary space types to enhance the office environment i.e. Mothers/wellness rooms, shower facilities, well-being and healthy eating amenities as discussed in "Recruitment and Retention Needs" on page 144 of Part 2.
  - Workplace Furniture – Standards for modern workplace furniture to ensure equity across departments for office and workspace types.
  - Square Footage Standards – Master plan recommends 300 SF/employee for office spaces (see "Space Utilization and Vacancy" on page 148 of Part 2). Shared conference spaces and amenity spaces would be additional SF outside of office square footage.
- Further investigation on shared conference space throughout the campus is recommended. Ensure that proper technology exists for hybrid meetings and that technology and room reservation procedures are consistent for all spaces to ensure ease of use.



Conference space and potential of hoteling work stations to be considered in other cities such as Portland to increase the ease in which the Departments can do business around the state.

- The State of Maine should continue their efforts to better understand what teleworker/hybrid work models might look like for the state and how this can affect the amount of spaces needed to be managed by the state as discussed in "Workplace Trends" on page 149 of Part 2.
- Existing unused state buildings should be renovated, and leases should be consolidated to fill the vacant space currently located on the east and west campuses.
  - Leases Planned to Terminate – These are leases that the master plan team knows the state is planning to terminate in the next few years for various reasons.
  - Recommended Lease Terminations (1st Priority) – These are leases that were requested by department heads to be moved to a different location as part of our department interview.
  - Optional Lease Terminations (2nd Priority) – These are leases that did not request moving to a different location, but could be considered to be moved to state owned property to save money and utilize current vacant space. Most likely these would move to east campus as there is more vacant space on that campus
  - Optional Lease Terminations (3rd Priority) – Two leases belonging to the Department of Administrative and Financial Services are included in this category at 51 Commerce Drive. During department interviews it was mentioned that this program could move closer to other DAFS programs in the cross building, However this movement was not a top priority. If there

is space in the future for this program to be accommodated in a state owned facility on the west campus these leases could be considered for termination.

- 45 Commerce Drive Leases – Leases at 45 Commerce Drive are included in their own category because they account for approximately 25% of all leases held by the State in the Augusta area. At this time the master plan team is not recommending immediate termination of these leases, however it has been noted that these leases are also some of the more expensive leases the state maintains so it could be a consideration in the future to move these programs to state owned buildings as a cost saving measure.
- Storage Facilities – Warehousing and storage facilities have been grouped into their own category. At this time the master plan team is not recommending terminating these leases as it is assumed that it would not be more advantageous for the state to maintain all this warehouse space themselves.

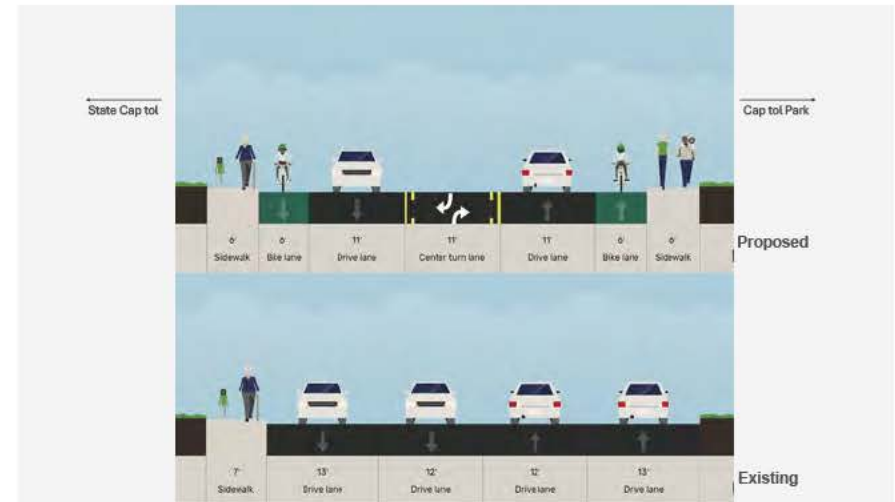
Leases Recommended to Remain – these are leases that the master plan team does not recommend terminating for a variety of reasons such as, terms of lease, department noted during interviews they wanted to stay in their current location, specialized space that does not exist in state owned building stock, etc.



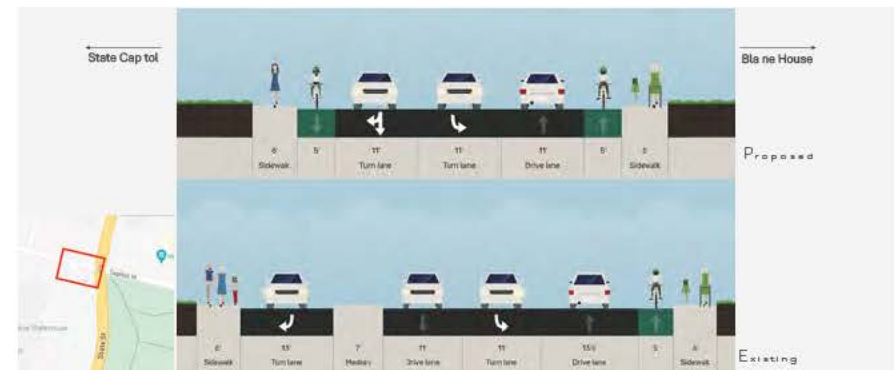
# MULTI-MODAL CIRCULATION AND PARKING

As discussed earlier, traffic and congestion in Augusta has decreased over the past two decades. Level of Service is generally good at peak hours, and parking is usually adequate. Since the road network around the state facilities is not stressed by current or forecast vehicle volumes, most recommendations focus on improving travel for alternative modes. These recommendations include:

- Complete gaps in the sidewalk network and replace sidewalks in poor condition. On the East Campus, add a sidewalk along Tyson Drive.
- For cyclists, the ideal north-south route is the Kennebec Valley Rail Trail. Constructing a direct trail connection from Capitol Park to the Rail Trail offers cyclists a faster, safer route to the West Campus.
- Extend the existing bike lane on Capitol Street in both directions. This can be done with paint alone by reducing vehicle lanes to 11 feet.
- In the West Campus area, consider reducing State Street to three lanes (two travel lanes and a center left turn lane) to allow for a bike lane and buffer between sidewalk and traffic. The State should work be in coordination with the City of Augusta and State of Maine DOT on the planning and development of traffic calming along State Street.
- As major employment hubs, public transit routes should serve the state campuses. Due to routing, long headways, and minimal service hours, public transit is not currently viable for



▲ Traffic calming recommendations for State Street in front of State House



▲ Traffic calming recommendations for Capitol Street and State Street intersection



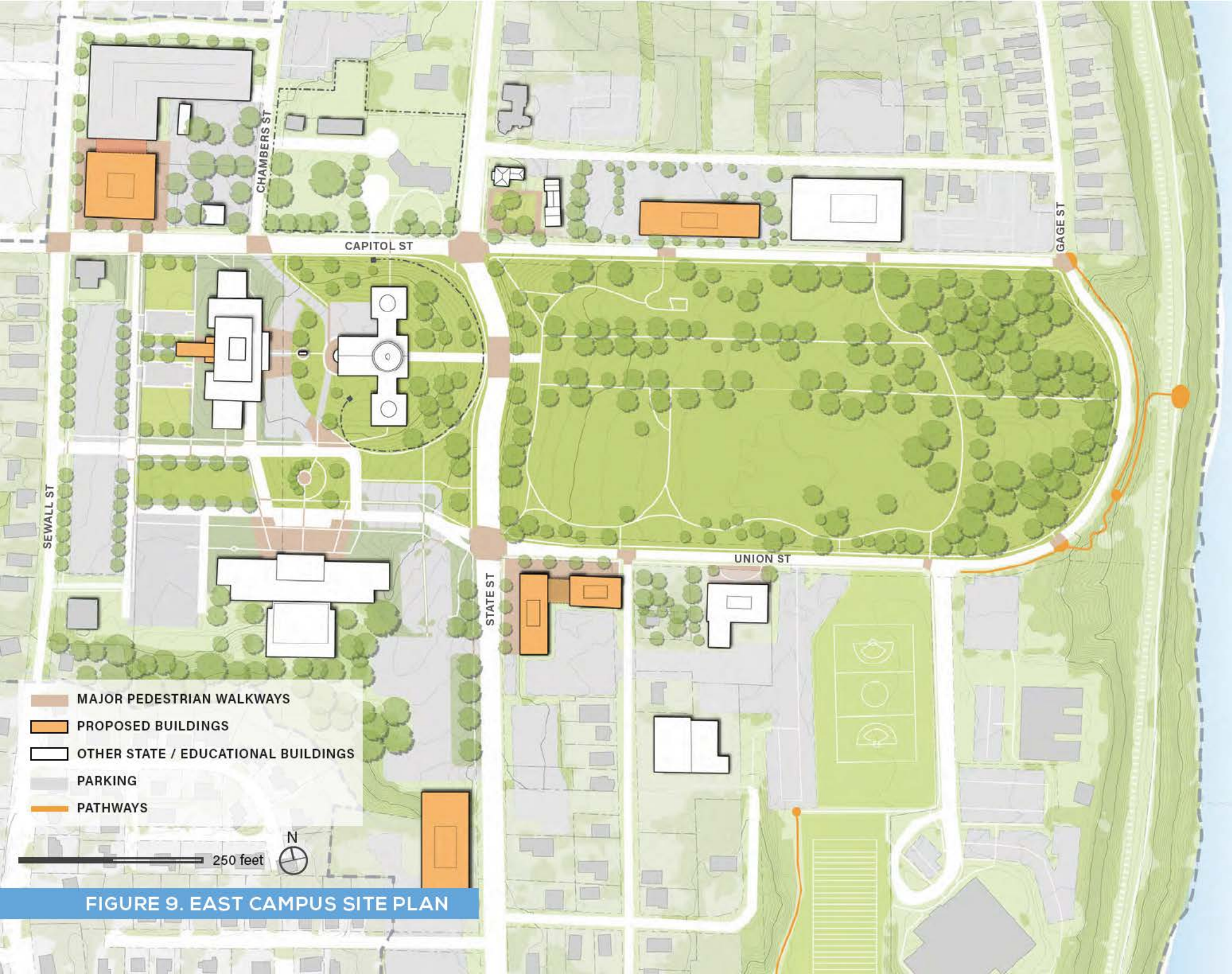
most state employees. The State should work with KVCAP to financially support regular service to the state campuses, ideally with multiple stops on each campus, at commuting hours. Once this service is established, this Plan also recommends subsidizing fares for state employees and installing lighting and shelters at bus stops on the two campuses.

- Most employees live outside Augusta, and many live a considerable distance from work. While they may have few commuting options besides personal vehicles, carpool matching is a low-cost way to reduce vehicle miles traveled. This Plan recommends that the State use Go Maine to match commuters along the same corridors for carpools. The State should also provide meaningful incentives for carpooling, including preferred parking and free EV charging.
- These and other transportation demand management strategies will help prevent parking shortages on the two campuses as more offices are consolidated to the two campuses and in-office work increases. The State should avoid expanding surface parking on the East Campus, even as the campus is used more intensively, if parking demand can be reduced instead. The one type of parking that should be expanded is electric vehicle charging.
- The State should expect demand to grow for EV charging as both the state fleet and employee vehicles include more EVs. Usage of state-owned charging stations should be monitored

so that spaces can be gradually added as demand grows. Currently only Level 2 chargers are available, however the State should consider adding DC fast chargers for those who will not be there all day. Visitor and time-limited parking spaces should be prioritized for DC fast chargers.







## PROPOSED WEST CAMPUS

### Building Projects

- 221 State Street (renovation or replacement)
- Capitol and Sewall Street Office Building and Parking Garage
- Office building adjacent to MeDOT along Capitol Park (if needed)

### Campus Improvements

- Introduce monument zone adjacent to Cross Building
- Parking removal and open space enhancements
- Improve wayfinding and signage

### Multi-modal Circulation and Parking Improvements

- Traffic calming, pedestrian safety enhancements
- Construct trail connection - Capitol Park to Kennebec River

# EAST AND WEST CAMPUS

## West Campus Recommendations

There is enormous potential to improve the public realm of this campus by enhancing existing open space, providing additional green space, redesigning parking, and creating an inviting, pedestrian-friendly, walkable campus. The plan includes introducing green space to the west of the Cross Office Building allocated for monuments; a new accessible visitor entrance to the Cross Building (including location for security screening); new vehicular drop-off at the Cultural building and improved pedestrian walkways, plantings, and hardscape. To satisfy parking demands, the plan includes developing a new parking structure across Capitol street from the Cross Office Building.

To further enhance the quality of the public realm, the planning team recommends traffic calming along State Street, providing a safer, more approachable connection between the West Campus and Capitol Park and improvements to key intersections adjacent to the campus. Additional multi-modal improvements include the introduction of a trail starting at the east end of Capitol Park, connecting down to the existing rail/trail corridor along the Kennebec River. This trail will provide pedestrian/bike access to downtown Augusta, reinforcing the important commitment the state has to improve and enhance the vitality of the Augusta downtown area.



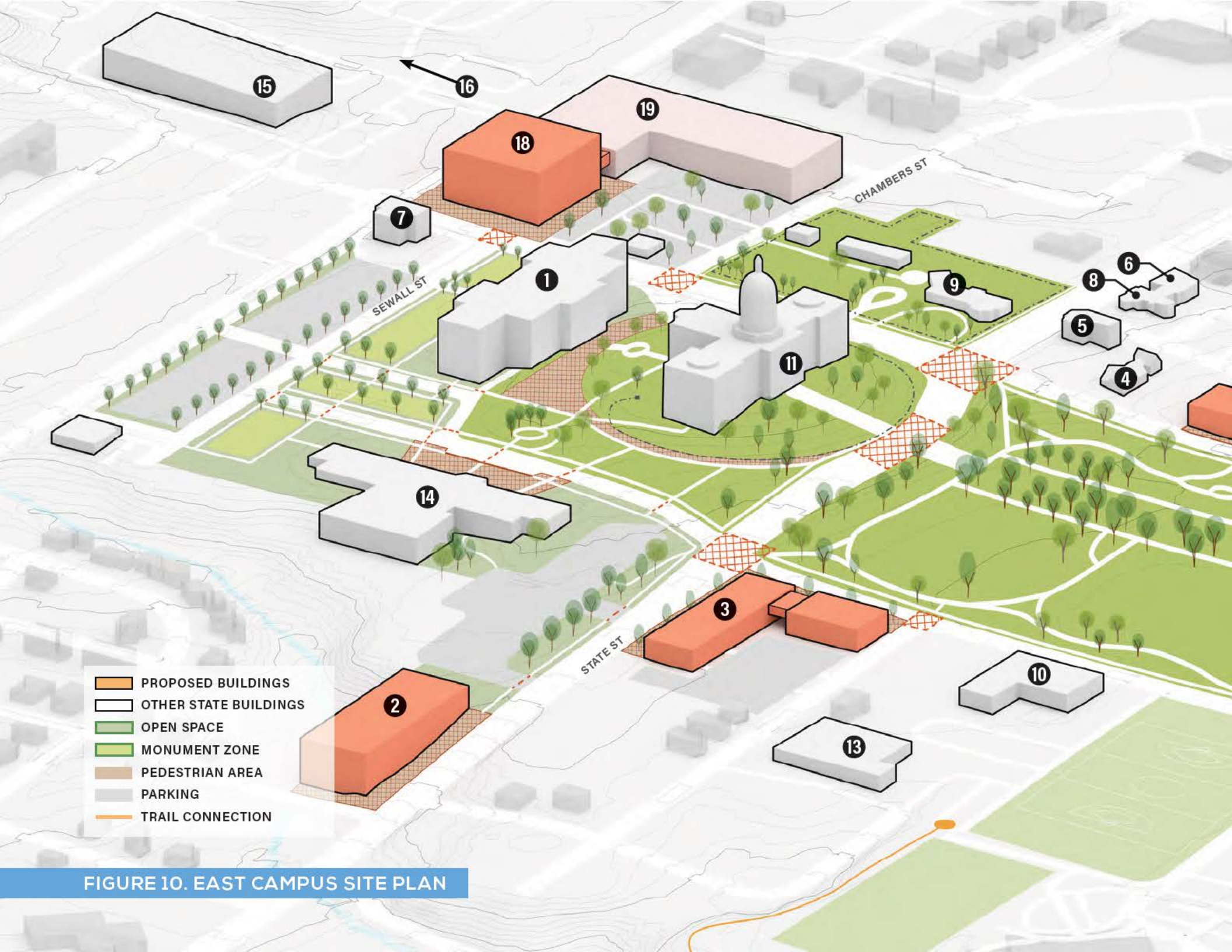
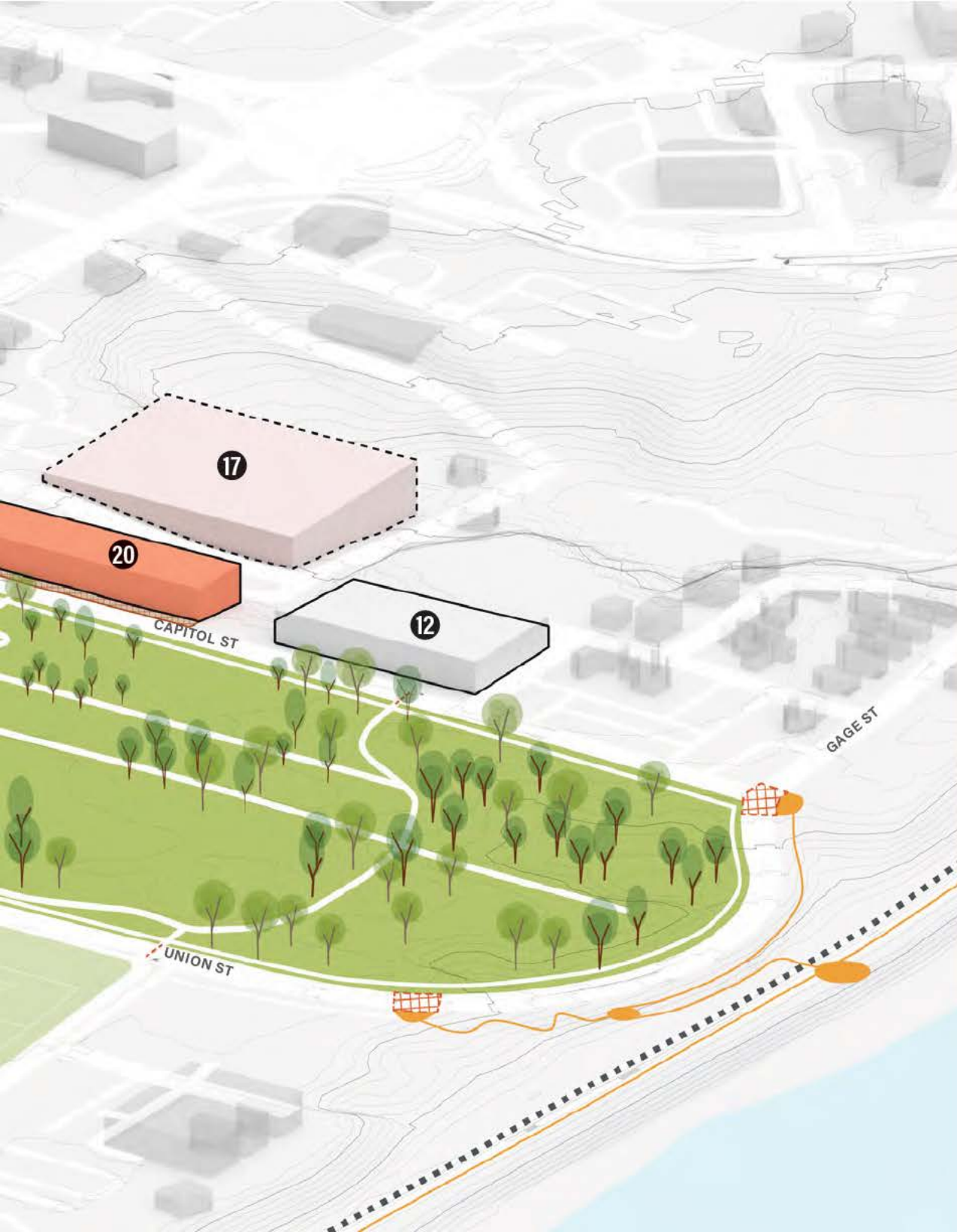


FIGURE 10. EAST CAMPUS SITE PLAN





## PROPOSED WEST CAMPUS

- ❶ BURTON M CROSS OFFICE BUILDING
- ❷ 242 STATE ST - OLD PUC BUILDING
- ❸ 221 STATE ST - OLD DHHS BUILDING
- ❹ DASCHLAGER HOUSE
- ❺ MCLEAN HOUSE
- ❻ MERRILL HOUSE
- ❼ NASH SCHOOL
- ❽ SMITH HOUSE
- ❾ BLAINE HOUSE
- ❿ OFFICE BUILDING (OLD LABOR)
- ⓫ STATE CAPITOL BUILDING (STATE HOUSE)
- ⓬ MAINE DOT HEAD QUARTERS
- ⓭ SERVICE GARAGE
- ⓮ MAINE CULTURAL BUILDING
- ⓯ DEPT OF HEALTH AND HUMAN SERVICES
- ⓰ MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
- ⓱ POTENTIAL NEW PARKING GARAGE SITE
- ⓲ POTENTIAL SITE FOR NEW STATE OFFICE BUILDING
- ⓳ NEW PARKING GARAGE
- ⓴ POTENTIAL SITE FOR NEW STATE OFFICE BUILDING





FIGURE 11. EAST CAMPUS SITE PLAN

## PROPOSED EAST CAMPUS

### Planning and Infrastructure:

- Comprehensive East Campus infrastructure plan including evaluation of needs and capacity, stormwater management, tunnel removal and phasing
- Comprehensive master plan for Public Safety Campus

### Building Projects:

- Stone Building – Renovate for office use
- New amenity building (footprint of original Sanborn building or upper levels of Central Building)
- New Innovation Zone centered around the existing CETA building and potential future site for new IF&W building

### Campus Character Enhancements

- Introduce pedestrian plazas between existing campus buildings
- Develop new amphitheater with views across the Kennebec River to the Capitol Building
- Improve campus signage and wayfinding

### Multi-modal Circulation Enhancements

- Bike-Ped Trails, pedestrian walkways, parking and other improvements
- Enhance trail connections to river and downtown

## East Campus Recommendations

The restoration and renovation of the Stone Building is a signature feature of the East Campus Plan with the capability of providing a contemporary workspace. Supporting the expanded employee occupancy on the East Campus, the planning team is recommending the addition of an amenity building to include a cafeteria and conference center. The proposed location for this building is on the footprint of the former Sanborn building adjacent to the Harlow building or in the Central Building.



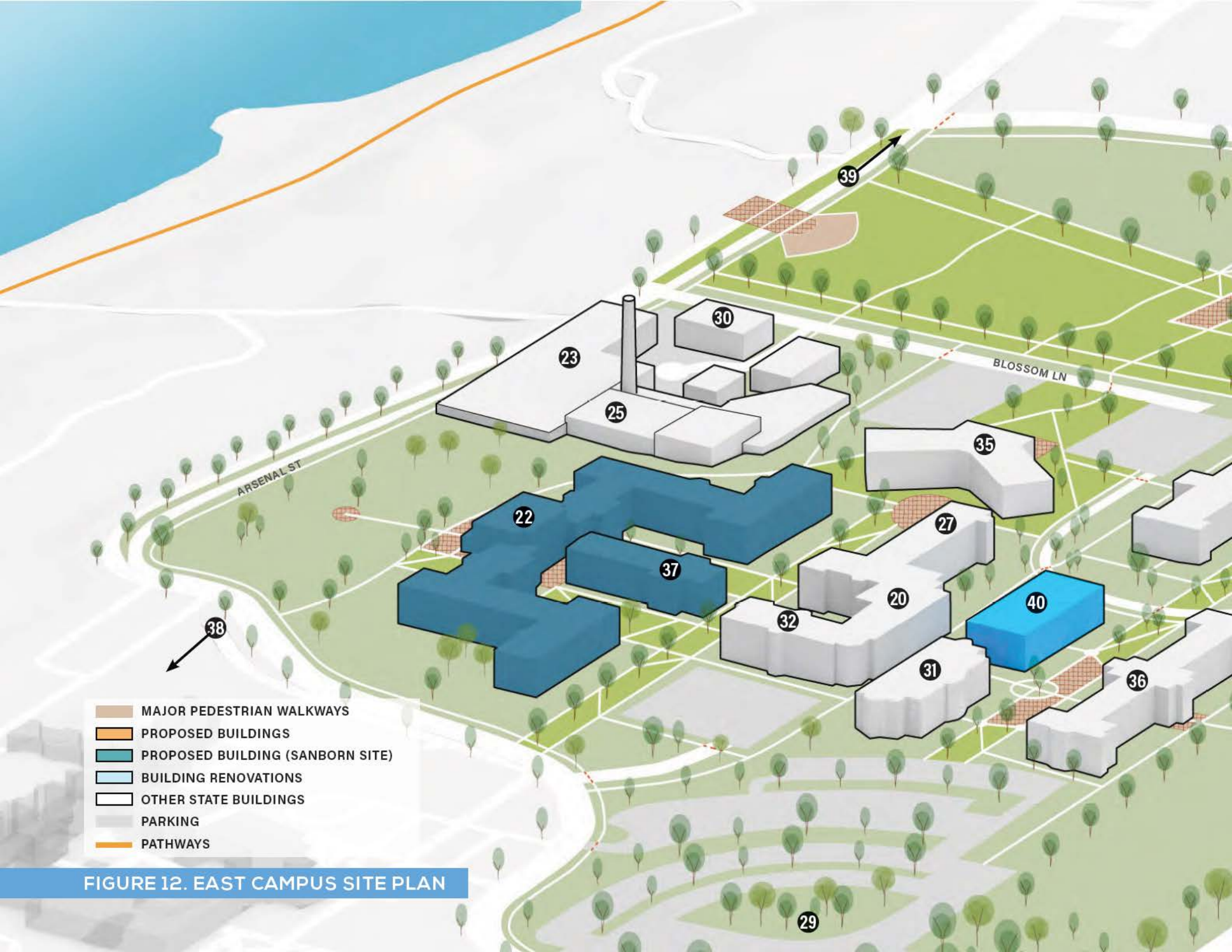


FIGURE 12. EAST CAMPUS SITE PLAN



## EAST CAMPUS

- 19 CETA BUILDING - OLD NURSES HOME
- 20 ELKINS BUILDING
- 21 MAINE STATE POLICE HEAD QUARTERS
- 22 STONE BUILDING
- 23 DEP RESPONSE STORAGE / GARAGE
- 24 STATE POLICE CRIME LAB
- 25 OFFICE BUILDING (OLD MECHANICAL BUILDING)
- 26 OFFICE OF CHIEF MEDICAL EXAMINER
- 27 TYSON BUILDING
- 28 BUREAU OF MOTOR VEHICLE
- 29 CAMPBELL BARN
- 30 DEP BOAT HOUSE
- 31 HARLOW BUILDING
- 32 WILLIAMS PAVILION
- 33 DEERING BUILDING
- 34 GREENLAW BUILDING
- 35 MARQUARDT BUILDING
- 36 RAY BUILDING
- 37 CENTER BUILDING
- 38 RIVERVIEW PSYCHIATRIC CENTER
- 39 FORMER ARSENAL
- 40 NEW AMENITY BUILDING
- 41 FUTURE DEVELOPMENT SITE
- 42 POTENTIAL SITE FOR IF&W
- 43 CETA BUILDING EXPANSION/ADDITION





FIGURE 13. MASTER PLAN





# PHASING AND IMPLEMENTATION FRAMEWORK

- Implement energy and climate action plan projects / initiatives in each phase and as part of each capital project.
- Incorporate all projects currently funded and/or in the design / planning and implementation pipeline by DAFS/BGS including the East campus utility tunnel removal, Stone Building enabling projects and others.
- Provide an implementable and flexible framework for DAFS/BGS for various facilities, circulation and infrastructure projects within the framework of MP Vision.
- Enable the development of a methodical implementation process from vision to construction including due diligence, feasibility, budgeting, legislative approvals, planning, design and constructions so that projects are budgeted, approved, and implemented in a timely manner
- Allow flexibility to accommodate the future workplace scenarios including the goal of balancing leased space, and the impact of teleworker policies that will be rolled out in the future.
- Stage enabling projects (infrastructure, renovations etc.), so that the plan vision be implemented in a staged, and methodical manner.
- Embed place-making, landscaping, and multi-modal circulation enhancements as part of each facility and/or major capital project.



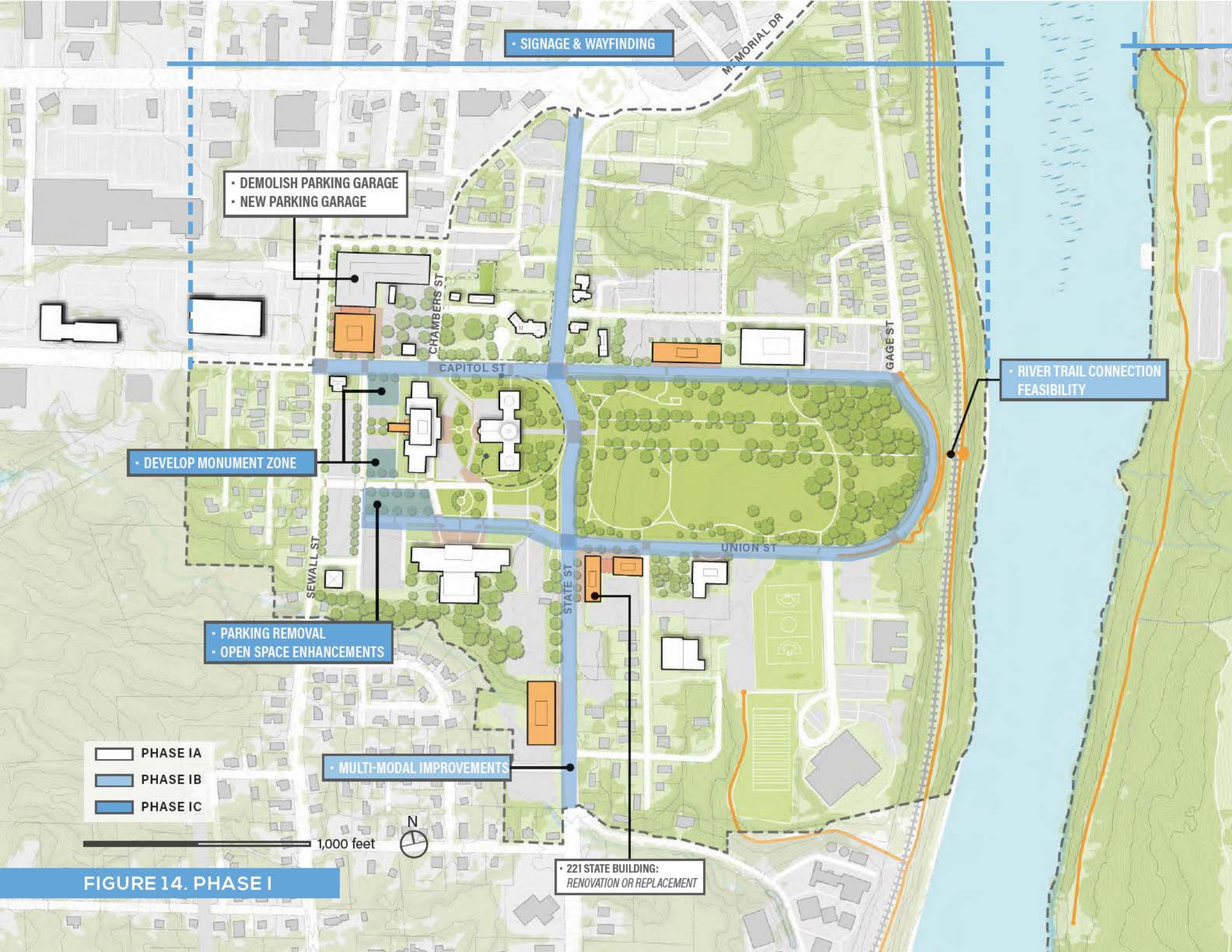


FIGURE 14. PHASE I



## • INFRASTRUCTURE PLAN

### • PUBLIC SAFETY CAMPUS MASTER PLAN

#### • BUILDING RENOVATION

#### • NEW BUILDING

INDEPENDENCE DR

BLOSSOM LN

HOSPITAL ST

TYSON DR

## Phase I: Near Term (0-5 Years)

### **Phase IA**

- 221 State Street Office Building
  - Renovation or replacement feasibility study
- Planning for Capitol & Sewall St. corner development (parking structure)
  - Including demolition of existing garage
- Public Safety campus master plan
- CETA Renovation
- Development master plan of EV charging facility

### **Phase IB**

- West Campus multi-modal improvements, traffic calming, pedestrian safety enhancements, security enhancements (Capitol & State Streets)
- Capitol Park to Kennebec River Trail Connection Feasibility
- Stone Building Preparatory projects and concept for reuse

### **Phase IC**

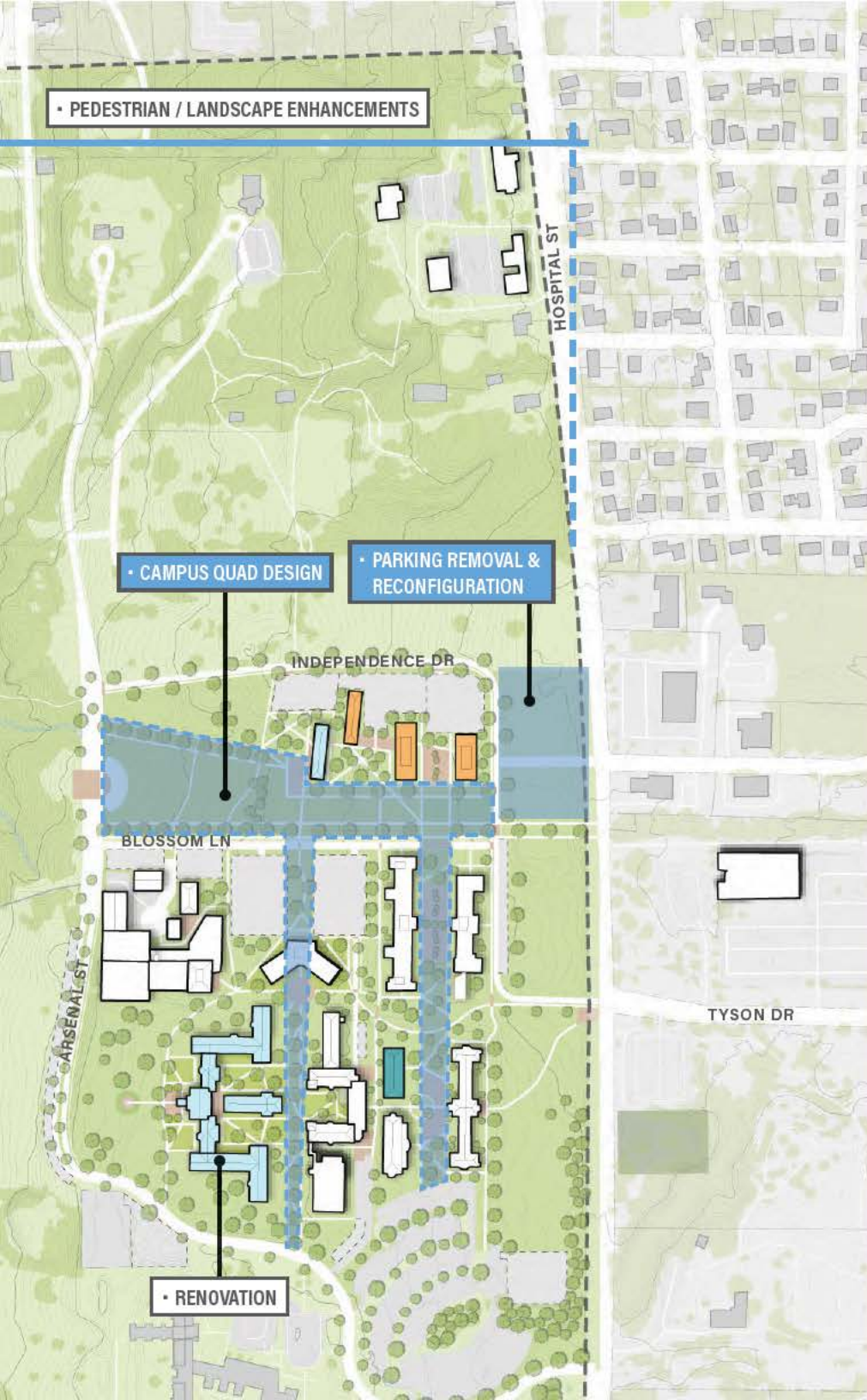
- Develop Cross Building monument zone and security addition
- Cultural Building parking removal and open space enhancements
- West campus wayfinding and signage
- Comprehensive East Campus infrastructure plan
  - Evaluation of infrastructure needs and capacity, stormwater management, Tunnel removal and phasing.
- Innovation District on-going development
- Stone Center Building renovation





FIGURE 15. PHASE II





## Phase II: Medium-Term (5-10 years)

### **Phase IIA**

- Stone Building Renovation
- Pedestrian enhancements along Capitol Park
- Pedestrian / landscape enhancements between East Campus Buildings

### **Phase IIB**

- 242 State Street Building Disposition
- Capitol & Sewall St. corner development (office)
- Sewall Street parking garage replacement

### **Phase IIC**

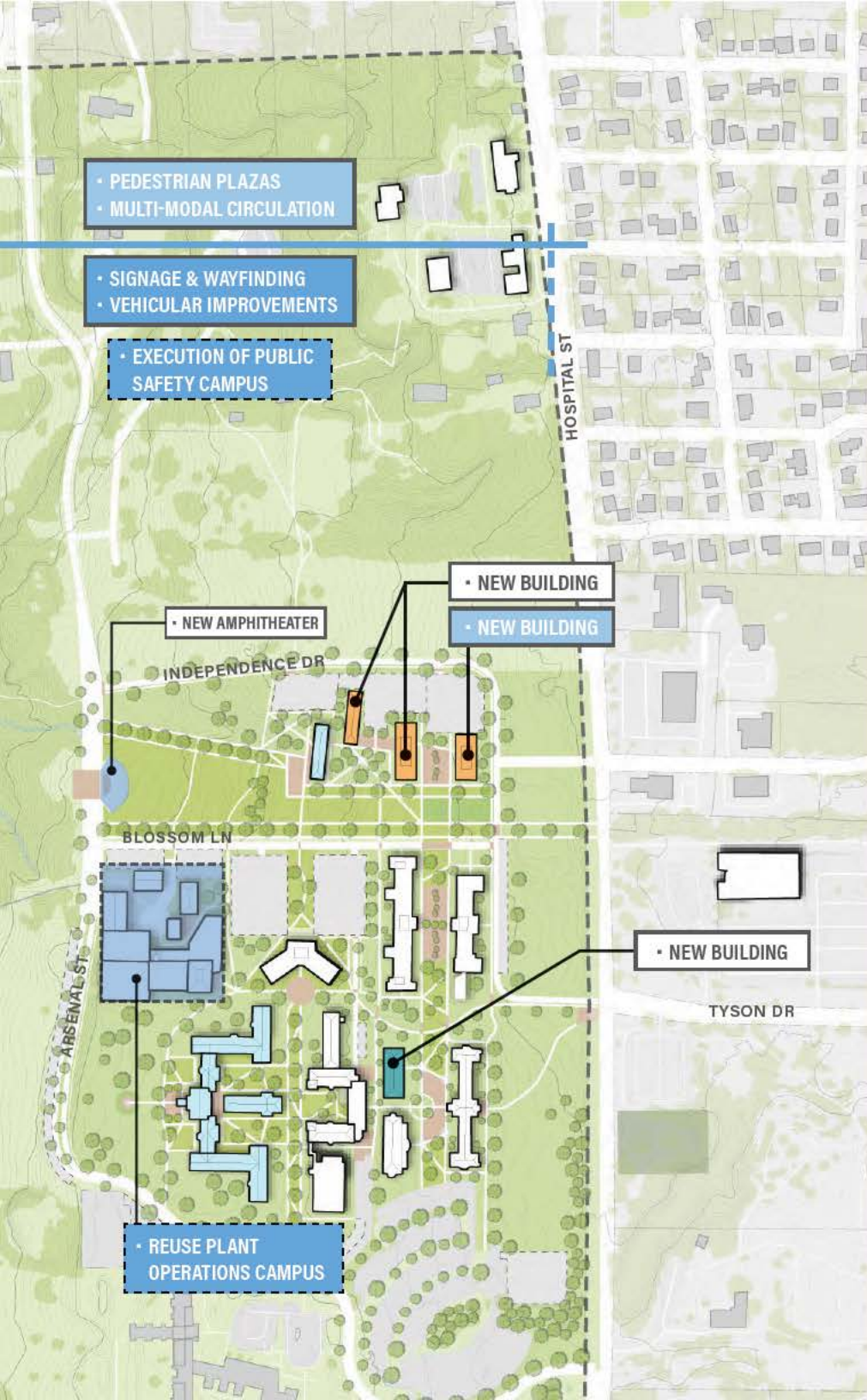
- East Campus Quad
- East Campus parking reconfigurations and additions (core campus and near Innovation District Building)





FIGURE 16. PHASE III





## Phase III: Long-Term (10-15 years)

### **Phase IIIA**

- East Campus Amphitheater
- Innovation District Building 2
- East Campus office building on Sanborn site

### **Phase IIIB**

- East Campus pedestrian plazas
- Innovation District Buildings 3
- East Campus multi-modal circulation improvements (bike-ped trails, walkways, parking, and other improvements)

### **Phase IIIC**

- East Campus signage and wayfinding
- East Campus vehicular improvements

## Future Projects: (15+ years)

- (If needed) Child & Valley Street parking structure near Maine DOT headquarters
- Reuse of East Campus Plant Operations Complex
- Execution of Public Safety campus master plan



Maine.gov





State of Maine

# Augusta Area State Facilities Master Plan

May 2023

Part 2

SMRT



Malcolm L. Collins AIA, LEED AP  
Architectural, Historic Preservation  
& Planning Concepts

DLRGROUP







# AUGUSTA AREA STATE FACILITIES MASTER PLAN

May 2023

Part 2









# TABLE OF CONTENTS

## Part 1

<b>FOREWORD</b>	<b>  7</b>
<b>ACKNOWLEDGMENTS</b>	<b>  8</b>
<b>EXECUTIVE SUMMARY</b>	<b>  9</b>
<b>1. INTRODUCTION</b>	<b>  29</b>
AUGUSTA AREA FACILITIES OVERVIEW	
PLAN, PURPOSE, GOALS, AND PLANNING PROCESS	
MAINE WON'T WAIT - CLIMATE ACTION PLAN	
MAJOR MASTER PLAN THEMES	
<b>2. VISION AND MASTER PLAN FRAMEWORK</b>	<b>  41</b>
2030 VISION	
GUIDING PRINCIPLES	
PLANNING & DESIGN PRINCIPLES	
<b>3. RECOMMENDATIONS</b>	<b>  47</b>
ENERGY, SUSTAINABILITY, AND RESILIENCY	
HISTORIC PRESERVATION	
WORKPLACE	
MULTI-MODAL CIRCULATION AND PARKING	
EAST AND WEST CAMPUS	
PHASING AND IMPLEMENTATION FRAMEWORK	

## Part 2

<b>4. AUGUSTA AREA FACILITIES CONTEXT</b>	<b>  81</b>
REGIONAL CONTEXT	
AUGUSTA DOWNTOWN CONTEXT	
EXISTING REGULATORY FRAMEWORK	
RELEVANT PLANS, INITIATIVES, AND PRIOR STUDIES	
<b>5. EXISTING CONDITIONS CAPITOL PLANNING DISTRICT EVOLUTION</b>	<b>  93</b>
CAPITOL PLANNING DISTRICT EVOLUTION	
OPEN SPACE AND NATURAL RESOURCES	
VIEW CORRIDORS	
HISTORIC DISTRICTS AND BUILDINGS	
EXISTING MULTI-MODAL CIRCULATION AND PARKING	
ENERGY, SUSTAINABILITY AND RESILIENCY	
FACILITY CONDITIONS	
INFRASTRUCTURE, TELECOMMUNICATIONS, AND INFORMATION TECHNOLOGY	
OPPORTUNITIES AND CONSTRAINTS	
<b>6. WORKPLACE: CURRENT AND FUTURE SPACE NEEDS</b>	<b>  141</b>
WORKPLACE EXISTING CONDITIONS	
DEPARTMENT SPACE NEEDS	
EXISTING SPACE UTILIZATION	
WORKPLACE TRENDS	
<b>7. APPENDIX</b>	
APPENDIX A - HISTORIC PRESERVATION DATA SHEETS	
APPENDIX B - DEPARTMENT WORKPLACE INDEXES	









04 /

# AUGUSTA AREA FACILITIES CONTEXT

**Regional Context**

**Augusta Downtown Context**

**Existing Regulatory Framework**

**Relevant Plans, Initiatives, and Prior Studies**







# REGIONAL CONTEXT

Located in Kennebec County, Augusta was designated the capital of Maine in 1832. The region and the city remain an employment hub, reflecting a rich industrial history of lumber and textile mills, farming, and paper manufacturing. The county's economy is still mainly industrial, while Augusta benefits from being the base of State government with a revitalized waterfront and business-oriented Downtown District. Augusta is a centralized hub for job and population accumulation and mimics many of the same characteristics of the region and State.

Based on 2021 Census data, Maine's population is approximately 1.3 million. The State Economist projects a 2.1% growth in the state's populations between 2018 and 2028, consistent with the Augusta region's projected growth (2.3%). The City of Augusta is projected to see a 1.7% decline by 2028. Maine's prime working-age population (age 20-64) is expected to decrease by 7.8%. While the state's overall population is set to increase, there is fluctuation in the region and city of this population and the proportion of working-age individuals.

Kennebec County has a population of 124,000, with about 19,000 living in Augusta. Both the county's and the city's populations have grown slightly in the past decade. Specifically, downtown Augusta's population has grown by 2-14%, despite some pockets of loss. There is a large commuter population, both solitary and carpool, into the capital from the surrounding county, and population density per square mile is greater than the State average (142F vs. 44). Poverty rates for the state and county are about 11%.



▲ Historic Downtown Water Street, Augusta

## AUGUSTA DOWNTOWN

Maine enjoys a state capital area located in a magnificent setting along both sides of the Kennebec River, with a rich cultural history, an intact fabric of historic structures, office and workplace buildings proximate to the capitol, and ample open space in walking distance to the Augusta downtown area. Vibrant neighborhoods include the Entertainment District, the Arts & Culture District, Golden Blocks, and the Medical District. The Augusta Riverwalk Park has been revitalized just north of the Capitol District. Residential neighborhoods surround these districts. The Augusta State Airport and the Augusta campus of the University of Maine are located just outside the city. The Maine Turnpike bisects Augusta, connecting the capital with the rest of the state.



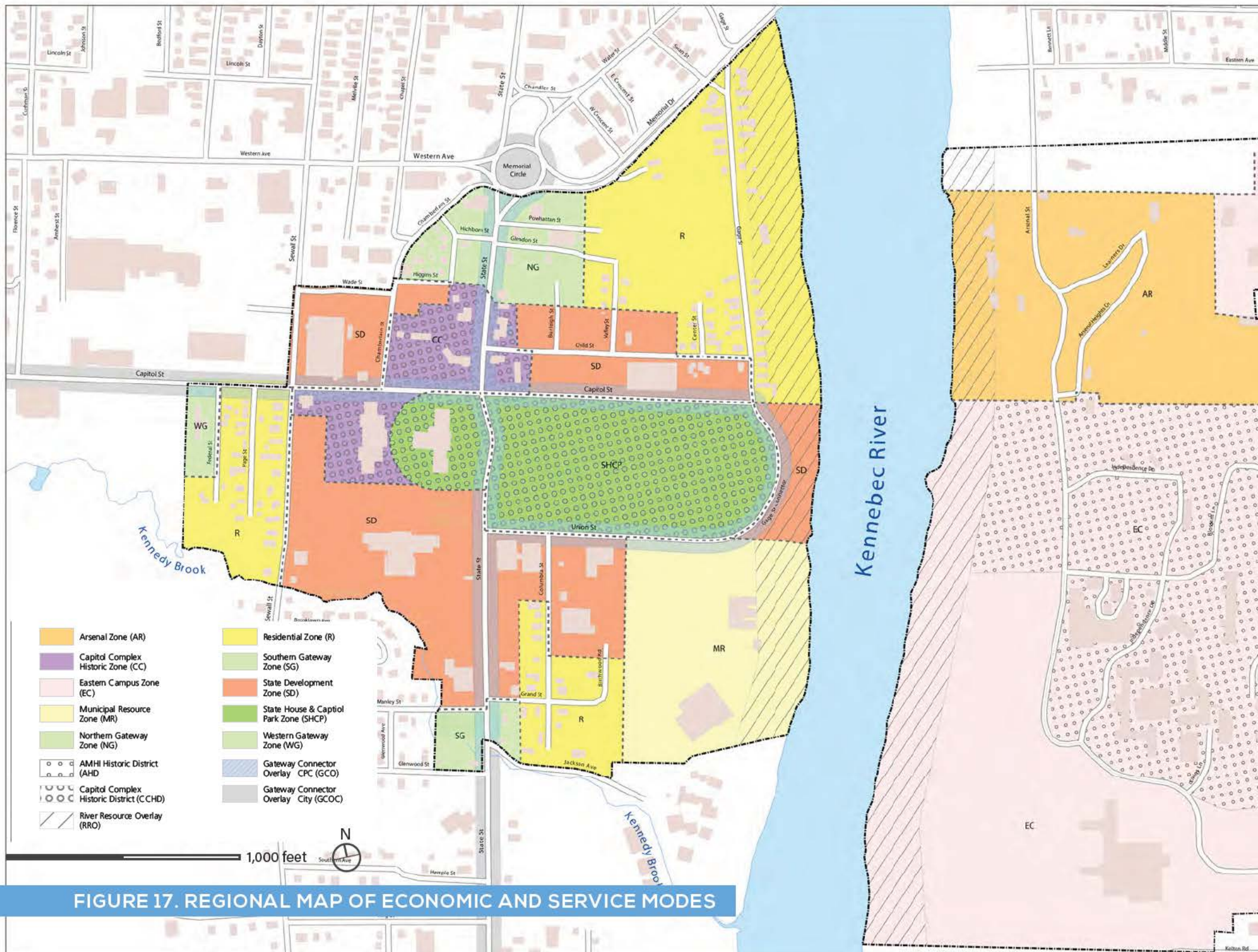
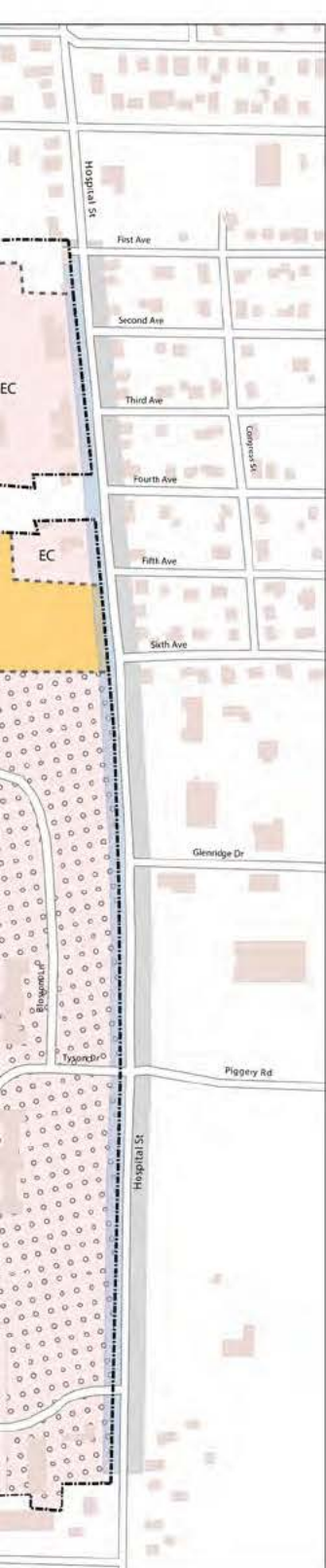


FIGURE 17. REGIONAL MAP OF ECONOMIC AND SERVICE MODES

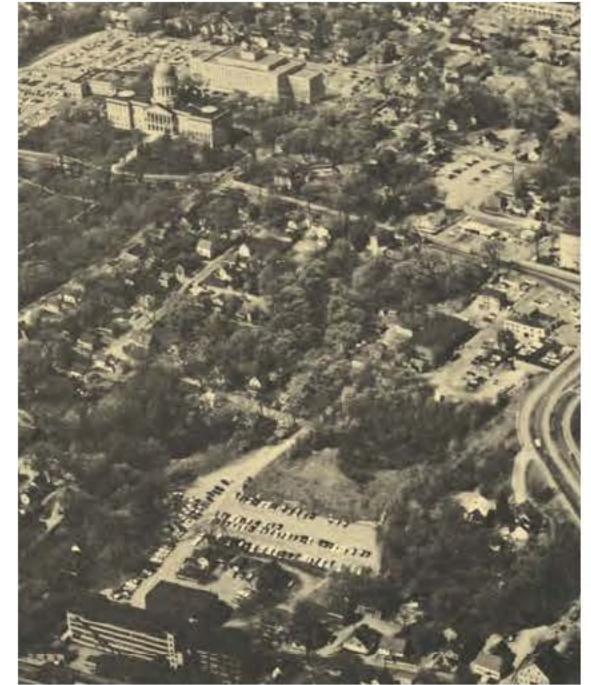




# EXISTING REGULATORY FRAMEWORK

## Capitol Planning Commission and Capitol Area District

The Maine Legislature established the Capitol Planning Commission (CPC) in 1967 to ensure effective planning and outcomes that accommodate State governmental agencies located within the CPC district outlined in Augusta. The CPC is charged with establishing a master plan and the orderly development of the future State owned buildings and grounds in the Capitol area. The CPC established the boundaries of the "Capital Area" District and governs all buildings or structures within that district. The Capital Area District is approximately one mile south of downtown Augusta downtown.



▲ 1969 Master Plan Aerial View



▲ Stone Building, circa 1860



## East Campus & West/State House Complex

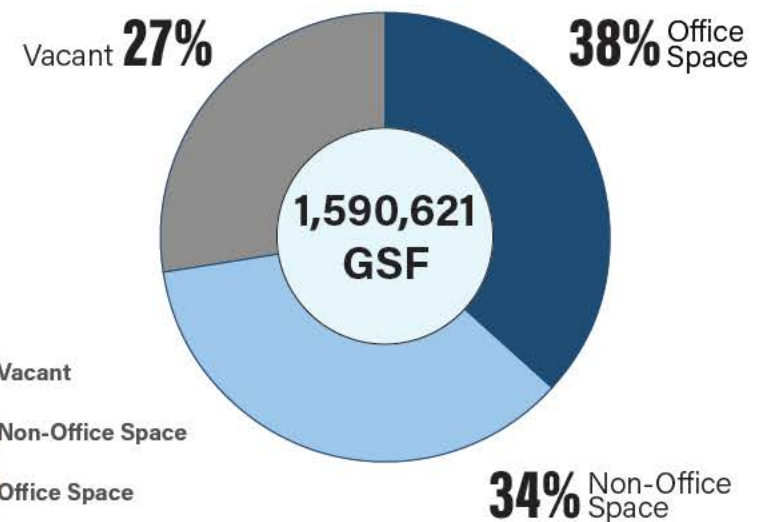
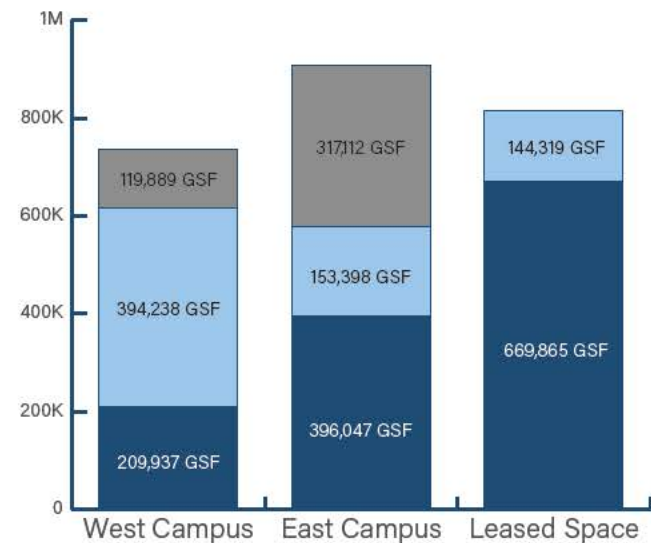
The facilities master plan team worked with the Bureau of General Services (BGS) to understand the inventory of State-owned and leased buildings in the Augusta area that are managed through DAFS/BGS and the State departments located in those buildings. Other facilities managed directly by the State departments may not be included in some portions of the master plan as directed by DAFS/BGS. These facilities included but are not limited to the following departments and facilities:

- Department of Transportation
- Department of Corrections
- Department of Public Safety, Maine Criminal Justice Academy
- Riverview Psychiatric Center

The planning team confirmed the location information gathered from DAFS/BGS through department interviews.

As the focus of this master plan, the overview in Figure 18 provides a summary of building stock for the East and West campuses in addition to the Augusta area State leased spaces. While the following section go into greater detail about campus conditions and utilization, the teams initial findings found opportunity to consolidate leased space into owned vacant facilities, maintain and support Augusta Downtown, and provide adequate State owned parking infrastructure.

Facility Portfolio - Owned & Leased



Facility Portfolio - Owned

FIGURE 18. STATE FACILITIES OVERVIEW



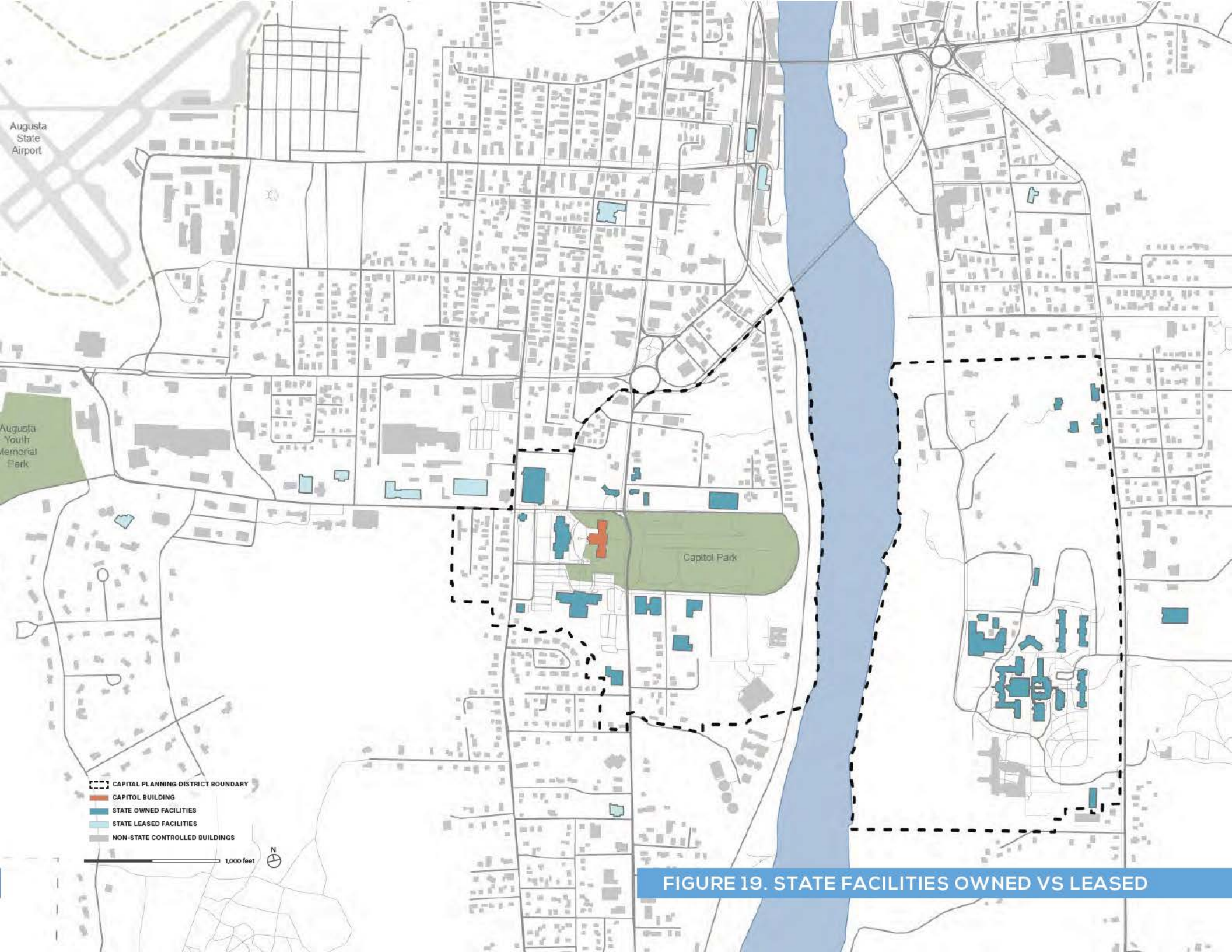


FIGURE 19. STATE FACILITIES OWNED VS LEASED

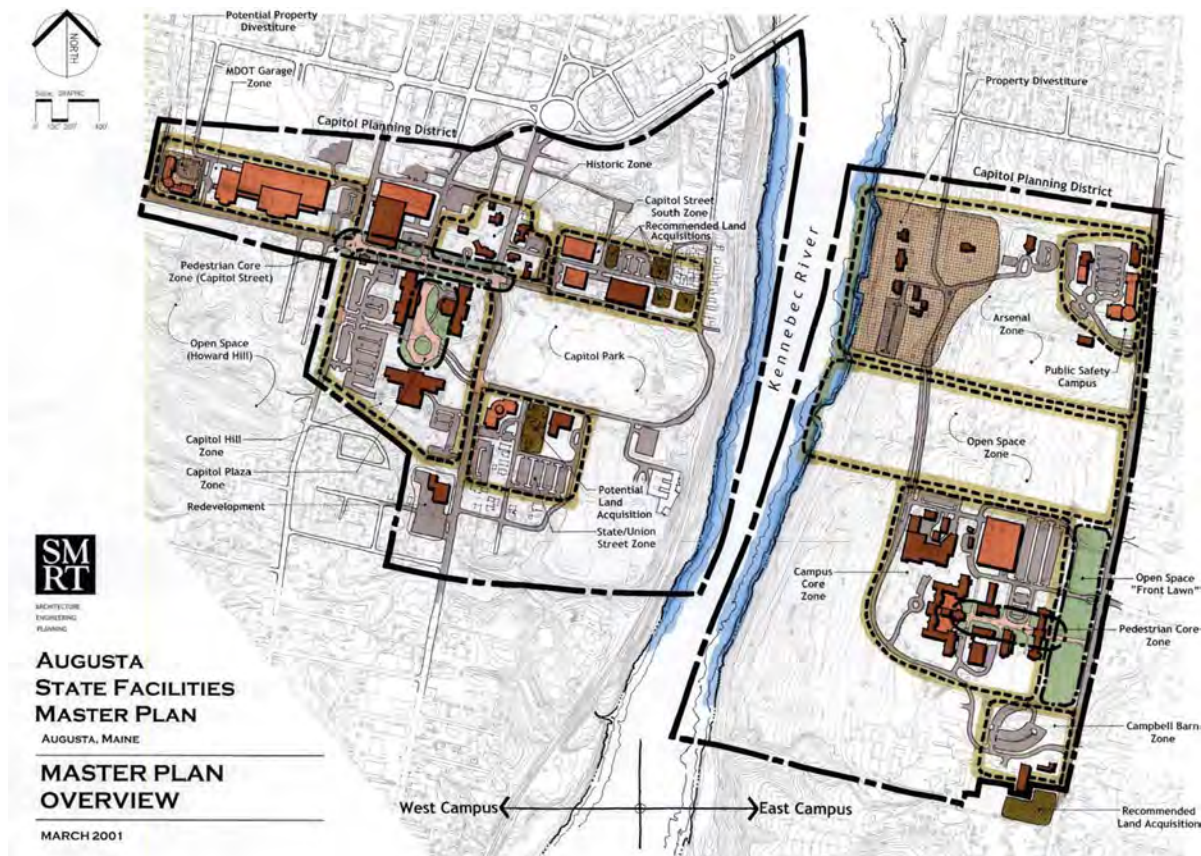


# RELEVANT PLANS, INITIATIVES, AND PRIOR STUDIES

All relevant plans, initiatives, and ongoing and prior studies were reviewed as part of the master planning process. The list of these studies is provided in the references section. The following provides highlights of the few that are pertinent.

## 2001 Augusta State Facilities Master Plan

The 2001 master plan created a blueprint for developing State real estate resources for the next 20 years. The goals of the 2001 master plan included improving work environments for State employees, improving stewardship of facilities, and consolidating state agencies to create appropriate spaces for public business. There was also an emphasis on restoring and reusing State-owned historic buildings and balancing leased and owned space occupied by State agencies, emphasizing leased space in downtown Augusta. Additional key points include enhancing green space on both campuses, as well as developing infrastructure for alternative transportation (pedestrian paths, ferry services, and downtown shuttles).



▲ 2001 Augusta State Facilities Master Plan Overview



## Augusta Pedestrian Safety Plan

Prepared by MaineDOT and BCM, the Augusta Pedestrian Safety Plan identified infrastructure changes to improve pedestrian safety ranging from refreshing crosswalk paint and signage to upgrading crosswalks to be ADA accessible. Another significant safety measure for implementation was evaluating roads for traffic calming measures. The main areas of recommendation and survey varied throughout the city, but Cony Circle and Memorial Circle impact the traffic to and from the Augusta Area East and West Campuses most prominently. Education and other campaigns were also created to encourage safer driving, walking, and biking.

## City of Augusta 2007 Comprehensive Plan

The 2007 Comprehensive Plan details the direction of the City of Augusta over the next decade, emphasizing the activation of the Kennebec River, attraction of the city to newcomers, and a commitment to education and historic aestheticism. There are also guiding principles for future land use, protecting open space and investing in urban housing and community development. The Riverfront Activation was proposed in the Plan and further developed since then and an emphasis on energy efficiency has also stayed strong as a key theme of Augusta and Maine public policy.



## Review of Other Capitol Complex Master Plans

### ▪ 1968 Capitol Complex Master Plan

- Prepared by architecture and planning firm Frank Grad & Sons, Newark, the 1968 Capitol Complex Master Plan summarizes the vision of the Maine Capitol Complex and establishes developmental objectives and recommendations. A major part of the Plan emphasizes the centrality and priority of the State House. As the State Capitol Complex is developed, the Master Plan also calls for the Park to stimulate public interest and add to the employment of the Capitol as a major asset with public facilities. There was an urgency to create office space to relieve over crowded conditions to cope with an anticipated 50% increase in State employees in next 10 years.

### ▪ 1969 Report of the Capitol Planning Commission on the 1968 Master Plan

- In 1969, the Capitol Planning Commission prepared a report on the 1968 Master Plan report by Frank Grad & Sons, Newark. An increase in space requirements and expansion of agencies into numerous smaller premises acquired by State from private owners had resulted in several State government functions scattered about the City, causing over-crowding and discomfort. Thus, the definition of the bounds of the Capitol Area was created, focusing on future development on the East Campus and proposed future facilities on the West Campus. There was also an emphasis on parking expansion and proposed improvements to roads and traffic controls.

### ▪ 1971 Capitol Planning Commission Report on Master Plan of the Capitol Complex and State Properties Located in Augusta and Surrounding Communities

- The 1971 Capitol Planning Commission Report was issued to the Senate and House of Representatives based on the 1969 Master Plan, recommending the retention of significant State-owned properties. Within the document is also a plan for a coordinated Highway-Capitol Complex Plan and for other state land uses in Augusta and Surrounding Communities (within a ten mile radius of central Augusta). The report also includes a schedule of state properties in the Augusta Area, summary of total acreages for each department or institution, and possible surplus properties.

### ▪ Capitol Planning Commission Report to the 108th Legislature

- The 1978 Capitol Planning Commission Report evaluates the changes in the 1976 Master Plan report update, and analyzes the advantages and disadvantages of centralizing government facilities in the Capitol Planning Area and the expansion of boundaries of the Capitol Complex to include other state government land located in the Augusta and Hallowell area.





FIGURE 20. MASTER PLAN TIMELINE







A photograph of a city waterfront. In the foreground, there is a body of water reflecting the sky and buildings. Behind the water is a row of multi-story brick buildings. A tall, thin church steeple is visible behind the trees on the left. The sky is blue with some white clouds.

05 /

# EXISTING CONDITIONS

CAPITOL PLANNING DISTRICT EVOLUTION

OPEN SPACE AND NATURAL RESOURCES

VIEW CORRIDORS

HISTORIC DISTRICTS AND BUILDINGS

ONGOING AND PLANNED CAPITOL PROJECTS

EXISTING MULTI-MODAL CIRCULATION

ENERGY, SUSTAINABILITY AND RESILIENCY

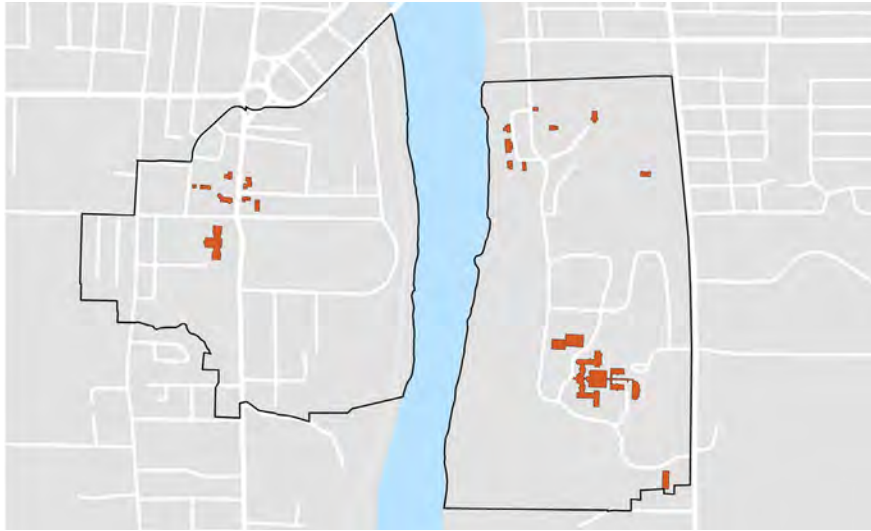
FACILITY CONDITIONS

INFRASTRUCTURE, TELECOMMUNICATIONS, AND IT

OPPORTUNITIES AND CONSTRAINTS



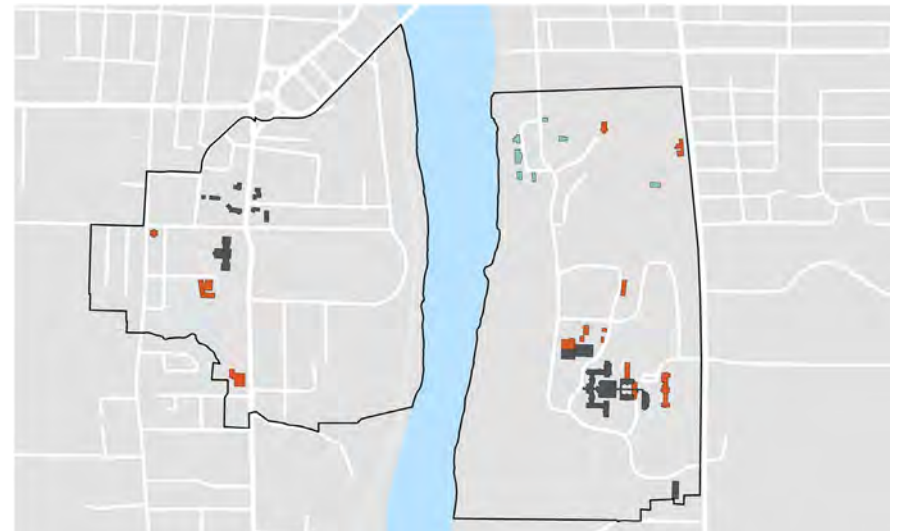
# CAPITOL PLANNING DISTRICT EVOLUTION



**FIGURE 21. EVOLUTION FROM 1800-1900**

## Phase I - Early Establishment: 1800-1900

On the West Campus, the State House was built between 1929-1932, hosting main government functions. The Bulfinch design was too small to accommodate Capitol functions after the first 20 years, so many renovations and expansions occurred over the years. On the East Campus, the Kennebec Arsenal (1828) and the Augusta Mental Health Institute (AMHI, 1840) existed on the land in their original functions. The AMHI expanded construction to add the Stone Building and Coburn Hall, as well as other buildings to help the institute function day-to-day.

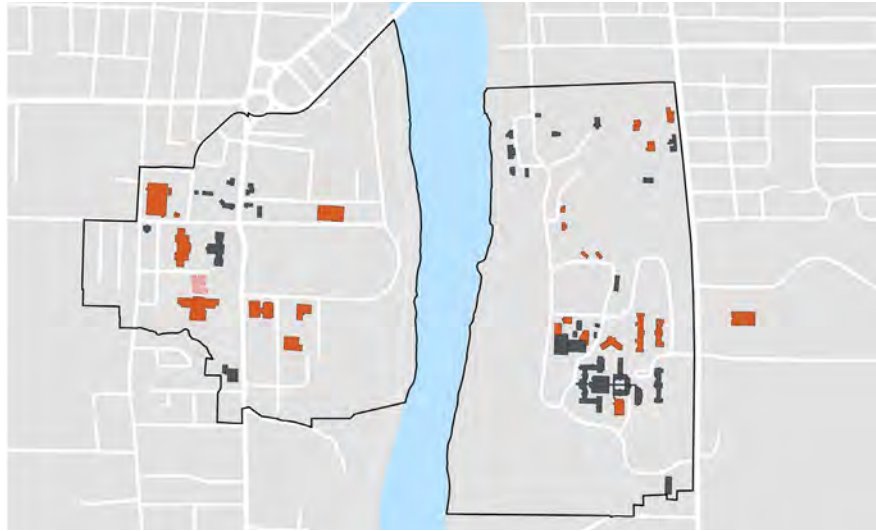


**FIGURE 22. EVOLUTION FROM 1900-1950**

## Phase II – AMHI Development: 1900-1950

There were continued expansions to the State House in the early 1900s. Additional office buildings were also built to the southwest (for the State Highway Department, Adjutant General's Office, and the Department of Education) and the Olmsted Brothers prepared a landscape plan for the Capitol grounds and Capitol Park. The Kennebec Arsenal was turned over to the State in 1905 and the AMHI utilized these buildings for their hospital staff and continued to expand with new buildings, including the Ray and Elkins Buildings.

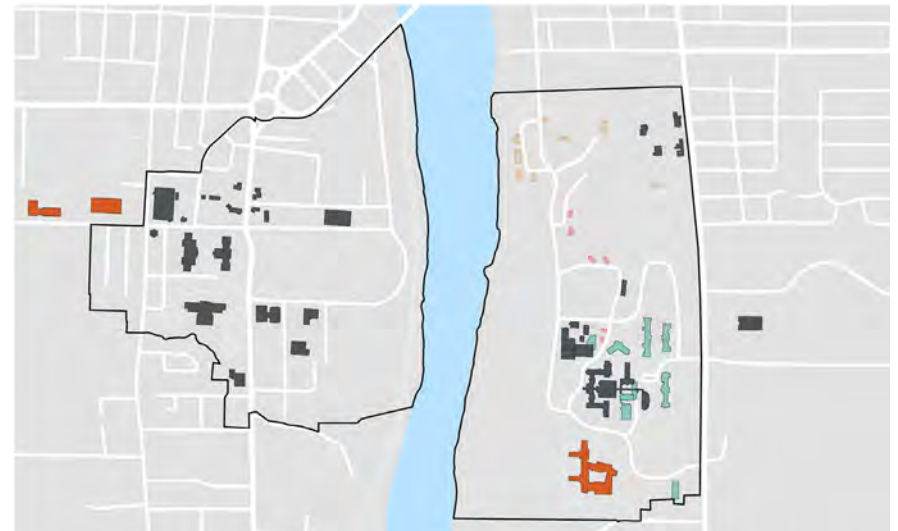




**FIGURE 23. EVOLUTION FROM 1951-2000**

### Phase III – Expansion & Decline: 1951-2000

The State House saw renovations. In 1969, the Maine State Cultural Building was built to host the Maine State Museum, Maine State Library, and the Maine State Archives. The Education Building was also demolished to make way for a public plaza and other amenities as the AMHI campus continued to expand with the Greenlaw, Marquardt, and Deering buildings, along with renovation of older buildings throughout the 1950s. At the turn of the century, the AMHI was turned over to become the East Campus of the Maine State Government.



**FIGURE 24. EVOLUTION FROM 2000-2021**

### Phase IV - Capitol Planning District: 2001-Current

The Department of Health and Human Services and the Maine Public Employees Retirement System have been constructed just outside the main bounds of the Capitol Area District. The Riverview Psychiatric Center was built on the South side of the East Campus and many state functions have moved into the East Campus buildings -previously AMHI).







FIGURE 25. OPEN SPACE AND NATURAL RESOURCES



# OPEN SPACE AND NATURAL RESOURCES

The East and West campuses are comprised of a variety of natural areas alongside government and municipal uses situated along the Kennebec River. The East Campus possesses 100 acres of open space between historic buildings, with a much lower density of development than the surrounding urban areas. The steep sides of the river valley create challenging conditions for development on both campuses, whereas the upper portions are flatter. Existing vegetation occurs in masses located primarily along the river corridor or as individual specimens along streets or in landscape locations.

The riparian corridor of the Kennebec River, which includes the river channel, riverbanks, floodplains, hill slopes and adjacent land and tributaries to the river, is an important resource and natural conduit to the biological systems. These systems are a part of an interconnected continuum that protects water temperature, increases interception and infiltration, reduces erosion, stabilizes base flows, and provides habitat.

The corridor is important in providing an ecologically healthy bio-system that facilitates the movement of native and migratory species while promoting reinvigoration and reconnection to nature. Boating, fishing, bird watching, and walking along the river are some activities that promote health and wellbeing through nature.



▲ Augusta Area Open Space



▲ Capitol Park



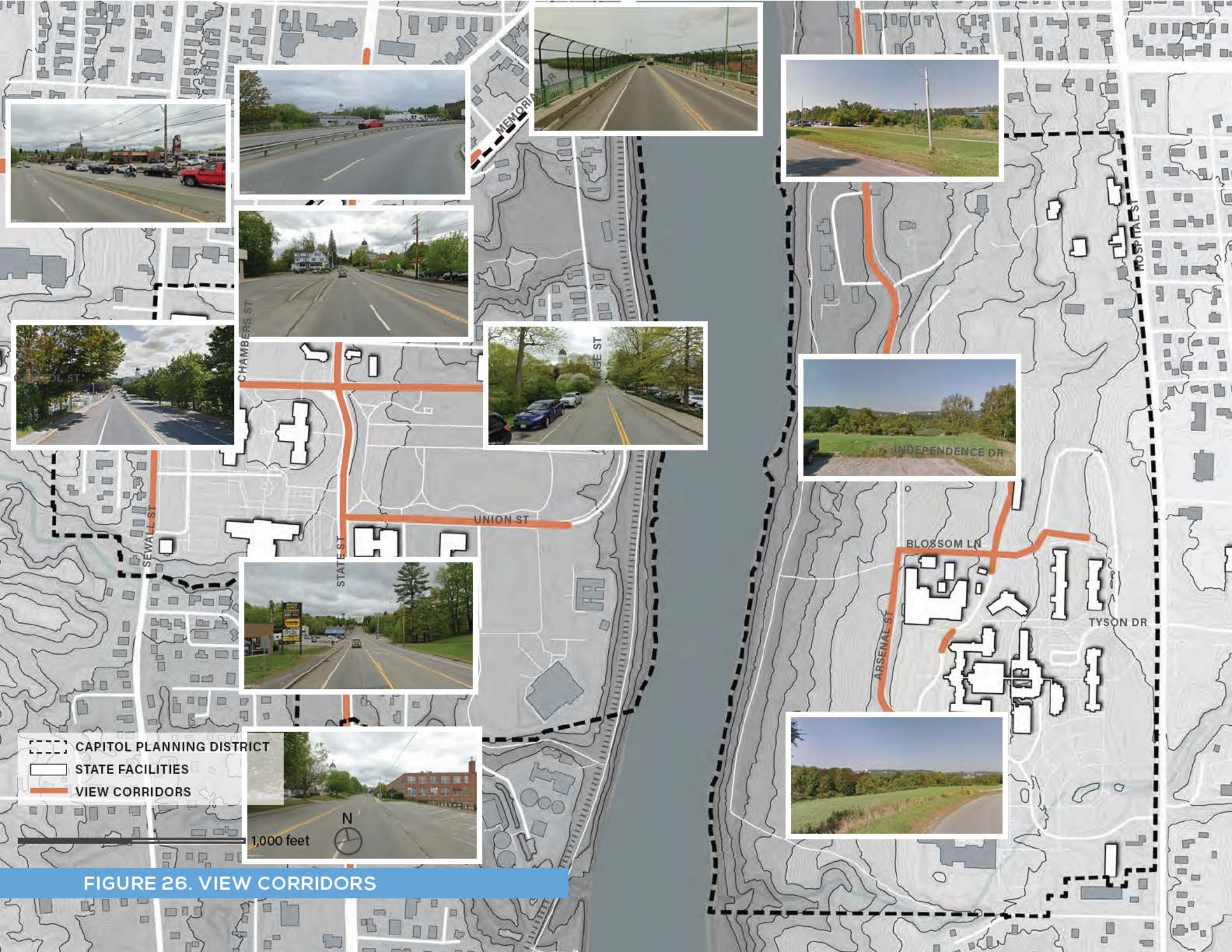


FIGURE 26. VIEW CORRIDORS



# VIEW CORRIDORS

Significant panoramic views exist from points on both sides of the Kennebec River where elevation and breaks between structures and vegetation guide the viewer's eye. Historic buildings and mature plantings frame views from Hospital Street and the East Campus looking west towards the Capitol. Of particular note is the view corridor formed between the Arsenal and AMHI. On axis with Capitol Park directly across the river, the view here is best from a Hospital Street vantage point and provides a fine look at the State House framed by the Olmsted landscape.

The visual character of the east campus can be characterized as having a non-urban, semi-rural and pastoral quality. A shift in visual character occurs at the Memorial Bridge from distinctly urban to the north, to a pastoral/rural character to the south.

Shorter-range viewpoints occur north and south of the Capitol along State Street. Long views to the Capitol occur at the west end of Capitol Street soon after it turns off Western Avenue. Long views to the East Campus exist from the Capitol through Capitol Park, and from Memorial Bridge.

From the west campus, vistas of the East Campus are framed by Capitol Park from the steps of the State House, and from all upper levels of the building.

Shorter-range viewpoints occur north and south of the Capitol along



▲ State Street approach toward State House from north.

State Street. Long views to the Capitol occur at the west end of Capitol Street soon after it turns off Western Avenue. Long views up the Kennebec River to the Capitol can be found as far south as Hallowell.

In general, there is a less urban “feel” to the West Campus as compared to the more central, commercial and office areas of the city. This is due primarily to a lesser density of building and more and larger concentrations of open space.



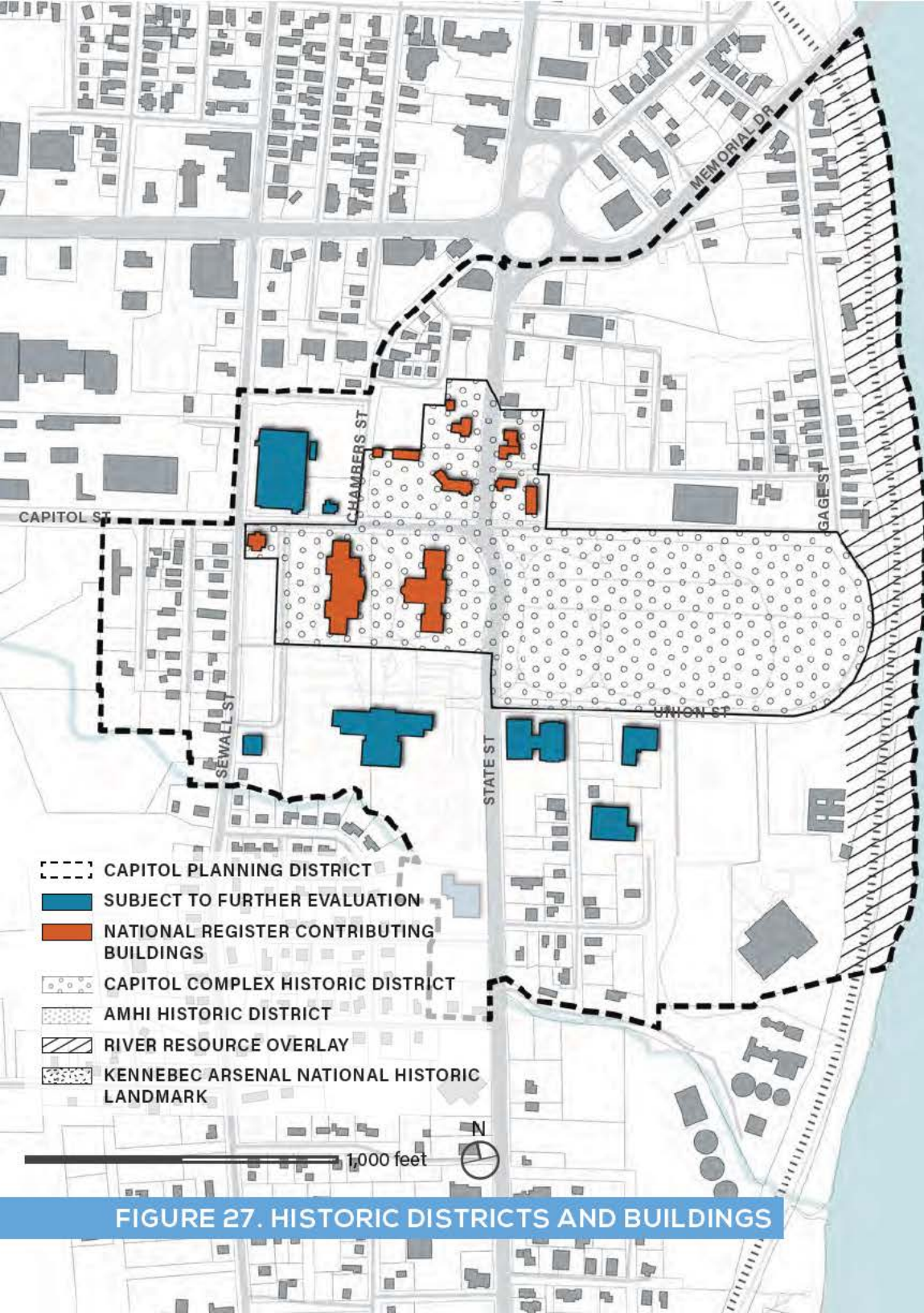
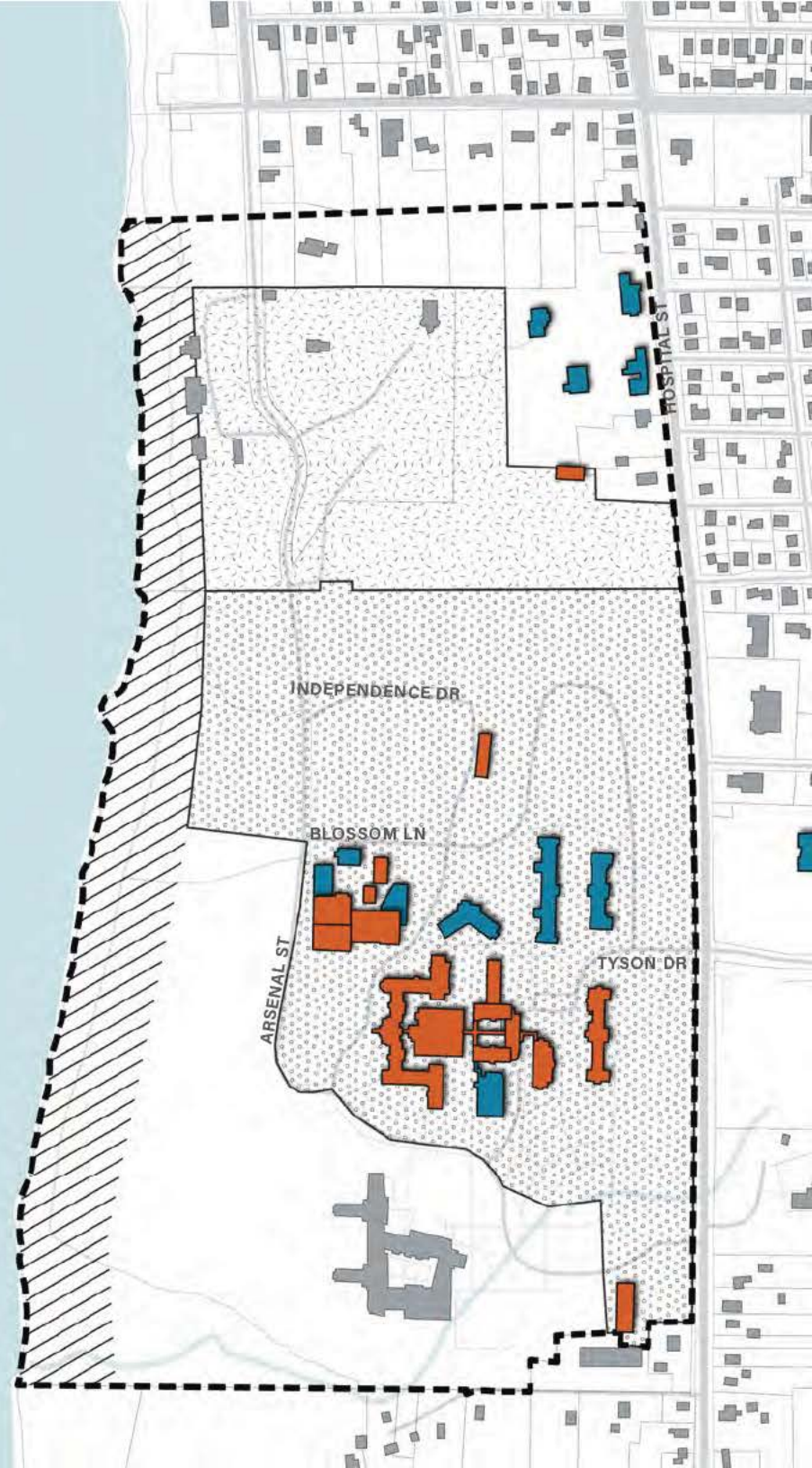


FIGURE 27. HISTORIC DISTRICTS AND BUILDINGS



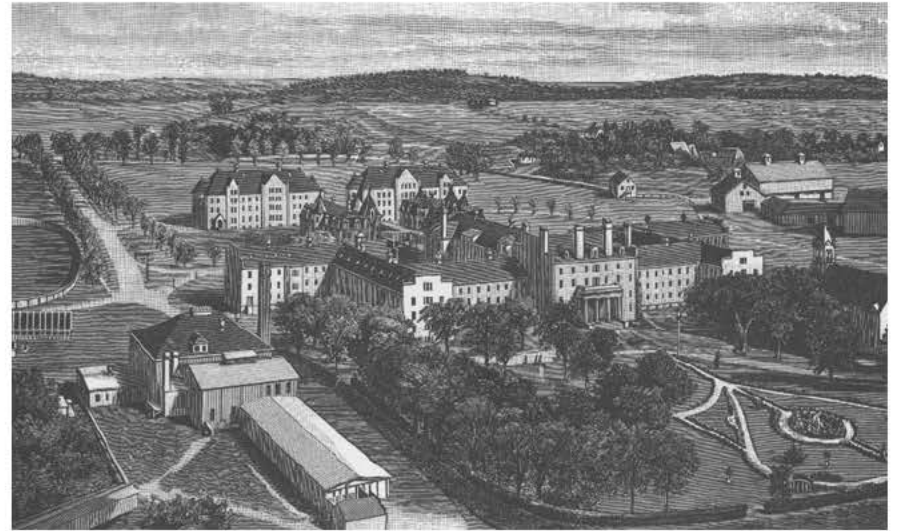


# HISTORIC DISTRICTS AND BUILDINGS

The buildings and grounds of Maine State Government in Augusta are unusual in one respect: almost all of these holdings are located in National Register Historic Districts. Many of the structures and landscapes of the West Campus are included as contributing buildings in the Capitol Complex Historic District, entered in the Register in 2001, while all the buildings of the East Campus are within the boundaries of the Maine Insane Asylum Historic District (AMHI district), established in 1982 and expanded in 2001. These districts include substantial acreage: 40 acres in the Capitol historic district, and 75 acres in the AMHI district.

Another remarkable aspect of the State's Augusta facilities is that there has been no new construction at all since the 2001 Augusta State Facilities Master Plan (2001 plan) was completed on the West Campus, and only one significant building constructed on the East Campus within the Capitol Planning District (CPD), that being the Riverview Psychiatric Center. The 2001 plan represented a new approach to meeting state office space needs, in that it focused not only on the historic AMHI buildings, but also on the more modern structures, as representing a significant amount of newly available useful office space. The 2001 plan called for the renovation of the Greenlaw, Marquardt, and Deering buildings, a direction set by the idea of reusing existing buildings and considered to be a more sustainable approach.

Because of the designation of the majority of the State's Augusta properties as historic, and because these buildings represent the bulk of the State's office and support space, the 2001 plan placed a great deal of emphasis on planning for the continued or adaptive use of these buildings, with rehabilitation, expansion and maintenance to



▲ 1850 AMHI Engraving

be carried out according to the Secretary of the Interior's Standards and Guidelines for the Rehabilitation of Historic Buildings. The National Register designations do not in and of themselves carry any protections with regard to the preservation of buildings within the districts. However, the 2001 plan led directly to the adoption of design guidelines for the CPD by the Capitol Planning Commission (CPC). The CPD includes the two historic districts, and thus brings the Secretary's Standards and Guidelines, upon which the CPC design guidelines are based, to bear on planning and execution of development projects within them.

The following are general existing condition observations relating to both campuses with regard to historic preservation resources and issues:



- Most buildings currently identified as historic (pre-1950 based on the 2001 plan) have been successfully rehabilitated as a result of a guiding principle of the 2001 plan being to make the best use of the State's existing building inventory.
- Buildings now 50 years old (built prior to 1972) and, as of 2023, not designated as historic present new renovation/expansion or replacement options.
- Buildings that have been rehabilitated since 2001 represent significant improvements in energy efficiency, though they may require further updates and upgrades to meet future energy efficiency goals.
- Good sites for new buildings are available on both campuses if needed.
- The grounds of both the East and West campuses require historical analysis and landscape plans in order to enhance remaining historic features and develop amenities for future employees and visitors.



▲ *Stone Building Illustration circa 1860*

- Streetscapes and riverfronts on both campuses offer significant opportunities for enhancing the historic and environmental resources and amenities they represent.
- Both East and West campus open spaces require a comprehensive campus planning approach for future development that respects their historic importance and the resources they represent.

## EAST CAMPUS

All East Campus State-owned properties are within the boundaries of the Capitol Planning Commission District, except the Bureau of Motor Vehicles building. All but a half dozen State-owned properties on the East Campus are located within the boundaries of the AMHI historic district. The AMHI district as it stands today includes 16 contributing buildings and 9 non-contributing buildings. The contributing buildings were constructed between 1840 and 1988, with the 5 buildings of the original AMHI district of 1982 comprising the historic mental health treatment facilities and dating from 1840 to 1889. Three of the five have been rehabilitated in keeping with the 2000 plan and with CPC design guidelines. The remaining two, the Stone Building and Coburn Hall (now known as the Central Building), which are the flagship structures of the East Campus, await preservation rehabilitation. DAFS/BGS have funded and are pursuing roof, masonry and other building envelope restoration work to be completed 2023-2025. The Central Building first floor was recently renovated and is now providing storage for the Maine State Museum.

The grounds of the East Campus bear little resemblance to their appearance and function during the heyday of AMHI as the state's principal mental health treatment facility. The patient care program



of the time included a substantial dependence on outdoor activities for patients. Thus at its peak the institution included over 500 acres of land, most of which was on the east side of Hospital Street. The grounds associated with the hospital itself consisted of about 100 acres, between Hospital Street and the Kennebec River. These were devoted largely to pastureland, cultivated fields, and landscaped areas, some of the latter serving passive and active recreational purposes. Today there is little evidence of these uses except for the bandstand on the open lawn in front of the Stone Building; remains of a granite wharf on the Kennebec below the Stone Building; and level, open areas around the Campbell Barn, the only surviving AMHI building representing the substantial group of farm buildings once surrounding it.

A significant amount of open space near the buildings has been developed as parking to serve the growing number of employees being housed in renovated East Campus buildings. Although some of them were laid out to minimize impact on campus buildings, other lots have been sited on an expeditious basis, without referencing the 2001 plan recommendations.

AMHI closed its doors in 2004 when the new Riverview Psychiatric Center opened on land just to the south of the Stone Building and west of the Campbell Barn. The availability of the AMHI buildings, both historic and modern, was one of factors leading to the 2001 Augusta State Facilities Master Plan. Since the adoption of the plan by the Legislature in 2002, all but three of the AMHI buildings have been rehabilitated to some degree, some of them in showcase fashion as excellent example of the adaptive re-use of significant



▲ Riverview Psychiatric Center opened in 2004

historic institutional buildings. Two of the remaining three, the Stone Building/Central Building and the CETA Building (formerly the AMHI Nurses Home) require rehabilitation, while one, a modern gymnasium, is currently underutilized and awaits a re-use plan or removal. DAFS/BGS have developed plans to repurpose the gymnasium for State Archives storage and are preparing plans to renovate CETA, Stone Building and Central Building, with first floor renovations to the Central Building already complete and top floor renovations planned for new meeting and conference center.

Buildings outside of the AMHI historic district include four structures on the Public Safety campus, the modern Bureau of Motor Vehicles building, and the Large Powder Magazine. The magazine and the Public Safety facilities are within the CPC district and are thus subject to design guidelines.





▲ *Capitol State House Drawings, Circa 1829*

## WEST CAMPUS

The most significant buildings of the Capitol Complex are contained within the Capitol Complex Historic District, established in 2001 along with the 2001 plan. The seven contributing buildings within the CCHD date from 1829 to 1956. Three of the contributing buildings were individually listed in the National Register prior to the nomination of the CCHD: the State House (nominated in 1973), the Blaine House (1966), and the Guy Gannett House (1983).

The Maine State House is, of course, the key structure in the district. The original building, designed by one of the most important architects of the colonial era, Charles Bulfinch, was completed in 1832. As it stands today, the original portion is hardly visible, due to substantial additions, both designed by notable architects, completed in 1891 and 1910. Many areas of the building have been rehabilitated or restored in recent years, including the House and Senate chambers in 1984-85. During the period of 1996 through the mid-2000's, significant rehabilitation and preservation projects included the restoration of major public spaces, structural and building system upgrades, accessibility and public safety improvements, restoration of exterior steps and walls, and replacement of the underground tunnel connecting the State House and the adjacent Burton Cross State Office Building.

The Blaine House has the honor of being a National Historic Landmark, meeting both historical and architectural significance criteria for that prestigious designation. In addition to the Blaine House and other buildings previously mentioned, there are five former residences clustered to the north of the State House that contribute to the district,



dating from 1830 to 1911. One of them, the Guy Gannett House, built in 1911, is not owned by the State but is within the Capitol Planning District.

The last contributing building described in the CCHD is the Nash School, located at the northwest corner of the district. It is a two-story masonry former public school building constructed in 1897, now used as state offices.

All of the contributing buildings are well-maintained and firmly established in their uses. The CCHD is within the CPD, so any alterations to them must adhere to the Secretary's Standards and Guidelines as well as CPC Design Guidelines. Integrity of buildings has generally been maintained. There have been no demolitions since the establishment of the district, nor have any new buildings been introduced in the district. The Cross Office Building, a non-contributing early modern office building completed in 1956, was completely rehabilitated in 2000-01 according to CPC design guidelines.

The CCHD designates three contributing historic landscapes that have considerable significance. Capitol Park was individually listed in the National Register in 1989 with the area of significance being landscape architecture and the period of significance of 1827 to 1929. The later years of the period are associated with the renowned landscape architectural firm, Olmsted Brothers. Originally laid out in 1827, many aspects of the design remain visible today, making Capitol Park a unique survivor among designed landscapes in Maine. It is a very early example of a public landscape, and the first known example of such a designed public ground in Maine.



▲ Capitol State House



▲ Blaine House





▲ *Capitol State Park Postcard*



▲ *Capitol State House Expansion*

Somewhat in spite of, and also because of, a small number of alterations of the landscapes, including redesign sketches dating from 1838, 1851, 1871, and most significantly, in 1920, Capitol Park continues to perform its original function of providing a dignified foreground setting for the State House. The 1920 scheme developed by the Olmsted Brothers retained the concept of the original tree plantings which formed a dignified axial approach from the riverbank to the State House, but the design incorporated new civic and recreational features, and expanded the park to include a city-owned Augusta driving park directly to the south. Due to financial constraints, only some of the Olmsted design recommendations were implemented, but those that were carried out, such as the pillars and steps at the State Street (western) entrance to the park, as well as curvilinear walks and broad expanses of lawn, remain as important elements of the design and continue the history of mostly passive uses in the park.

Historic photos of the Blaine House show a landscape of lawns, mature trees, and informal plantings throughout its history until 1920, the year after the house became Maine's Executive Mansion. That year, while the Olmsted Brothers were working on the Capitol Park design, the firm was retained to develop a landscape plan for the house. This resulted in a master plan that was in large part carried out, resulting in a site zoned to fulfill political and domestic functions in keeping with the property's new role. A formal front entry to the house was finally realized in 1990. The New England Garden was rebuilt in 2006-2007. A variety of efforts to restore the Governor's Garden and other planted areas of the lawns is ongoing.

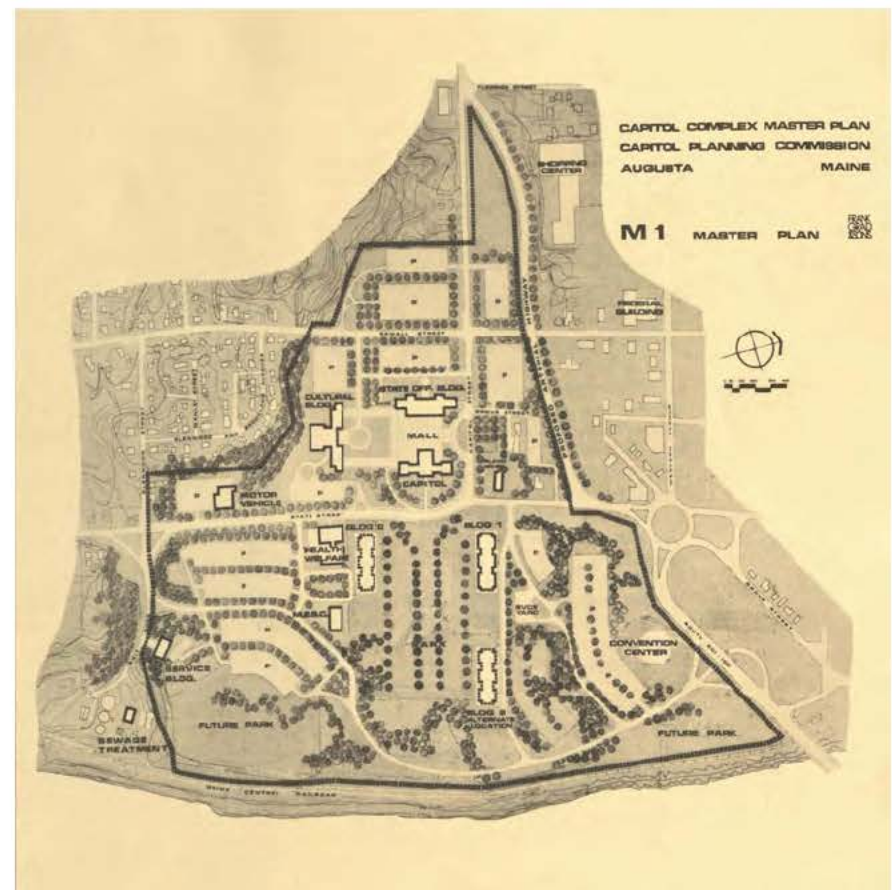
The grounds of the State House have been relatively open throughout



its history. The architect for the original building laid out a design for the grounds with the intent of maintaining a substantial open green space to the east, facing the river, and around the remaining sides to a lesser degree, with a few specimen trees dispersed throughout. A view of the State House painted in 1836 shows this approach to have been implemented, with the building positioned in an open lawn with a small number of trees scattered around it. That openness, whether purposely maintained or accidental, remains despite occasional efforts to develop planting beds or memorials in the foreground of the Capitol. The Olmsted planning for Capitol Park included some attention to the State House grounds, showing a picturesque open English landscape concept of expansive lawns and lines and groupings of trees, accented with stairways, steps, and gates as the primary features of the landscape. Thus minimal planting and open lawn as exist today around the building remain appropriate.

## Buildings and Grounds Beyond The Boundaries Of The Capital Planning Commission and National Register Districts

State-owned buildings outside of the Capitol Complex Historic District but within the Capitol Planning District boundary include a small number of government buildings generally constructed after the period of significance for the National Register district, which ends with the year 1951. Since then, some of these buildings may have acquired significance and should be evaluated for designation, either as individual buildings or as additions to the CCHD.



▲ Capitol Planning Commission Report, Master Plan, 1969





- CAPITOL PLANNING DISTRICT
- RECENT DAFS/BGS PROJECTS
- UPCOMING FY 22-23 PROJECTS
- STATE FACILITIES





## RECENT (2017-2021)

### DAFS/BGS PROJECTS

- 1 DHHS NEW OFFICE BUILDING (2017-19)
- 2 DEERING BUILDING RENOVATION (2016-17)
- 3 CULTURAL BUILDING RENOVATION (2020-2024)
- 4 RAY BUILDING RENOVATION (2019)
- 5 GREENLAW BUILDING RENOVATION (2020)
- 6 MARQUARDT BUILDING RENOVATION (2016-2020)

### FY 22-23 PROJECTS

- 7 DASCHLAGER, NASH AND MCLEAN BUILDING RENOVATIONS
- 8 SMITH MERRILL WINDOW RESTORATION
- 9 221 STATE STREET RENOVATION OR NEW CONSTRUCTION
- 10 BURTON M. CROSS OFFICE BUILDING FLOORING, INTERIORS, ENVELOPE, REPAIRS, AND SECURITY STUDY
- 11 MECHANICAL BUILDING FACILITY ASSESSMENT & REPAIRS
- 12 OCME ADAPTIVE REUSE RENOVATION
- 13 STONE BUILDINGS REMEDIATION, ROOF REPLACEMENT AND REPAIRS,
- 14 HARLOW BUILDING ASSESSMENT & REPAIRS
- 15 WILLIAMS PAVILION ASSESSMENT & REPAIRS
- 16 BMV CHILLER REPLACEMENT PROJECT
- 17 TYSON ROOF REPLACEMENT

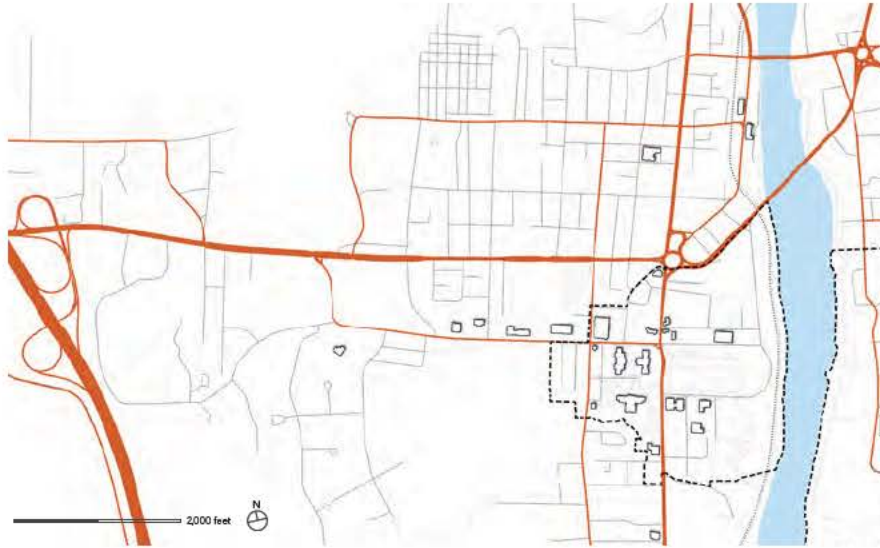
# ONGOING AND PLANNED CAPITOL PROJECTS

Existing conditions assessments for facilities and spaces include a review of ongoing projects and initiatives, facilities, and infrastructure undertaken by the DAFS/BGS for the owned facilities, including within the 2023 Augusta Area Facilities Master Plan. The adjoining map highlights the FY22-23 capital projects and the projects underway through funding from prior fiscal years. DAFS/BGS has undertaken a series of building envelope and mechanical system improvement projects over the last few years and through the pandemic for many of the facilities for its owned facilities portfolio.



▲ New Office Building for Department of Health and Human Services, 2017-2019





▲ Vehicular circulation paths



▲ Existing vehicular access, West Campus



▲ Existing vehicular access, West Campus



▲ Existing vehicular access, West Campus



# EXISTING MULTI-MODAL CIRCULATION

How commuters and visitors choose to travel to their state government destinations has a significant impact on the entire transportation system in Augusta, from vehicular traffic volumes to transit ridership. For decades, the campuses were developed to facilitate vehicular mobility and parking. Even as the state moves to reduce reliance on single-occupancy vehicles, efficient vehicular circulation remains an important public expectation.

The West Campus is bisected by State Street, which is an arterial street that transforms into U.S. Route 201. It intersects with U.S. Route 202, which connects to the Maine Turnpike. Sewall, State, Capitol, and Union Streets are the key roads used to access state buildings and parking lots. Parking is distributed throughout the footprint. Internal circulation is on city streets.

The East Campus is adjacent to Hospital Street, also known as State Route 9, which also intersects with U.S. Route 202. The East Campus can be reached on Arsenal Street, but access is predominantly from Hospital Street. There are two entries to the campus from Hospital Street – one signalized (Tyson Drive) and one stop-controlled (Arsenal Street). The East Campus has a more substantial network of internal streets and walkways for circulation.

The 2001 master plan anticipated worsening congestion with traffic throughout Augusta increasing 25-50% by 2015. At the time, the Third Bridge was not yet built, and congestion through Augusta (especially at the two traffic circles) was worse than it is today. Augusta had 18 intersections with lengthy delays and congestion. The intersections of Capitol Street with State Street and Capitol Street with Sewall Street

were projected to need dedicated turn lanes. At the time, congestion along Western Avenue, especially at the Memorial and Cony Circles, was increasing, and adjacent neighborhoods were feeling the effects as commuters sought alternate routes to avoid congested areas.

Ultimately, the forecasted traffic growth did not materialize. Population loss, the opening of new relief routes (i.e., Third Bridge), and other factors caused traffic to decrease from 1995 to 2017. Overall, AADT (average annual daily traffic) decreased by an average of 30% throughout Augusta in this time frame. Traffic was compared over these years to show the long-term trend without the abrupt (and partly temporary) changes introduced by the pandemic.

Traffic was compared over these years to show the long-term trend without the abrupt (and partly temporary) changes introduced by the pandemic. These intersections have also seen significant investment since the previous master plan. In 2005, the Traffic Signal System Modernization Project improved a system of 17 connected signals along Western Avenue, Whitten Road, Sewall Street, State Street and Bridge Street. The comprehensive updates included coordinated timing plans, a new signal control system, fiber optic communications, and ancillary signal component upgrades and greatly improved intersection operations throughout the network. VHB monitored the signal system for 12 months following construction in 2009 and determined the upgrades also improved safety as the average number of crashes per year was reduced by 41%.





▲ Existing vehicular access, West Campus

## Vehicular Traffic Flow

Traffic flows well in Augusta, with very little traffic delay. Level of Service is a measure of how well traffic flows, with A being free flow with minimal delays and LOS E or F indicating that the roadway is over capacity and considered congested. A 2021 traffic signal timing project found that no signalized intersections in Augusta currently operate at Level of Service of E or F.

Intersections near the East and West Campuses were reviewed with data from the 2021 project. Using traffic volumes, roadway geometry, and the signal timing plan, the level of service for each of these intersections was calculated for the morning and evening peak hours. Each intersection is assigned a letter grade from A-F to identify

conditions from free flow (A) to congested (F). During the morning peak hour, the West Campus intersections operate at LOS A and B, and the East Campus intersection of Tyson Drive, Piggery Road, and Hospital Road operates at LOS C. During the evening peak hour, the intersections of Capitol Street and Sewall Street on the West Campus and Tyson Road, Piggery Road, and Hospital Road on East Campus operate at LOS C and all other intersections operate at LOS A or B. This demonstrates that the road network surrounding these campuses is performing well during rush hours.

With the State's recent investment in Augusta's traffic signal infrastructure and minimal traffic delays, motorists are well-served by the current road network. At this time, the most worthwhile improvements would be for the safety and convenience of pedestrians, cyclists, and other alternative modes. Augusta's trend of stable and decreasing traffic volumes maximizes available options. Streetscaping, traffic calming, or other modifications that may reduce capacity are more viable under these conditions.



## Campus Connections

The two state campuses are somewhat isolated from each other and from the main commercial areas of Augusta. The 2001 master plan noted significant movement between the two campuses throughout the day and recommended an improved connection between the two. Options explored included water taxis, a pedestrian bridge, and shuttle service; these were not considered viable by the Steering Committee.

The range of reasonable options for new connections depends on the amount of movement between campuses. This was investigated using Streetlight, a probe data service that aggregates records from cell phone towers. The East Campus, West Campus, and Downtown Augusta were set up as three separate analysis zones. These are shown in Figure 24. Streetlight was used to count the number of trips starting and ending in one of those three zones on an average day. Downtown Augusta was included to capture mid-day trips for lunch or appointments. Pre-pandemic data was chosen to exclude times when nearly all meetings were held virtually. Data was pulled for one full work week (May 13-17, 2019) and the average daily trip numbers are shown in Figure 25.

This data shows a low, but not trivial, number of trips between these three areas. While not enough to justify shuttle service, these short, frequent trips are good candidates for micro mobility modes. Offering a small e-bike (electric motor-assisted bicycle) fleet for state employees would create an attractive alternative to driving.

FIGURE 29. AVERAGE DAILY TRIPS BETWEEN CAMPUSES AND DOWNTOWN			
FROM/TO	DOWNTOWN	WEST CAMPUS	EAST CAMPUS
DOWNTOWN		24	8
WEST CAMPUS	79		24
EAST CAMPUS	25	105	



Figure 30. Level of Service at Signalized Intersections





FIGURE 31. WEST CAMPUS PARKING LOT CAPACITIES



## Existing Parking

The state provides free parking for employees, legislators, and visitors at the two campuses. Parking demand fluctuates significantly with the start and end of the legislative session. Historically, the state has prioritized parking for legislators (and visitors with legislative business) during session. The Capitol Police has authority to impose temporary restrictions to that effect and reserves spaces in West Campus lots on an ad hoc basis.

Parking was evaluated in the 2001 master plan. It noted crowded lots and state workers resorting to street parking. It was critical of the sprawling surface lots that continue to dominate much of the state footprint. The 2001 master plan made numerous parking recommendations, including:

- Convert some preferred spaces to short-term parking
- Construct an East Campus parking garage
- Build remote parking lots for peak days with shuttle service to both campuses
- Reduce demand for parking by increasing support for carpooling/van pooling
- Improve paving, curbing, and landscaping in surface lots
- Expand the Sewall Street parking garage

Since 2001, the major projects recommended – a new garage and an expanded one – were not built. Parking demand has not yet justified their construction. Particularly with increased teleworking, parking supply is much less of a concern now than in 2001.

Standalone parking studies were completed of the East and West Campuses in 2016 and 2017, respectively. The 2016 East Campus study was performed amid a large-scale renovation project for vacant buildings on the East Campus. These renovations allowed more of the state workforce to be based at the East Campus. The 2016 study concluded that existing parking was adequate to support the increased demand through at least September 2017. After that point, it recommended an additional 268-335 spaces be added. Noting deteriorated pavement surfaces in East Campus lots, the study also recommended a subsurface investigation to identify causes and options for repair.

The 2017 study investigated parking capacity on the West Campus and efficiency of the parking network. The study called out several lots needing moderate repairs and maintenance. It also called for improving the garage's layout by widening spaces and changing the angle from 60° to 45°. The plan also called for the newly acquired lot at the former Bangor Savings Bank to be restriped for 20 spaces. Notably, the study did not see a shortage of parking or recommend additional capacity.

## Parking Capacity

Parking is ample, mostly comprised of surface lots ringing the campuses. All parking is free, and only a small share of spaces are restricted. As shown in Figure 26, parking on the West Campus can be divided into 25 areas with a total capacity of 1,992 spaces. This is a larger figure than listed in the 2017 parking study, which did not include parking areas at the DOT office. This includes the Sewall Street Garage.





FIGURE 32. EAST CAMPUS PARKING LOT CAPACITIES



Parking on the East Campus consists of several surface lots scattered throughout the campus with a total of 1,359 spots. Around 84% of the East Campus parking is unrestricted, mostly used by employees. The 2016 study found that parking lots closest to the campus core and at the Riverview Psychiatric Recovery Center approached full occupancy at peak times, while other lots never saw utilization above 50%. East Campus parking areas are shown in Figure 27.

## Electric Vehicles

Electric Vehicle (EV) charging is a relatively recent addition to the state campuses. On the West Campus, the State Garage and DOT have a total of six EV charging stations. The Ray Building on the East Campus has four EV charging stations. Although not directly on either campus, the Bureau of Motor Vehicles building at 101 Hospital Street has an additional two EV chargers.

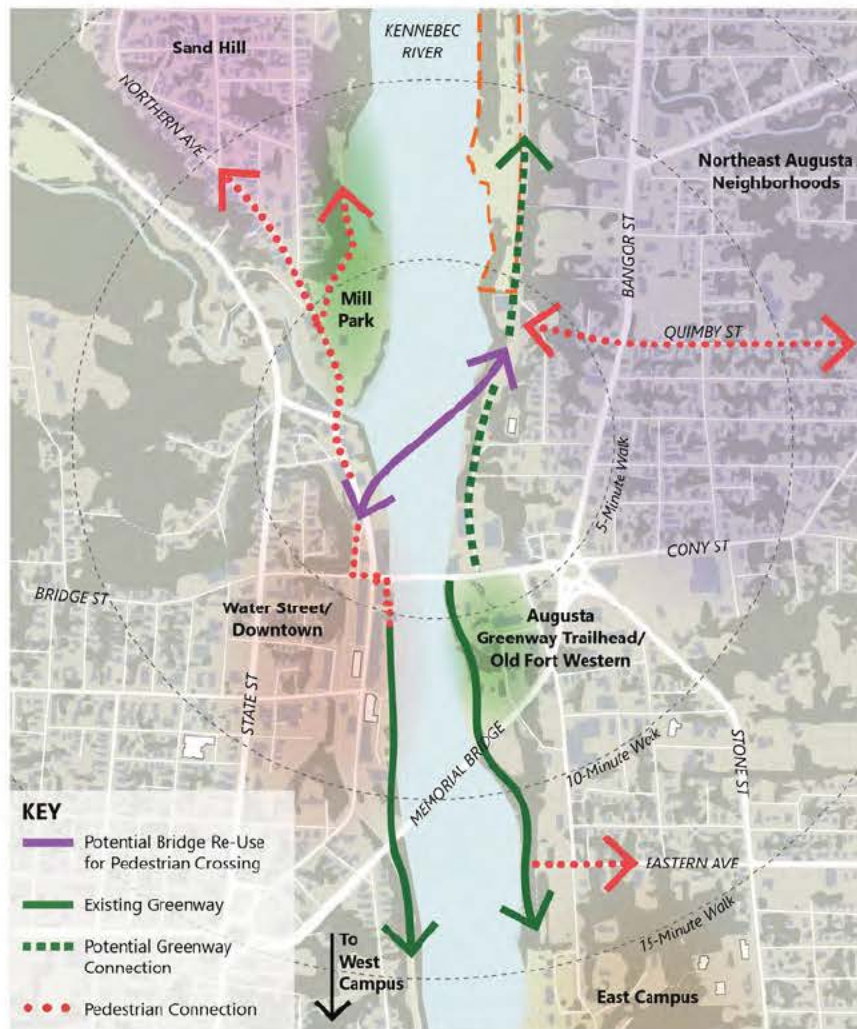
All EV chargers on the state campuses are Level 2 chargers, with a cost of \$1/hour (BMV building) or \$0.79/hour (state campuses). These have a 6.6 kW charging rate, powering 12-30 miles per hour (depending on the vehicle). These are available to the public and complement other chargers available in Augusta at UMA, the city parking structure on Dickman St, and private businesses.

Reducing transportation emissions is central to the Maine Climate Action Plan, with support for EV adoption a prominent part of the recommendations. The Climate Action Plan estimates that Maine



Figure 33. Electric Vehicle Chargers





Augusta Master Plan — Northeast Connector  
Augusta, Maine | March 2022

Figure 34. ELECTRIC VEHICLE CHARGERS

will need 219,000 light-duty EVs on the road by 2030 to meet targets, an almost 40-fold increase from the 5,577 electric vehicles registered in Maine as of December 2021. Even progress far short of that goal will demand additional EV charging on the state campuses in coming years.

The state should prioritize keeping EV charging capacity ahead of demand. Visitors and staff should be confident that they can always find charging on campus. DAFS/BGS should monitor EV usage through its payment platform. When 75% or more of chargers are simultaneously occupied on a regular basis, additional capacity should be added. To manage electric load, DAFS/BGS may consider using splitters or smart circuit breakers to add capacity. These devices can control charging to multiple vehicles, for example charging vehicles sequentially to spread the load throughout the day. A map of current EV charging spaces on the state campuses is shown in Figure 28.

## Public Transportation

Public transportation in Augusta is provided by the Kennebec Valley Community Action Program (KVCAP). There are six fixed-route bus lines in Augusta and one intercity route to Waterville. The routes all meet at a downtown hub (the Depot at Winthrop and Water Streets) as shown in Figure 29.

The 2001 master plan noted that bus service for commuters in Augusta ranges from fair to poor. Despite system improvements, that characterization remains true today. Each route sees only 3-7 runs



per day, with one-hour headways. Service times are limited and mismatched with typical work schedules, with most routes operating from 8:30 am – 3:30 pm.

Although services are limited, strong demand for public transit exists. Pre-pandemic, the Kennebec Explorer buses were serving over 100,000 passengers per year. Commuters are very likely an untapped source of new ridership.

Both campuses are served by at least one bus route. The structure of routes is not ideal for commuters, most of whom would need to make a transfer. The West Campus is directly served by only the Gardiner line, which makes only three daily runs. It could be better served by one of the Augusta loop routes. On the East Campus, riders must catch the bus on Hospital Street. Buses could conceivably be routed in a loop through the East Campus to pick up commuters closer to their workplaces. As it stands, very few employees are likely commuting by public transit.

Among alternative modes, public transit should be considered a top growth opportunity. KVCAP already partners with other major employers in Augusta on subsidized fare programs and tailored bus services. If the State sponsors improved bus service and offers appropriate incentives, public transit would become a more popular commuting mode.

KVCAP is currently planning an overhaul of bus hours, frequency, and routes. It is an opportune time for the State to partner with KVCAP and have a voice in shaping the new system. At a minimum, the State should consider:

- Offering subsidized or free transit passes to employees
- Subsidizing additional bus runs to state campuses to align with typical work hours
- Subsidizing connections to in-town “loop” service at the West Campus
- Subsidizing the extension of at least one bus route into the East Campus (not just stopping at Hospital Street)
- Establishing a “Guaranteed Ride Home” program for employees who commute by transit

## Carpooling

Most of the state workforce commutes from beyond Augusta, Hallowell, or Manchester. People with longer commutes are ideal candidates for carpooling, but often need help with matching rides or finding meeting points.

Carpooling potential was investigated by reviewing data from the Bureau of Human Resources. Data on employee home zip codes was used to compile a map of employee origins (shown in Figure 26) and determine their most direct route to the state campuses.

Figure 30 shows commuting routes at the regional level. The thickness of each road indicates the volume of Augusta campus commuters expected to use it. Significant volumes of commuters come from all directions, but some directions have more park-and-ride options than others. Commuters from Cumberland County have a multitude of park and rides along their path to work and can likely be easily matched for carpooling. Many towns 20-40 miles from Augusta also have park-



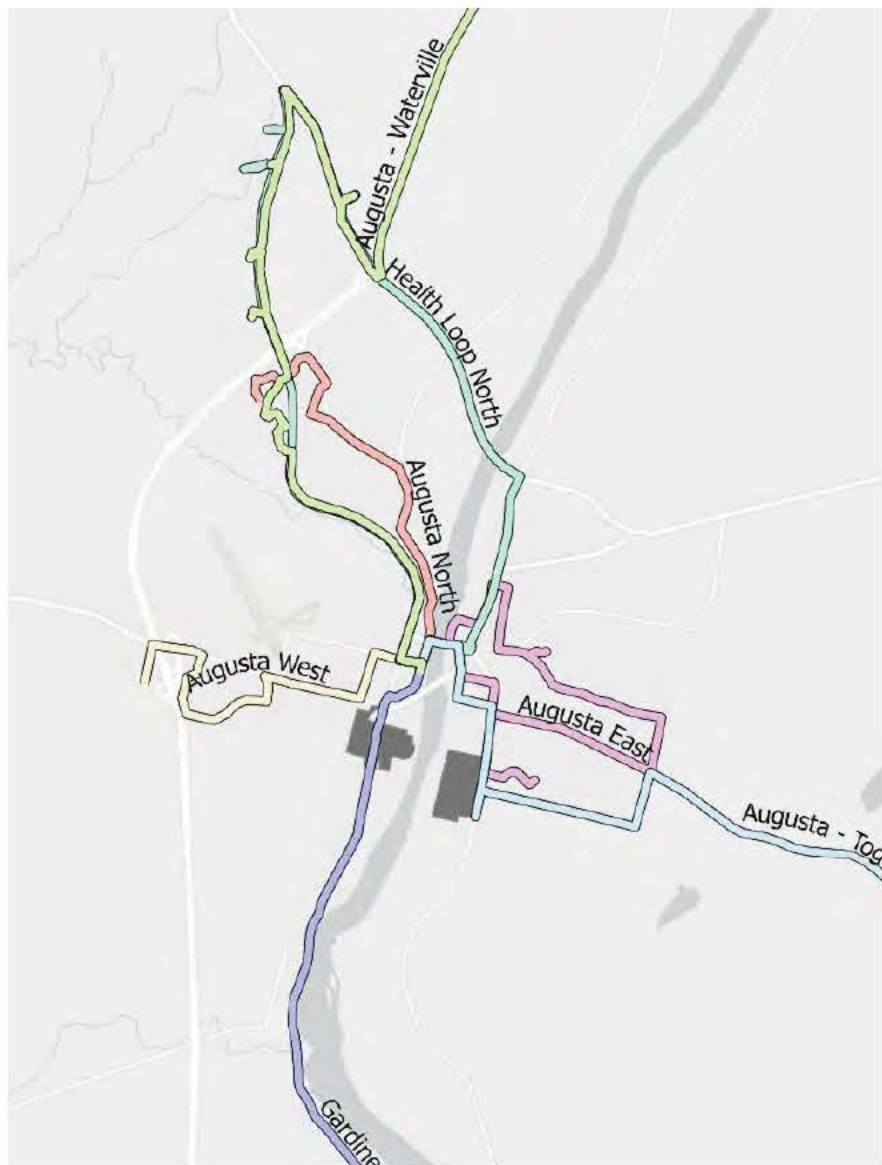


Figure 35. TRANSIT SYSTEM MAP

and-ride lots located in town. If every employee commutes daily, this revealed the number of commuters using each road segment. This was overlaid with park and ride locations to determine potential muster points for carpools.

In contrast, some of the areas closer to Augusta see high commuter volume but do not have park-and-ride facilities. Figure 31 highlights some of these areas, which include most of Waldo County, eastern Kennebec County, and even some larger cities like Waterville.

The State may consider sponsoring additional park and ride locations in areas with a high density of state employees but limited carpool capacity. Both towns without park and rides and towns where they approach capacity should be considered.

Carpool matching, where a service matches commuters on similar schedules whose routes overlap, can be readily outsourced to Go Maine. The State has had varying levels of participation with the program over the years. Each campus currently has a small number of preferred parking spaces reserved for Go MAINE. The East Campus has 20 Go MAINE parking spaces scattered across various lots, which were at full capacity most of the day when the 2016 Parking Study was conducted.

With most of the state's workforce commuting from outside the reach of transit (or bicycle/walking distance), carpooling will need to be a core part of the state's strategy. Incentives for carpooling should be generous – preferred carpool parking, drawings for prizes, and an emergency ride home program are all worth consideration.



## Pedestrian Circulation

The quality of pedestrian and bicycle infrastructure ranges from good to poor depending upon which campus and block you are on.

Figure 36 illustrates the existing pedestrian network on the West Campus. As shown, pedestrians are accommodated on most roadways in the West Campus, however the sidewalks along Capitol Street and State Street are adjacent to high volume roadways with little to no separation from vehicles. The pedestrian network has multiple places, including along important corridors like Sewall Street and Capitol Street, where sidewalks are only provided on one side. Pedestrian connections within parking lots have improved significantly on the West Campus as shown in Figure 32.

Although earlier studies supported the provision of a raised island to provide pedestrian refuge for the high-volume crossing between the State Office Building and the parking garage, it has not been constructed. There is only one sign warning vehicles to yield to pedestrians within crosswalk placed on the brick pavers in the center of Capitol Street accompanied by a flashing light.

On the East Campus, there is limited pedestrian accommodation. Most significantly, most roads do not contain any sidewalks. Hospital Street does have sidewalks on both sides; however, Tyson Drive provides the primary connections into the East Campus from Hospital Street, and there are no sidewalks along this roadway. A pedestrian connection does exist diagonally into the campus to connect to the Ray Building and a good connection is present between the Ray and Deering

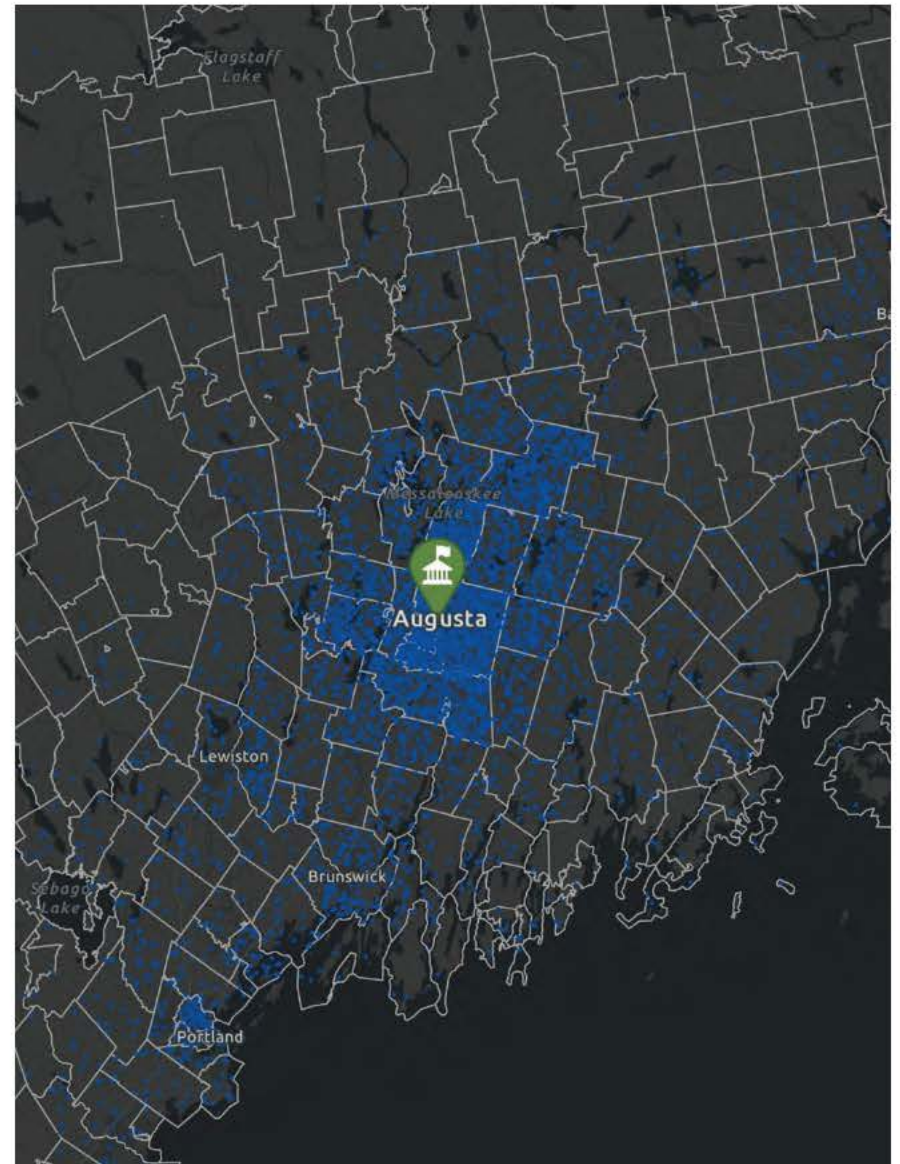


Figure 36. EMPLOYEE HOME LOCATIONS

buildings. Additionally, the grade on the entire campus is constantly changing with many steps and minimal flat walks. This is a concern and challenge for the disabled.

In June 2018, as a part of a Maine DOT signal project, pedestrians and bicycles were counted from 6:00 AM to 6:00 PM at Augusta's signalized intersections. Pedestrian traffic was highest on the West Campus, with over 100 pedestrian crossings at each intersection. This was true even at intersections that are not between parking lots and major buildings, demonstrating a certain base volume of pedestrian travel. Pedestrian traffic is much lower on the East Campus, with fewer walkable destinations. Other than a short stretch of Capitol St, there are no bicycle lanes around the campuses. As stated above, several roadways do not have adequate bike lanes.

## Pedestrian Safety

The crash history from 2017-2021 (inclusive) at intersections surrounding the two campuses was reviewed. Maine DOT has not identified any high-crash locations bordering the campuses. Likewise, the five-year crash summary did not find significant crash volume in this area. The intersections that experienced the highest number of crashes were Capitol Street and State Street, and Capitol Street and Union Street/ Garage Street. There were no fatal crashes or crashes involving bicycles or pedestrians over the five-year span.

The highest crash volumes occurred at Capitol/State and Capitol/Gage, with 4 crashes per year at each. The majority of crashes at

the nine intersections reviewed were related to intersection conflicts. None caused deaths, and none involved a pedestrian or bicyclist. Overall, this demonstrates a low frequency and severity of crashes around the state campuses. A table summarizing crash history for individual intersections can be found in the appendix.

## Bicycle Network

Bicyclists are not as well accommodated as pedestrians on the West Campus. There are shoulders marked as bicycle lanes provided along Capitol Street between State Street and Sewall Street, however, these bicycle lanes do not continue west of Sewall Street. State Street does not include any shoulders so cyclists must ride in traffic lanes.

The Kennebec River Trail is located along the west bank of the Kennebec River. It lies below a small bluff from Capitol Park and the rest of the West Campus. It can be accessed via a short connection trail at the YMCA. It is a lengthy trail, extending all the way to Gardiner with few at-grade crossings. To the north, it extends downtown. Pedestrians and cyclists heading downtown can use the trail to avoid high-traffic crossings, bypassing the Memorial Circle and passing beneath Western Ave. Unfortunately, the trail connections to the West Campus are not ideal, with only one out-of-the-way access point. A direct connection from Capitol Street would make the trail more accessible and increase the appeal of walking or bicycling from the West Campus to other points in Augusta.



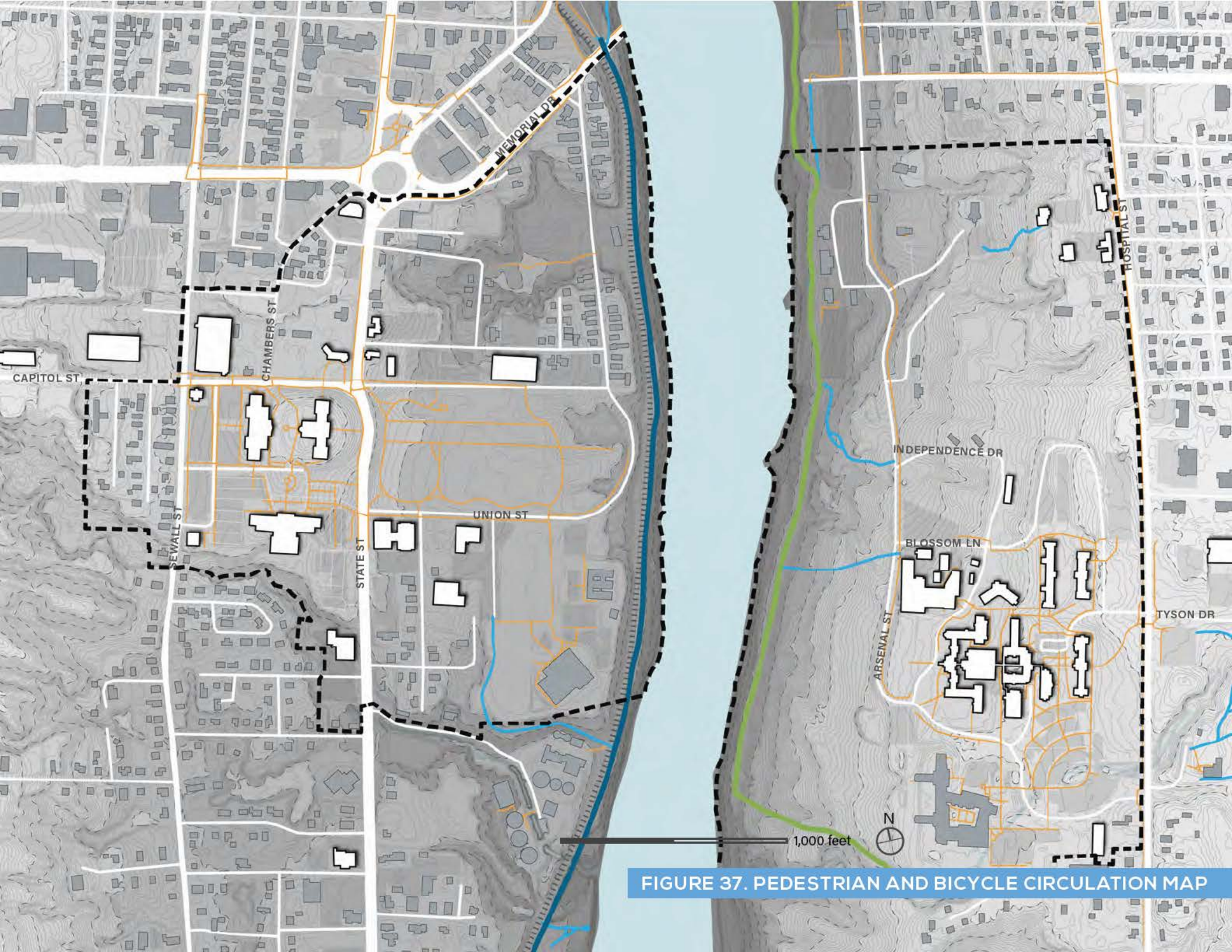


FIGURE 37. PEDESTRIAN AND BICYCLE CIRCULATION MAP





FIGURE 38. FACILITIES ENERGY USE CONDITIONS MAP



# ENERGY, SUSTAINABILITY AND RESILIENCY

## Data Collection and Methodology

The State of Maine Augusta facilities encompasses a wide range of building characteristics, and use types. Buildings are organized in three geographic groupings: West Campus, East Campus, and off-campus, which includes buildings in a much larger super-region. An evaluation of buildings occurred through data analysis, user group interviews, and on-site survey. The general condition of buildings currently in use is from fair to good, while buildings that have low to no occupancy have a much wider range of conditions.

## Climate Action Plan and Energy Goals

The Bureau of General Services (BGS) has been collaborating with the Governor's Office of Policy Innovation and Future (GOPIF) to bring to life Maine's Climate Action Plan: Maine Won't Wait.

DAFS/BGS currently is organized into multiple functional groups, including a planning, design, and construction group, and a facility management group. Recent design projects have been influenced by the Maine Uniform Building and Energy Code (MUBEC), which adopts ASHRAE Standard 90.1-2016 as a reference energy standard.

Energy goals have been evaluated on a project by project basis, which indicates the benefit of this master planning effort in stitching together goals and initiatives in alignment with long-range components of Maine Won't Wait. Energy benchmarking is currently not a regular component of current facility management workflow.

## Energy Data

DAFS/BGS provided data for several of their facilities that was then benchmarked against ENERGY STAR Score. The analysis of this data provided insight into building efficiency and can identify areas of differed maintenance or suggested retrofit.

Energy analysis can be used to determine how much energy a given building uses, its operational costs, and its operational carbon emissions based on regional grid emission factors. This is vital information as the State aims to reduce energy use and greenhouse gas emissions. Identifying top energy use contributors can assist with the planning process to develop the most effective way to reduce energy use and carbon emissions.

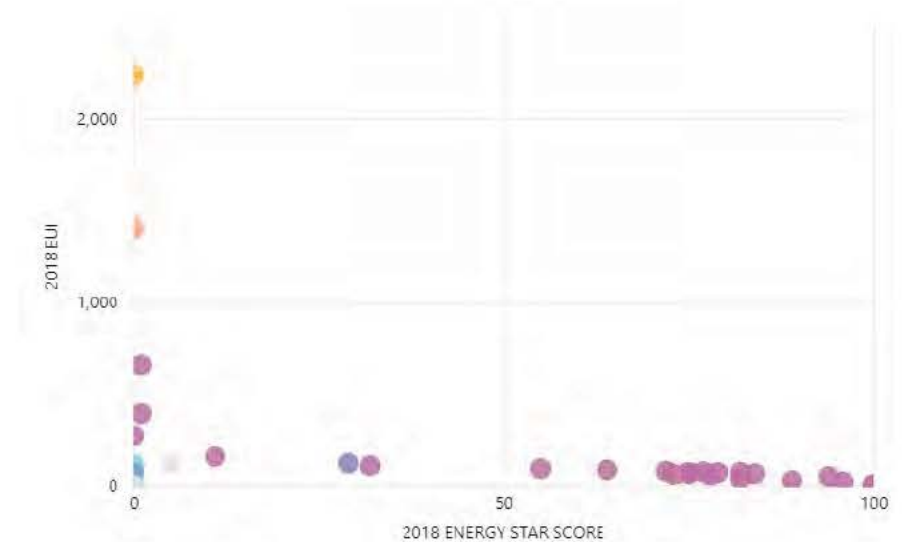


Figure 39. Table of energy star score of buildings

## State of Facilities

As is the case for much of Maine's building stock, many of the States Augusta owned facilities are aging and performing below acceptable industry energy standards. This results in a building stock that requires more energy consumption to operate, leading to higher energy demand from suppliers, higher utility costs, and increased carbon emissions.

There are many factors that contribute to a building's energy use intensity (EUI). A building's thermal envelope performance and air tightness, efficiency of mechanical and building systems, and implementation of passive design strategies can all play a role in defining a property's energy demand.

The master plan collected data on approximately 1.2M gross square feet of State owned facility assets and scored them by level of retrofit and capital investments required to meet industry benchmarks. Of the inventory assessed, roughly 38% of the building stock requires "light touch" retro-commissioning for optimization, while 12% and 51% require ASHRAE Level 2 audit and larger capital investments, with the later requiring the most significant investments. These results are in correlation with the "Facility Conditions" on page 129.

## Background Initiatives

The Maine Climate Action Plan sets a goal for the state to decrease greenhouse gas emissions by 45% by 2030 and 80% by 2050. Within the Climate Action Plan, several strategy themes are explored, including Strategy B – Modernize Maine's Buildings: Energy-Efficient, Smart and Cost-Effective Homes and Businesses. This strategy theme includes the following sub-topics:

- Transition to cleaner heating and cooling systems, efficient appliances – DAFS/BGS has implemented variable refrigerant flow heat pump technology in its most recent modernization projects.
- Accelerate efficiency improvements to existing buildings – DAFS/BGS has continued to invest in modernizations of several buildings, as well as spot energy upgrades, such as LED lighting retrofits.
- Advance the design construction of new buildings – DAFS/BGS has guided successful recent modernizations. There is an opportunity to integrate facility management insights to increase consistency of building systems used.
- Advance the design and promote climate-friendly building products – there are increasing opportunities to explore use of locally resourced low-embodied carbon products, such as mass-timber and to set policies related to sourcing of building systems.
- "Lead by Example" in publicly funded buildings – this master planning effort is a key step in supporting the goals of this sub-topic.



## Background Initiatives, continued

- Renewable fuels standard – due to the climate, fuel sources must be selected carefully to assure resilience, reliability, and efficiency in heating buildings. On-site renewable energy sources, such as solar, should be carefully integrated with consideration to historic preservation, end-of-life replacement, and cost effectiveness. Building efficiency should continue to be prioritized first and then balanced with renewable energy.
- Replace hydrofluorocarbons with climate-friendly alternatives – over the past five years, there has been a significantly increased focus on the impact of refrigerants on climate change. The global warming potential (GWP) of R-410a, an often used refrigerant for commercial HVAC systems, has a GWP of over 2000 times that of carbon dioxide. Systems implemented today should utilize alternative refrigerants or be suitable for use with drop-in replacements in the mid-term.

## Alignment with CAP and Goals

The master plan will address energy, sustainability, and resiliency using three categories of recommendations:

- Building level energy conservation scope: the team will recommend an investment intensity and target energy use reduction by property and timeframe.
- Renewable energy – the team will clarify the role of renewable energy on-site and regionally in supporting the State's climate action goals. We will identify candidate properties best suited to demonstrate net zero energy level performance, to allow the State to educate and show progress in a positive and accessible way.
- Programs and policies – the team will identify programs and organizational policies that will have the most impact both short-term and long-term on energy management. This may include completely new initiatives or evolutions of existing initiatives related to roles, technology, and standards.



FIGURE 40. FACILITIES CONDITIONS MAP



# FACILITY CONDITIONS

## Data Collection

The criteria for data collection and analysis of facility conditions were based on building function, location, and scope of the master plan. The criteria were set to include buildings owned by the State and within the two major geographic groupings, East and West campuses, and exclude utility, storage, or other general unoccupied support facilities. Analysis of the facilities was conducted in collaboration and conjunction with DAFS/BGS staff through on-site observations, various user group interviews, and prior assessment reports performed within the last (5) years and provided to the team by DAFS/BGS.

## Scoring Methodology

Facilities were scored across the following four categories: building envelope, building systems (mechanical, electrical, and plumbing), external site conditions, and interior finishes and Code compliance. Each category was scored on a scale of (1) to (4) with (1) representing poor conditions and (4) representing excellent conditions. The score from each category was combined and averaged to provide an overall score for each facility.

The following is a general breakdown of the building scoring:

- Score 1 – Poor. These facilities are considered in disrepair and unoccupiable in their current condition. Extensive work should

be done to bring the building within compliance with health and safety standards necessary for occupation.

- Score 2 – Fair. These facilities are occupiable but need repair. Interior finishes are dated or worn, building envelope shows signs of air or water infiltration and poor thermal envelope, site has overgrowth and cracking or damaged hardscapes including parking and walking paths, and building meets Code as an existing building but improvements should be considered for future renovations.
- Score 3 – Good. These facilities need minor repair or maintenance within the next 5-10 years. Facilities function properly but aging building systems or envelope components are nearing their end-of-life and will need to be replaced, upgraded, or more regularly maintained. Site components, such as vehicular drives and pedestrian paths, are in acceptable condition but some areas may need repair in the near future. Facilities meet current code.
- Score 4 – Excellent. These facilities are newly constructed or recently renovated and with routine maintenance should not need considerable work for 10-20 years.

## Summary of Data

In total, 2,137,157 gross square feet of State-owned facilities (located in Augusta, Vasselboro and Hallowell), were included in this assessment, with 52% of the assessed area receiving a score of (3), or good condition. A quarter of facilities assessed received a score of (1) or poor condition, totaling 601,178 gross square feet, of which 257,984 gross square feet are attributed to the Stone Building on the East campus.

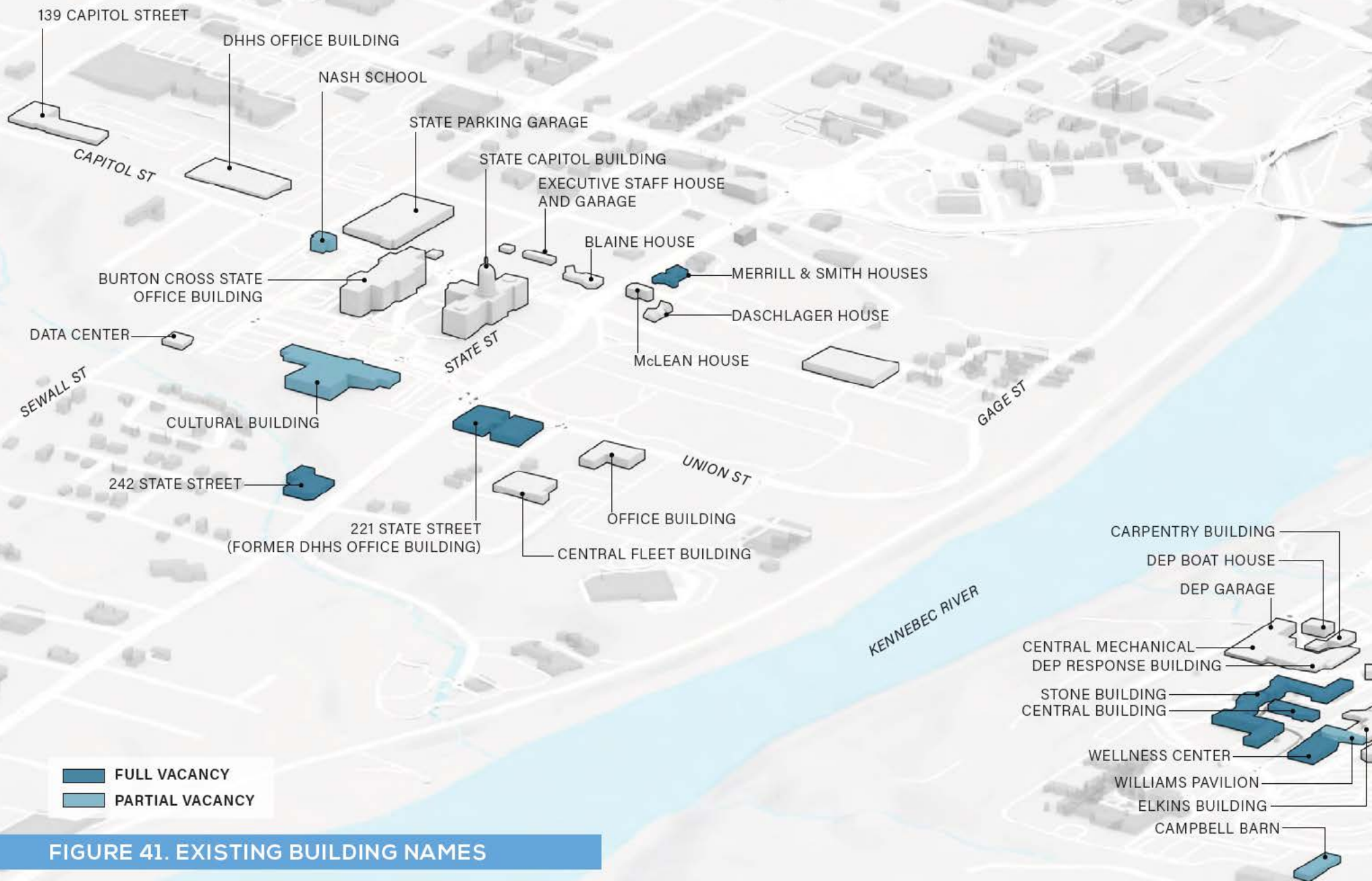


FIGURE 41. EXISTING BUILDING NAMES





## Existing conditions

The facilities master plan team worked with the Bureau of General Services (BGS) to understand the inventory of state-owned and leased buildings in the Augusta area that are managed through DAFS/BGS; as well as what state departments are located in those buildings. Other facilities that are managed by the state departments directly may not be included in the building inventory. The location information gathered from DAFS/BGS was confirmed through department interviews.

### State Owned Buildings

The state of Maine currently owns 54 buildings in the Augusta area, totaling 1,819,311 GSF. These buildings are split between the east and west campuses, with 30 buildings on the east campus totaling 925,265 GSF and 18 buildings on the west campus totaling 751,693 GSF.



## EXISTING WEST CAMPUS FACILITIES

- 1** BURTON M CROSS OFFICE BUILDING
- 2** 242 STATE ST - OLD PUC BUILDING
- 3** OLD DEPT OF HEALTH AND HUMAN SERVICES
- 4** DASCHLAGER HOUSE
- 5** MCLEAN HOUSE
- 6** MERRILL HOUSE
- 7** NASH SCHOOL
- 8** SMITH HOUSE
- 9** BLAINE HOUSE
- 10** OFFICE BUILDING (OLD LABOR)
- 11** STATE CAPITOL BUILDING (STATE HOUSE)
- 12** STATE OFFICE GARAGE
- 13** MAINE DOT HEAD QUARTERS
- 14** SERVICE GARAGE
- 15** MAINE CULTURAL BUILDING
- 16** DEPT OF HEALTH AND HUMAN SERVICES
- 17** MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM

**FIGURE 42. WEST CAMPUS SITE PLAN**



## West Campus

The West Campus, anchored by the Capitol Building, the Cross Office Building, and the Cultural Building, is the centerpiece of the State Capital area. It includes Capitol Park and state-owned properties on Capitol and Union Streets. The geographic center of the West Campus is Capitol Park, an open space of approximately 20 acres leading from the State House east to the Kennebec River. A City-owned recreation and sports complex abuts the southeast end of the park, extending the feel of open space south along the river.

The area immediately north of the State House on State Street is comprised largely of historic structures, including the Blaine and Gannett Houses. West of Sewall Street on Capitol Street is the Maine Department of Transportation garage facility. A small pocket of residential development lies between the Capitol Hill complex and Howard Hill, a largely undeveloped and wooded preserve to the west.

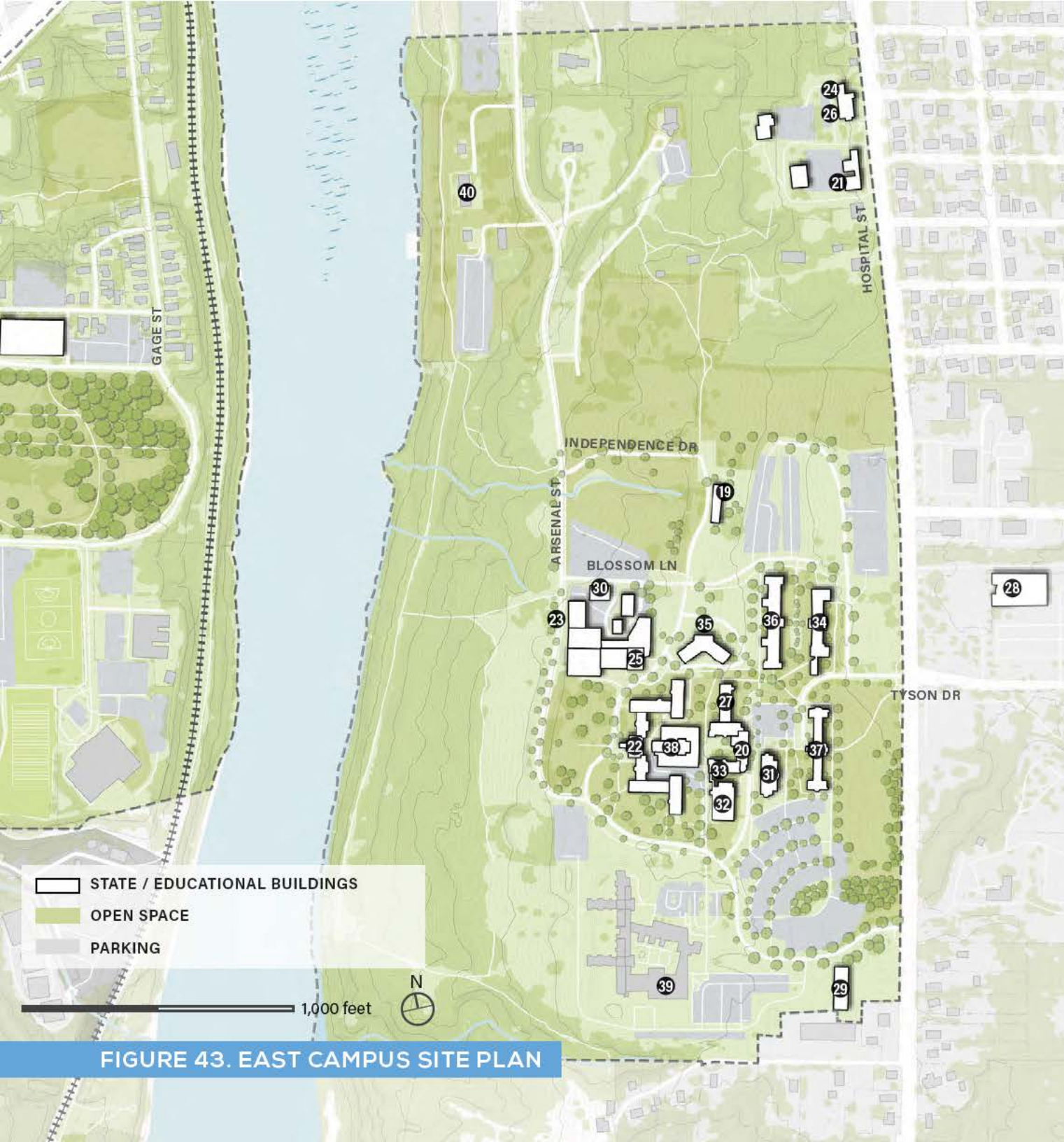


▲ Plaza and green space located between State Office Building and State House



▲ Historic detailing of McLean house scheduled for restoration in 2023-2024





## EXISTING EAST CAMPUS FACILITIES

- 19 CETA BUILDING
- 20 ELKINS BUILDING
- 21 MAINE STATE POLICE HEAD  
QUARTERS
- 22 STONE BUILDING
- 23 DEP RESPONSE GARAGE
- 24 STATE POLICE CRIME LAB
- 25 OFFICE BUILDING (OLD  
MECHANICAL BUILDING)
- 26 OFFICE OF CHIEF MEDICAL  
EXAMINER
- 27 TYSON BUILDING
- 28 BUREAU OF MOTOR VEHICLE
- 29 CAMPBELL BARN
- 30 DEP BOAT HOUSE
- 31 HARLOW BUILDING
- 32 WELLNESS CENTER
- 33 WILLIAMS PAVILION
- 34 DEERING BUILDING
- 35 GREENLAW BUILDING
- 36 MARQUARDT
- 37 RAY BUILDING
- 38 CENTER BUILDING
- 39 RIVERVIEW PSYCHIATRIC  
CENTER
- 40 FORMER ARSENAL

FIGURE 43. EAST CAMPUS SITE PLAN



## East Campus

The East Campus (formerly the Augusta Mental Health Institute) includes large open space between historic buildings and has a much lower density of development than the surrounding urban areas. The East Campus also includes the Kennebec Arsenal, owned by Main Street LLC. The Campus is flanked by small-scale residential neighborhoods to the north and northeast, open space to the east and southeast, and rural residential development to the south, with the Kennebec River forming its western boundary. The revitalization of the East Campus has been underway over the last three decades. The state has already restored, renovated, and re-occupied many of the original hospital buildings, including Tyson, Harlow, Deering, Ray, Marquardt, and Greenlaw Buildings. The Stone Building was occupied by hospital administration and patients until it was replaced in 2004 with the Riverview Psychiatric Center. It has remained unoccupied since then with building envelope renovations scheduled for 2023 with subsequent phases of work planned to restore occupancy.

## Other DAFS/BGS Facilities

The 2023 Augusta Area Facilities Master Plan included the Maine Criminal Justice Academy in Vassalboro and an approximately 62,000 GSF facility at 10 Water Street in Hallowell. The Maine Criminal Justice Academy includes approximately 167,000 GSF facilities and about 105 acres. The Master Plan reviewed energy data and building condition assessments for these two locations, but excluded them from the workplace analysis and scenario recommendations. This includes exclusion from lease consolidation scenarios and space utilization.



▲ East Campus with Capitol Building in Background



▲ East campus Tyson Building and Elkins Building

# INFRASTRUCTURE, TELECOMMUNICATIONS, AND INFORMATION TECHNOLOGY

Three major factors on the horizon could stress the State facilities' electric infrastructure: increased loads from electric vehicle charging, electrified heating and cooling, and on-site power generation.

Three-phase power is important as it provides the level of voltage necessary for DC fast charging of electric vehicles, vital to a clean transportation future. Three-phase power is also important for larger scale power generation. A strong electric grid will minimize the amount of energy storage necessary on the State campuses.



▲ Governor Mills launches EV charger infrastructure plan at Maine Turnpike, 2019

Both the East and West campuses have ready access to critical three-phase power in the Central Maine Power distribution system. The West campus is largely ringed with three-phase power options. There is a mix of above ground and buried power lines. The operating voltage of each line is 12,470 volts. The East Campus is served by three-phase power from an overhead line on Hospital Street. On the East Campus itself, all lines are underground. Other potential power connections may be available to the campus from Kelton Road and Arsenal Street. While the East Campus lines are less redundant than the West Campus, in both cases they should provide adequate service for interconnection with solar installations and DC fast charge electric vehicle charging.

Supporting EV fast charging will require upgraded electrical services at charging locations as most current building services will not have available capacity. Electrification of other services (hot water, heating, cooling) will also need to draw from available amperage in those service boxes.

To support expanded EV charging, energy storage will likely become necessary to ensure voltage frequency remains in acceptable ranges. With building-level line upgrades and potentially energy storage, the grid should support anticipated volumes of electric vehicle charging at the West Campus due to the multiple distribution lines available. The East Campus can certainly support a small volume (on the order of 10) simultaneous fast chargers with current infrastructure; however, it is likely that at some point either an additional electrical feed, an improved substation, significant battery storage or other improvements will be necessary to address needs. This constraint could be avoided



by installing only Level I or II chargers instead of DC fast chargers, but this prolongs charging time.

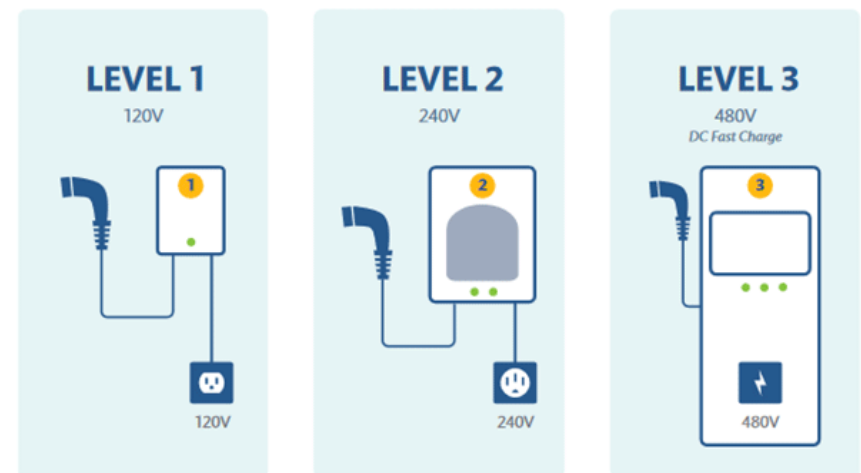
The transition to renewable heating and cooling will involve electrified building heat, meaning greater building-level loads during heating and cooling seasons as buildings no longer use the central heating and cooling plants. The additional loads will almost certainly require additional power supply to buildings. These upgrades must be considered early on in planning, as storage, line and substation upgrades will likely need years to accomplish.

On-site generation will be an important part of meeting the State's climate goals. The State has already made a major investment in solar, installing 13 MW of generation in partnership with Cenergy on three DOT-owned sites in the Augusta area. When completed, the DOT solar projects will supply 70-75% of annual energy usage on the East and West campuses.

The State should continue to build its generation capacity with additional projects. As long as current federal tax incentives and advanced depreciation advantages continue to exist, Maine should continue to work in partnership with private entities. By design, only private entities are eligible for these federal incentives which significantly enhance the return on investment of solar, wind or energy storage investments. The easiest method to accomplish this would be to replicate the DOT project on other undeveloped state properties and net meter the additional necessary power to the appropriate feeder line and service meter at state facilities.

Installation of solar panels over existing parking lots, roof tops or

green spaces on the campus can also be considered. Each campus has approximately nine acres of parking lots. Carport-style solar installations require roughly 2.5 acres per megawatt of installed panels. At this rate, each campus could support two to three megawatts of solar over parking alone. With a capacity factor of 18.9% for solar in Maine, a combined installation of approximately five MW would generate on the order of 7,500 MWh per year. These sites will be more expensive to develop per unit versus vacant land. However, there are benefits of having solar be visible to the public as it demonstrates the viability of the technology, uses land efficiently, and provides covered parking. As with the DOT initiative, any projects designed directly on the campuses should be done in conjunction with a private partner to take full advantage of the available federal benefits. DAFS/BGS should also consider engaging an Energy Procurement Consultant to assist with pricing alternatives.



▲ Three primary types of charging equipment

# OPPORTUNITIES AND CONSTRAINTS

The following opportunities and constraints were observed.

## Utilization

At the time of data collection, including agency interviews in 2021, a significant portion of buildings are underutilized due to the Covid-19 Pandemic, the resulting telework protocols, or vacant awaiting renovation. This is true particularly on the East Campus, with approximately 37% of the building stock vacant primarily due to unoccupied Stone Building. In addition to the vacancies, Covid-19 protocols have limited employees in office, further reducing the building utilization figures. Densification can be a key energy conservation measure, as the relative energy use per occupant for lighting and enclosure heating and cooling decreases as occupant density increase. We recognize that there is an inherent amount of embodied carbon associated with existing buildings. While the State might reposition buildings in the portfolio, it is key that there is a viable future for these buildings and good stewardship from any potential future Owner.

## Enclosure Upgrades

The prevalence of historic structures with mass masonry will require careful analysis prior to addition of air-tightening and thermal insulation upgrades. Enclosure upgrades should be considered in an integrated manner with the sizing of replacement HVAC systems. Oversized equipment results in a longer-term maintenance burden, ties up capital that can be deployed to other building features, and can impact overall operational efficiency.

## Design Standards

Lessons learned from the industry and across DAFS/BGS can shape design standards and guidelines used by project teams. This standards can integrate target energy and water use standards for new construction and modernization projects. We recommend leveraging opportunities to standardize equipment types in the categories of lighting controls, space cooling and heating, ventilation air delivery, building automation systems, and renewable energy systems.

## District Utility Systems

The State has significant prior experience with district utility systems, both on the West and East campus. We recommend that a focused utility plan be developed for the West campus that explores conversion from natural gas heating systems to electric fuel source systems. For the East campus, because of recent investments in distributed HVAC systems, we recommend a plan be developed that determines the future disposition of existing steam heating systems. The State showed significant leadership in attempting to implement a biomass co-generation system. We recommend lessons learned from that process be shared within DAFS/BGS, to inform future decisions that balance innovation against risk.



## Energy Management

DAFS/BGS has invested significantly in data analytics in the past few years to progress facility management, with an emphasis on maintenance and user comfort. Additional efforts can leverage the Honeywell Forge platform to further optimize energy tracking, even if there are limitations to how aggressive scheduling and temperature setbacks can be. DAFS/BGS will benefit from developing a formal energy manager position in the organization (vs. current use of a consultant) and using ENERGY STAR portfolio manager as a repository for utility data and benchmarking.

## Data Gaps

Energy data for a significant portion of properties outside the core Augusta campuses is not currently available, due to limitations in staffing. We recommend a forward-looking approach that sets clear requirements for data capture, including roles and responsibilities, and data gathering frequency.

## Historic Preservation

The previous facilities master plan (2001) was successful in establishing a framework for making the highest and best use of the State's real estate resources by rehabilitating several of the historic East Campus (former AMHI buildings) and the two primary existing buildings of the West Campus. This plan update highlights the opportunities and constraints offered by those significant State buildings in Augusta that remain to be adapted or updated for continuing or new uses, or in one or two instances, replaced. These are the Stone Building on the East, the DHHS buildings at State and Union streets, and 242 State Street. With their prominent locations and appropriate uses, these rehabilitated or new buildings can be used to meet the functional and environmental requirements outlined in this plan while also weaving them into the historic landscapes of their respective campuses.

The Stone Building complex represents a remarkable opportunity to re-use an irreplaceable historic building group, but at significant cost. The three West Campus buildings occupy prime real estate and could be sensitively upgraded for continuing state office use, or they could be replaced with landmark-quality green buildings with sites developed to meet many of the design and use goals of this plan.









06 /

# **WORKPLACE: CURRENT AND FUTURE SPACE NEEDS**

**Workplace Existing Conditions**

**Department Space Needs**

**Existing Space Utilization**

**Workplace Trends**

**Future Growth and Space Projections**

# WORKPLACE EXISTING CONDITIONS

The planning team collected available existing space data for the DAFS/BGS-owned facilities and also used an online survey instrument. The survey responses were followed by phone/virtual interviews with each division or department. The survey and interviews were beneficial in understanding the existing and future space needs and workplace conditions.

During the survey and interview process, the planning team collected information on the following topics:

- Department Mission, Organization, & Duties
- Impacts of the 'Maine Won't Wait Climate Action Plan' & other relevant legislation
- Impacts of climate change on services and daily operations
- Current locations and critical adjacencies (only locations in Augusta were discussed)
- Current square footage, space types, and employee counts
- Projected growth and space type needs over the next 20 years
- Deficiencies in current spaces (environmental deficiencies or space type deficiencies)
- Number of visitors and ability to accommodate visitors
- Parking and commuting needs
- Security concerns
- Recruitment and retention needs
- Teleworking and technology needs

All information collected from the survey and meetings was compiled into department indexes documenting the comprehensive needs of each department. These indexes, as well as a copy of the survey questions, can be found as part of the "Appendix B - Department

Workplace Indexes". The following departments participated in this data collection process:

- Department of Administration and Financial Services (DAFS)
- Department of Agriculture, Conservation, and Forestry (DACF)
- Maine Attorney General (AG)
- Department of Economic & Community Development (DECD)
- Department of Education (DOE)
- Department of Environmental Protection (DEP)
- Office of the Governor (OG)
- Department of Health and Human Services (DHHS)
- Department of Inland Fisheries and Wildlife (IF&W)
- Department of Labor (DOL)
- Department of Marine Resources (DMR)
- Department of Professional and Financial Regulation (DPFR)
- Department of Public Safety (DPS)
- Maine Secretary of State (SOS)
- Maine State Auditor (MSA)
- Maine State Treasurer (MST)
- Workers' Compensation Board (WCB)

The following departments were not included within the scope of the master plan at the direction of DAFS/BGS.

- Department of Transportation\*\*
- Department of Corrections
- Department of Defense, Veterans, and Emergency Management

*\*\* Department of Transportation was included in the department interviews that were conducted.*



# DEPARTMENT SPACE NEEDS

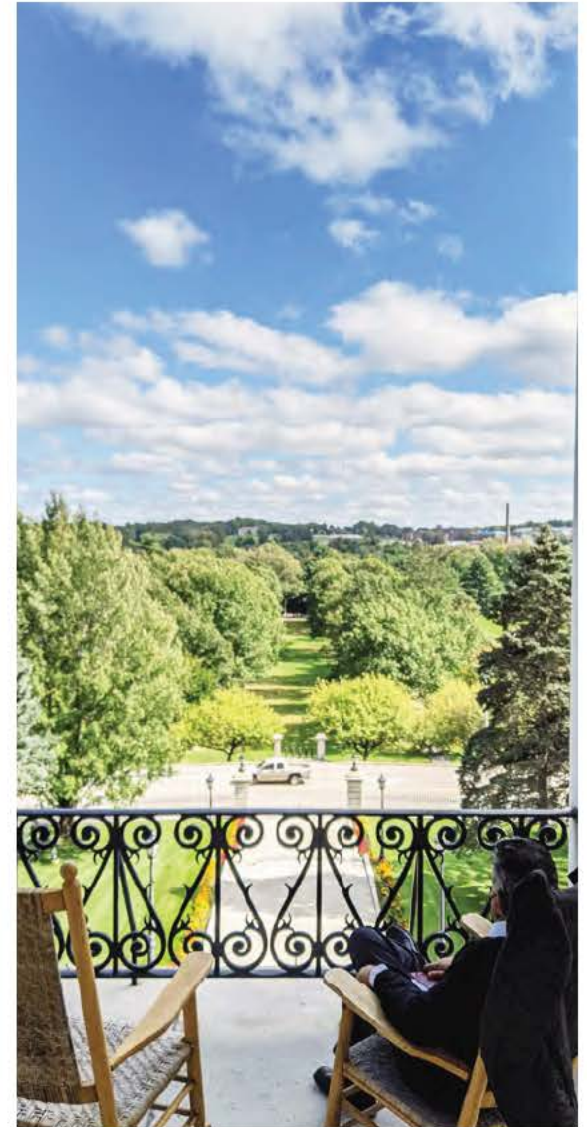
The impact of the Climate Action Plan on departmental space needs is not significant. Overall, most departments did not anticipate the need for additional staff or adding programs to specifically address Climate Change. A few departments noted relevant legislative directives that could actively change their services and staffing. These include:

- Dept. of Economic & Community Development
- Dept. of Environmental Protection
- Dept. of Health and Human Services
- Dept. of Labor

Departments that support and protect natural resources, waterways, and wildlife are seeing the effects of climate change in the environment and are adapting their programs and support as necessary. Across the board, growth in programs or changes in the number of full-time employees due to climate change are predicted to be minimal, though some operational changes statewide are anticipated.

The changes most anticipated due to climate change are less travel, less commuting and different ways of working, which could lead to a reduction in workspace needed. Some agencies also anticipated new services, changes to existing services, and changes in the workforce and required skill sets. See Figure 44 on page 144 to see how climate change is expected to impact the workplace. Many departments also anticipated operational changes that were not agency specific. These changes included:

- The possibility of shared transportation to reduce carbon emissions by State employees who commute, incentivized by the "Go Maine" program.
- Greater emphasis on electric and hybrid vehicles for State-owned auto fleet.
- Potential opportunities for integration of solar power collection on State-owned property.
- Installation of EV chargers in State parking facilities and, for departments with staff who operate across the entire state, the feasibility of statewide access to EV chargers.



▲ Capitol Park

## Recruitment and Retention Needs

Maine faces some of the same issues with recruitment and retention as other states, including competition with the private sector and federal government. Departments that have law enforcement divisions, such as the Department of Public Safety and the Department of Inland Fisheries and Wildlife, see issues due to the nationwide lack of interest in law enforcement professions.

Attracting new talent and appealing to the younger generation entering the workforce will be a factor the State will need to consider in the 20-year implementation of this plan. In the survey, respondents stated that they thought having assigned workspaces in the office, access to conference spaces, and the quality of the office environment were the most important factors when it comes to attracting and retaining employees, followed by space for an impromptu gathering and access/connection to outdoor spaces, see Figure 45 on page 145.

Workplace amenities will also be a factor in attracting and retaining employees. The following considerations are nationwide trends that when implemented improve employee satisfaction and retention:

- Teleworking and work schedule flexibility – This includes the flexibility to work from home at least part time.
- Wellness centers or membership reimbursement to fitness centers.
- Outdoor recreational opportunities – People will often walk or run on their lunch break, however showers and places to freshen up after outdoor activities must also be provided.
- Mixed use campuses to make the campuses a thriving and energetic area. It could be beneficial to State employees to better integrate the campus into the surrounding community and make the campus feel easier to reach through walking/biking etc.
- Mothers/wellness rooms promote health and personal well-being.

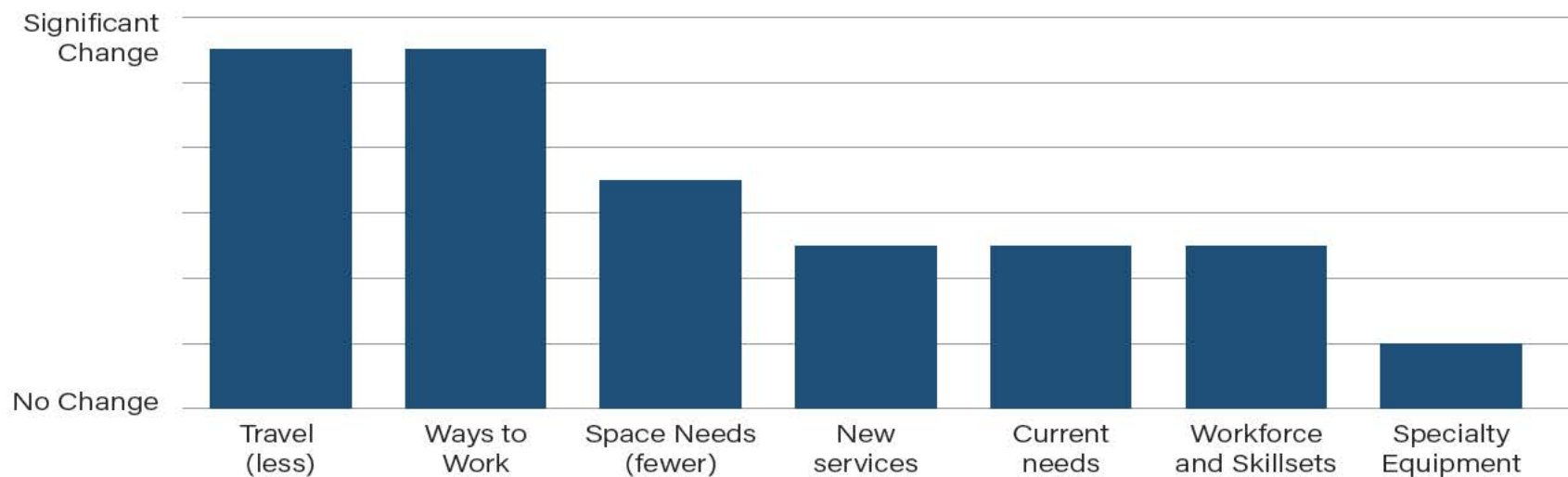


Figure 44. Most anticipated changes due to impacts of Climate Change



- Healthy food options accessible to all workplaces.
- Modern work spaces – Updating work spaces to meet modern trends in workplace design would aid in attracting new talent. This includes spaces that have more light, lounge/informal meeting spaces, drop-in hoteling spaces, and ergonomic furniture.
- Hoteling stations in other cities such as Portland – This could aid employees that commute from other communities but also provide conference space in other cities for the State to conduct meetings.
- Shared transportation options provided by the GoMaine program along with other incentives for alternative transportation methods.

See "Workplace Trends" on page 149 for more information on trends.

## Parking and Commuting Needs

Most State employees commute daily in personal vehicles. While teleworking has greatly decreased the number of people driving to the East and West campuses daily, it is anticipated that over the course of this 20-year plan the majority of employees will come back to the office for at least a few days a week. During the interviews, the consensus was that there is ample parking on campus. However, some of the available parking is located at a distance from the buildings in which people work. Interview participants also noted that parking on the West campus is significantly more difficult when the legislature is in session. Other specific parking highlights include:

- Lack EV chargers, both personal and State fleet vehicles.
- Parking not well lit, leading to security concerns.
- Lack of guest parking directly adjacent to buildings that receive walk-in foot traffic.
- No bus or large group parking adjacent to Cultural Building.
- Accessible parking for employees is not always easy to come by.

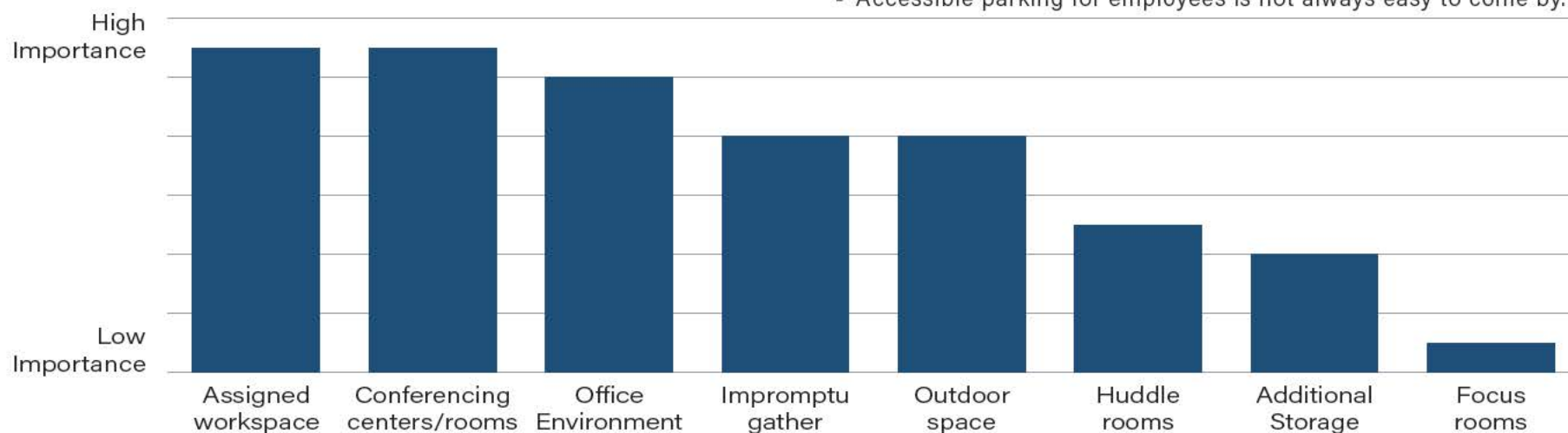


Figure 45. Desired spaces and characteristics for attracting and retaining employees per data collected through Workplace Survey and interviews.

# EXISTING SPACE UTILIZATION

## Inventory of State Occupied Space

The 2023 Augusta Area master plan includes facilities owned and managed by the Bureau of General Services (BGS) within the Augusta area. An existing inventory of DAFS/BGS owned space was compiled for the Augusta Area facilities. From that information, the facilities master plan team compiled an inventory of the current space utilization of the State of Maine current as of February 2023. Listed below, and in Figure 46 on page 147, is a summary of building area that were inventoried as part of the 2023 Augusta Area master plan:

- 75 total State buildings included in the master plan scope, 69% are State-owned and 31% are leased.
- 54 State owned buildings included within the master plan scope, 38% is dedicated to office space, 34% is non-office space, and 27% is currently vacant.
- 25 State leased buildings, 82% is dedicated to office space, and 18% is non-office space.

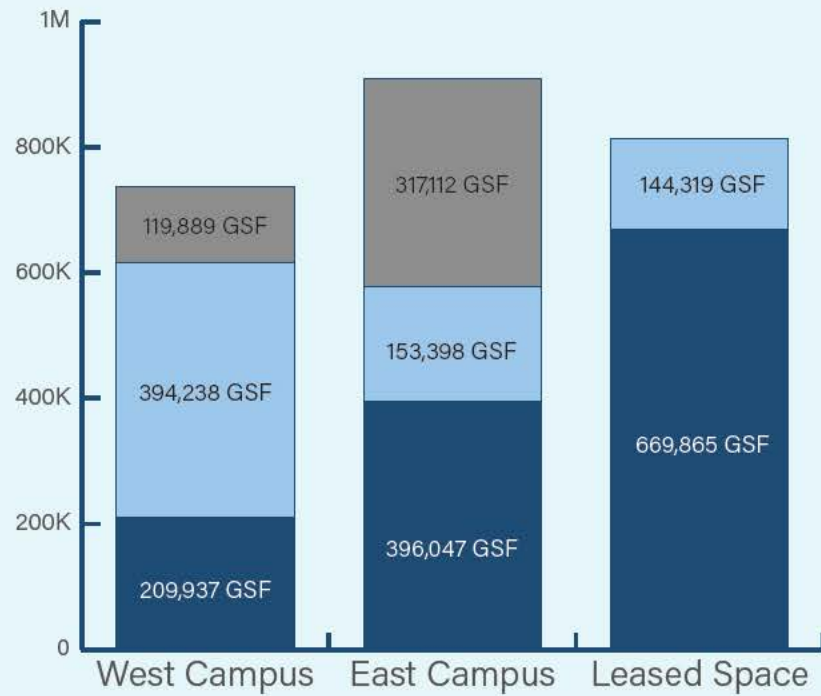
Definitions of the different space type categories that are shown in Figure 46 on page 147, are listed below:

- **Office Space GSF** – Gross square footage of space that is dedicated to use as an office. It includes square footage of personal offices and cubicle spaces as well as support spaces for the offices such as circulation, break rooms, work rooms, etc. This number is used when calculating the SF/person of a building.
- **Non-Office Space GSF** – Gross square footage of space that is dedicated to uses other than office. Spaces in this category include Labs, large hearing rooms, large dedicated storage spaces, amenity spaces not assigned to agencies, etc. This number does not factor into the SF/person of a building.
- **Vacant GSF** – Gross square footage of space that is currently vacant in each building.
- **Out of Scope GSF** – Gross Square footage of space belonging to agencies that were not in scope for this facilities master plan.
- **Total GSF** – Calculated by adding the sum of the Office Space GSF, Non-Office Space GSF, Vacant GSF, and Out of Scope GSF. This number shows the total gross square footage of each building.
- **# of Employees** – The current number of employees housed in each building as confirmed in the department interviews.
- **Total Employees** – Total number of employees currently in housed in each building.
- **SF/employee** – Calculated by dividing the Office Space GSF by the # of Employees. This number helps the facilities master plan team better understand how efficiently the office space is used in each building.

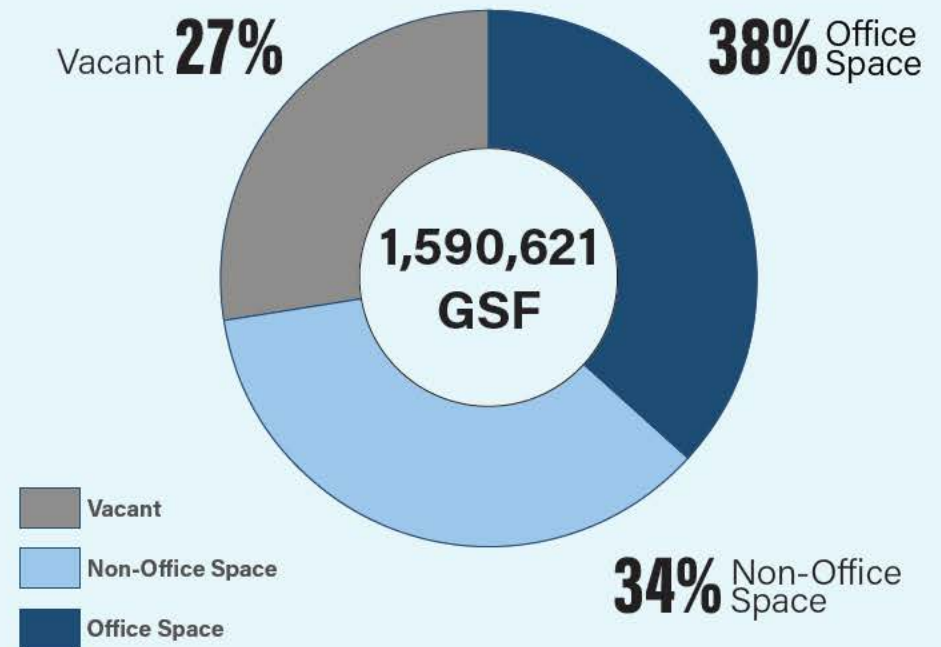


## Augusta Facilities By The Numbers

Space Utilization - By Campus



Space Utilization - Owned Facilities Only



Facility Portfolio - Owned vs Leased



\*Note: State Capitol Building, Vasselboro campus, and Hallowell excluded from figures

FIGURE 46. STATE OF MAINE AUGUSTA FACILITIES BREAKDOWN

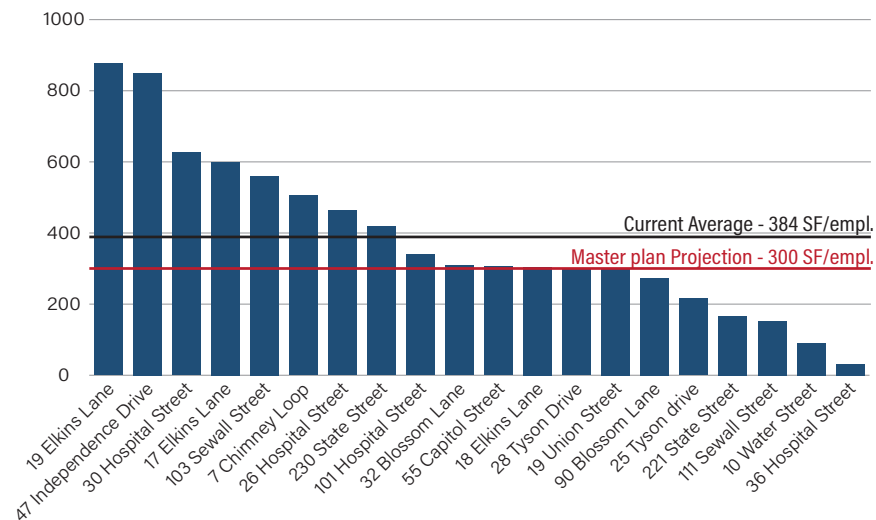


Figure 47. Square Footage Per Employee in State Owned Buildings

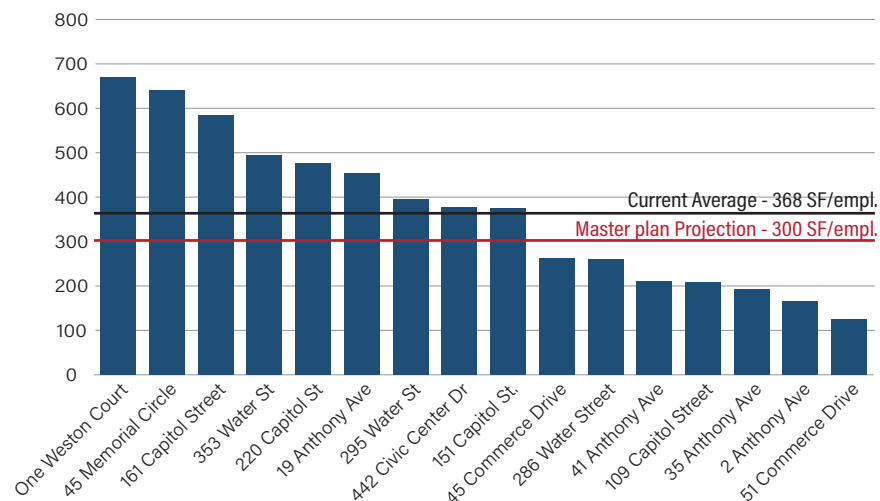


Figure 48. Square Footage Per Employee in State Leased Buildings

## Space Utilization and Vacancy

The 2001 facilities master plan recommended a space utilization standard of 250 SF per employee for the State of Maine. This does not meet modern space standards for class A office space, however it does align with other State governments, which tend to range from 200-250 SF/employee as a goal space standard according to other published facilities plans.

Our analysis of data provided by the State shows that State-owned buildings currently average 384 SF per employee (see Figure 47), while State-leased buildings average 368 SF per employee (see Figure 48). For State-owned buildings this breaks down to an average of 317 SF per employee on the West campus and 413 SF per employee on the East campus. While the majority of State facilities are above the average 2001 master plan recommended space utilization, it is likely that this is due to the nature of the building typology. Most State-owned buildings are not modern Class A office buildings, rather historic buildings that have been adapted for office use, as seen in Figure 27 on page 100.

To understand the efficacies possible for the States current owned building stock, the Stone Building, Ray Building, and Cross Office Building were selected as case studies, as they represent the oldest to newest eras of campus building stock, and the unique characteristics of those eras. Using a combination of recent renovations and our own programming analysis, the case studies provided a reasonable utilization factor for each building typology. Our team then categorized State owned buildings by these three typologies and applied the corresponding utilization factor. Based on this data, future projections as discussed in "Workplace Trends" on page 149 use a space utilization standard of 300 SF/employee to calculate future space needs for the State of Maine.



# WORKPLACE TRENDS



▲ Augusta Area State Facilities Interior Workplace , Cross Office Building



▲ Augusta Area State Facilities Interior Workplace, Cross Office Building

This 2023 facility master plan takes into account the current facility conditions and future space needs of the Augusta Area Facilities for the next 15+ years. It is worth mentioning that the space planning analysis was conducted during the Covid-19 pandemic. The pandemic has led to questions about the future of the workplace, employee commuting patterns, and the future of offices in general, which introduces a level of uncertainty to the planning process.

The planning team follows current research on post-pandemic workplace trends and offers the following key findings. Although space needs will continue to evolve, the workplace is set for reinvention by combining the best elements of the past with future promises focused on creating healthier and dynamic workplaces.

The most prominent workplace evolution over the last few decades has been the balance between 'heads-down focus work' and providing layers of collaboration to improve employee productivity and well-being. As we transition into a post-Covid-19 future this remains a focus. The return to work, teleworker, and hybrid work policies are likely to change again as we adapt to new policies, technologies, and strategies for returning to work.

During the pandemic, working from home forced employees to collaborate differently and increased dependency on existing and new technology. While the slow return to the office environment is expected to bring back some old challenges, those who are in the office will have opportunities for impromptu collaboration and engagement by overhearing their co-workers discuss their daily tasks. The "future of now" workplace is becoming part of workplace design, and the following opportunities are emerging:

# FUTURE GROWTH AND SPACE PROJECTIONS

## Projected Space Needs Scenarios

Projected space needs for the next 20 years were calculated using the employee count data provided by DAFS/BGS and the space standard of 300 SF/employee. This does not take into consideration moving employees in leased space to state-owned space. With the uncertainty around the future of teleworking and the evolution of the workplace as previously outlined, the master plan team studied the space and climate impacts of different teleworker scenarios; 100% of in-office employees, 10% remote employees, and 25% remote employees. It is important to note that these space projections are for employee needs only, including workstations and workplace amenities. Department requirements for storage outside of typical office storage is not included in Figure 49 but are present in the department data sheets included in "Appendix B - Department Workplace Indexes".

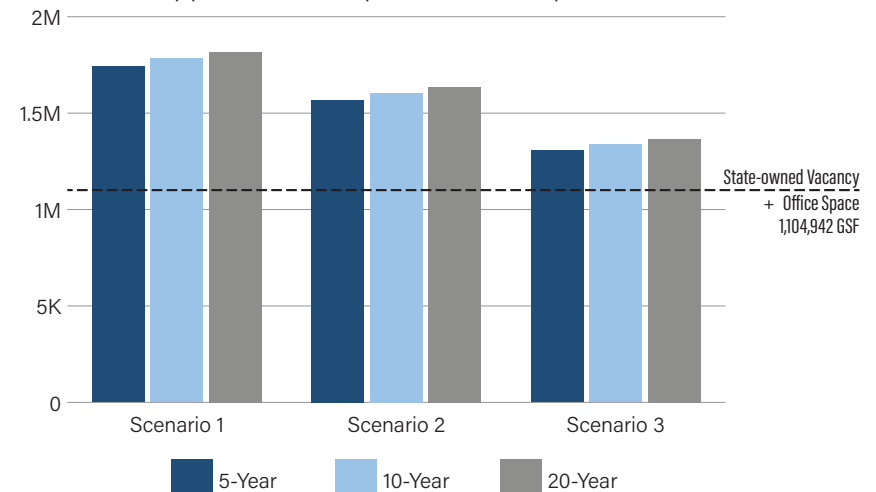


Figure 49. Space needs to accommodate growth predictions based on space utilization factor of 300 SF/employee.

- **Communication tops the list as the most important single element in the future.** No matter where team members are physically, they must be linked with a purpose, with a sense of belonging, and be aligned in their work. This communication will foster trust and teamwork, and accountability. Effective communication will channel the energy to the desired results.
- **The air quality and amount of fresh air introduced into space will be reevaluated.** New spaces will be built to open to the outside and allow activities to flow seamlessly from indoors to outdoors. Mechanical systems will be reevaluated to reduce airborne particles, thereby reducing the exposure to disease. The amount of fresh air introduced into work areas will be increased.
- **More touch-less.** We will likely see more touch-less options on entry doors, elevators, and features within a space. Technology, apps, and voice technology will help us achieve fewer ways to touch things.
- **Anti-microbial materials will be in high demand throughout workspaces, as the focus to naturally reduce any kind of bacteria in the workplace will be beneficial.** Materials with natural inherent anti-microbial tendencies will be used more frequently, and coatings to resist germs will be considered. All materials will be evaluated based on routine disinfecting.
- **The focus on wellness in the office is paramount now.** It will be critical that employees want to come to the office, not only for interaction but because it is a place where they feel good, feel uplifted, and are connected to their colleagues. Their productivity will depend on feeling their health, safety, and welfare is important to their employers.



### **Scenario 1 - One-for-One Workstation Assignment**

This scenario looks at space needs if 100% of employees are provided with their own dedicated work space in State managed facilities, how the State operated prior to Covid-19. After speaking with State departments and analyzing nationwide workplace trends, it is expected that not all employees will return to the office and thus it would not be economical for the State to maintain workspace for all employees. Using this scenario, it is projected that the State would need 1,818,900 GSF of space in 20 years.

### **Scenario 2 - Limited Hybrid Work Environment**

This scenario illustrates the total space needs of the State if 90% of employees are provided with their own dedicated work space in State managed facilities. This scenario aligns with the State's own estimates that 10% of employees will work remote full-time and would not need dedicated work space in a State managed facility. All other employees working in the office full-time or in a hybrid fashion are projected to receive a dedicated workspace. Using this scenario, it is projected that the State would need 1,637,010 GSF of space in 20 years. Given current workplace trends, this scenario offers a realistic number for the high range of projected space needs.

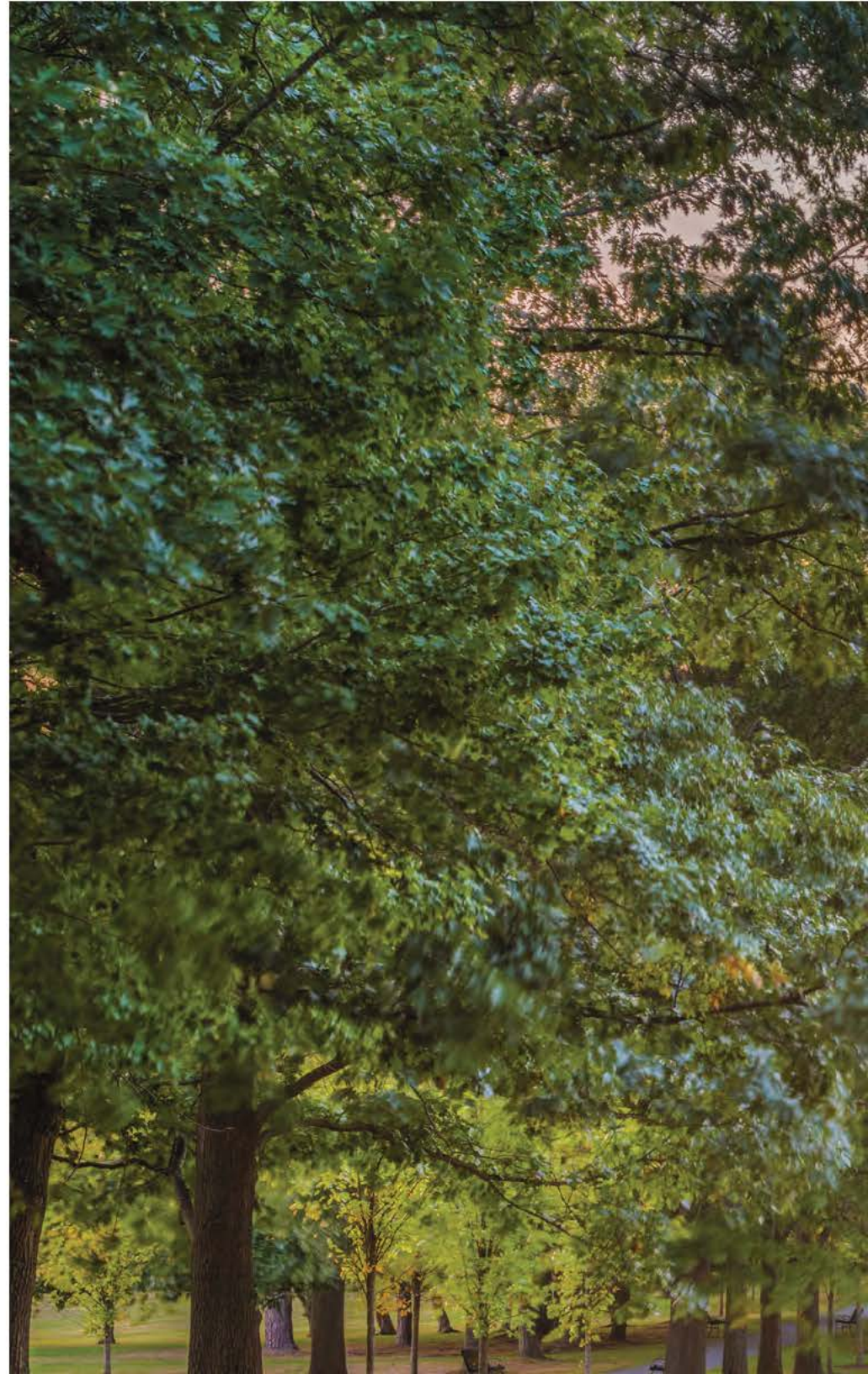
### **Scenario 3 - Hybrid Work Environment**

This scenario assumes work spaces are provided for 75% of employees in State managed facilities. This scenario takes into account hybrid working and the possibility of shared work stations. Employees may not have dedicated work stations but rather would share a workspace

with another employee or a greater number of hotel stations can be provided for use by any employee in the office on any given day.

This scenario assumes that 10% of employees are remote full-time, 40% of employees are in the office full-time and need their own dedicated work space, and 50% of employees are working a hybrid model and only in the office part-time (3 days a week). Providing a desk for all full-time in-office employees and 70% of employees working in a hybrid fashion results in providing a workstation for 75% of the total projected employees for a department as illustrated in Figure 49. Using this scenario, it is projected that the State would need 1,364,175 GSF of space in 20 years.

These projections assume annual growth based on a combination of data collected during Department and Agency interviews and as stated by data shared by DAFS/BGS at the time of this study. As previously mentioned, the State of Maine will need to further explore how its work from home policies will apply to different departments within the State to better understand how much GSF they would like to target for their 20-year projections. However, these studies do provide valuable data in the impacts these policies can have on space needs and the environment.







Maine.gov