Iowa State Capitol Complex | Master Plan

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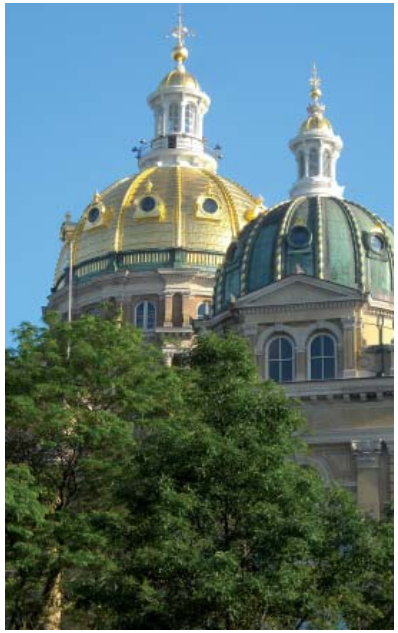

State of Iowa Department of Administrative Services
& Capitol Planning Commission

Confluence
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Preface

Introduction

The Iowa State Legislature appropriated funds to the Department of Administrative Services for updating the last Master Plan for physical facilities on the Iowa State Capitol Complex, which was published in April 2000. This updated plan has been prepared in close collaboration with the Capitol Planning Commission for its consideration and acceptance. The consultant team was led by Confluence and Zimmer Gunsul Frasca Architects LLP with Jeffrey Morgan Architecture Studio, the Tilghman Group and Snyder and Associates. The structure of the updated Master Plan document is similar to the 2000 edition, but the text and graphics have been revised throughout.

What this Plan Is:

This Updated Master Plan is intended to provide a rational basis for decisions concerning the restoration, preservation, improvement and expansion of the Capitol buildings and grounds. As such, it addresses the values of those whom the Capitol Complex represents; values including the quality design and materials of architecture and landscape, principles of sustainability, access and circulation, relationships to adjacent communities, views and vistas, statues, fountains, and memorials. The Plan is rooted in the history of the place and of the fabric of the Capitol. Recommendations are made for eventual expansion of the grounds to the north, where the freeway now forms a 'natural' edge. The Iowa State Capitol Complex Updated Master Plan represents a vision for the future of the Capitol and its adjuncts, and makes clear recommendations on how that vision is to be achieved.

The Updated Plan is also intended as a resource for local jurisdictions and neighborhoods surrounding the Capitol. Opportunities for complementary development are investigated. These interests include Des Moines Planning and Zoning Commission, Metropolitan Transit Authority, neighborhoods including East Village, Capitol Park and Capitol East, and businesses and associations such as the Des Moines Development Corporation.

What this Plan is Not:

This plan did not study the needs of the Legislative or Judicial branches of state government. Plans completed by other consultants for these branches were referenced and these references are cited in the plan.

The Iowa State Capitol Complex Master Plan is not a directive as to what buildings, statues, fountains, and monuments shall be built, nor what programs shall be developed. It does not direct growth.

This plan does not appropriate funds. Projects should still be looked at on an individual basis and funds allocated to follow the intent of the Master Plan.

Last, this plan does not limit or restrict future planning. For all of the research completed and interviews conducted, the team can't predict the future. This plan has a vision for the next 50 years, but we fully understand and anticipate that a combination of technology, transportation changes, culture, and financial decisions will alter this vision as time passes. This is a snapshot in time that took into account those before us and will hopefully lead those after.

How the Master Plan was Developed:

The Department of Administrative Services formed a consultant selection panel composed of members of the Legislative and Judicial branch staffs, the Capitol Planning Commission, and the Department of Administrative Services. The panel interviewed several firms prior to selecting the consultants for this study.

A Steering Committee of approximately 20 individuals representing a broad cross section of people in the Capitol Complex, the surrounding neighborhoods and area businesses was formed. The Steering Committee met regularly, reviewing supporting data and elements of the plan as they were developed.

Committee members and consultants attended meetings to review the history of planning at the Capitol Complex and to identify the underlying design philosophies of the layout of the Complex. The Masqueray Plan of 1913 was the Master Plan of the Capitol Complex which established the classical layout which still predominates. Town meetings were regularly held in Des Moines to present information to interested persons and groups. All elements of the plan were presented at the town meetings after they were presented to the Steering Committee, and were made available on the DAS website.

All agencies of the Executive Branch were contacted to provide information on staffing levels and locations for the past six years, and projected changes during the next 20 years. The agencies identified a need to continue a moderate rate of growth. An analysis of space owned and leased by the State, combined with the needs of the Executive, Legislative and Judicial branches, was used to identify the need for possible new buildings on the Capitol Complex.

How to use the Master Plan:

This Master Plan includes a number of recommendations, primarily regarding land use and building locations. Decision-makers in facility planning should closely follow these recommendations. Specifically, the Master Plan addresses recommendations and guidelines for planning, architectural scale, massing and character, landscape features, parking, facility preservation, and maintenance. These recommendations should be closely studied and should be considered in all facility decisions.

This Master Plan includes recommendations for further studies to develop a five-part Site Development Implementation Plan. These include a landscape plan and a site amenities plan. These studies should be undertaken as soon as possible based on the Master Plan. This plan also contains recommendations regarding the design and construction of future buildings to meet needs identified in the planning process. These recommendations should be re-evaluated based on data that is current at the time decisions are being made.

Most of the information and recommendations in this Master Plan will remain valid for many years. However, each addition and change to the Capitol Complex and its neighbors will influence future actions, so the plan should be reviewed on a regular basis and updated as needed. The Plan provides a framework and guidelines for the planning of future development of the Capitol Complex. It provides the linkage of the past through the present to the future for use of the Complex.

Chapter 1: The Vision

The Vision

Restoration of the Capitol and creation of the West Capitol Terrace have reaffirmed the power of this icon to represent the State of Iowa. The Capitol Building is a remarkable and magnificent statement by the state's founders of their vision for Iowa. Built at a time when statehood was still a recent innovation for many people, the testament made by the Capitol Building was clear and unequivocal: this state will stand and will lead for all time.

Today, that promise has been remade through painstaking restoration of the state's finest symbol. Today too, awareness has shifted to the complex of buildings and grounds that support the Capitol Building and its occupants in governing the state. The once magnificent grounds have been overlooked, and overrun by parking – except for the West Capitol Terrace which demonstrates how restoration from parking to valued civic space can be achieved. The exceptional precedent for civic architecture set by the Capitol Building has been completely ignored by some of its companion buildings.

The vision set forth by this Master Plan is for a Capitol Complex that exemplifies in setting and function the dignity it embodies in spirit and purpose. Changing perspectives are evident in the jobs performed by state employees, and in the functions that the buildings of the Capitol Complex must fulfill. Revitalization of the built heritage of the past hundred years will enable government to work more effectively in this century. Perception of the Capitol Complex, as a symbol or as the place where work proceeds on the behalf of citizens, remains vitally important.

This vision is founded in historic precedent yet colored and substantiated by the real needs of the present and future. On one hand, it will address the economics and efficiencies of various configurations of workspace and location; on another, it will explore the relationship of the Capitol Complex to the city of Des Moines and the state, as well as the internal configuration of the Capitol grounds.

These distinct visions call for community-based sponsorship of the Master Plan. A Steering Committee made up of state, local and neighborhood representatives and public agencies brought a broad spectrum of viewpoints to the development of a vision for the Capitol Complex. Through the updating process, these ideas were carried forward and refined under the watchful eyes of the Capitol Planning Commission and Master Plan Steering Committee. Connections to downtown and the river have been improved since 2000, with public and private investments along Locust Street beginning to draw together the distinct visions of the Capital City and neighborhoods.

The civic qualities of the Capitol grounds elicit feelings of pride in citizens of the state and awe visitors to the Capitol Complex.

Goals

The Steering Committee summarized its vision for the Capitol Complex as a destination, as a sponsor of connection and interrelationship, as an image or icon for Iowa, and as a vision for the future in the following statements:

A Destination:

- A civic and urban presence in the city
- A place that provides a sense of arrival through a sequence of events in the landscape
- A place of gathering and celebration designed for people rather than for the storage of vehicles
- An open and welcoming environment for citizens of the state and its employees
- A place of civic pride that fosters a sense of ownership throughout the state
- A place of clarity and aesthetic purpose
- A place of security
- Connections/Access for visitors, workers, and dignitaries

An Image of Iowa:

- Providing greater accessibility for all citizens of the state to their government
- Relating to adjacent neighborhoods and business communities
- Forging public and private partnerships for growth and progress between the state, capital city and its communities
- Enabling efficient operations between various state agencies
- Portraying a symbolic relationship among the three core functions of government: Executive, Legislative and Judicial
- Extending the reach of the Capitol Complex to schools, citizens, the nation, and the world through enhancements in communications and technology
- Leading preservation of the environment through sound and sustainable development planning

A Vision for the Future:

- Stable, secure, optimistic, and confident in planning objectives
- A source of inspiration for the future

Purpose

The purpose of the Master Plan is to give form to the vision; to equip the Capitol Planning Commission with the tools it needs to guide physical improvements and new developments consistently toward fulfillment of established goals. It is a baseline against which complex proposals for action can be measured by the community and by those entrusted with decision-making. It provides a foundation for the formulation of public policy and the allocation of public resources. The Master Plan connects the visions and aspirations of the present with their realization in the future.

Background

Realization of the vision requires an understanding of issues that are rooted in past planning principles. The Master Plan builds upon these past efforts by providing a framework for action by the Capitol Planning Commission in its guidance of planning decisions. The Master Plan sets forth explicit purposes and objectives and emphasizes urban design and development guidelines that make it a useful and productive guide. The Capitol Planning Commission issues regular progress reports in order to keep long-range plans up-to-date and recommends near-term actions. These efforts continue to be of utmost importance.

The Capitol Planning Commission takes the lead in reviewing project design and development. These responsibilities include:

- Providing a design context and architectural guidelines for individual projects so that each is a coordinated step toward making the Capitol a more vibrant, architecturally cohesive and well-planned complex
- Ensuring that future buildings contribute to the overall vision for the Capitol Complex
- Encouraging public awareness of the Capitol Complex as a district unique in the state and an asset to the City of Des Moines
- Shaping public space as a critical element of the urban infrastructure
- Coordinating each new component of the public environment so that it contributes to a whole that is more than the sum of individual projects

Community Planning Objectives

One of the planned development goals is to create a Capitol Complex environment that is distinctive in civic quality and appearance, yet fully connected to the communities that surround it. This will require a broad-based advocacy originating in a vision shared by both City and State. The Master Plan acknowledges the value of community building and neighborhood interdependence, and seeks to produce a clear direction for a future that will be in tune with Des Moines' aspirations. The Capitol Complex has an opportunity to connect to the adjacent community, which is rare when it comes to state capitols. Clear and achievable objectives lay the groundwork for providing that vision.

Objectives of Planned Development:

- Preserve and enhance the dignity, beauty, and architectural integrity of the Capitol Building, other state office buildings, and the Capitol grounds
- Rebuild those elements that constitute the public realm on the Capitol Complex: the streets, gardens, and public spaces
- Protect, enhance, and increase the open public spaces within the Capitol Complex and City of Des Moines when deemed necessary and desirable for the improvement of the public enjoyment, shaping future development and forming the identity of the Capitol grounds
- Recognize the goals of adjacent neighborhoods and define the relationship of each to the Capitol Complex. Ideally these symbiotic relationships would provide housing, dining and retail opportunities for Capitol Complex employees and quality park/open space and a regional draw for the neighborhoods
- Create a compelling vision for future improvements in the Capitol Complex as integral parts of the development of Des Moines
- Identify opportunities for future locations of state government agencies, offices, and parking facilities in the Capitol Complex
- Establish a flexible framework for additions to Capitol Complex buildings that will remain in keeping with the spirit of the 1913 E.L. Masqueray Plan
- Reinforce connections between the Capitol Complex and its neighbors, downtown, and the Des Moines River
- Develop circulation and formal approaches within the Capitol Complex for pedestrian movement, the street system, and transit so that conflicts are minimized and formal relationships between buildings and landscape are developed
- Protect important public views to and from the Capitol

The connection between the East Village and the Capitol Building and grounds along Locust Street is an excellent example for how other parts of the Complex should seamlessly integrate with the surrounding community.

Approach and Concept

The Master Plan is guided by the historical context of the Capitol. A number of the Master Plan recommendations specifically address this context and its influence on future improvements.

- Adhere to formal garden planning principles within the Capitol Complex. E.L. Masqueray's visionary design for the Capitol grounds relates directly to the north-south and east-west axes of the Capitol Building. That geometry continues to influence building placement and spatial relationships within the Capitol grounds and beyond

- Treat the Capitol Complex as a destination that richly combines open spaces, cultural facilities, transportation systems, state services, and employment opportunities

- Strengthen connections to downtown Des Moines and the riverfront by improving more Capitol approaches and key visual corridors. The plan includes guidelines for development of physical and visual connections

- Encourage a transportation strategy that will promote universal access for pedestrians and strong bicycle and transit access while providing for the needs of motorists and service traffic

Communication

The Capitol Planning Commission has emphasized the importance of healthy relationships between the Capitol Complex and nearby neighborhoods, being aware of influences of each upon the other. Department of Administrative Services staff should communicate with institutions and organizations outside its jurisdictional boundaries to cultivate cooperation. Some specific opportunities exist for the Capitol Complex to develop in harmony with the City of Des Moines and neighborhoods of East Village, Capitol Park, and East Capitol.

Process

This Master Plan was developed through extensive contact with state and community representatives to solicit ideas, values, and goals for the Capitol Complex. Planning workshops provided legislators, state agencies, local government, neighbors, residents, and business leaders the opportunity to be involved in the planning process as well as providing guidance to the consultants. Carefully targeted conversations brought to surface the priorities among potential improvements. Regular presentations to the Steering Committee introduced coherent and relevant visions from which 10-, 20-, 30-, 40- and 50-year objectives were derived for the Capitol Complex. The result is an ambitious but realistic plan. Participants can be expected to have a vital role in the implementation of planning recommendations. Conversations and a survey given to Capitol Complex employees during the updating process have confirmed the validity of these values and goals, although expectations of growth have been tempered.

Organization of the Plan

This document begins with a description of the historical development and past planning efforts of the Capitol, and current visions of the neighborhoods. The component parts of the Capitol Complex are then discussed, and recommendations are made as to how the vision should be applied to specific framework elements.

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Chapter 2:
Principal Influences on the Plan

Historical Development

The history of planning at the Capitol Complex is nearly as rich as the civic art of the Capitol Building. Part of the legacy of these important plans survives; much more has been lost. After its millennial restoration, and reconstruction of the West Capitol Terrace, the Capitol Building has reclaimed its architectural preeminence. This, together with a continuation of complementary and essential restoration of the grounds, sets a clear course for the next 10 years. A valid measure of success is the extent to which the Capitol Building and grounds became an even more popular place where young and old choose to congregate, learning what it means to be an Iowan.

The visionary plan for the Capitol grounds, forged a century ago, has been all but extinguished by ubiquitous parking. Redesign of the West Capitol Terrace has shown how that tide can be turned, restoring use of the grounds to gardens and gathering places.

Old Capitol, University of Iowa, Iowa City

Relocation of the Capital

The movement of American people west carried with it the successive locations of Iowa's seat of government. First established as a territorial capitol in Burlington, the seat of government moved to Iowa City in 1840, where Iowa made the transition to statehood. The Old Stone Capitol building now serves the University of Iowa. With continued westward expansion, the search for a more central location suitable for the support and organization of early settlers led to an official decision in 1846 to relocate the Capital to Des Moines. The infant city of Des Moines, strategically located between the Mississippi and the Missouri rivers, received the great honor of being named the Capital City. The legacy of the first State Capitol in Iowa City persists as an icon for Iowa with even greater strength today in the hilltop Capitol which presides over the city of Des Moines.

A donation of 9.5 acres by Wilson Alexander Scott secured a site for the new Capitol. Initially, citizens of Des Moines could afford only a modest building, now affectionately termed the Old Brick Capitol, which was located just south of the present Capitol Building. The Old Brick Capitol supported the affairs of the state while planning proceeded for its impressive successor. The Old Brick Capitol would serve Iowa for almost three decades until its destruction by fire in 1892.

Territorial Capitol, Burlington

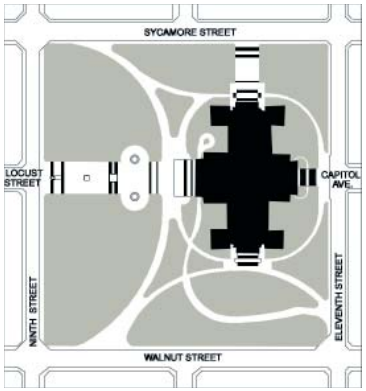
Old Brick Capitol, Des Moines

New Capitol Building

In 1870, a Capitol commission designated John C. Cochrane and A.H. Piquenard architects of the Capitol Building. The architects had the impressive task of building a fitting home for a young state government and for a proud and spirited pioneering community.

The project's first phase saw a setback with the failure of the first cornerstone laid in 1871, which succumbed to the moisture of a severe winter. Building resumed two years later and would continue under the successive guidance of Piquenard and his assistants M.E. Bell and W.F. Hackney and was first opened in 1884. The General Assembly was in session in 1884, the governor took office in 1885, and the Supreme Court room was dedicated in 1886.

In keeping with the sentiment of the time, the design of the Capitol Building drew inspiration from the nation's Capitol and from French and Italian classical models for a new expression of American civic identity. Piquenard was a native citizen of France and studied and practiced architecture there before emigrating to America. Before working on the Iowa Capitol Building, Piquenard helped design the Illinois Capitol Building which shares some similarities to the Iowa Capitol Building. He and Bell drew inspiration for the dome from Saint Peter's Basilica in Rome. The Iowa State Capitol Building bears a magnificent central dome clad in 23-carat gold. Four smaller domes mark the four corners of the Capitol Building. The command of the golden dome in the landscape has become a symbol for Iowa's seat of government, and the splendor of interior ornament is another source of pride.



Current Capitol Building under construction, left. 1884 Weidenmann Plan for the Capitol Building, right.

The Capitol property was generous enough to accommodate ceremonial civic approaches and appropriately-scaled civic space for large gatherings at the Capitol Building. Early plans for the Capitol and grounds anticipated these, interestingly affording considerable importance to the northern approach. Jacob Weidenmann's 1884 plan for Capitol Square also established the principle of extending the Capitol steps into what has now become West Capitol Terrace. The West Mall accommodated an easy walk to the streetcar serving downtown Walnut Street and Court Avenue. Weidenmann surrounded the Capitol with lawn and a Victorian knot of ornamental walkways to "furnish a setting worthy of the building." Following implementation of the Weidenmann plan for the Capitol grounds, the Old Brick Capitol was demolished after the fire and the site donated to the Grand Army of the Republic for the Soldiers' and Sailors' Monument. The monument was placed to mark the old building, and so is off axis with the Capitol.

In 1904, fire from an errant workman's candle broke out during an effort to outfit the building with electricity and ravaged the north wing of the Capitol Building, The ceiling and chandeliers of the House chambers were destroyed along with various other furnishings and art. Undeterred, Iowans immediately began reconstruction of the building and its contents. Much of the building was repainted and many of the impressive mosaics, statues and large paintings left out of original building due to cost concerns were finally added.

Over the years the Capitol Building underwent several renovations and modifications, but by the early 1980s the deterioration of the exterior had advanced to the point that it was becoming a significant safety hazard and an extensive, multi-phased restoration effort was started in 1983. Over the next 26 years much of the structure's stone walls, windows, doors and copper roof were replaced or repaired and cleaned. The dome was regilded for the third time since it was originally built and the interior walls, surfaces, stained glass and artwork were extensively cleaned, repainted and restored to much of their original look.

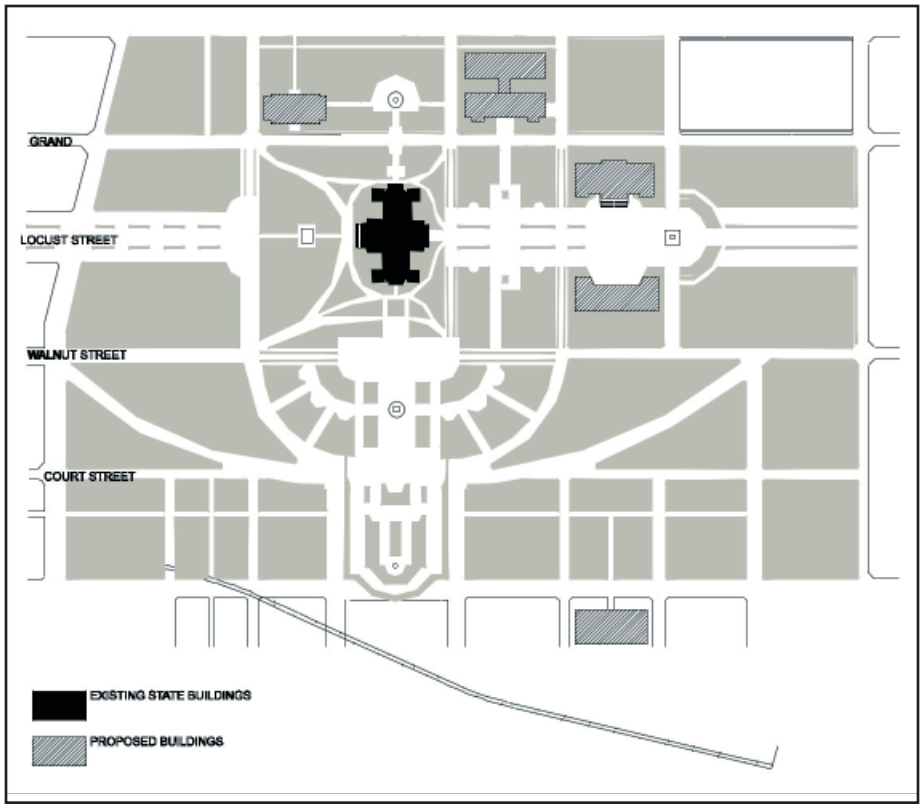
E.L. Masqueray Plan

The most influential plan for the Capitol grounds was prepared in 1913 by E.L. Masqueray. This plan dramatically expanded the Capitol grounds from a 9.5-acre block to a 31-acre campus. Comprehensive and far reaching, the plan restored the natural scenic value of the Capitol site, enhanced the view of the Capitol from the railroad, and anticipated future buildings and memorials.

Masqueray's plan uses the grounds and approaches to this monumental civic building to support its landmark status, while at the same time framing important views back to the city. The Masqueray Plan extended the axes of the Capitol to all four compass points with ornamental walks, monuments, and gardens. A major feature of this plan was the siting of the Allison Memorial on the Capitol axis to the south. Formal gardens and a bridge extended the grounds over Court Avenue. In the 1990s, this bridge was found structurally unsound and was demolished. Parking lots have progressively replaced the formal gardens of Masqueray's plan until reconstruction of the West Capitol Terrace demonstrated the value of usable gardens and open space. Further restoration of the dignity and architectural heritage of the Masqueray plan should be a priority of the current plan. The Masqueray plan recommended relocation of the Soldiers' and Sailors' Monument to a location on axis east of the Capitol.

This Master Plan builds upon the organizational geometry of the 1913 Capitol Extension Plan by E. L. Masqueray.

The clearing of modest structures and enhancements of the south axis greatly improved views from the trunk line trains, Left.



The 1913 E. L. Masqueray Plan remains a source of inspiration for enhancements of the Capitol grounds.

Recent Planning

After the Masqueray Plan, more than 50 years elapsed before another plan for the Capitol grounds was undertaken. By this time the car had replaced the railroad and streetcar in providing access to the Capitol. In 1963, the Capitol Planning Commission, with the Iowa Chapter of the American Institute of Architects, undertook a comprehensive 20-year plan for the Capitol grounds. This plan recommended underground parking for 250 cars and the relocation of surface parking east of the Capitol. This recommendation has been carried forward into Capitol plans for over 30 years and was specifically addressed in the 2000 Master Plan. In a stark departure from the Masqueray Plan, the 1963 plan recommended a building site which would terminate the Capitol axis to the east and recommended a building site slightly off axis to the north (now the Grimes Building). The area in front of the future Grimes Building, "Capitol Court," was the center of a proposed pinwheel configuration of future buildings. The east, north, and west Capitol axes were reinforced by proposals for malls with lawns, fountains, and walkways. The plan proposed private apartment development north of the Capitol between Des Moines Street and the freeway.

In the 1970s and 1980s a series of plans was undertaken for the Capitol Complex to address office, legislative and parking needs. These plans included the following: Jon Crose & Assoc. and Charles Herbert & Assoc. (1971); Barton-Aschman & Assoc. (1973); Hansen, Lind & Meyer and Sasaki, Dawson, DeMay (1974 & 1977); and Bussard Dikis Assoc. Plan (1988-89). In addition to looking at long-range needs, location criteria, and enhancements to the grounds, these plans focused on the East Mall, including the replacement of surface parking with underground parking, landscaping, and space for legislative and office needs.

In 1989, plans were submitted to the State by Bussard Dikis Associates with BRW Architects for underground legislative offices, meeting rooms, services, cafeteria, and parking east of the Capitol. In this design, "the roof has been carefully designed with planting and paved plaza areas to enhance the grandeur of the Capitol while serving as an entourage, or foreground, for the views of the east side of the Capitol" and surface parking was to be removed. Although these plans sought to improve the quality of the grounds by providing peripheral and underground parking structures, these facilities have not been built and in the interim, ironically, the amount of surface parking has expanded near the Capitol.

The search for state funding for added legislative space and parking has been on-going. The 2000 Master Plan, and this updated version of it, both seek solutions to the problem of parking-dominated Capitol grounds through a comprehensive approach to transportation and access.

Planning for the Capitol grounds has also been influenced by downtown planning. Des Moines was one of the earliest cities to join the City Beautiful movement started by the 1893 Chicago Colombian Exposition. The 1907 Des Moines Plan called for reclaiming the industrial riverfront for an impressive Civic Center. A 1911 plan called for a Civic Center to be connected to the Capitol by a grand boulevard and civic spaces. These plans, and 1927 and 1932 updates by Harland Bartholomew and the Des Moines Civic Center Architectural Commission, continue to influence planning between the river and the Capitol, as with the Capitol Gateway East Urban Design Plan, which led to stronger ties between the river and the Capitol along an improved Locust Street.

The most recent plan for downtown Des Moines (What's Next, Downtown?, 2008) supports the notion of a renewed commitment to the Masqueray plan, effusing that the Capitol Complex has "the potential to be a world class resource that forms the east edge of downtown."

The civic centers of Des Moines have traditionally been important aspects of city and riverfront planning.

Capitol Complex Buildings

1. **Capitol Building** (1871-1886) Cochrane and A.H. Piquenard and Bell and Hackney

2. **Carriage House** (ca. 1884)

3. **Ola Babcock Miller Building** (renovated 2002), formerly State Historical Building (1899-1910) Smith & Gage

4. **Public Safety Building** (renovation and addition 2007) Design Alliance, formerly Records and Property Building (1915)

5. **Lucas Building** (1949-1952) Tinsley, Higgins & Lighter, formerly State Office Building

6. **Fleet Building** (1950), formerly Vehicle Dispatch

7. **Workforce Development Building** (1962-1963) Smith Voorhees Jensen Architects, formerly Employment Security Building and Job Services Building

8. **Jessie Parker Building** (expansion and addition 1969, 1977), Durrant Group Inc., formerly Vocational Rehabilitation (1959)

9. **Grimes Building** (1968) Smith Voorhees Jensen

10. **Hoover Building** (1975-1978) Brooks Borg Skiles Architecture Engineering

11. **Wallace Building** (1977) Durrant Deininger Dommer Kramer Gordon

12. **Central Utilities Plant** (1976) Brooks Borg Skiles Architecture Engineering

13. **Facilities Management Center** (1980) Brooks Borg Skiles Architecture Engineering

14. **State Historical Building** (1984-1987) Brown Healy Bock

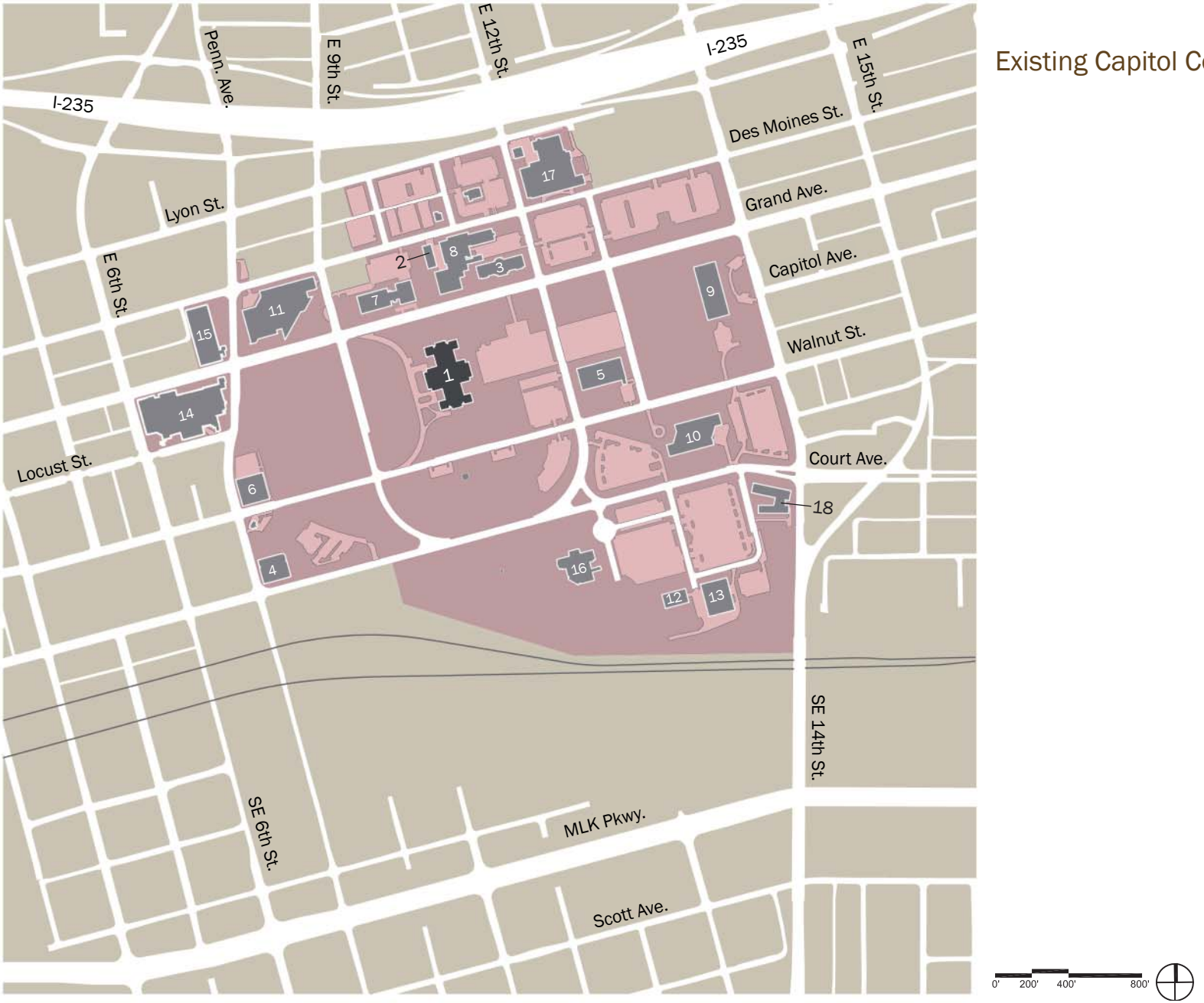
15. **Parking Structure** (2002-2003) Johnson Development Corporation

16. **Judicial Branch Building** (2004) DLR Group

17. **Mercy Capitol Building** (Annexed 2009), formerly Mercy Capitol Hospital (2002), Des Moines General Hospital (1916)

18. **Iowa Utilities Board/Office of Consumer Advocate Building** (2010) BNIM

Existing Capitol Complex



Capitol Neighborhoods

The Capitol Building is a dominant landmark and gives identity to adjoining neighborhoods. The Capitol grounds are a popular destination for all Iowans, but also serves a local function as a park for those who live nearby. Conversely, the neighborhoods provide services for those who work at the Capitol and many who visit. This mutual benefit can only function well if movement between Capitol buildings and grounds and the adjacent neighborhoods is easy and obvious. This has not been the case in the past, with the result that there is a functional isolation of much of the Capitol Complex from its neighbors. An objective of the Master Plan is to heal this rift.

The overall urban vision for the Capitol Complex should recognize the goals of its neighbors: East Village, Capitol Park, and Capitol East. The Capitol Complex Master Plan complements action plans developed by each neighborhood. It recognizes that major arterials such as Grand Avenue and East 14th Street can employ landscaping, signage, and other streetscape elements to distinguish neighborhoods and connect them at transition areas. Implementation of pedestrian amenities and ground-floor building uses will increase street-level activity within and between neighborhoods. Preservation and expansion of housing in these neighborhoods — and particularly in the vacant lands that separate them — could provide opportunities for state employees to live within walking distance of the Capitol Complex, incidentally reducing parking demand.

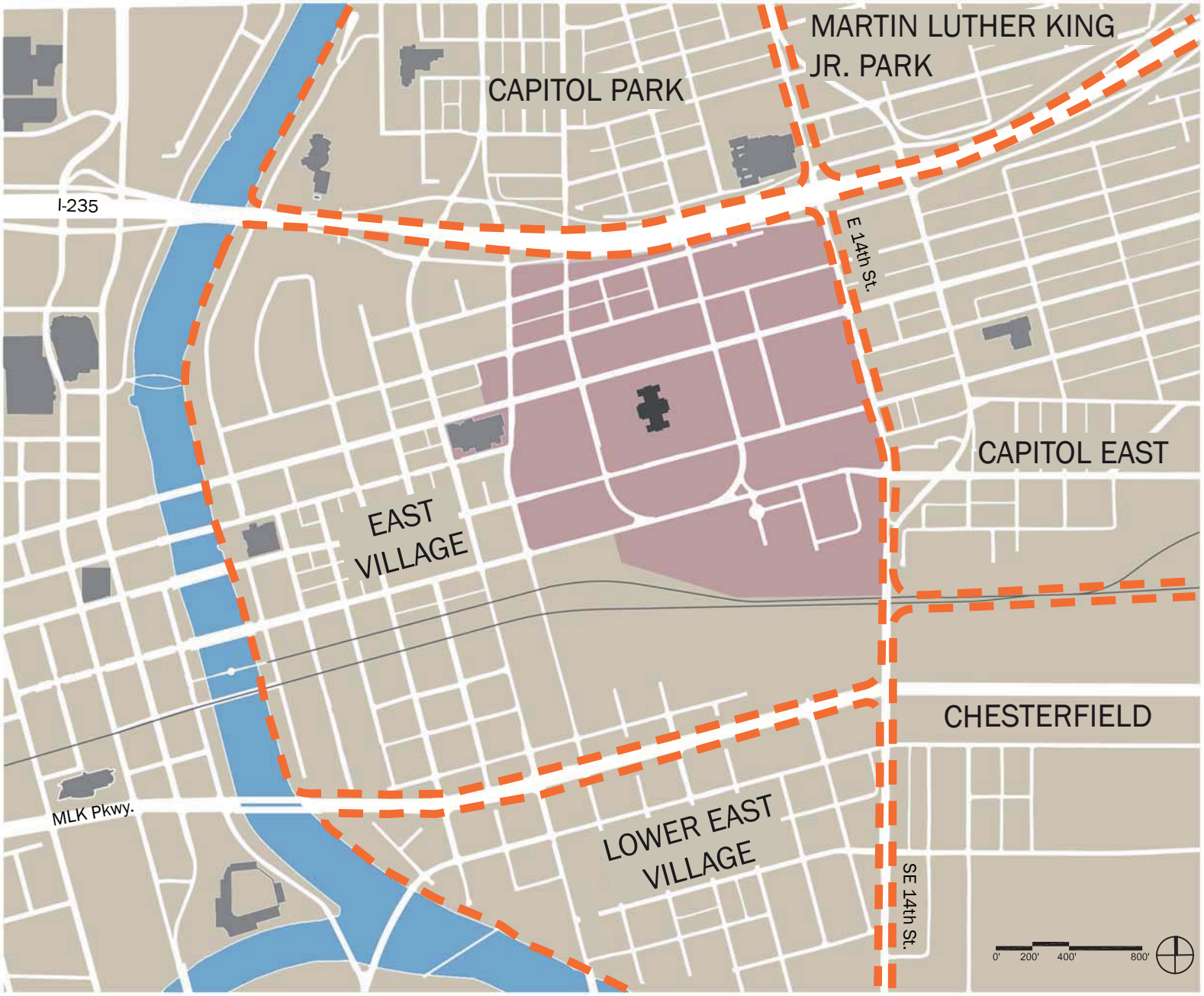
Capitol Neighborhood Image

Once known collectively as Lee Township, the neighborhoods surrounding the Capitol Complex grew apart without fully realizing their autonomy or establishing their own neighborhood centers. This condition was exacerbated by the construction of the MacVicar Freeway (I-235), and by the changing face of the Capitol grounds, once a favorite play area for neighborhood children but now dominated by parking to the south and east. Both Capitol Park and Capitol East neighborhoods are physically separated from the Capitol buildings and grounds by major roadways, and lack a commercial center strong enough to draw business from the Capitol Complex, as the East Village is able to do. Public open space, a strong core, and clear edges will improve neighborhood image and visibility, and will strengthen each community.

Neighborhood planning areas have been identified by the City of Des Moines as follows:

- East Village (area west of and including the Capitol Complex)
- Capitol Park (area north of the Capitol Complex and I-235 freeway)
- Capitol East (area east of the Capitol Complex)

The East Village is developing into a strong mixed-use urban center that greatly benefits from, and contributes to, visitor and employee traffic to and from the Capitol Complex.



Neighborhoods Surrounding the Capitol Complex

Occupants of the Capitol Complex and neighboring districts would benefit from enhanced commercial facilities serving both.

East Village

East Village is located on the east side of Downtown east of the Des Moines River. It is bounded to the north by the MacVicar Freeway (I-235), south by Vine Street, west by the Des Moines River, and east by East 14th Street.

The axial importance of East Locust Street as a gateway and approach to the Capitol Building gives East Village a unique identity within the capital city. East Locust Street functions as 'Main Street' and is distinguished by a number of historic buildings.

Substantial public and private investment in recent years have built upon an established mix of uses to build a vibrant commercial and entertainment district, including housing, employment, and retail. Recreational opportunities for East Village residents abound in the Capitol Complex, public parks and trails, and nearby entertainment centers. The revitalization of East Locust Street has helped to assert the identity of East Village and strengthen its relationship to the Capitol Complex.

Continued infill development and the creation of public plazas will restore East Village as envisioned in the Capitol Gateway East Urban Design Plan (September 1997). Ground-level retail and upper-level residences are critical to the revitalization of the street and the livability of the neighborhood.

The urban living environment of East Village contrasts with the more traditional detached and duplex housing in Capitol East and Capitol Park. Residential areas in East Village were displaced by the expansion of the Capitol Complex and growth of light commercial districts. Infill housing would increase the opportunity to live and work in the Capitol area; a stated goal in local plans. A variety of housing types and price ranges would introduce the density and activity required to sustain and draw services from the Capitol Complex and west downtown. Townhomes, condominiums, and lofts are among the preferred housing types for East Village. An urban live-work situation is appealing to people of different age groups and disciplines and can be an important amenity for the Capitol Complex and the capital city.

The residential area north of Grand Avenue and south of the I-235 Freeway is nominally part of East Village but is isolated from it by major roads, including Pennsylvania Avenue, Grand and East 14th Street. The decline of residential property can be attributed to ownership patterns and to the proliferation of surface lots and on-street parking serving the Capitol Complex. The portion between East 9th and 14th, Grand and I-235 no longer functions as a residential neighborhood. Acquisition by the State would enable this land to be restored as a northward extension of the Capitol grounds to a 'natural' boundary at the freeway retaining wall. Views of the Capitol from northern vantage points would also be restored. A number of churches in the expansion area are likely to continue operation.

The streetscape improvements along Locust Street, above, have played an important part in the revitalization of the East Village over the last several years.

Capitol Park

Capitol Park is a 48-block area northeast of downtown. It is bounded to the north by Washington Avenue, south by the MacVicar Freeway (I-235), west by the Des Moines River, and east by East 14th Street. Its central location and proximity to the Des Moines River originally attracted many fine estates to this neighborhood. Capitol Park has since seen many changes and challenges in its development, including the construction and subsequent removal of a railway right-of-way, the construction of I-235, and the incorporation of large institutional uses such as the Iowa Lutheran Hospital.

Capitol Park is home to East High School, Des Moines' largest. Although the quality of housing has generally declined, Capitol Park has sustained steady population growth. Diverse housing styles and a strong family and school tradition make Capitol Park an attractive place to live and raise a family.

Although views of the Capitol recede as one moves further north through Capitol Park, direct links to the Capitol Complex make it an attractive housing location for both Capitol employees and downtown workers. Higher density units are anticipated on the southern edge of the neighborhood. The Capitol Park Neighborhood Association Action Plan (October 1995) states a goal of becoming a market-based self-sustaining neighborhood.

City planned improvements to the East 14th Street Commercial Corridor should complement street improvements further south on East 14th Street between Capitol East and the Capitol Complex. The East University Beautification Project will enhance street amenities and will make University Avenue the neighborhood focus for families and businesses. Where possible, Capitol Park should pair open green space with residential occupancies. Burke Park, the Memorial Monument, and Filmore Park on East University Avenue connect the neighborhood to the Riverfront and greenway. Under the city's plan, Capitol Park bike trails and open space can join a greater urban park system of neighborhood squares and recreational areas that relate to the Des Moines River and the Capitol Complex.

George Washington Carver Community School, top left, and East High School, above, are significant centers of community within the Capitol Park Neighborhood.

Capitol East

Capitol East is a 50-block area beyond the Capitol Complex on the east side of Des Moines. It is bounded to the north by the MacVicar Freeway (I-235), south and east by railroad tracks, and west by East 14th Street. It is one of the oldest neighborhoods of working families in Des Moines.

Capitol East is separated from the Capitol Complex by busy through streets, parking lots and under-developed land. Housing is predominantly single-family with some multi-family units folded in between institutional and remaining industrial uses. Restoration of functional connections between buildings on the Capitol Complex and services within the neighborhood will be necessary to enable Capitol East to become fully energized, benefiting from large numbers of state employees. In particular, compact mixed-use development should be encouraged along East Grand Avenue and East Walnut Street between East 14th and East 15th streets. An increase in workforce and market rate housing accompanying such improvements would make this an attractive location for some state employees to live.

Stewart Square is a neighborhood park on the west edge of the Capitol East neighborhood. Its location limits the park's ability to function as a focus for the community, but it is greatly valued as a place of recreation. It could become the focus of a new generation of compact, mixed-use development – possibly including expansion of Stewart Square to the south along East 14th Street.

The Capitol East Neighborhood Action Plan addresses many important housing issues. Sustaining and rebuilding the integrity of Capitol East means a commitment to rehabilitating existing housing, providing affordable housing, encouraging more density (particularly adjacent to the Capitol Complex), promoting new construction, and addressing vacant lots. City and neighborhood outreach programs for business, health care, youth, and security would also be great amenities for the Capitol East neighborhood. Since completion of the 2000 Capitol Complex Master Plan, new investment in commercial properties, especially along East Grand Avenue, have enlivened the neighborhood.

Recent retail development like these shops on East Grand Avenue, top, are an indication of revitalization efforts currently underway in the Capitol East neighborhood. Expansion of Stewart Square, above, could serve as a catalyst for additional mixed-use development.

Proposed Land Uses

The previous commentary has noted the erosion of active uses close to the Capitol Complex, resulting in isolation of adjacent neighborhoods from the Capitol. Proximity to the Capitol Complex may have led property owners to assume the threat of eventual acquisition by the State. Deferred maintenance and blight leave few alternatives. The commercial, cultural, and residential needs of Capitol Complex employees would be best served if neighborhoods were easily and conveniently accessible. Thus the urban fabric around the margins of the Capitol grounds should be repaired – in some places by extending the reach of the Capitol grounds, in others by growing the neighborhood toward the Capitol.

Recommendations

The strong physical presence of the Capitol should not detract attention from the individual needs of neighbors, visitors, and participants in state government. The Capitol Complex should provide an active and pedestrian-friendly environment for public access and gatherings, as exemplified by the West Capitol Terrace. The grounds should extend the life of the Capitol into the adjacent neighborhoods for the mutual benefit of residents and employees. Such a relationship is increasingly evident in the East Village along Locust Street, but is deficient elsewhere.

Where there can be some certainty, long-term boundaries to accommodate Capitol Complex growth should be established. Elsewhere, long-term uses that benefit the community as a whole should be investigated with the City and the neighborhoods, to remove uncertainty and blight.

Framework guidelines inspired by neighbors were incorporated into the Capitol Complex section of the Master Plan.

Chapter 3:
Capitol Complex

Concept

The concept for this Master Plan is founded in the historic plans and designs which made Iowa's Capitol and grounds so remarkable in their early conception. Noble aspects of the inherited Complex are to be respected, while erosions of them are to be rectified. This approach will provide the Capitol Complex with a solid foundation on which to move forward with its vision for the future.

Historic and Civic Architecture

The Capitol could have remained a stand-alone building, being of a self-sufficiently symmetrical configuration. The additions of the Historical Building, now called the Ola Babcock Miller Building, and the E.L. Masqueray plan for the gardens expanded the symmetry of the Capitol Building into an organizational geometry within which numerous other buildings could fit. The first components of the Capitol Complex set precedents for civic architecture and a formal system of relationships between buildings and their grounds. These qualities elicit pride and awe in visitors. By stark contrast, a number of buildings added in the second half of the twentieth century forsook all pretense of civic quality. Recommendations for future buildings do not call for a historicist revival, but for a return to the principles of civic quality and respect for the primacy of the Capitol Building.

Seat of State Government

The significance of the Capitol Complex as a symbol to the people of Iowa cannot be overstated. It represents the state's proud heritage and is a harbinger of greater things yet to come. As Iowa's civic garden, the grounds of the Capitol Complex bring people together to play, celebrate, gather for a cause, demonstrate their concerns, and reach out to their elected officials. As the seat of state government, the Capitol Complex demonstrates the commitment of the legislature to Iowa's citizens. Recent restoration of the Capitol Building is not complete until the grounds surrounding the building are restored and enhanced.

Efficient and Accessible Government

State offices exist solely to serve the needs of Iowans, and so should be welcoming and easy to navigate. The efficiency with which state buildings support their civic duties and the clarity of organization that makes them accessible are critical components in providing citizens a positive overall experience. A strong sense of arrival at the Capitol Complex from each direction will convey an immediate sense of accessibility. It will provide visitors with an environment that fulfills their expectations and enhances their experience of state government.

As departments have grown and changed over the years, the original clarity of location has become obscured. Two related objectives of the Master Plan are to enable state employees to work more efficiently and to make their services more accessible to the public, their clients.

Good Neighbor

Civic buildings on the Capitol Complex constitute a strong physical presence for the State and a strong point of identity for the City of Des Moines. The physical transition between the Capitol Complex, surrounding neighborhoods, and the city beyond represents a symbolic association between the State and its citizens. Planning for a more coherent government center amidst existing neighborhoods offers an opportunity for an overall enhancement of the community. Each Capitol Complex development proposal provides an opportunity to form ties to a larger urban context. This relationship reflects the same qualities of stewardship and responsible action that are expected from state government.

Maintenance

Maintenance is a key component to any campus or complex. Over the years the Capitol Complex has seen maintenance funding appropriated elsewhere as gardens, monuments, parking lots, mechanical systems, and buildings aged without the upkeep needed or desired. Maintenance is not only about keeping buildings and equipment in running order; it is also about maintaining standards of civic quality worthy of the state's seat of government. Development packages, whether they involve street improvements, landscaping, building art, or signage, should each include as part of the criteria for approval a maintenance plan and the resources and authority to ensure its continued implementation. Maintenance plans should be formulated in consultation with professionals and those responsible for the execution of those plans.

Maintenance can also include reviewing the Master Plan. Over time there are projects that crop up that were unexpected and unplanned. When this takes place it is important to review the Master Plan and maintain the integrity of it. In the last 50 years a number of piecemeal expansions of surface parking have slowly eaten away so much of the gardens that little if any of the original setting remains. While it is understood that these projects will happen, a quick check of the plan can allow these 'temporary' and sometimes not so 'temporary' projects to take place while respecting the significant planning efforts of those in the past.

Infrastructure and Energy Conservation

In the past, many decisions concerning accommodation for state employees have been driven primarily by considerations of minimizing initial capital costs. Experience has demonstrated that this is rarely fiscally responsible in the long run; that cheap leases often carry with them the burdens of high energy costs, reduced flexibility by poor space utilization, and heavy maintenance costs. An objective of the Master Plan is to guide decisions toward longer term economic benefits (also see page 99 for sustainability principals).

Attention to the working details of the Capitol Complex will add much to operating efficiency. Building services, grounds maintenance, security, communications (e-mail and internet), recycle programs, and energy conservation are growing priorities for an expanding state complex. The State needs to monitor and evaluate energy costs (which include the cost of capital, equipment, installation, maintenance, depreciation and labor) on a continuing basis to ensure the most beneficial system for heating, cooling, and other environmental needs. Additional efficiency can be achieved when state employees live close to the Capitol Complex and when they take advantage of technology that allows a work-from-home setting.

Sustainable Development

Applying sustainable development principles is a priority in the Master Plan to ensure environmentally sound development. Principles for sustainable development must preserve the civic design excellence and dignity of the Capitol Building and grounds, as viewed in the Master Plan. They may be applied on a case-by-case basis as a guide for renovation, restoration, and new development. The plan will address issues of sustainable site planning, energy efficiency, water safeguarding, material and resource conservation, indoor environment quality, and solid waste reduction.

Legend

1. Iowa State Capitol
2. Ola Babcock Miller Building
3. Lucas Building
4. Judicial Building
5. Hoover Building
6. Public Safety Building
7. Historical Building
8. IUB / OCA Building
9. Maintenance Buildings
   a. Facilities Management Center
   b. Central Energy Plant
10. Existing Parking Garage
11. Future Visitors Center
12. Future Building
13. Future Building
14. Future Building
15. Future Building
16. Future Building
17. Future Building
18. Future Building
19. Future Building
20. Future Building
21. Future Parking Garage
22. Future Parking Garage
23. Future Parking Garage
24. Future Trail Connection
25. West Capitol Terrace
26. Future North Mall
27. Future East Mall
28. Redeveloped South Mall
29. Reconstructed Court Avenue Bridge
30. Japanese Bell
31. Shattering Silence Monument
32. Proposed West Terrace Fountain
33. Iowa Workers Monument
34. WW II Memorial
35. Future Reflecting Pool
36. Kasson Plaza
37. Proposed Relocated Peace Officers Memorial
38. Existing Soldiers and Sailors Memorial
39. Proposed Significant Memorial Locations
40. Potential New Energy Plant
41. Expanded Stewart Square (Not a State Project)

Master Plan for the Capitol Complex

Approaches and Gateways

General

A civic responsibility of the Capitol Complex is to provide a well-defined edge, an introduction and a reception for visitors and personnel.

Street improvements on the approaches to the Capitol Complex can strengthen the civic identity of the Capitol Building and its grounds. Locust Street has been restored to two-way operation on the east side and transformed into a "Capitol Way" binding the Capitol Complex, East Village, Des Moines River, and Downtown more strongly together and encouraging redevelopment. The distinctive lighting, landscaping, special paving and other pedestrian amenities on East Locust Street and the completion of the West Capitol Terrace have increased pedestrian movement between the Capitol and East Village. Grand and Court avenues are other significant gateways that could engage the Capitol grounds with perimeter landscaping and trees. The development of landscaping at the perimeters of the Capitol Complex is not a means of division but of union through shared civic amenities. The most effective gateways are those which announce arrival at a place of significance without resorting to signs or literal gateways. They achieve their purpose with visual and urban design cues that are supported but not supplanted by signage. The approach and passage into state grounds should be clearly announced in this way. The State may work with the City on these improvements.

The bridges across the Des Moines River also serve as means of physical passage and symbolic connection. They function effectively as gateways to both sides of the city because of the views afforded to their users as well as the sense of passage from one bank to the other. Bridge enhancements further strengthen connections to the Capitol Complex. The bridges that span the Des Moines River provide the insignia for the City of Des Moines.

The Capitol Building is ever present to those traveling through downtown along Locust Street, right, who can see the Capitol Building just as easily from the Meredith Headquarters 2 miles to the west as they can at its eastern terminus at the base of the West Capitol Terrace.

Objective:

Work with the City of Des Moines to better connect the Capitol to the City with distinct and comprehensible gateways into the Capitol Complex.

Guidelines:

- Seek inspiration from the visions of past plans, particularly the 1913 E.L. Masqueray Plan
- Preserve and improve major approach routes to protect and enhance orientation and views of the Capitol Building and downtown landmarks
- Develop height restrictions for buildings along Capitol approaches to preserve the preeminence of the Capitol Building
- Define boundary locations and edge conditions to serve as gateways between state facilities, institutional complexes, and neighboring residential and retail areas
- Use signage, streetscape, and art elements to mark gateways into the Capitol Complex
- Capitalize on the visual prominence of the Capitol Building within Des Moines and its east/west and north/south visual axes
- Treat key intersections on the periphery of the Capitol Complex as secondary gateways

Specific Recommendations:

- Expand the boundaries of the Capitol Complex from Pennsylvania Avenue on the west (including the Historical Building and parking ramp) to East 14th Street on the east; and from I-235 on the north to the railroad (excluding the Iowa Association of Community College Trustees and Trucking associations buildings)
- Support orderly city development in keeping with Capitol Complex vision by active participation in a design advisory team for the City of Des Moines
- Support continued development of the East Village as an active transition between the Capitol Complex and downtown Des Moines
- Support the expansion of East Village to include the Market District of East Village (south to the river); new mixed use development in Northeast Riverfront; infill and mixed use development along East Grand Avenue; and mixed use development surrounding Stewart Square in the Capitol East neighborhood to provide workforce housing and services for the Capitol Complex
- Strengthen symbolic connections to the river crossings on Grand Avenue, Locust Street, Walnut Street, and Court Avenue
- Improve gateways at the intersections of East Grand Avenue, East Walnut Street, East Court Avenue, and Des Moines Street with Pennsylvania Avenue and East 14th Street
- Improve and expand gateways east and west of the Capitol Complex at East 6th and 15th streets
- Recognize and encourage the expansion of Stewart Square (east of East 14th Street) as a gateway park (Note: This will be a project for the city of Des Moines who own and maintain this land.)
- Collaborate with the city of Des Moines to improve East Grand Avenue and East Court Avenue streetscapes

View Corridors and Streets

View Corridors and Capitol Views

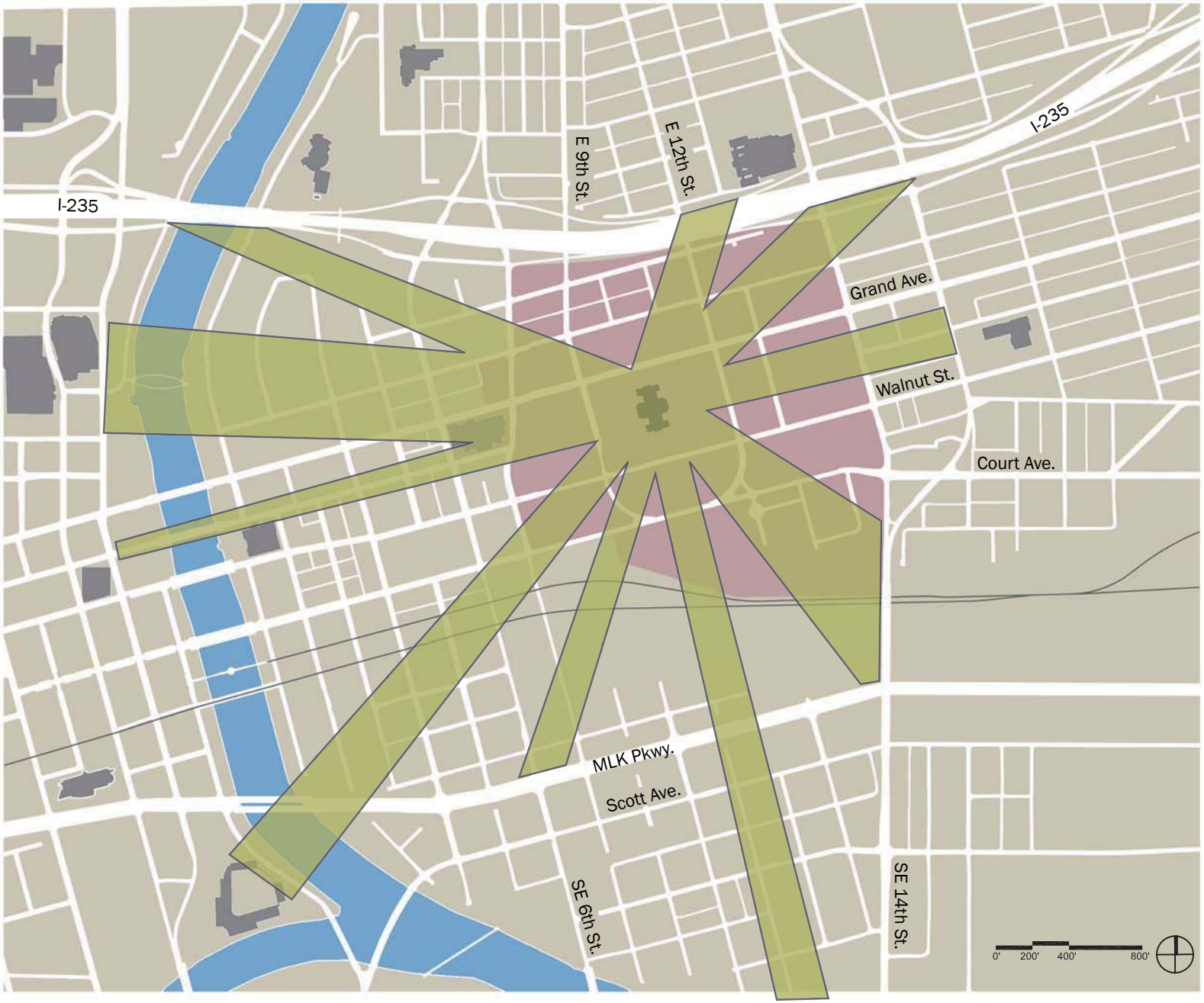
Splendid atop a grassy knoll, the Capitol Building is visible from many key points in the City of Des Moines. Noteworthy prospects include those from the Veterans Auditorium, Principal Park, the Des Moines River, Southeast 14th Street Bridge, Interstate freeway (at East 2nd Avenue, East 6th Street, Pennsylvania Avenue, and East 15th Street) and U.S. highways. A variety of view opportunities exist from near and far, from the city's public landmarks, numerous streets, and public spaces. The extension of Martin Luther King, Jr. Parkway eastward will reestablish the prominence of the view of the Capitol Complex from the south, once important when most visitors arrived by train.

Views of the Capitol Building from within the Complex itself have a pleasing sense of immediacy. The value of these, and partial views of the Capitol Building, should not be overlooked; these add richness to the experience of moving through or near the Capitol Complex, and are as valuable in orienting people as are distant and complete views. Examples of such partial views include Capitol views at the terminus of a neighborhood street or between building structures and residences. Occasions for view appreciation also arise when pedestrians pause at the perimeter intersections of Grand Avenue, Pennsylvania Avenue, Walnut Street, and East 9th and 14th streets. Impressive Capitol views are encountered from unexpected places and illustrate the many opportunities to preserve as well as create Capitol views.

View corridors are oriented not only toward the Capitol Building but out toward downtown Des Moines and city neighborhoods as well. The view of the downtown skyline from the Capitol steps is particularly valued. The Iowa Capitol Complex Master Plan places a high value on the landmark status of the Capitol Building and encourages the City and State to continue collaboration on protection and enhancement of view corridors. Construction in view corridors with restricted heights should be tailored to specific topographic conditions of the development site.

Views to the Capitol Building from Principal Park, top, and from East High School, above, are just two of the many important view corridors that need to be maintained.

View Corridors



View Corridor protection through the Capitol Dominance District will maintain the visual prominence of the Capitol Building within the City of Des Moines.

Objective:

Work with the City of Des Moines to preserve the Capitol Building as the dominant landmark of the Capitol Complex.

Guidelines:

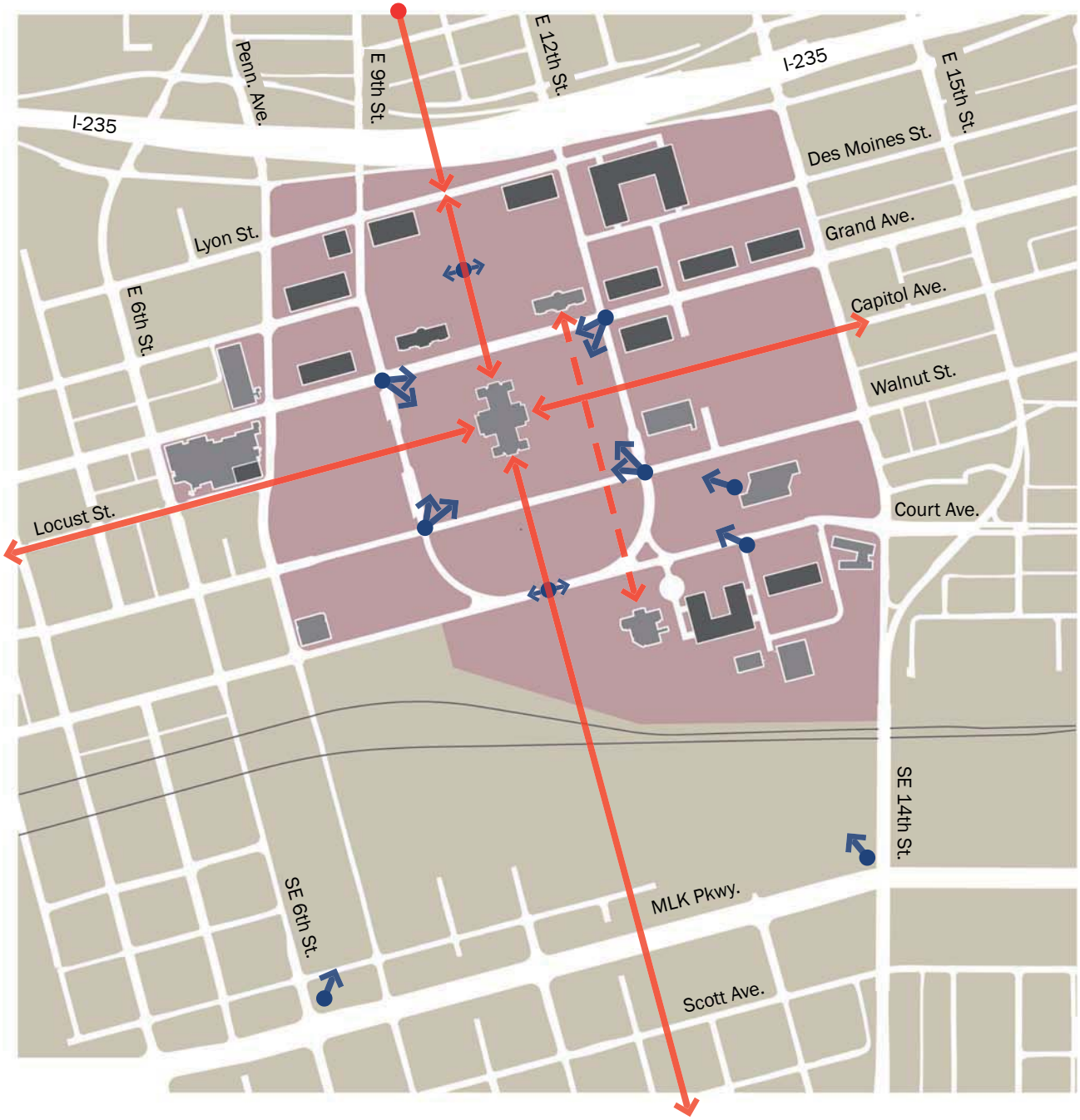
- Define and preserve view corridors
- Use the Capitol Building as a landmark for orientation within the Capital City
- Preserve and enhance distant views to and from the Capitol Building, protecting views from public places
- Protect view corridors in two directions when possible
- Capture views of the Capitol Building from strategic gateways, approaches, and intersections
- Enhance views of the Capitol Building with implementation of streetscape features that frame and articulate the view
- Emphasize views of the Capitol Building as a terminal point of attraction for vehicular and pedestrian traffic from Locust Street
- Locate and configure buildings to reinforce the dominance of the Capitol Building when viewed from within the Capitol Complex and the surrounding community
- Restrict the storage of vehicles where they would impinge on important views
- Orient the main entrances/exits of buildings and approaches to capture views of the Capitol, important views of the city, and other important views within the Capitol grounds

Specific Recommendations:

- Ensure that new development is consistent with the City's Capitol Dominance District and a potential View Corridor Protection ordinance
- Establish Principal View Corridors to retain full view of the Capitol from key locations such as Locust Street, Fluer Drive, Principal Park, I-235, Iowa Events Center, and MLK Parkway
- Seek appropriate height restrictions under City of Des Moines jurisdiction to preserve and enhance Capitol views. Reflect the changes in topography from the river to the Capitol Building in determining appropriate building height
- Protect and improve views from Walnut Street
- Preserve views to the Capitol Building from the east neighborhoods where view opportunities are limited
- Preserve views from the proposed Martin Luther King, Jr. Parkway extension, which is to be built south of the railroad. Protect the serenity of the Prairie Ridge view, the southernmost part of the Capitol grounds. Work with the City on a plan for the complementary development of the properties between Martin Luther King, Jr. Parkway and the railroad

View to the Capitol Building from the Wallace Building entrance.

Significant Views Within and Outside the Capitol Complex



Key

Desirable Viewpoint
Secondary View Corridor
Primary View Corridor

0' 200' 400' 800'

Streetscapes

The experience of a well-planned street can be a memorable one for drivers and pedestrians alike. Quality and continuity in street design unify disparate parts of a neighborhood. Maintenance of streets and properties prevents decline and contributes to people's pride of place. Capitol approaches and view corridors demand special attention to basic street features.

Formerly known as Sycamore or Keokuk, Grand Avenue was appropriately renamed when it achieved a connection from the state fair grounds across the Des Moines River to Downtown, stretching past the Des Moines Art Center to the western edge of Des Moines and into West Des Moines. Its role as a connector street is critical to the definition and accessibility of the communities that it touches.

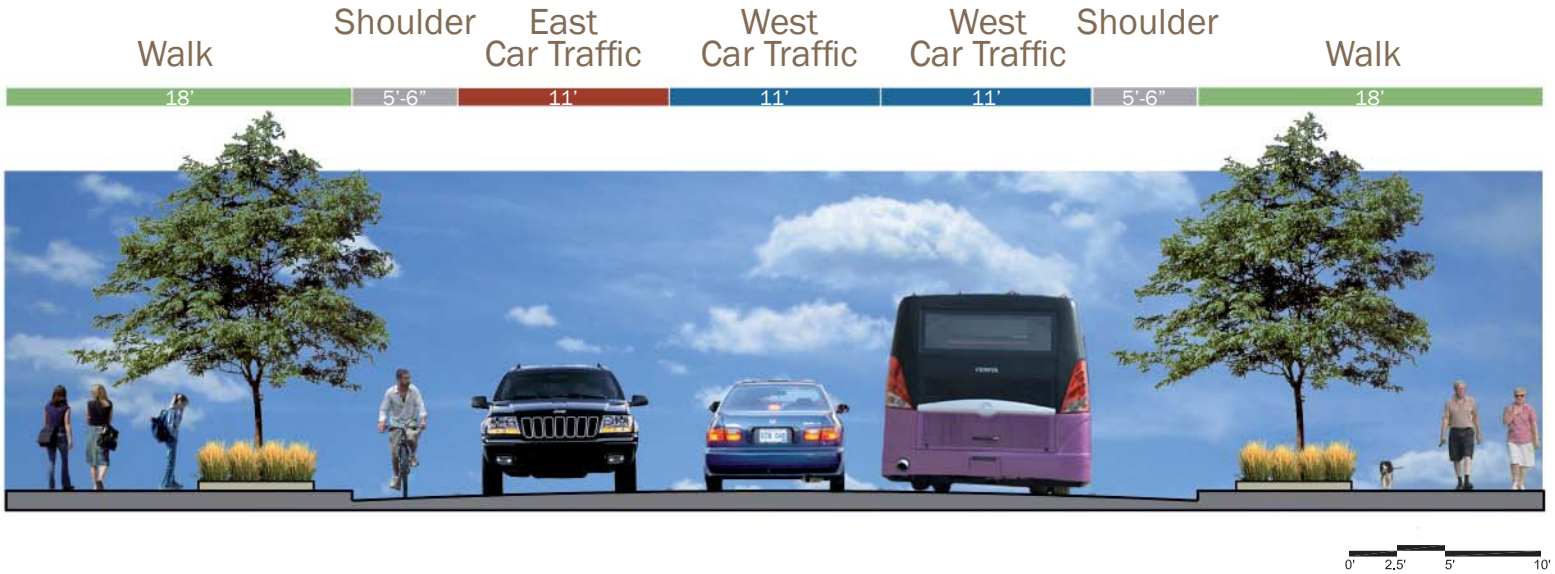
The State should work with the City to evaluate improvement of Grand Avenue between Pennsylvania Avenue and East 14th Street as a "green" street, in recognition of the special role it plays. Streetscape enhancements to Grand Avenue could provide for safe and attractive pedestrian circulation along busy areas as well as creating dignified approaches to several state buildings: the Historical Building, the Ola Babcock Miller Building, and proposed new structures north of Grand Avenue. Particular attention should be given to street corners and pedestrian crossings on Grand Avenue at Pennsylvania Avenue, East 9th and 12th streets, on the north Capitol axis, and to the Ola Babcock Miller Building. These improvements to Grand Avenue should extend across the river, expanding the urban greenway system and creating a truly "Grand" Avenue.

The Court Avenue corridor should also be enhanced. Along with the replacement of the Court Avenue Viaduct, a landscaped median and the tree lined street will help define the south side of the Complex.

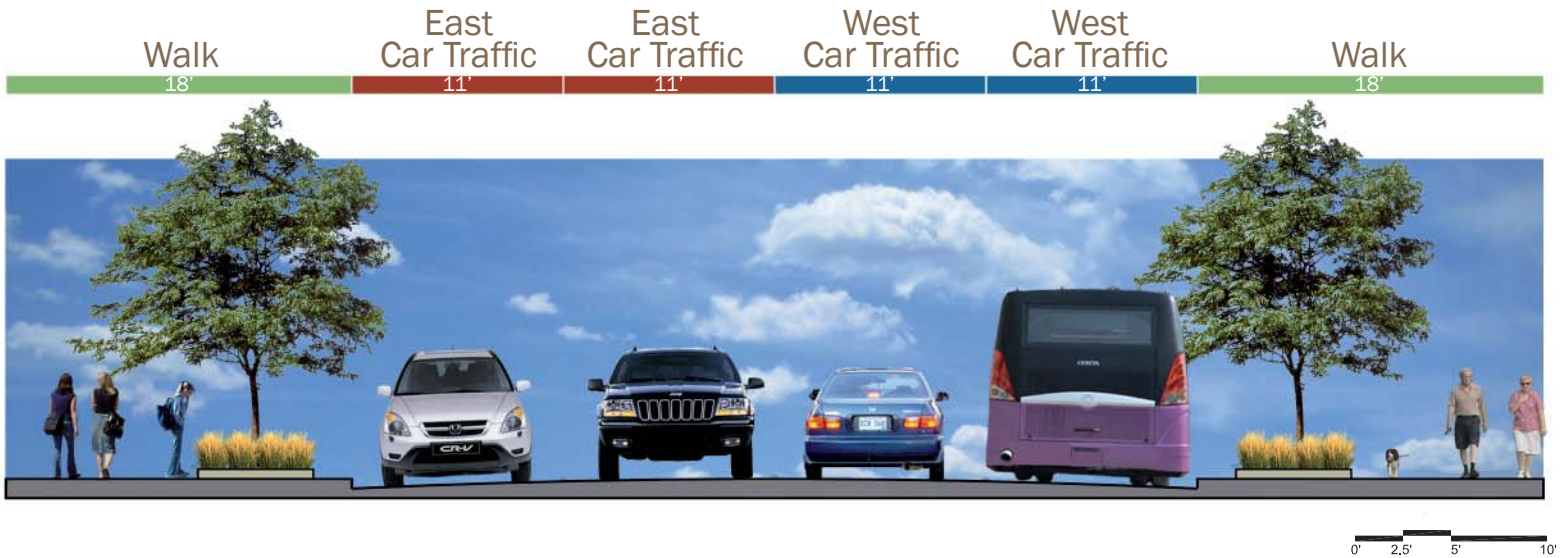
Des Moines Street streetscape should recognize the need to accommodate vehicular movement from parking north of Grand Avenue to I-235 access ramps. With the completion of Martin Luther King, Jr. Parkway, Court Avenue will need to accommodate access between parking areas and the parkway or I-235.

Improving the pedestrian streetscape of Grand Avenue, top, and giving it the tree-lined grandness of Polk Boulevard, above, would greatly enhance the look and feel of this historic corridor that has always desired to live up to its grand name.

Grand Avenue Section: 3 Lane + Shoulder Option



Grand Avenue Section: 4 Lane Option



Objective:

Work with the City of Des Moines to invest in improvements to the principal approaches leading to and from the Capitol.

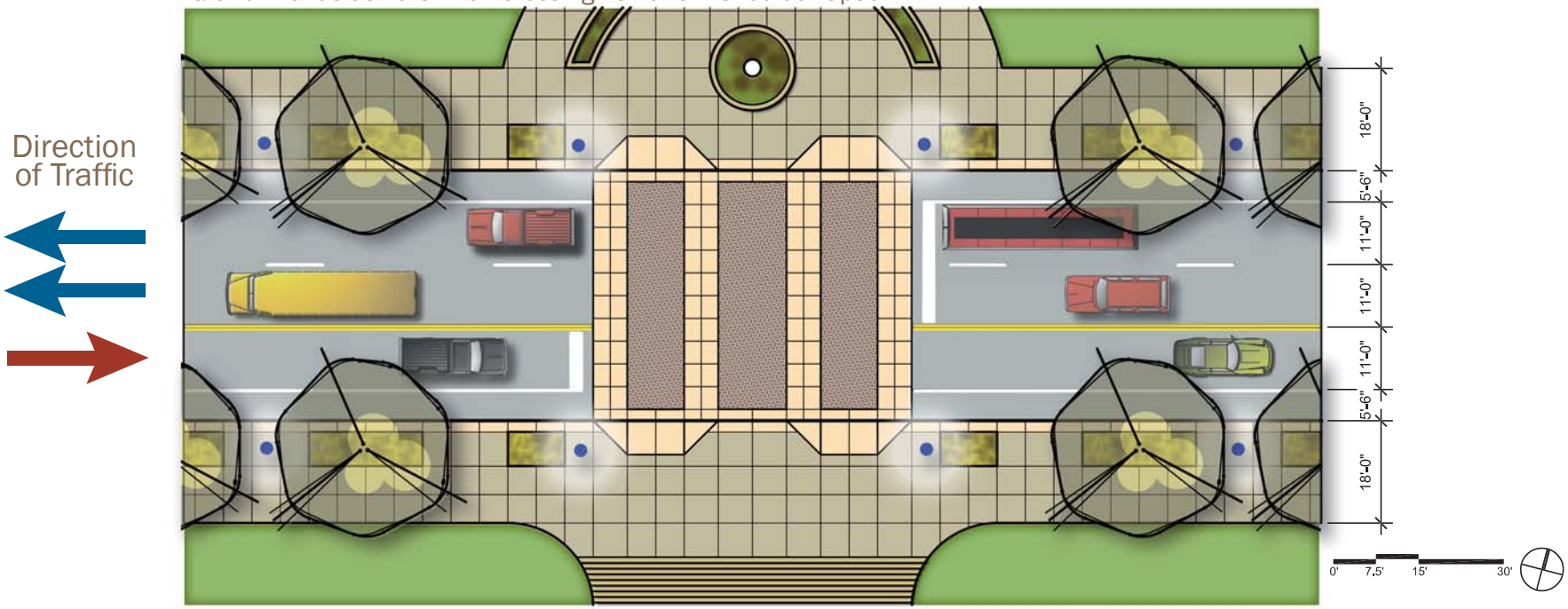
Guidelines:

- Reconfigure streets to accommodate a mix of modes (complete streets): vehicular, transit, bicycle and pedestrian
- Promote continuity of street furnishings, paving and plantings along the length of approaches and view corridors
- Set standards for paving, landscape, lighting, signage, tree planting, benches, trash receptacles, bus shelters, and information systems on view corridors. Reflect historic themes of the Capitol Building. Views should be a priority when installing these elements
- Maintain and prune street trees
- Promote uniform pedestrian-scaled street lights with banner supports on Capitol approaches for Capitol Complex and neighborhood identity
- Work with local neighborhood associations to devise a vision for improvements of commercial corridors near the Capitol Complex
- Respect historic precedents for building lines and architectural scale
- Encourage a mix of active, street oriented uses at ground level
- Develop special paving treatments at crosswalks entering the Capitol Complex
- Provide pedestrian-activated signals or timed signals to improve pedestrian safety and slow traffic

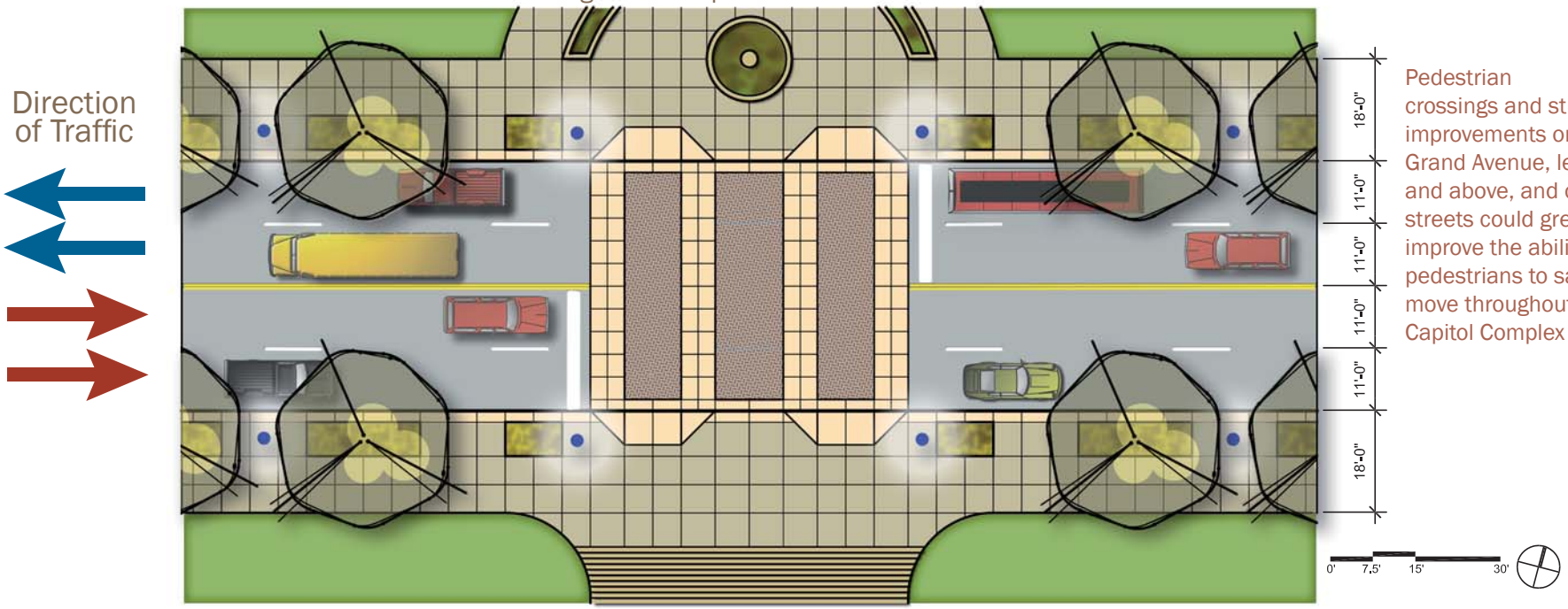
Specific Recommendations:

- Narrow the roadway from 48' (four 12' lanes) to 44' (four 11' lanes) on Grand Avenue between Pennsylvania Avenue and East 14th Street and widen and landscape the sidewalks by two feet on each side of the right-of-way
- Install a pedestrian-activated signal at pedestrian crossing on axis north of the Capitol Building
- Mark inside lanes on Grand Avenue with leading turn markings at East 9th and 12th streets, avoiding the need for central left turn lanes at these locations, or consider leading left-turn signal arrow without designating a lane
- Specially pave crosswalks on Grand Avenue
- Bulb sidewalk at northwest side of intersection at Locust Street and Pennsylvania Avenue to reduce the crossing width for pedestrians moving from the Historical Building to West Capitol Terrace
- Specially pave crosswalks in intersection at Locust Street and Pennsylvania Avenue, creating a "plaza-like" feel, while designating clear pedestrian crossings
- Encourage street improvements, including lighting, sidewalks, and tree canopies, along East 14th Street to create a better pedestrian environment
- Plant trees on the approach streets of East 6th Street, Grand Avenue, Pennsylvania Avenue, and East 14th and 15th streets
- Close Des Moines Street between East 9th and East 12th street. Pave to encourage pedestrian use and crossings
- Develop Court Avenue with landscaped medians set back as appropriate for a new Court Avenue bridge replacement. The median would create a park like atmosphere and allow turn pockets for parking access

Grand Avenue at North Mall Crossing: 3 Lane + Shoulder Option



Grand Avenue at North Mall Crossing: 4 Lane Option



Pedestrian crossings and street improvements on Grand Avenue, left and above, and other streets could greatly improve the ability for pedestrians to safely move throughout the Capitol Complex

Access and Circulation

Over the years, parking and vehicular circulation within the Capitol Complex have eroded the park-like quality of the Capitol grounds. This Master Plan provides for surface lots to be reclaimed for open space, gardens and other uses while parking is shifted predominately to structures. A hierarchy of streets reflects the role each plays in providing access to the Capitol area. Convenient parking should be easily accessible from major freeways and parkways. Vehicular circulation and parking within the pedestrian-oriented areas of the Complex should be kept to a minimum.

Objective:

The State should work with the City of Des Moines to minimize circulation and parking within the Capitol Complex gardens and open spaces.

Guidelines:

- Provide clear regional access routes and directional signs to the Capitol Complex from the I-235 freeway and Martin Luther King, Jr. Parkway on East 6th and 7th streets/Pennsylvania Avenue and East 14th and 15th streets
- Direct visitors to assigned parking structures at the perimeter of the Capitol Complex, easily accessible from the freeway and parkway
- Designate Grand Avenue, East 6th and 7th streets/Pennsylvania Avenue, and East 14th and 15th Streets as regional access streets
- Designate Locust Street and Court Avenue as neighborhood connectors
- Designate other streets for local access and encourage on-street parking where it will not clutter views to the Capitol
- Design and dimension streets to satisfy their vehicular and pedestrian circulation functions and to make them visually compatible with the entire Capitol Complex

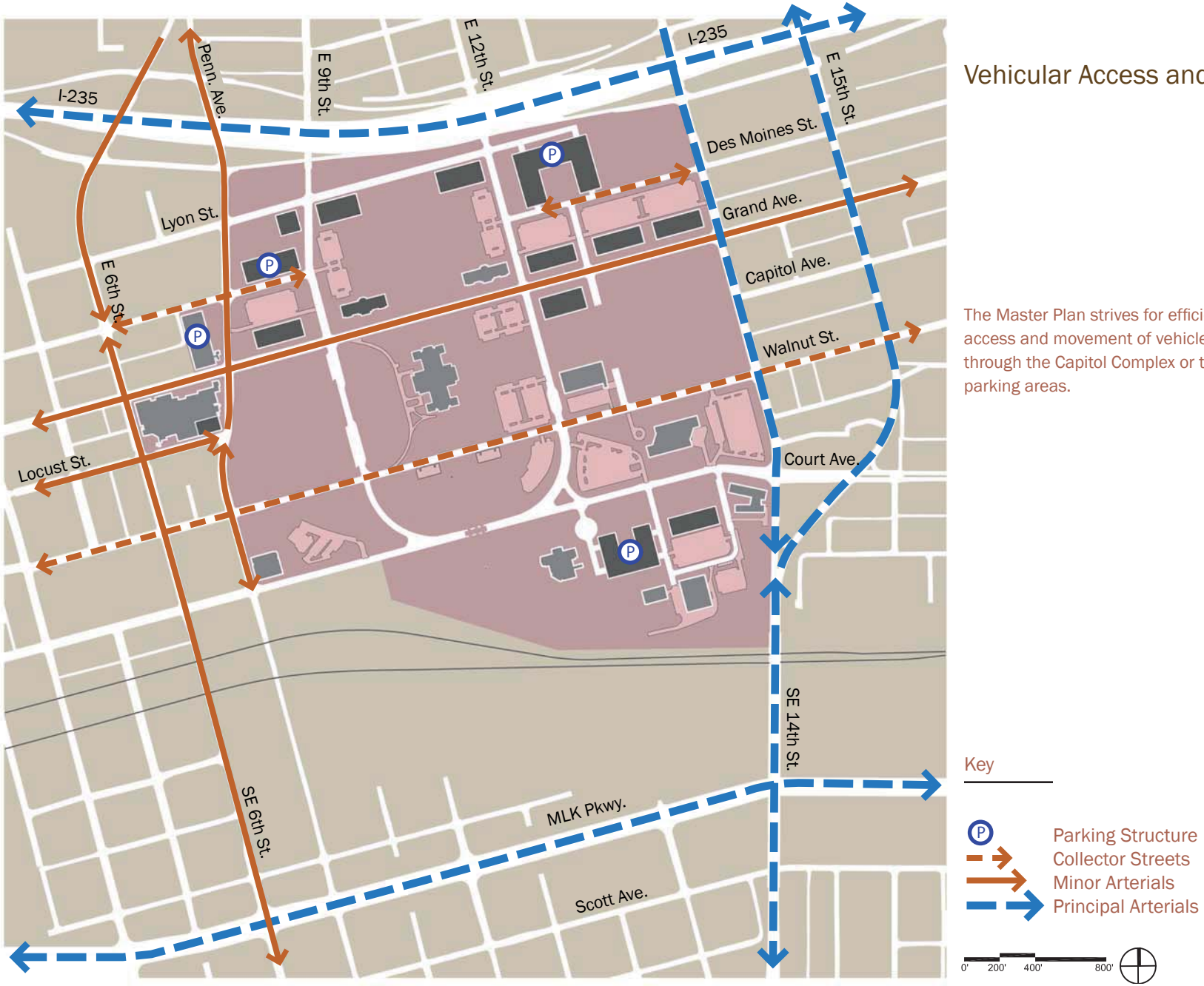
Specific Recommendations:

- Construct a raised landscaped median on Court Avenue from the current Lot 1 and Lot 4 driveway west to Dey Street (this could extend as far as Kasson Plaza). While Court Avenue was previously re-striped for three lanes from four, the median would complete its conversion by improving pedestrian crossing conditions and enhancing its landscaping, consistent with the image of the Capitol grounds
- Reduce the width of the roadway on Grand Avenue to four 11' lanes and widen sidewalks by two feet on each side. Enhance pedestrian crossings

Making all the intersections of Grand Avenue more pedestrian friendly and attractive,like what was done at the corner by the Worker's Monument, above, would make Grand Avenue feel like much less like a barrier to pedestrians wanting to cross.

Vehicular Access and Circulation

The Master Plan strives for efficient access and movement of vehicles through the Capitol Complex or to parking areas.



Street Level Activity

The vitality of commercial areas surrounding the Capitol depends on increased pedestrian movement between the Capitol Complex and these areas. Active street level activities such as retail and dining could draw patrons throughout the day. Continuous and transparent street frontages also give a sense of 'eyes on the street' which make pedestrians feel more secure. East Locust Street, East Grand Avenue, and East 14th Street are active arteries of trade that can attract area residents and visitors and employees from the Capitol Complex.

Objective:

Work with the City of Des Moines to promote pedestrian activity along approach streets.

Guidelines:

- Encourage businesses to locate on Capitol approach streets. Develop the Capitol Complex integrally with surrounding commercial development
- Promote continuous pedestrian linkages along Capitol Complex view corridors
- Make streets more attractive to pedestrians with improved civic amenities such as renewed paving, kiosks, seating, awnings, signage, artwork, and flowers
- Encourage a sidewalk café zone in front of restaurant establishments where sidewalks are wide
- Recognize the link between higher density developments and increased pedestrian activity
- Promote a mix of uses, including housing
- Encourage infill development of uses that attract pedestrians
- Discourage blank walls and ground floor uses that do not engage the public street

Specific Recommendations:

- Open Historical Building to Locust Street and the West Capitol Terrace to provide pedestrian access and views to the Capitol for visitors and reception-goers
- Retain curbside parking on commercial streets wherever practicable for convenience of patrons and drivers

Retail and upper level housing uses promote pedestrian activity along Capitol approaches and increase patronage of neighborhood businesses.

Building Frontages

Consistent building edges along an approach street help frame views down that street. Achieving continuity in building frontages implies infill development of active uses that will contribute to commercial success and to an attractive pedestrian environment. Building frontages should actively engage the street for visibility and increased patronage. Off-street parking should be adjacent to and behind the buildings it serves, interrupting continuity of the active street frontage as little as possible. Shared use of parking facilities should be encouraged to minimize the proportion of land used for vehicle storage.

Objective:

Work with the city of Des Moines to provide interesting, diverse and commercially successful building frontages along approaches and view corridors to engage pedestrians and motorists.

Guidelines:

- Organize a group to evaluate building frontages on a street-by-street basis, according to guidelines set forth in adopted neighborhood plans
- Set building storefront façades to the property line and minimize interruptions to the active frontage
- Encourage the expansion and rebuilding of street frontage on commercial corridors to reduce excessive setbacks
- Encourage façade transparency at street level to promote pedestrian activity and safety. Avoid large areas of curtain wall, blank wall, or mirrored construction. The objective is to make sidewalk users aware of activity within the buildings and increase the ability of occupants to observe them
- Relocate commercial activities that lack pedestrian-oriented frontages in favor of more active and visible uses

Even grand civic buildings like the Museum of Natural History, top, and the Metropolitan Museum of Art, above, in New York City are respectful to the active street frontages of their respective avenues by positively contributing to the street level pedestrian environment while also minimally interrupting the continuity of the established street frontage.

- Encourage rehabilitation of storefronts that are in disrepair or lack a storefront character
- Emphasize contextual design appropriate to the scale and architecture of the area
- Encourage buildings to have a height of at least one-half the width of the public right-of-way up to prescribed height limits
- Encourage direct pedestrian access into buildings at frequent intervals, no greater than 50 feet
- Improve the landscape of existing parking lots in nearby commercial areas

Specific Recommendations:

- Replace ground floor uses of building frontage on Locust Street which are not open to the public. Assist with relocation of businesses within the area
- Review and monitor the design of building frontages on East Locust Street, East Grand Avenue, and East 14th Street

Capitol Drives and Footpaths

When integrated with a landscape plan, footpaths and access drives such as Finkbine (East 9th Street), East 12th and Walnut streets reinforce the geometry of the malls and provide for the functional movement of vehicles and pedestrians. Footpaths and access drives should accommodate the individual in his or her variety of travel modes without compromise to the visual impression of the Capitol Complex. It is important to note that a reasonable detour for an automobile (around a super block for example) may be unreasonably far for a pedestrian. Principles for supporting circulation should give primacy to pedestrian movement within the heart of the Capitol Complex, since it conflicts least with the efficiency of state government and the amenity of the place. It is not a suitable place to store automobiles or other private property. It is a place to walk, think, discuss; in other words, a place conducive to the business of state government.

Clear and attractive pathways like the one above enhance the experience of pedestrians moving through the Capitol Complex.

Street Design

Attention to the human-scaled elements of each street will bring the monumental civic architecture of the Capitol Complex to a more familiar level of understanding. This suggests a Capitol Complex that supports active and pedestrian-friendly environments for public access and gatherings.

Streetscapes are comprised of building façades, sidewalks, landscaping, lighting, signage, and street furnishings. The pedestrian-scaled elements of the streetscape should also relate to the larger context of Capitol Complex site amenities, so that all parts of the Capitol Complex are unified. Visual connection between buildings, landscaping, drives, and footpaths relays the richness of Capitol Complex settings as places worthy of pause and reflection.

Objective:

Establish design guidelines and standards for Capitol Complex drives and footpaths that respond to people as well as to place. Work with the City of Des Moines on recommendations.

Guidelines:

- Reflect historic themes of the Capitol Building and grounds in the design of drives and footpaths
- Improve drives and footpaths for efficient access to state buildings and safe travel to and within the Capitol Complex
- Provide accessible routes for all users
- Develop footpaths through the Capitol grounds that are integrated with landscape features
- Connect formal and informal garden footpaths with utilitarian paths to parking areas
- Provide shading over exposed pedestrian pathways to temper the heat of the summer sun
- Provide special paving in garden areas
- Improve pedestrian crossings and encourage their use
- Implement lighting design standards on drives and footpaths in accordance with Capitol Complex standards, and update existing lighting that does not conform to lighting design standards
- Minimize bus staging within the Capitol Complex and lessen conflicts with pedestrians
- Provide pedestrian access to buildings from the garden side, rather than serving only those who arrive by vehicle
- Plant trees along interior drives

The historic themes of the Capitol Complex should be evident in the design of drives and footpaths.

Specific Recommendations:

- Provide special crosswalk paving to reconcile the irregular geometry of the East 7th Street and Locust Street intersection to mark these crosswalks more clearly to improve pedestrian safety

- Develop an informal pedestrian pathway from the east entrance of the Capitol Building to Grand Avenue and Walnut Street. Design it as part of an overall circulation system which is integral with the landscape design for the Capitol grounds

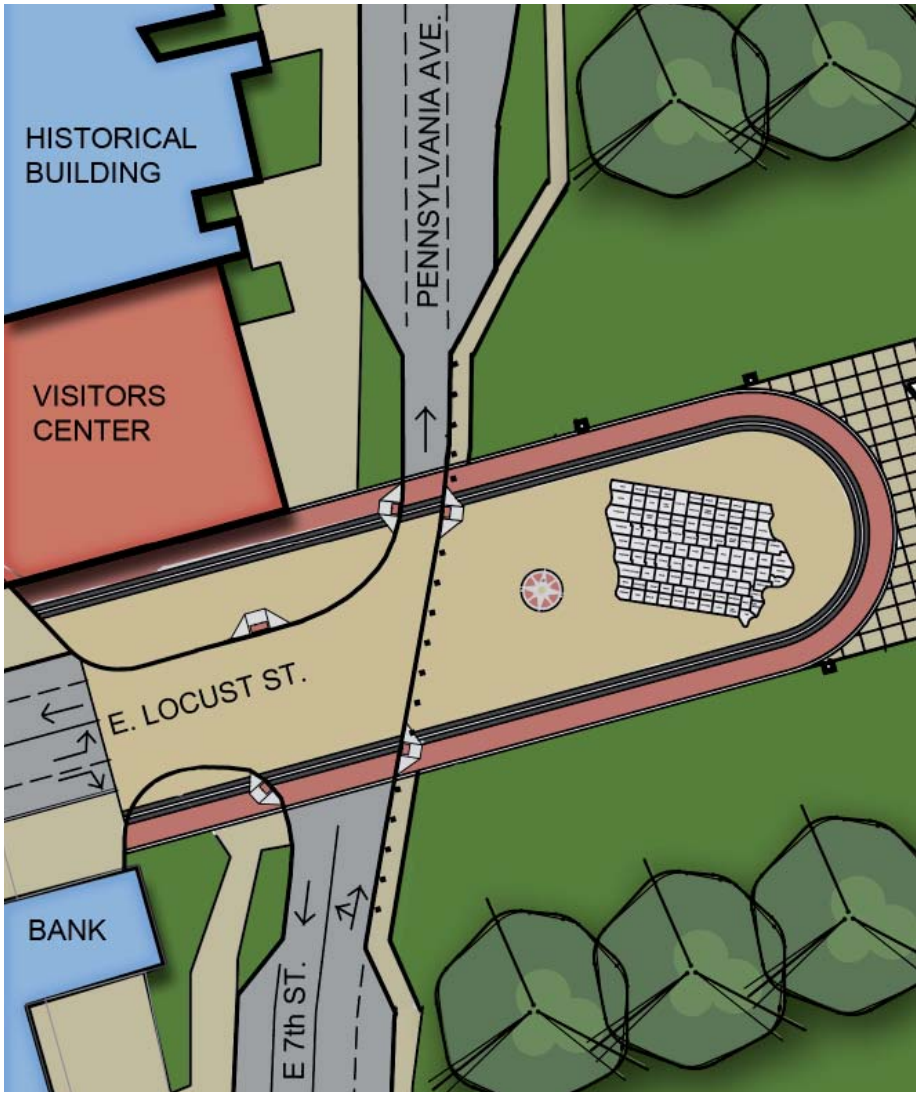
- With removal of parking on the East Mall, rebuild East 12th Street as a Capitol drive

- Replace existing pedestrian lighting (white balls) on the East Mall with a fixture more appropriate to the historic nature of the Capitol Complex, consistent with design guidelines for site amenities. The selected fixture should be used consistently throughout the Complex

- Provide pathways connecting buildings south of Court Avenue to a new Court Avenue bridge with vertical circulation

- Provide a sidewalk at Dey, Court Avenue, East 12th Street, and wherever needed for an improved pedestrian connection to the new Judicial Building

- Mediate the grade change from the South Mall with ramps and steps to connect with pedestrian crossings on Dey Street and Court Avenue to new developments south of Court Avenue



Similar to other intersections along E. Locust Street, the terminus intersection at E 7th Street/Pennsylvania Avenue should be modified to be more pedestrian friendly with curb bump-outs that reduce the distance pedestrians must walk to cross the street.

Landscape Framework

Capitol Malls

The Capitol Building is arguably the grandest building in Iowa and beyond. It was built on a constrained site, but with the clear intention that it would have an appropriately open and grand setting. In 1913 the State acquired that extra land, and the geometry of the preceding street grid was transformed into a Beaux Arts system of axes, views and curved driveways. The present landscaping and development of the Capitol grounds should complement the singular presence of the Capitol Building and befit the role of the Capitol Complex as the seat of government and place of community.

The spaces which extend the presence of the Capitol Building into the grounds along each axis of symmetry, the Capitol malls, should be civic spaces that promote public use at all scales and levels, for both civic business and personal recreation. The perception of the Capitol grounds should be of an urban park setting disposed to social pleasures, thoughtful ambles, and quiet repose. Grand settings that respond to the individual can reduce personal intimidation and create an environment more likely to stimulate daily use. However, the character of each of the four Capitol malls should be distinct and different, since the configuration and specific uses of each is different. The east and west facades of the Capitol are clearly the dominant elevations, and make the east and west malls pre-eminent.

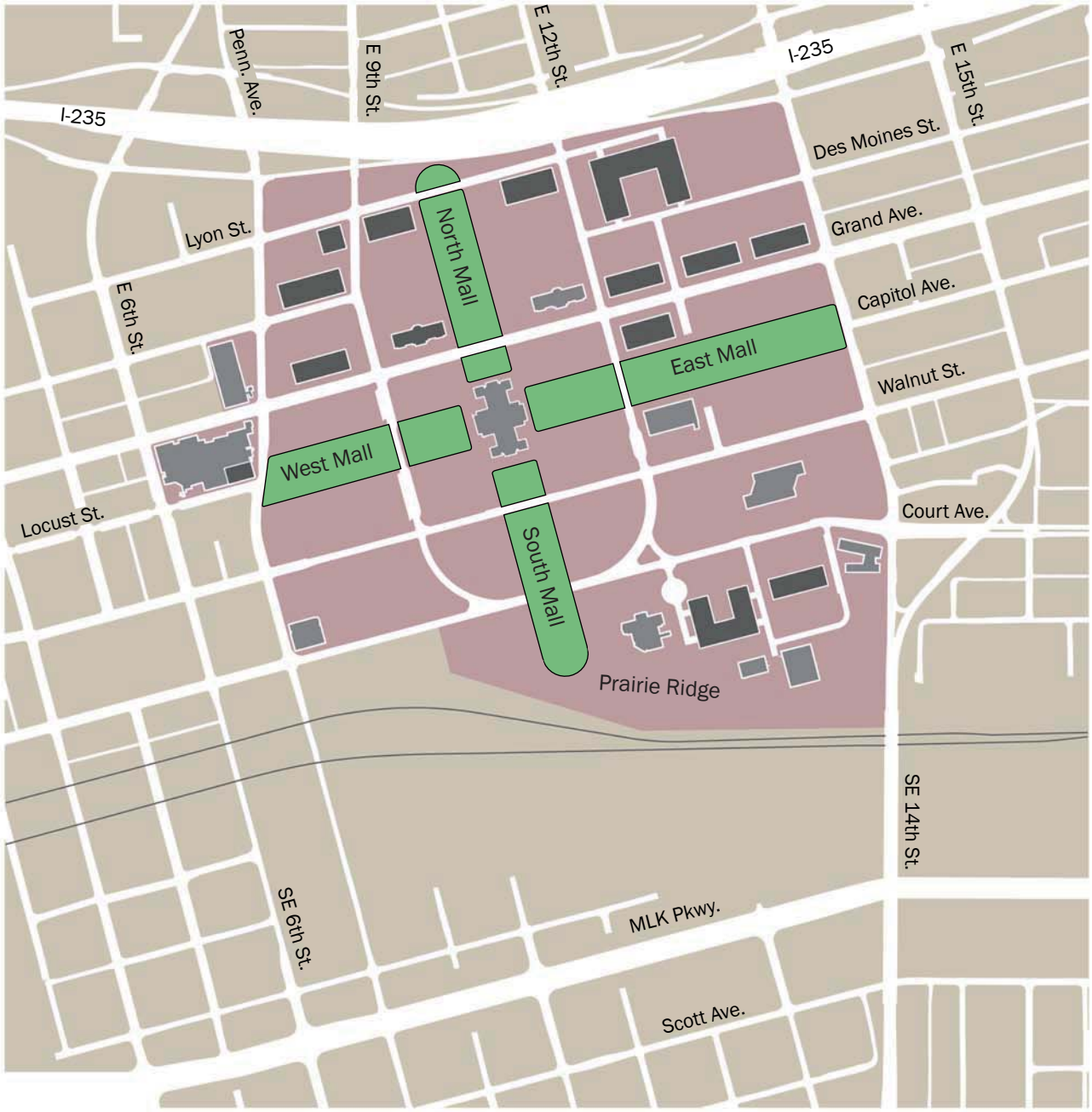
The **West Mall** is bounded by Grand Avenue, Walnut Street, East 7th Street, and the west face of the Capitol Building. This ceremonial entrance should present the Capitol at its finest. Temporary structures at the west edge of the Capitol grounds should be replaced by forecourt features that frame the pedestrian approach to the Capitol Building and complete the West Capitol Terrace. The completion of the West Capitol Terrace will create a fitting threshold for the Capitol Building.

The **East Mall** is defined by Grand Avenue, Walnut Street, East 14th Street, and the east face of the Capitol Building. While the West Mall serves as a formal and ceremonial entrance for the Capitol Building, the East Mall provides an inward focus for state buildings east of the Capitol Building. A framework of open space and tree-lined corridors could bring intimacy and scale to the East Mall, replacing unsightly parking lots which inhibit pedestrian circulation and detract from the quality of the Capitol Complex. Potential future demolition of the Grimes Building would restore the view of the Capitol Building from Capitol Avenue, enhance the relationship with the East Capitol neighborhood and provide views of the Capitol from East 14th and 15th streets.

The **South Mall** encompasses land south of Walnut Street. It contains the bulk of memorials and monuments in garden environments, and has received the greatest attention of all the malls in the past. The off-axis siting of the first great monument, Soldiers and Sailors Monument, set an interesting precedent and gives a particular informality to the space, although surface treatments adhere largely to the symmetry of the Capitol Building. The informal nature of the South Mall, particularly on the west side, creates a serene, verdant setting at the Capitol Complex. The demolished Court Avenue Bridge, envisioned as part of the E.L. Masqueray's plan, should be rebuilt as part of restoration of the grounds. With the completion of the Martin Luther King, Jr. Parkway extension and redevelopment of the neighborhood, the potential of creating a greenway south to the river should be explored.

The **North Mall** extension to the freeway will be a key enhancement of the Capitol Complex grounds, since no recognizable spaces or relationships currently acknowledge the presence of the Capitol from the freeway. The I-235 freeway is sunken well below ground level around the Capitol Complex, hindering even passing views of the Capitol Building from the freeway. The expansion of the North Mall to the I-235 freeway and introduction of a terrace element visible to users of the freeway could assert the presence of the Capitol Complex. The importance of this visual presentation requires quality and thoughtfulness of design.

A fifth major element of the Capitol Complex landscape is largely independent of the malls. The **Prairie Ridge** area extends south from Court Avenue to the boundary of state lands along the railroad. Extensive landscape development and increased building density on the east end can be anticipated.



Capitol Malls

Each of the four Capitol malls and Prairie Ridge have unique attributes and civic responsibilities to the Capitol Complex Landscape Framework.

Objective:

Provide grounds which are a suitable setting for the Capitol Building and a source of pride for the citizens of Iowa.

Guidelines:

- Reinforce the use of Capitol malls as urban parks. Consider designation as a state park
- Expand the "buildings in the green" image of the West and East malls to the North and South malls
- Integrate principles of sustainability in landscape development and maintenance. Favor drought-resistant and disease-resistant species to minimize watering and chemical use. Also, use deciduous shade trees in combination with annual plantings to reduce loss of moisture by evaporation
- Ensure the survival of plant life on Capitol Complex grounds through introduction of a comprehensive grounds maintenance program. Develop the grounds maintenance plan in consultation with professional groundskeepers
- Encourage volunteer programs for garden maintenance as an exemplary way of involving the community in the beautification of the Capitol grounds. The Des Moines Men's Garden Club formerly tended the gardens south of the demolished Court Avenue bridge. Participation in Capitol Complex goals promotes a sense of ownership and proprietorship of the Capitol Complex
- Preserve existing trees and respect memorial plantings during Capitol Complex development where possible. Where disturbance is unavoidable, transplant memorial trees to a site consistent with the memorial's location criteria
- Provide deciduous trees in formal mall areas, planted in regular form and density, and complementary to existing dedicated trees

The great pride and civic qualities that the West Mall axis, left, has brought to the Capitol Complex now needs to be reflected on the East Mall axis, above, which currently is broken up by several large, unsightly parking lots.

- Cultivate prairie grass in formal areas for visual interest. Coordinate such plantings under a landscape implementation plan for the whole Capitol Complex
- Use high-maintenance plantings, such as annuals, only as special features in high traffic areas such as the formal gardens. Elsewhere, use low-maintenance and predominantly native plantings
- Encourage landscape elements that allude to Iowa's uniqueness, especially symbols of Iowa's heritage such as the tallgrass prairie and farming
- Provide informal evergreen and deciduous tree groupings at informal garden areas for year-round richness of the landscape context
- Provide lawns and perimeter landscaping to soften the edges of the Capitol Complex and provide connection to area neighborhoods
- Provide raised planters and flower beds containing seasonal planting, for color and interest. Design the edges of raised planters to encourage informal seating
- Provide some shade over terraces and hard surfaces to increase summer use
- Remove ice and snow from building terraces during the winter
- Integrate environments for gathering in the landscape framework
- Provide site seating at informal lawn areas for public use
- Ensure public safety in the layout and density of landscape features

The North Mall, above, like the East Mall, is marred by parking lots which detract from views to and from the Capitol.

Many of the grand qualities that the South Mall axis, left, normally would offer are currently lost because the alley of sycamore trees leading away from the Capitol Building are overgrown and block views outward.

Specific Recommendations:

- Develop central promenades on building axes for pedestrian connection and garden development
- Develop informal tree plantings at the east edge of the Capitol Complex near East 14th Street
- Soften the freeway edge in the North Mall
- Prune the sycamore trees on the south side of the Capitol Building to improve the view of the South Mall from the building
- Consider an arboretum setting for parts of Prairie Ridge
- Develop the Prairie Ridge grounds south of Court Avenue to the river valley with sustainable landscape plantings to celebrate its natural scenic views
- Clean up the area outside and around the Central Utilities Plant and Facilities Management Center. Screen both facilities with plant material as necessary

Noticeably different in character and function, the scenic views south from the Prairie Ridge could be enhanced even more with sustainable landscape plantings that both celebrate and serve as a model of Iowa's rich natural heritage.

The Malls' role as regional civic gathering spaces are most evident during the Yankee Doodle Pops concert held every July 3rd on the West Mall. These crowds of over 125,000 people can even spill over into the South Mall.

West Capitol Terrace

The West Capitol Terrace is the forecourt across which the Capitol Building is viewed from Locust Street and downtown Des Moines. The Capitol Building shares its east-west axis of symmetry with Locust Street, and this relationship is fundamental to organization of West Capitol Terrace. It is a place of celebration and congregation on special occasions, and as a passive park of greenery, a peaceful respite from the serious business of the Legislature and other state functions.

Dignified settings not only support the functional roles of buildings and circulation patterns but provide opportunities for programming, whether structured or unstructured, formal or casual. The natural slope of West Capitol Terrace facilitates an amphitheater setting. The Capitol grounds could sponsor a variety of gatherings and audience configurations. The grounds could be designed to accommodate these so that they can be staged, performed, and removed without damage. Occasions for public gatherings on the Capitol Complex promote community participation and require effective event management, appropriate staging areas, and parking strategies. Currently, community events include Music Under the Stars, Easter Egg Hunt, fair parades, and celebration of Martin Luther King, Jr., Day, Independence Day and other federal holidays.

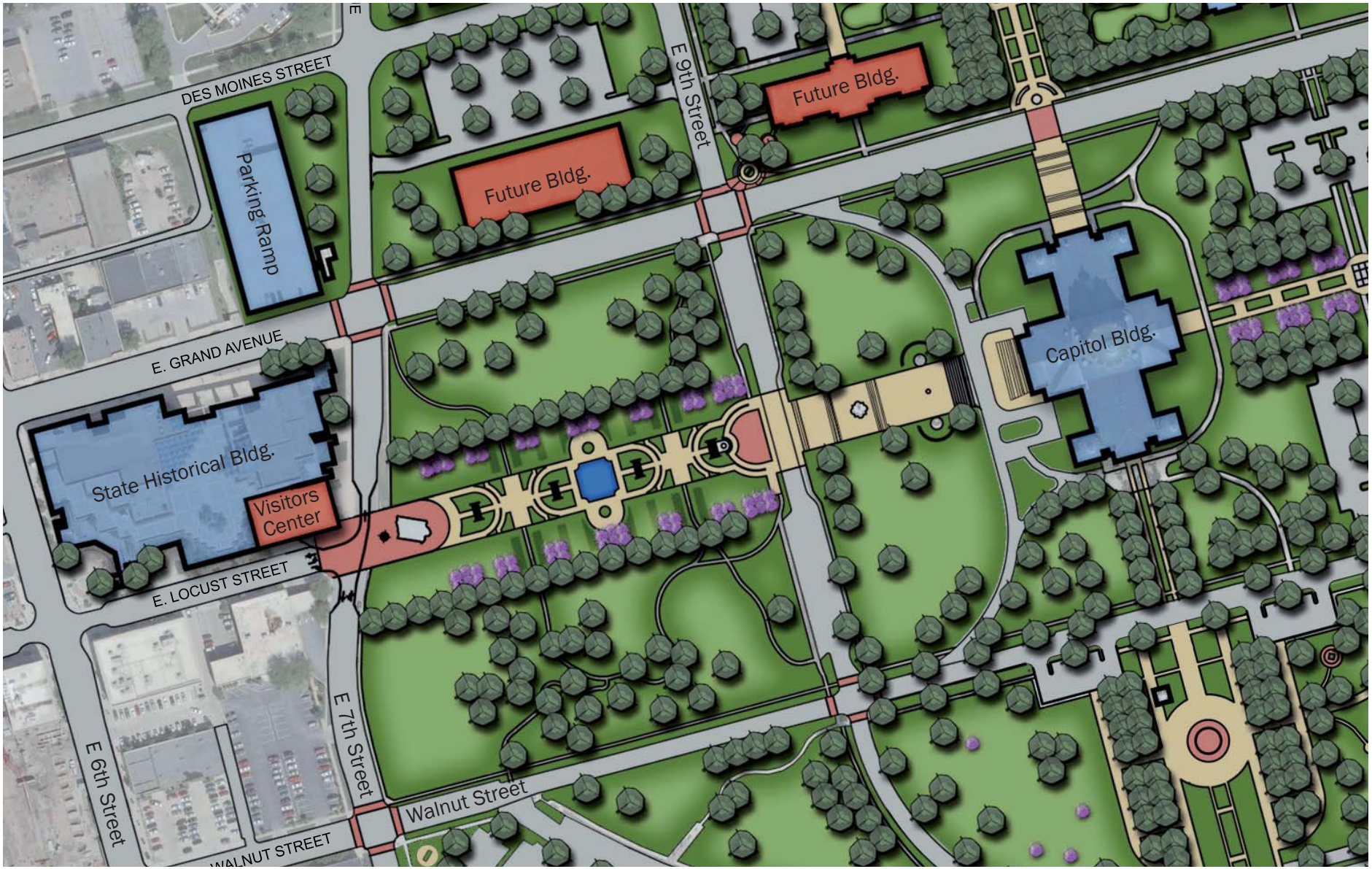
A grove of trees planted as memorials and by the Trees Forever organization south of the West Capitol Terrace near Walnut Street adds summer greenery and defines the southern edge.

Specific Recommendations:

- Develop the East Locust Street terminus to direct traffic, bicycles and pedestrians safely and effectively
- Complete the West Capitol Terrace by developing a plaza as a fitting eastern terminus to East Locust Street
- Preserve the avenue of mature trees parallel to the east-west axis of the Capitol Building as an important feature of the West Capitol Terrace landscape
- Develop accessible ramps integral with new and existing terrace steps to make the west side approach more equitable to all visitors of the Capitol Complex
- Closely integrate the landscape plan for the area between the Capitol Building and Finkbine (East 9th) from East Grand Avenue to East Walnut Street with access driveways and even a few discrete and unobtrusive short-stay parking spaces at the west Capitol steps. Find inspiration in the 1884 Weidenmann plan
- In keeping with the cultural and educational theme of the Historical Building, support development of public event use of the West Capitol Terrace gardens
- Accommodate a staging area and amphitheater setting on the West Capitol Terrace for performances
- Install signature fountain in the central lawn space
- Complete the West Capitol Terrace with the removal of the 709 and 711 East Locust buildings and relocation of the Fleet garage and motor pool from 301 and 307 East 7th Street

View away from Capitol along the West Terrace axis

West Mall - Proposed Vision



East Gardens

At the beginning of the 21st century, encroachment of buildings to the Capitol Building is less of a threat than the insidious and rising tide of parked automobiles. Currently, vehicles press against the east steps of the Capitol. These, together with most vehicular access, should be removed, and the graciousness of the landscape restored as has been accomplished on the West Capitol Terrace.

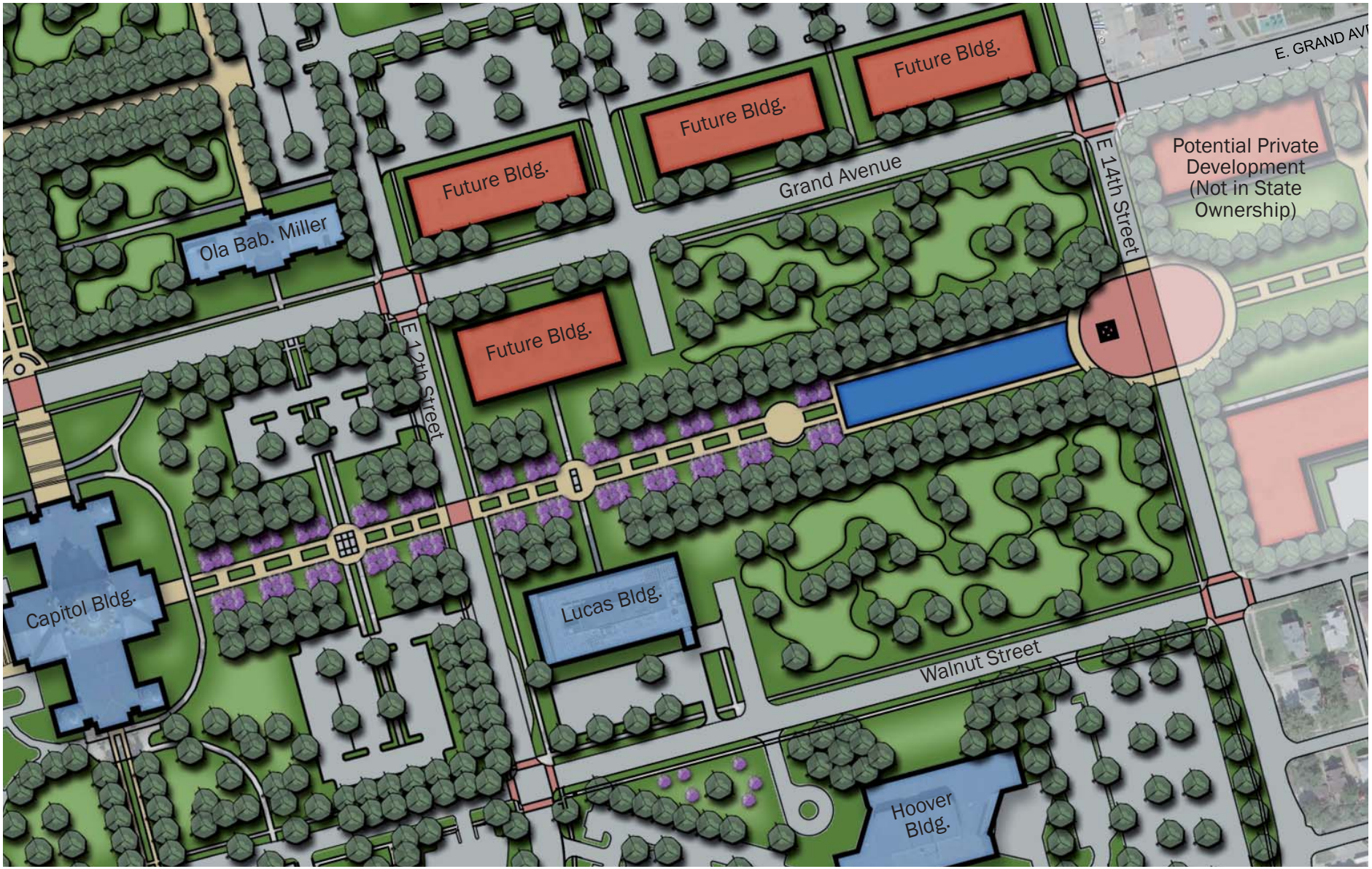
Parking currently compromises the dignity of the east entrance to the Capitol Building. In place of parking, a central pedestrian promenade from the Capitol steps could engage several formal gardens of distinct character. These gardens will serve as visual and spatial connectors between buildings to the north and south, whether on the mall itself such as the Lucas Building and its potential mirror building, or across Grand Avenue such as the Ola Babcock Miller Building. These gardens will integrate the WWII Memorial Plaza and new trees on the East Mall. The East Gardens should be intimate in character and facilitate activities of the State.

Specific Recommendations:

- Remove parking from the East Gardens in the area between the north face of the current Lucas Building and the south face of the proposed Lucas mirror building
- Provide formal gardens east of the Capitol Building that visually connect the Ola Babcock Miller Building with new development directly to the south, and the Lucas Building with a potential mirror building framing the Capitol
- Study replacement of the Grimes Building and restoration of the axial view to the Capitol Building from the east
- Extend the east axis of the Capitol across and expanded Stewart Square to engage Capitol Avenue
- Legislative parking will be provided at the NE and SE corners of the Capitol block and appropriately screened from the street and East Mall

View to Capitol along the East Garden axis

East Mall - Proposed Vision



North Gardens

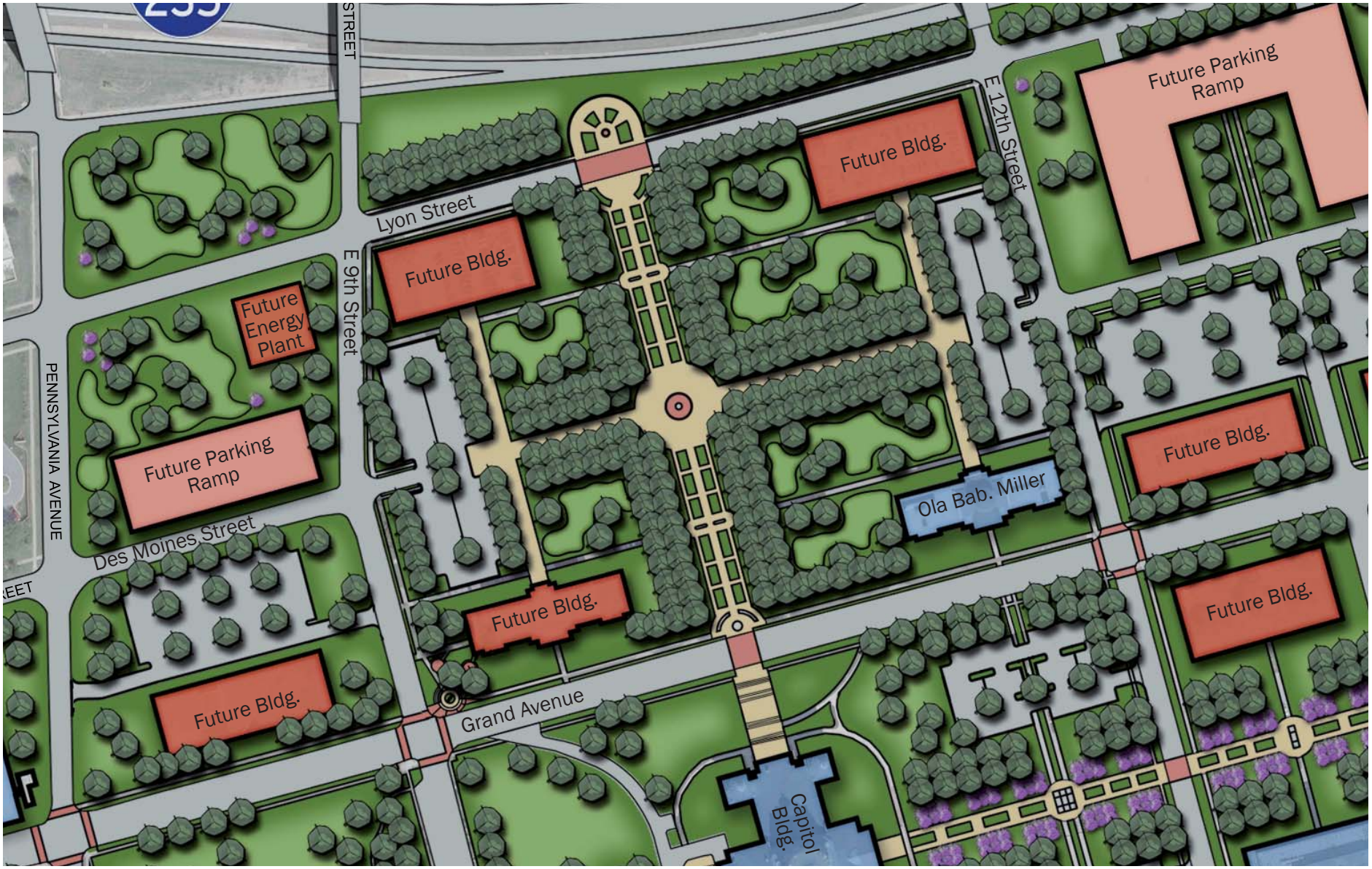
The North Gardens will introduce a new focal point for the Capitol Complex, acknowledging a north axis which to this point has been underdeveloped. A generous width should be maintained for gardens extending from the Capitol across Grand Avenue to the I-235 freeway. Future building developments on the west and east sides will provide enclosure for the North Gardens. They will also direct views north to a new terrace at the freeway terminus and frame views south toward the Capitol Building.

Specific Recommendations:

- Develop lawns and open space along the north axis from the Capitol Building to create public open spaces in the North Mall and extend the presence of the Capitol to the freeway
- Develop a garden terrace element at the bank of the freeway to terminate the north visual axis and identify the Capitol Complex from the freeway
- Assure safe and direct passage for pedestrians across Grand Avenue between the North Gardens and the Capitol, including but not limited to a pedestrian activated signal
- Provide modest sized surface parking lots on the east and west sides of the North Gardens to provide convenient visitor and staff parking while maintaining views along the Des Moines Street alignment. Parking structures should be located away from the gardens closer to where vehicles enter the Complex
- Provide new significant memorial/monument locations

Views to Capitol along the North Garden axis, above and top.

North Mall - Proposed Vision



South Gardens

The South Gardens provide an important link between present activity centers and future civic activity to the south. Once well-connected by the now demolished Court Avenue pedestrian bridge, new linkages should strive for similar landscape integration. The landscape between the Capitol and Judicial Building should be developed.

Specific Recommendations:

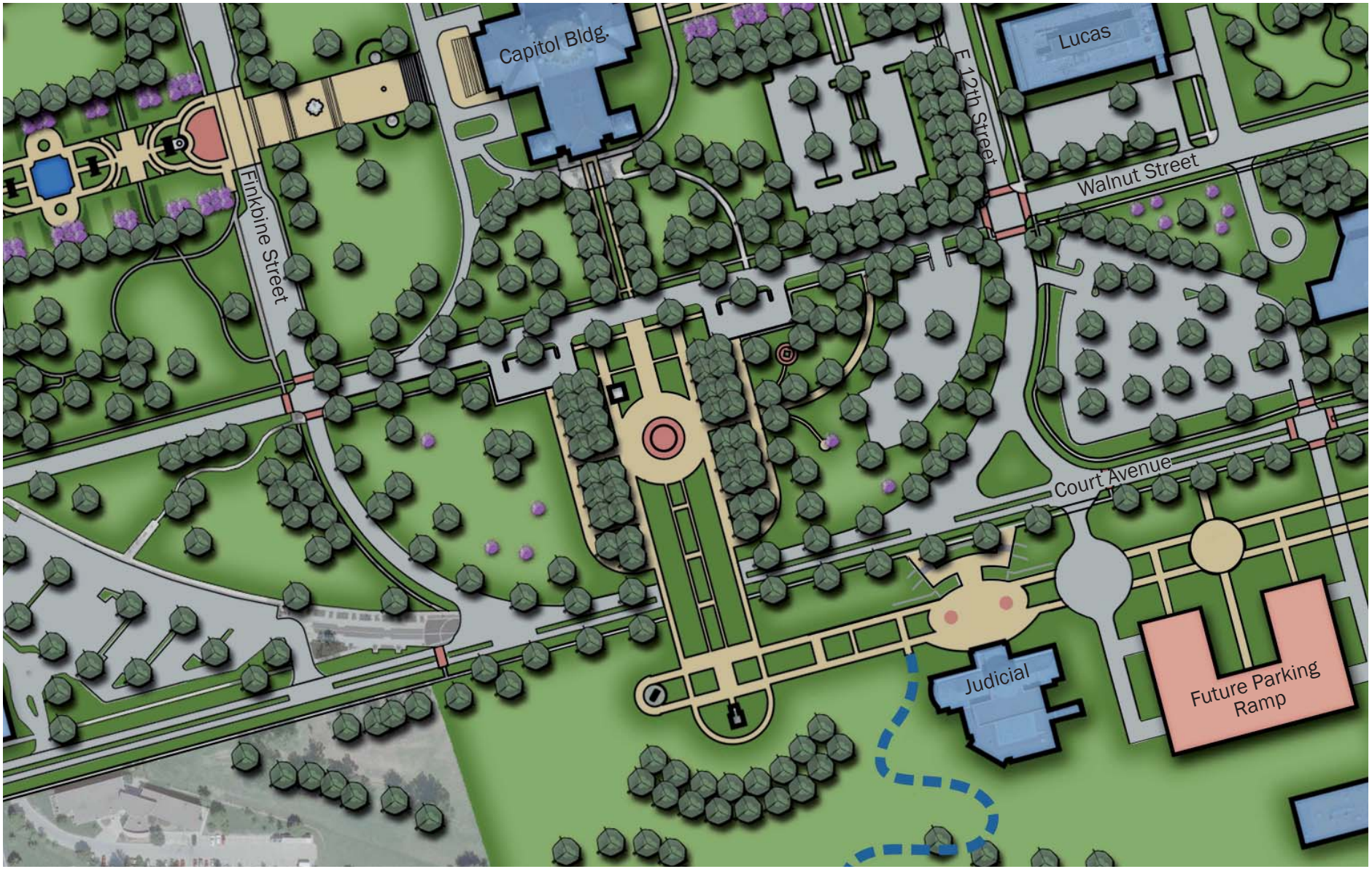
- Enhance the ties between the gardens south of Court Avenue and the rest of the Capitol Complex by restoring the former Court Avenue Viaduct
- Formalize the monument garden area south of the Capitol Building to engage a new Court Avenue bridge
- Encourage the extension of the South Mall to the Des Moines River to provide a view of the river from the Capitol Complex, a view corridor from the river and Martin Luther King, Jr. Parkway to the Capitol dome, and provide needed park and open space for the community
- Consider relocation of the Solders and Sailors Monument to one of the significant monument sites identified in the Master Plan. If re-located the current location should be recognized as the site of the old Brick Capitol
- Provide trail connection from Capitol grounds to central Iowa trails network

Court Avenue Bridge Design Guidelines

- Locate a replacement bridge over Court Avenue on axis with the Capitol Building. The structure should be restored with similar character to its predecessor
- Extend the formal gardens of the Capitol south across Court Avenue
- Design the new bridge to embody the quality and materials precedents set by the Capitol Building
- Avoid obstructing views of Capitol Building
- Provide vertical pedestrian access to sidewalks on Court Avenue
- Provide ADA access over Court Avenue
- Face the bridge structure with stone material to blend with the Capitol steps

Views to Capitol Building along the South Garden axis, top and above.

South Mall - Proposed Vision



Monuments and Public Art

Public art enriches the built environment and can improve our understanding of a place in ways that buildings, landscape, and infrastructure do not. Public art at the Capitol Complex reflects state values, recognizes the achievements of citizens of Iowa, documents the milestones of a democratic institution, and records the historical development of the Capitol grounds.

The State commitment to developing the Capitol malls has produced memorials of significant civic importance. Monuments, memorials, and historical markers abound on the Capitol Complex. The continuation of both state and private funding for the implementation and maintenance of public art is critical to future efforts. However, enthusiasm for the installation of commemorative works should be tempered with the priority of maintaining the dignity of the Capitol malls.

Capitol Malls

Objective:

Honor Iowa's history with appropriate siting of selective works of art on the Capitol malls or elsewhere in the Capitol Complex.

Guidelines:

- Secure endowments for each new and existing monument and public art installation to pay for maintenance
- Exercise discretion and restraint in authorizing additional artworks and monuments on the Capitol malls
- Maintain the dignity of existing works of art and memorials
- Assess the condition of existing monuments for restoration
- Ensure accessibility of open spaces for appreciation of monuments and public art
- Integrate new monuments and public art on the formal Capitol Gardens where they respond to visual and axial relationships of public spaces and entry points in the landscape framework. Artworks may be used to orient visitors to the Capitol Complex
- Respond to all approaches in the siting of monuments. Do not turn one's back to buildings and public spaces, such as the WWII Memorial Plaza
- Ensure that each piece is appropriate to its setting. Consider relocation of monuments, such as the Soldiers and Sailors Monument, which do not meet accepted guidelines for setting and location
- Preserve trees dedicated with plaques to mark the fortitude and longevity of their life as well as the dignity of the Capitol grounds
- Dedicate gardens of commemoration as an alternative to monuments
- Encourage public art features that may become attractions for visitors such as fountains or garden terraces

Specific Recommendations:

- Enhance the image of the WWII Memorial Plaza
- Rotate WWII Memorial wall to the south side of the plaza to restore the central axis corridor
- Consider relocation of the Solders and Sailors Monument to one of the significant monument sites identified in the Master Plan. If re-located the current location should be recognized as the site of the old Brick Capitol

Incorporating monuments like the Soldiers and Sailors Monument, left, and the World War II Memorial, top, into garden areas and landscape elements have set precedents for future consideration.

Streets and Boulevards

The significance of streets as principal approaches to the Capitol Building, or as elements of orientation within the Capitol Complex, can be enhanced with judicious placement of public art.

Objective:

Increase the emphasis on expanding the Capitol Complex's monumental nature beyond the malls into other areas of the Capital City, especially along boulevard axes and visual corridors.

Guidelines:

- Promote public artworks along major approaches to or visible from the Capitol Building to reinforce view axes and to facilitate the orientation of pedestrians and motorists
- Integrate new monuments and public art with existing landmarks and entry points, both vehicular and pedestrian
- Use landscaping to emphasize axes and view corridors

Buildings and Art

Public art has always been an important component of civic architecture. However, it must be consistent with the character of the building and the scale and use of the specific space it is to adorn.

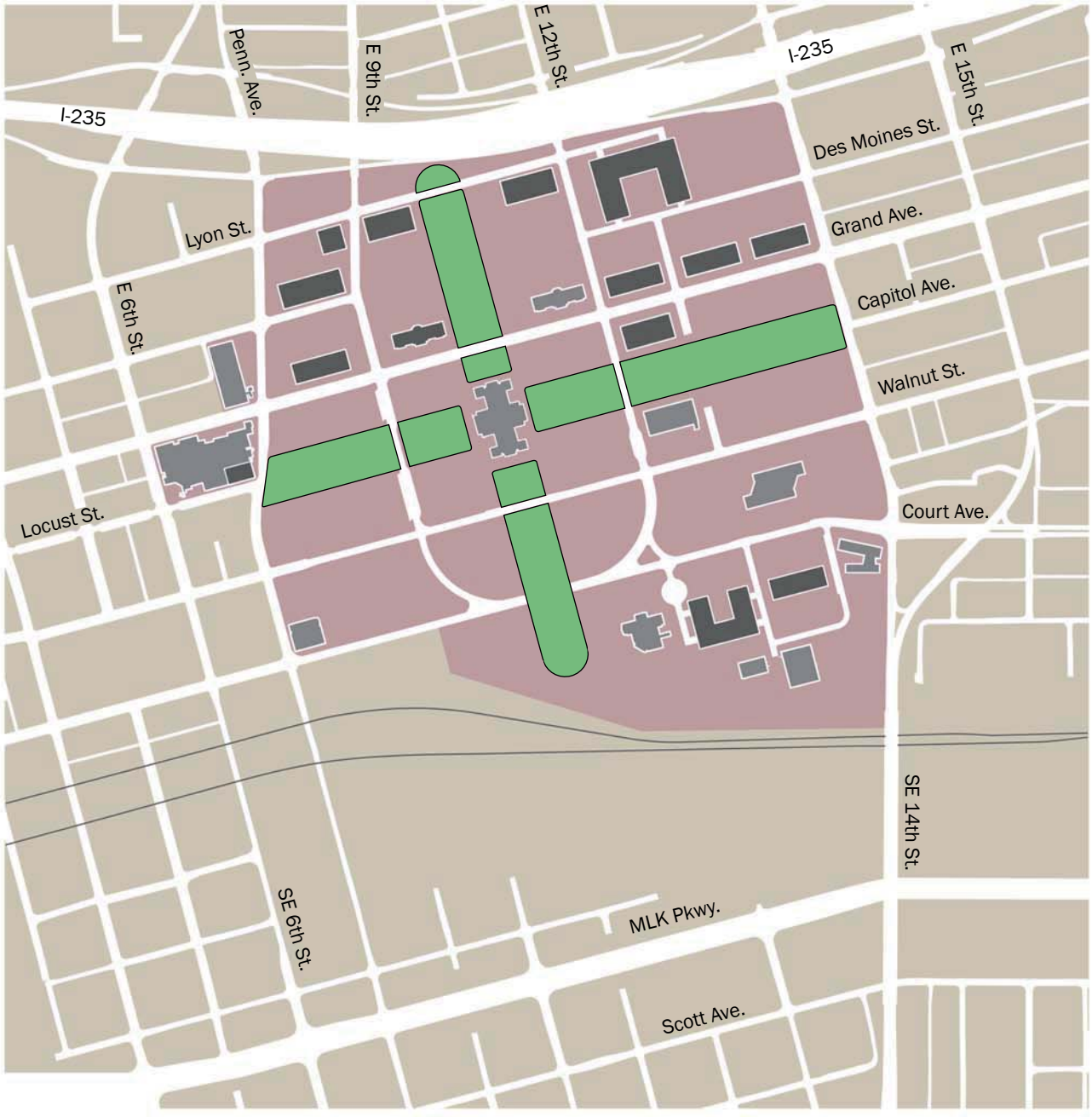
Objective:

Plan buildings with provisions for public and commemorative art.

Guidelines:

- Memorialize significant persons and events by renaming existing features or buildings as an alternative to adding monuments
- Continue to integrate art in the design process of new construction
- Commission works of art for specific locations in new and existing buildings. These may be commemorative pieces
- Use art and monuments to facilitate wayfinding by locating near building main entries and on view axes

Monuments and Public Art



Key

Formal Garden and Monument Zone

0' 200' 400' 800'

Site Amenities

Lighting

Implementation of a coordinated lighting, signage, and landscape plan could provide elements of continuity and compatibility between Capitol Complex buildings and clearly designate the civic boundaries of the Capitol Complex. Each state building on the Capitol grounds has been developed in an order and manner reflective of its time, bringing to the Capitol Complex a variety of lighting as well as signage. Lighting on the Capitol Complex should work within an overall lighting plan rather than be developed independently during each building project. Lighting standards should be capable of accommodating Capitol Complex expansion.

In order to create environments that are attuned to their predominant use, it is important to distinguish between the needs of vehicular, pedestrian, and building lighting, and address those special conditions where they intersect. Appropriate fixtures for illumination of roadways, access drives, and parking areas will be used in vehicular zones. Smaller pedestrian-scaled fixtures for illumination of garden areas, pedestrian pathways, and sidewalks may be used in pedestrian zones. Where these zones meet, it may be appropriate to employ several fixture types, or a hybrid that will meet the lighting distribution appropriate for the area. The purpose is to enable users to see one another and ensure their safe passage; not to illuminate paved surfaces beyond required levels.

Objective:

Implement a comprehensive lighting standard for the Capitol Complex.

Guidelines:

- Select lighting fixtures that relate to the Capitol Complex as a whole
- Select luminaires and optics that direct light where it is needed, and prevent light trespass and pollution of the night sky
- Support design quality, energy, and maintenance efficiency in lighting choices
- Provide lighting where it will improve Complex security and the safety of pedestrians
- Provide appropriate illumination levels: sufficient for recognition, but not so great as to create abrupt contrasts with unlit areas
- Provide outlets for special occasion lighting and equipment for events
- Provide feature lighting for special features and monuments to complement that of the Capitol Building
- Provide lighting for roads, access drives and surface parking lots
  - Design Character: Historic, cast iron pole, bracket arm and luminaire.
  - Illumination Characteristics: cool white light
- Provide special pedestrian lighting for mall areas, pedestrian pathways and sidewalks
  - Purpose: To enable personal recognition, rather then illuminate the ground plane.
  - Design Character: Historic, cast iron pole, mast arms for banners, luminaire.
  - Illumination Characteristics: warm white light.
- Provide for potential illumination of selected buildings on the Capitol Complex

Lighting should relate to the historic character of the Capitol while still being energy efficient and not polluting the night sky, such as this example, right, from the West Capitol Terrace.

Pedestrian Amenities

Seating and waste receptacles are pedestrian amenities that work together with lighting and signage. The appearance of streets and open spaces can benefit from use of common design elements, colors, and materials to create a matching set of furnishings. This type of coordination produces visually cohesive and distinctive public spaces.

Objective:

Coordinate pedestrian amenities with lighting and signage systems.

Guidelines:

- Coordinate pedestrian amenities such as benches, waste receptacles, pedestrian lighting, and signage with use of common materials, colors, and styles
- Provide supplemental seating in the form of planting ledges and benches that are integral to the landscape and lighting system
- Use historic site furniture designs using quality, low-maintenance materials that are of sound construction
- Use quality materials, colors and finishes to match historic pedestrian light fixtures and other site features
- Use waste receptacles made of materials appropriate to the context, and of colors coordinated with the overall site amenities system
- Provide removable bollards to designate predominantly pedestrian zones or pedestrian crossings
- Adhere to sound sustainability guidelines in the selection of all products

A coordinated set of pedestrian amenities such as benches, bike racks and trash receptacles bring cohesion to disparate parts of the Capitol Complex.

Sign and Visitor Information

Beyond the visible and physical presence of the Capitol Building, signage and visitor information provides the public with its initial impressions of the Capitol Complex. Well-integrated signage reinforces the State's commitment to its citizens by helping visitors feel that their time and comfort is valued. Visitors will feel welcomed upon entering the Capitol Complex when signs and visitor information help them find the services they seek.

Signage for staff and service personnel are likewise critical components of the Capitol Complex signage system. Operational efficiency supports the overall goals of the Capitol Complex.

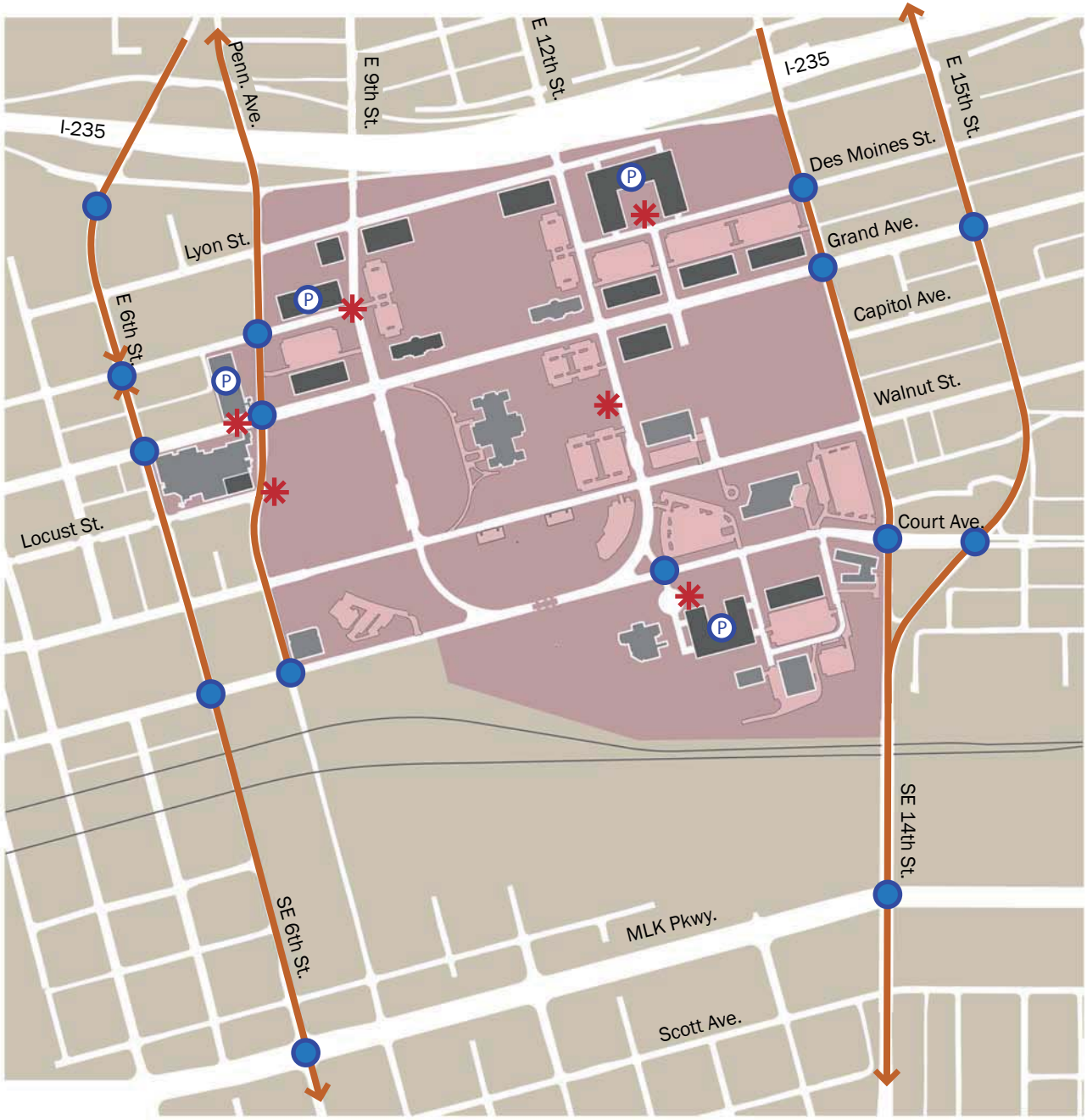
Objective:

Provide clear directional and identity signage for Capitol Complex buildings and features.

Guidelines:

- Develop a coordinated system of signage for all indoor and exterior applications at the Capitol Complex for progressive implementation including buildings, parking, monuments, gardens, and malls
- Use clear, distinctive, and consistent signage graphics
- Size signs and lettering to be legible yet discreet. Adopt a type font appropriate to the civic character of the Capitol Complex
- Develop an icon (such as a dome or building silhouette image) to be used as a recognizable logo for possible city-wide use in directional signage to the Capitol Complex
- Encourage cooperation of public and private agencies to use standard iconography on all signage, using International Graphic symbols when appropriate
- Color code signage types for clarity (vehicular, pedestrian, restrictive, directional, identity), and coordinate interior, exterior, and tunnel signage
- Locate signs consistently, so that visitors can anticipate where to find them
- Coordinate signage design and placement with outdoor lighting to ensure legibility after dark
- Respond to both automobile and pedestrian sign-reading requirements
- Develop a structural support system reflecting the historical character of the Capitol Complex
- Respond to circulation patterns of visitors, staff and service
- Design and implement gateway markers at each major entrance to the Capitol Complex
- Encourage maintenance of the signage system, including timely replacement of obsolete information and supply of new signs, meeting all requirements of the Americans with Disabilities Act (ADA)
- Eliminate unnecessary, confusing, or inappropriate signs
- Promote Capitol Complex information via the Internet and other means

Signs and Visitor Information



Signs and visitor information should be planned in accordance with vehicular and pedestrian movement.

Key

- Directory Kiosk
- "Capitol Visitor Parking" Sign
- Parking Garage
- Primary Roads

0' 200' 400' 800'

Specific Recommendations:

- Develop a map that identifies state buildings and parking areas, and other Capitol Complex features
- Provide “State Capitol” signage at freeway and parkway connections
- Provide identity and directional signage to visitor parking areas at the intersection of key approaches (Des Moines Street, Grand and Court avenues with East 6th Street, Pennsylvania Avenue, and East 14th and East 15th streets)
- Provide Capitol Complex way-finding signage near all parking directed to visitors
- Provide “Capitol Visitor Parking Entrance” signage to lots and parking structures
- Equip Capitol Complex facilities with a signage manual detailing standard fonts, colors, sizes, etc.
- Provide Maintenance Department with equipment for manufacturing indoor and exterior signs consistent with the signage manual, and the means to place and affix them appropriately

The attractive, uniform directional signage found throughout downtown and the East Village, right, to direct visitors to important buildings are much more effective, welcoming and easier to read when compared to similar signage currently used elsewhere like along East 14th Street, top right.

Directional Signage

Directional signage should anticipate the movement of visitors and service providers unfamiliar with the Capitol Complex. Directional signage is necessary at gateways and along important approaches where it can efficiently guide visitors to parking areas, the Welcome Center, and other desired destinations within the Capitol Complex. Visual devices such as signs (with clear and attractive graphics), directory kiosks, and maps can be very helpful in moving people efficiently throughout a building or complex.

Objective:

Direct visitors to Capitol Complex destinations.

Guidelines:

- Coordinate use of a single Capitol signage system with city and state roadway agencies
- Integrate traffic signs within the Capitol Complex with Capitol Complex standards
- Improve signs at access points to create an information hierarchy for visitors and personnel. Clarify visitor parking locations and service access
- Provide directory kiosks at key pedestrian entrances (Locust and Walnut streets) and from visitor parking areas. They should identify driving and walking directions to Capitol Complex buildings
- Develop a map brochure of state services and destinations, including information on public transit, bike routes, visitor parking, accessible entrances to each building, and areas for disabled parking
- Provide information on access to the Capitol by public transit with all printed materials sent to potential visitors. Include information on parking fees, locations of visitor parking, and bicycle facilities
- Identify destinations and routes to attractions elsewhere in the Capital City

Signage used throughout downtown Des Moines provides a great example of effective directional sigange.

Identity Signage

A visitor arriving at any building in the Capitol Complex should be able to identify it easily from an automobile or sidewalk. Identifying signage should be consistent with the architecture and with the civic qualities of the place as a whole. The Capitol itself needs no signage, but most other buildings need to be identified from at least one direction.

Objective:

Clearly identify Capitol buildings, grounds, and features.

Guidelines:

- Ensure that identity signage is consistent with the scale and architecture of the building to which it relates
- Design and locate identity signage with consistency
- Coordinate identity signage with street design elements such as pedestrian lighting
- Clearly identify agencies at single-tenant and multi-tenant buildings
- Identify the year of dedication on identity signage for enhanced historical context
- Standardize color and graphics for building interior signage throughout the Capitol Complex
- Develop transit stop signage particular to Capitol routes using distinct logo and color, yet recognizable as part of the public transit system

Current building identity signage for the Ola Babcock Miller Building, above, clearly states the name of the building to visitors, but does not identify the building as its primary use as home to the State Library.

Interpretive Signage

Capitol Complex buildings and grounds offer great settings for historical displays and background information that tell the story of Iowa's State Capitol. However, signage and displays should not be permitted to clutter the Capitol Complex. Interpretive pieces should be designed as a cohesive system, coordinated with signage, lighting, and other features to be part of a discrete but effective visitor assistance program.

Objective:

Maximize the education value to visitors, particularly students.

Guidelines:

- Use interpretive signage in conjunction with public art and new monuments to tell the story of Iowa's State Capitol
- Make explanatory text concise, to-the-point, and easy to read
- Promote public and private school visitor programs. Tour guides may come under auspices of the Legislative Service Bureau
- Promote summer docent programs
- Promote placement of information kiosks off-complex to promote walking tours and development of the pedestrian corridor between the Capitol Complex and the downtown area. Promote development of a guide sign program for walking tours both on and off the Capitol Complex

Specific Recommendations:

- Tell a relevant story through interpretive signage and exhibits
- Publish maps for self-guided tours via interpretive markers
- Provide story boards or interpretive markers for self-guided interpretive and monument tours of the Capitol Complex. Potentially use podcasts that visitors can download
- Use quotes from famous Iowans to bring history to life. Instill pride in Iowa with "Heritage Tourism"
- Create an educational exhibit at the Future Visitors Center in the Historical Building
- Develop a virtual tour of the Capitol Complex for remote access
- Develop informational material about the archaeological resources of the grounds
- Collaborate with local visitors' resources to include the Capitol Complex on tour schedules

Interpretive signs or kiosks like the ones above could greatly help both visitors and employees with navigating the Capitol Complex, as well as teaching everyone more about its history and how it currently operates.

Visitors Center

A most telling evidence of the attraction of the Capitol Building is the near constant presence of school children and other visitors. Visitors and constituents should receive the highest consideration at the Capitol Complex. Public and cultural institutions of all types recognize the value of providing visitor centers and information desks for the public. A Visitors Center for the Capitol Complex at a fitting location would meet the needs and enhance the overall experience of visitors to the Capitol Complex. The Capitol Planning Commission has expressed a preference for the Visitors Center to be located in the vicinity of the West Capitol Terrace. The Iowa Historical Building, located on Locust Street at the gateway to the West Capitol Terrace, is well-located for this purpose. Significant renovations should be made in the Historical Center to make it more transparent, ADA accessible, and inviting. Exhibits on the historical development of the Capitol Complex would allow for an in-depth experience for visitors. The proposed Capitol Shuttle loop would allow tour groups to utilize this service and help overcome climate and ADA challenges. Visitor parking could be accommodated in the parking structure at Pennsylvania and Grand Avenue. Buses and drop-off could be accommodated on the south side of Grand Avenue on the north side of the Historical Building.

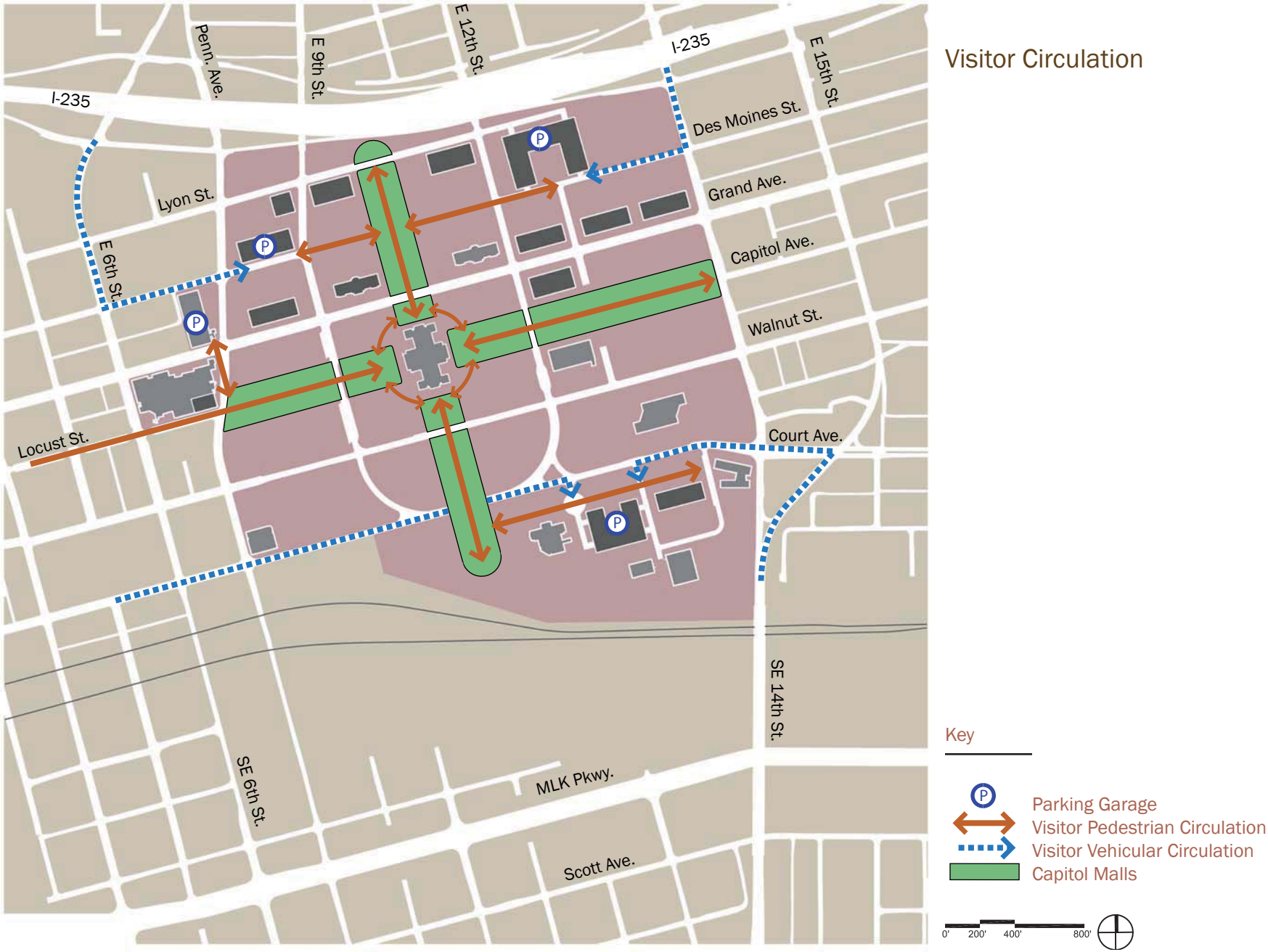
Objective:

Extend a welcome to Capitol Complex visitors and enhance the quality of their visit by providing helpful information.

Guidelines:

- Study locations for a Visitors Center that is accessible to all visitors. Seek operations support and other resources from public-private partnerships. A location near the West Capitol Terrace is preferred by the Capitol Planning Commission
- Identify an organization charged with operating the Visitors Center for the Capitol Complex
- Provide short-term and ADA parking near the Visitors Center
- Provide audio-visual capabilities for public orientation and education
- Incorporate an educational exhibit at the Visitors Center
- Encourage development of visitor information on the Internet and through other means
- Produce video documentation of Capitol Complex building and grounds development for public information and education
- Provide adequate restrooms for the Visitors Center
- Update educational exhibits at the Capitol Building
- Make provision for tour buses to drop off and pick up visitors at the center with parking located inconspicuously and away from the Malls

Visitor Circulation



Buildings

The Capitol Building is the centerpiece that sets both the tone and standard for all buildings around it. Buildings housing the offices of government should strive to create an environment rich in tradition, inspirational for those who work in them, and memorable to those who visit them. Accomplishing this requires elevated civic aspirations, clarity of vision, and thoughtful planning. Each building is significant in how it contributes to or detracts from this effort.

Preservation, Renovation, and Redevelopment Planning

Under the direction of the Department of Administrative Services, the Capitol Building restoration has been a worthy task with remarkable results. Renovations and relocation of state agencies should occur in a phased schedule that meets Capitol planning objectives.

Objective:

Preserve and enhance the dignity, beauty, and architectural integrity of the Capitol Building and other state buildings in the Capitol Complex.

Guidelines:

- Develop programs to ensure ongoing maintenance of building structure and appearance, emphasizing preventive maintenance and improved energy efficiency
- Prohibit demolition or development that will diminish or obstruct views of significant buildings and sites
- Ensure that the remodeling of existing buildings is consistent in scale, materials, quality, and execution with the Capitol and its neighbors
- Update all state buildings to meet accessibility standards
- Relocate state agencies from unsafe buildings
- Bring ailing but viable Capitol Complex buildings into full code compliance
- Remove temporary buildings and uses in a timely manner
- Incorporate the existing tunnel system into the planning and design of new state facilities
- Ensure that parking structures do not assume visual prominence

Specific Recommendations:

- Complete restoration of the Capitol, Lucas, and Ola Babcock Miller buildings
- Relocate the Fleet Services from the West Mall at East 7th Street to a convenient but separate location. The gas station and vehicle maintenance facilities should be removed to the same location. Work with the City of Des Moines and Polk County on potential facilities relocation
- Provide curbs, sidewalks, and street trees to maintain the pedestrian network and to prepare for future development, particularly on the North and South malls

New Buildings

New buildings must be amenable to the rapid changes in today's government and workplace that demand flexibility in a building's use over the course of its lifetime. Proposed government buildings should also reflect the symbolic themes associated with state and citizenry. Broad rather than user-specific assignments of buildings and site locations will enable planners and designers to continue to respond to changing needs in their design proposals. With the exception of some special purpose spaces, most new construction on the Capitol Complex should be of general office space, amenable to use by a variety of different departments and agencies as future needs may dictate.

Objective:

Supplement the Capitol Complex with buildings that enable state government to serve with greater efficiency (refer to State of Iowa Executive Order 6 and/or LEED to guide the construction projects).

Guidelines:

- Provide facilities adaptable to changing needs
- Share resources and assembly space between adjacent state-occupied buildings
- Recognize space needs for cultural and recreational purposes when planning state buildings. Support development of cultural uses that recall the rich heritage of the people and State of Iowa
- Respond to the need for compatibility with various land uses in the surrounding community
- Encourage nearby commercial services and other facilities to support the needs of state employees and visitors
- Maintain space for wellness and childcare services near the Capitol Complex

Specific Recommendations:

- Initiate a dialogue with neighboring institutions and businesses on possible shared use parking and wellness and childcare partnerships
- Consider agency storage opportunities on lower levels or in undesirable spaces on or near the Capitol Complex
- Future buildings should provide day-lighting to all work stations and keep storage areas in the levels below grade when possible

Potential Building Sites

Among the most compelling arguments for the consolidation of state offices in new or existing buildings in and around the Capitol Complex are:

- Increased contact between Legislative, Judicial, and Executive branches of government
- Easy access to a comprehensive range of governmental services for local and state users
- Shared amenities
- Overhead cost efficiencies associated with proximity which also takes advantage of Complex-wide support services, including mail, copying, training, maintenance, fleet services, and security

State government continues to deliver services which are important to the livelihood of the citizenry. Physical access to services provided on the Capitol Complex continues to be of prime importance, especially for those who do not have easy access to computers and cars. Consolidation of state offices in the Capitol Complex would also increase the ability to develop a comprehensive traffic management program for state employees that would lead to reductions in traffic, air pollution and parking construction and operation costs.

Potential building sites warrant a density of development consistent with the prevailing or planned civic and urban context. Important considerations include the definition of streetscape, building massing that reinforces the sense of the existing terrain, and integration of open space. The flexibility of a site to accommodate offices of varying types and sizes is particularly valuable. Use of large areas for surface parking runs counter to these principles.

The dominant position of the Capitol Building at the highest point of the Capitol grounds invokes strong axes of symmetry. However, many existing buildings have been placed in a more asymmetrical manner. Resolving this transition requires reinforcement of spatial and axial relationships through the careful siting and landscaping of new developments.

The east-west axis of the Capitol Building is a principal organizing element. New development sites are indicated where they frame views of the Capitol Building, or enhance a relationship with existing buildings. They also relate to vehicular and pedestrian circulation.

Building a mirror of the Lucas building between the East Mall axis and Grand Avenue would not only be a great enhancement to the civic qualities of the East Mall, the site is also very much usable in its current state, requiring minimal changes to current Capitol Complex parking or building infrastructure when compared to other proposed sites.

Objective:

Support the established principles of civic design and a cohesive Capitol Complex in the siting of buildings.

Guidelines:

- Maintain a strong symbolic relationship between the Capitol Building and the core functions of state government: the Legislative, Judicial, and Executive branches. These three uses are considered of highest importance in design considerations
- Accommodate agency needs in the Capitol Complex and Capital City for a balanced approach that unites the Capitol Complex with the City
- Acquire property critical to view protection and long term growth
- Respond to the spatial relationships created by existing buildings and spaces on the Capitol Complex. New development should respect established axial relationships between buildings. Consider sites that create new gateways, define the edges of open space, and reinforce the dignity of the Capitol Building
- Locate social service agencies on sites that are easily accessible by the public and coordinate transit stops at these destinations. Locate those facilities that have limited need for public access on sites that are least prominent
- Redevelop surface parking lots for new state office buildings and civic spaces, consolidating displaced parking into structures
- Only in exceptional circumstances consider siting a building underground in order to preserve important views of the Capitol Building, its open spaces and greenery
- Locate all parking structures on the periphery of the Capitol Complex
- Evaluate the appearance and effects of potential development sites and parking structures from all directions on views

Specific Recommendations:

- Locate future buildings that directly serve the Legislative, Judicial and Executive branches on the Capitol Complex
- Appropriate funds for land acquisition north to I-235 between Pennsylvania Avenue and East 14th Street to accommodate expansion of the Capitol Complex

Placing buildings along the north edge of Grand Avenue, above (right side of image), would greatly enhance the urban qualities of Grand Avenue while also providing a much needed, well defined edge to the East Mall (left side of image) that these buildings would all overlook.

Preview of development phases 1 through 5. Refer to Appendix B for a complete and detailed phasing summary.

Phase One (2010-2020)

Key

A New Building - 270,000 GSF
B New Building - 300,000 GSF
1 Build East Gardens to WWII Memorial
2 Start North Gardens
3 Improve Locust Street Pedestrian Crossing

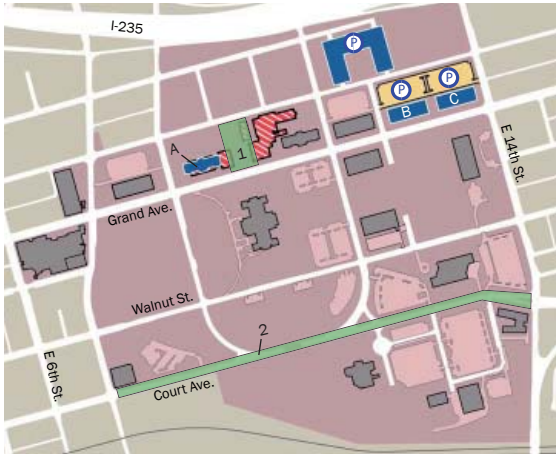
Parking to Add
Buildings to Remove
Existing Buildings

Phase Two (2021-2030)

Key

A New Building - 270,000 GSF
B New Visitors Center
1 Rebuild Court Avenue Bridge and Improve South Gardens
2 Complete Grand Avenue Streetscape
3 Expand East Gardens
4 Complete West Capitol Terrace, Build Fountain

Parking to Add
Buildings to Remove
Existing Buildings



Phase Three (2031-2040)

Key

A New Building - Legal Support / Elected Officials - 100,000 GSF
B New Building - 270,000 GSF
C New Building - 270,000 GSF
1 Continue North Garden Work
2 Complete Court Avenue Streetscape

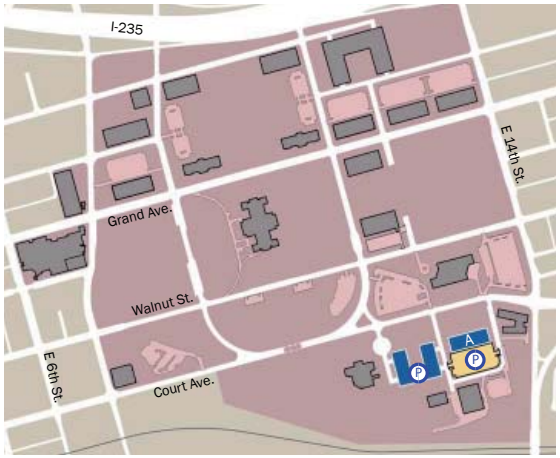
Parking to Add
Buildings to Remove
Existing Buildings

Phase Four (2041-2050)

Key

A New Building - 280,000 GSF
B New Building - 280,000 GSF
C New Energy Plant
1 Complete North Gardens to Interstate
2 Complete East Gardens
3 Complete Pedestrian Plaza

Parking to Add
Buildings to Remove
Existing Buildings

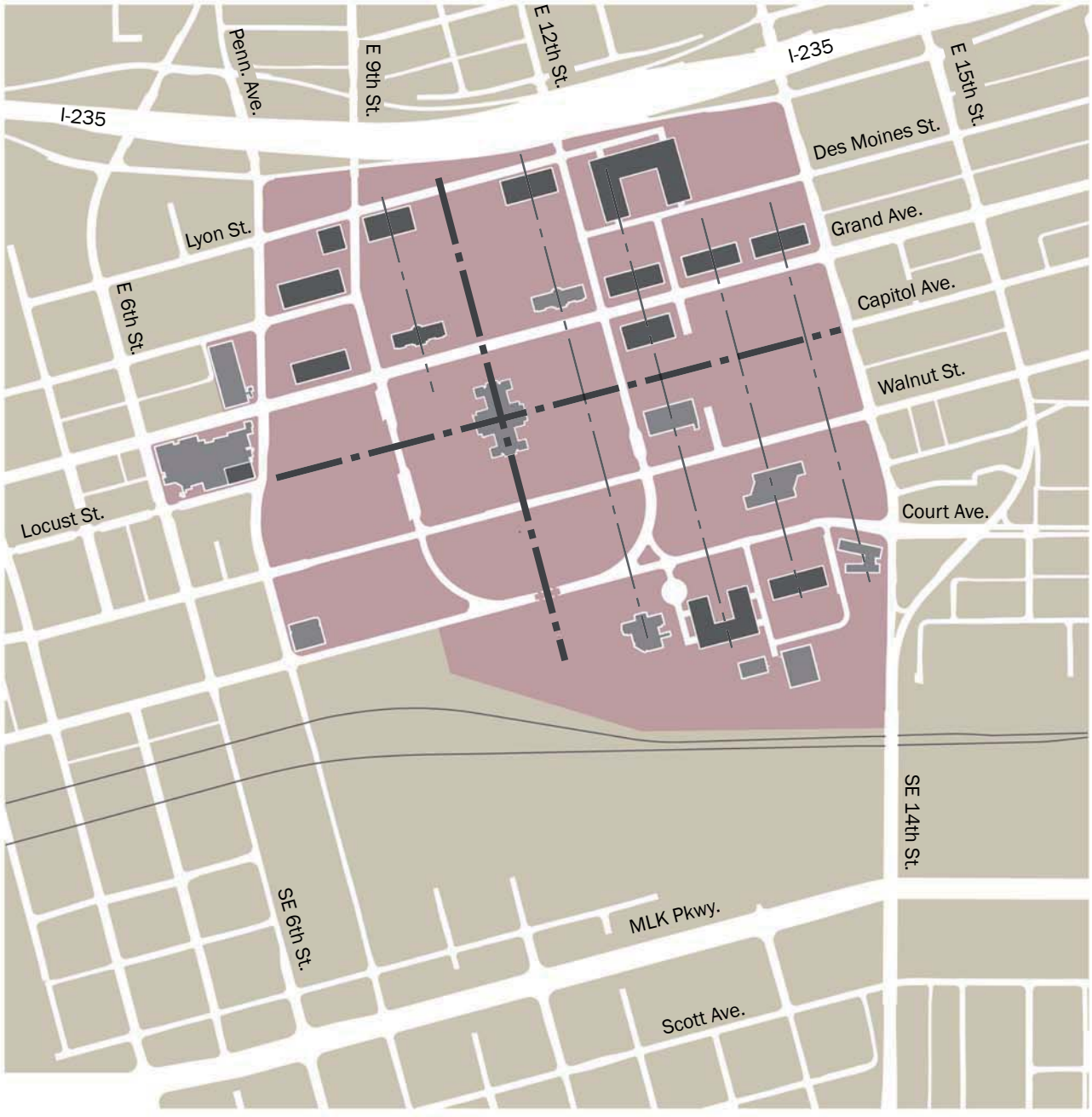


Phase Five (2051-2060)

Key

A New Building - 270,000 GSF

Parking to Add
Buildings to Remove
Existing Buildings



Major Axis

Axes of symmetry are clearly expressed in building development as well as landscape treatment.

Key

- Existing Structure
- Proposed Structure
- Primary Axis
- Secondary Axis

0' 200' 400' 800'

Architectural Design

The architectural character of Capitol Complex buildings should support the preeminence and civic qualities of the Capitol Building. This criterion has not been adhered to consistently in the past. In order to ensure consistent and appropriate quality in new and remodeled buildings in the Capitol Complex, a set of architectural design guidelines should be established and consistently implemented. These will also provide the Capitol Complex with a uniform basis for evaluating the suitability of proposed building designs. The Capitol Complex should also maintain a working relationship with design and build teams to ensure that Capitol Complex guidelines are not compromised by the need for increased efficiency in construction.

Objective:

Establish standards of architectural quality that are appropriate to the civic functions and longevity of the Capitol Complex.

Guidelines:

- Be responsive to the scale of the surroundings in the detailing and massing of buildings
- Maintain building height restrictions to protect the visibility of the Capitol Building. New buildings should not exceed the shoulder of the Capitol Building in height
- Provide civic spaces and forecourts to state buildings. Where two buildings front each other in an axial relationship, develop a dignified space for the expanse between them
- Orient buildings that flank the Capitol gardens on the north and south sides to respect the primary east-west axis, although buildings need not be mutually symmetrical
- Capitalize on the permanence of the landscape by providing buildings that do not draw attention away from the Capitol Building
- Provide entries to public open space, gardens, or major approach streets, and accommodate disabled access
- Ensure that state buildings on the perimeter of the Capitol Complex are compatible with neighborhood scale and views of the Capitol Building
- Design for natural light into lower levels
- Connect new buildings to the existing tunnel system wherever practicable
- Adhere to principles of sustainable design

Specific Recommendations:

- Align the frontage of proposed buildings with entrances off the north side of Grand Avenue with the existing Ola Babcock Miller Building
- Align the frontage of proposed buildings south of Court Avenue with the Judicial Building
- Create civic architecture through appropriate design, quality materials, and creative use of color. Ensure the inherent design is as “timeless” as possible. Building composition and detailing should be consistent with the civic qualities of the Capitol Complex
- Incorporate concepts such as symmetry in the facade of buildings to respond to visual axes, formal open spaces, building groupings and major entrances. Emphasize major pedestrian entrances with ceremonial architectural treatments
- Emphasize selective use of natural stone for the building enclosure that is compatible with other buildings on the Capitol grounds. This could include pre-cast concrete facades to simulate stone. Avoid curtain wall construction typical of many developer buildings. Avoid highly reflective surfaces
- Provide architectural elements that are small in scale (unlike the Wallace Building, where large surfaces of glass and masonry vie for attention with the Capitol Building)
- Design building systems to be highly efficient throughout their life cycle, including equipment installed costs, energy costs, maintenance cost, and replacement cost

- Specify all materials and public area finishes to reduce maintenance costs and provide durable finishes capable of supporting active use

- Specify the roof and other weather-tight enclosures to have at least a 20-year warranty

- Select the structural system for a facility based on the space program, building proportions, and long-term economics to provide the State with the most functional and efficient space. Concrete systems have desirable vibration control characteristics. They are also highly durable and are well suited to specialized loading needs. Steel framing systems perform well for large open column spacing and can be erected quickly

- Design floor structures to support a minimum uniform live load of 100 pounds per square foot, and a concentrated load of 1,000 pounds on a 2'-0" x 2'-0" area. The distance from a floor slab to the bottom of the structure above should accommodate suspension of cable infrastructure in the ceilings and flexibility in the rearrangement of HVAC and lighting delivery systems

- Provide a comprehensive vertical and horizontal telephone, data and electrical distribution system which can accommodate future changes in technology for each workstation. Avoid the use of power poles and tombstones. Pre-wire walls and columns, and preset cable distribution boxes in the floor areas of open spaces

- Specify elevators to provide a maximum cycle time of 24 seconds and provide highly dependable and timely service

- Promote use of demountable walls for flexibility and reuse of materials, substantial glazing to bring in natural light, a highly absorbent acoustical ceiling, and durable finishes in interior environments. Higher quality finishes such as gypsum board ceilings and masonry, metal, or wood wall finishes should be considered at entry and public areas

- Provide each facility with a comprehensive visual and electronic security system or the capability to install such a system if events in future years dictate

- Promote use of open office space planning in other than specialized applications. Use standardized furniture systems in approximately 85% of the space

- Specify facilities to have a raised floor for distribution of cabling systems and other utilities in some instances

- Provide sufficient space in mechanical, electrical and communications/data rooms for equipment servicing and replacement

- Utilize the central energy distribution system for chilled water and steam for all new facilities unless other circumstances dictate

Building Foundation Landscaping

The foundation plantings around each civic building should be engaged in the Capitol Complex landscape framework. Appropriate plantings help resolve the exposed bases of existing buildings. Plantings and the design of the ground plane should generally acknowledge the axial structure of the Capitol Complex around the Capitol, although many elements of the landscape may depart from this.

Objective:

Provide a dignified setting for buildings that will enhance their civic qualities and strengthen their relationship to the landscape.

Guidelines:

- Allow for the proper spatial and functional relationship between open spaces and surrounding buildings
- Connect foundation landscaping with adjacent open spaces. Develop landscaped forecourts for buildings relating them to the overall landscape plan
- Provide plantings along expected bases of buildings that also provide seasonal color and interest

Specific Recommendations:

- Provide base definition at the east side of the Capitol Building
- Identify areas for foundation landscaping improvements in conjunction with a landscape master plan

Example of foundation planting around the U.S. Capitol Building in Washington D.C.

Examples of foundation plantings around the Lee County Courthouse in Opelika, Alabama, below, and the California State Capitol Building in Sacramento, California, right.

Utilities

Pedestrian/utility tunnels under the Capitol Complex grounds currently provide electrical, steam and condensate, chilled water supply and return, natural gas, telephone, security, communications, and television distribution. The tunnel system also serves as a civil defence shelter for some buildings on campus. At this time, the Capitol Complex has a plan to remove utilities from the existing tunnel system and bury them adjacent to the tunnel.

Specific recommendations will be developed separately as a part of a vertical infrastructure assessment.

MECHANICAL SYSTEMS

Existing Heat Source and Chilled Water

Primary heating and cooling for Capitol Complex buildings is provided from a central energy plant. The central energy plant contains three dual fuel boilers and uses fuel oil as back-up to natural gas.

Most of the Capitol Complex receives chilled water from the energy plant which has a 600-ton chiller and two 750-ton chillers. Piping runs from the energy plant through the utility tunnels. Several buildings on the Capitol Complex contain individual chillers of varying tonnage. Some connect to the Capitol Complex loop, and some are independent.

The anticipated expansion of the Capitol Complex will require additional cooling capacity beyond the capacity of the energy plant, and so will be supplied separately.

Future Heat Source and Chilled Water

The existing boilers have some surplus capacity for future loads. When boiler replacement is scheduled, boiler size should be reviewed. Energy costs, cost of capital, equipment, installation, maintenance depreciation, and labor should be compared to ensure that the State chooses heating systems that are the most beneficial, both economically and environmentally. The Master Plan anticipates that an additional central energy plant will be needed in the NW quadrant of the complex to accommodate growth north of East Grand Avenue.

ELECTRICAL SYSTEMS

Existing Electrical Service

MidAmerican Energy provides utility feeders with a minimal level of redundancy. The existing utility tunnel system is used to distribute service to buildings. Buildings not adjacent to the tunnels have directly buried electrical service.

Emergency generators are located at several sites on the Capitol Complex. Provisions for electrical back-up service to critical areas should be maintained and additional generation and battery back-up service should be evaluated.

Proposed Electrical Service

In order to ensure adequate electrical service, utility feeders should be connected to the loop and the existing service should be upgraded to meet projected needs. Separate demand meters should be installed at each building to aid conservation efforts.

Telephone and Cable Systems

A central phone center for the Capitol Complex accommodates distribution to proposed state buildings. If telephone, fiber optic, and cable television distribution systems are desired within state buildings, it is the responsibility of the State, as a consumer, to incorporate them. Distribution may be simplified by routing through existing tunnels, and integrated into new tunnel connections for future building needs.

Iowa Communication Network

The Capitol Complex is provided with service from the Iowa Communication Network (ICN), which has installed a fiber optic loop to allow continued communication throughout the Capitol Complex.

CIVIL SYSTEMS

Sanitary Sewer and Storm Water Infrastructure

The Capitol Complex has separate sanitary and storm sewer networks, which achieve greater sanitary sewer capacity and accessibility than combined systems. There appears to be no constraint with respect to accessibility and capacity of either sanitary sewer or storm water infrastructure. It is recommended that these systems be reviewed as street projects and adjacent construction takes place.

Storm Water Detention

Storm water detention will be accommodated in a regional system with a broad brush approach. The green spaces identified in the Master Plan need to be utilized as detention, geothermal farms, and recreational space. It is intended that all green space would have a series of lower areas that will be part of a larger system to hold and infiltrate storm water. This includes all of the identified mall areas. Each building constructed will have to be reviewed individually, but the intent of this plan is to look regionally when treating storm water. It is anticipated that some building projects will establish a large detention network, while others may simply tie into an established one from a previous phase.

Water Demands and Pressure

Meeting anticipated water demands for anticipated development over the next 10 to 20 years should not be a constraint. Water mains in close proximity to Capitol Complex buildings have water pressures that are adequate for potable water supplies. Each building will need adequate fire protection and water pressure. Each building has an independent fire protection service connected to the city water supply. State-owned fire hydrants are provided at the Capitol Building. Other facilities utilize city-owned hydrants for fire department connection.

Parking

Capitol Complex Parking

The current location of parking lots in the forecourts of major Capitol Complex buildings diminishes the quality of the entire Capitol Complex by making parked vehicles a visual focus. Vehicles now intrude in what should be open landscape and a pedestrian precinct. While parking has been expanded to meet normal demand, supply is tight during the legislative session. As new buildings are constructed, additional parking will be needed. In order to reduce visual intrusion within the Capitol Complex and to satisfy future needs, new and relocated parking should be provided outside the Capitol gardens. However unlike earlier plans, this plan does not call for underground parking east of the Capitol Building.

Objective:

Provide parking lots and structures that serve users well and maintain the qualities and aesthetics of the Capitol Building, its grounds, and surroundings.

Guidelines:

- Reduce the demand for employee and visitor parking within the Capitol Complex by implementing an effective transportation management plan. Implement charges for parking sufficient to recoup operating and maintenance costs
- Consolidate parking in structures and in less visible areas of the Capitol Complex which are nonetheless convenient to both visitors and employees
- Develop parking in sufficient quantities to serve buildings within a walking distance of 500 to 800 feet
- Avoid adding large surface lots that impede pedestrian passage. While some existing large lots will remain, primarily those near the Hoover Building, new lots should approximate the footprint of a building in order to provide appropriate pedestrian scale
- Develop adequate parking concurrently with building development. New office buildings should provide not more than 2.95 spaces per 1,000 gross square feet (the current demand ratio) with a long-term goal of reducing that ratio by five to ten percent through transportation management
- Provide clear directional signage to parking entrances. Provide parking entrances from minor streets with visible signage from major streets. Allow sufficient distance between garage entrance and adjacent intersections
- Use consistent signage, lighting, and landscaping for parking areas, identifying them as parts of the Capitol Complex
- Provide safe and clearly identifiable pathways for pedestrians from parking to building entries
- Ensure that landscaping and lighting create safe parking lot environments during all hours
- Minimize the negative effects of parking on adjacent residential areas

Specific Recommendations:

- Monitor parking demand and employee travel trends through periodic surveys
- Meet the non-legislative session parking needs by adding new spaces to the Capitol Complex perimeter
- Remove surface parking from the Capitol gardens with the exception of parking for the disabled in specified locations
- Provide disabled parking at the west steps of the Capitol Building and in a lot west of the Lucas Building for proximity and accessibility

- Reconfigure the surface parking at existing Lot 6 near the south monument gardens. Parking should not visually dominate the entryway to the grounds

- Maintain on-street parking at the edges of the Capitol malls, excluding Grand Avenue

Parking Development:

- Use the parking structure north of Grand Avenue, west of Pennsylvania Avenue, to serve state buildings and legislative needs. Provide tunnel connection to the Capitol Building when the Wallace site is re-developed

- Develop parking ramps north of Des Moines Street west of East 9th Street and east of East 12th Street and east of the Judicial Building

- Re-configure and replace the parking lots east of the Capitol. The east mall should be restored while still providing a buffer along Grand Avenue, Walnut Street, and East 12th Street. These lots should be constructed with special attention given to landscaping, lighting, and LEED principles

Current parking at the Capitol Complex does little to treat or reduce the large quantity of polluted stormwater runoff that often flows directly into nearby streams and rivers, while also seriously detracting from the overall look and civic importance of the Capitol Building.

Surface Parking Lot Design Guidelines

Guidelines:

- Prohibit surface parking within North, South, East, and West Capitol gardens
- Size parking lots so that the area they cover will be no greater than a future building site or parking structure at that location
- Provide a setback from major streets (East Court Avenue and East Grand Avenue) equal to building setback of existing adjacent permanent buildings. Parking lot perimeters should not extend beyond adjacent building frontages
- Provide ten feet minimum setback from minor streets
- Maintain existing grades for surface parking lots. Prohibit the use of berms at the street frontage
- Maintain large trees, low hedges, or shrubs on lot perimeter
- Plant canopy trees to shade surface lots. Locate and protect them to minimize interference with snow plowing operations. Conserve existing mature trees within new surface lots

Incorporating Best Management Practices (BMPs) into all future parking lots will not only greatly improve the quality and reduce the quantity of all stormwater runoff, they also will enhance the look or aesthetics of any new surface parking lot.

Structured Parking Design Guidelines

Guidelines:

- Minimize unoccupied space at the base of parking structures adjacent to sidewalks
- Incorporate public/private services at ground level (coffee, child care, medical, etc.)
- Use forms and materials, proportions and design elements that are sensitive to adjacent structures and complement the Capitol Complex
- Limit parking structure size within the Capitol grounds to maintain appropriate scale and to minimize traffic congestion at entrances and exits.
- Connect parking structures to a secured pedestrian tunnel system where such opportunities exist
- Provide one or more levels of parking below ground level to limit height of structure above ground level and to maximize views to the Capitol Building without loss of parking capacity. Parking structures should be less visually dominant than the Capitol Complex buildings they serve
- Provide pedestrian access to each parking facility as close to an intersection as possible to promote for pedestrian crossing safety and convenience
- Provide structured parking entirely below ground level if located within the Capitol gardens
- As required incorporate energy plant facilities on the lower levels of the garages

Parking structures like the one at Saint Joseph's University in Philadelphia, left, or the one for the Kansas City Public Library in Downtown Kansas City, above, are great examples of how parking structures can seamlessly integrate with urban fabric around them and provide a welcoming edge to pedestrians at the street level.

Transit

Public transit use by state employees and visitors reduces parking demand and vehicular circulation on the Capitol Complex. The plan encourages expanded use of public transit through incentives, promotions, and the enhancement of transit facilities and service. As Grand Avenue is a primary transit corridor, additional office development is encouraged in this corridor to take advantage of transit access.

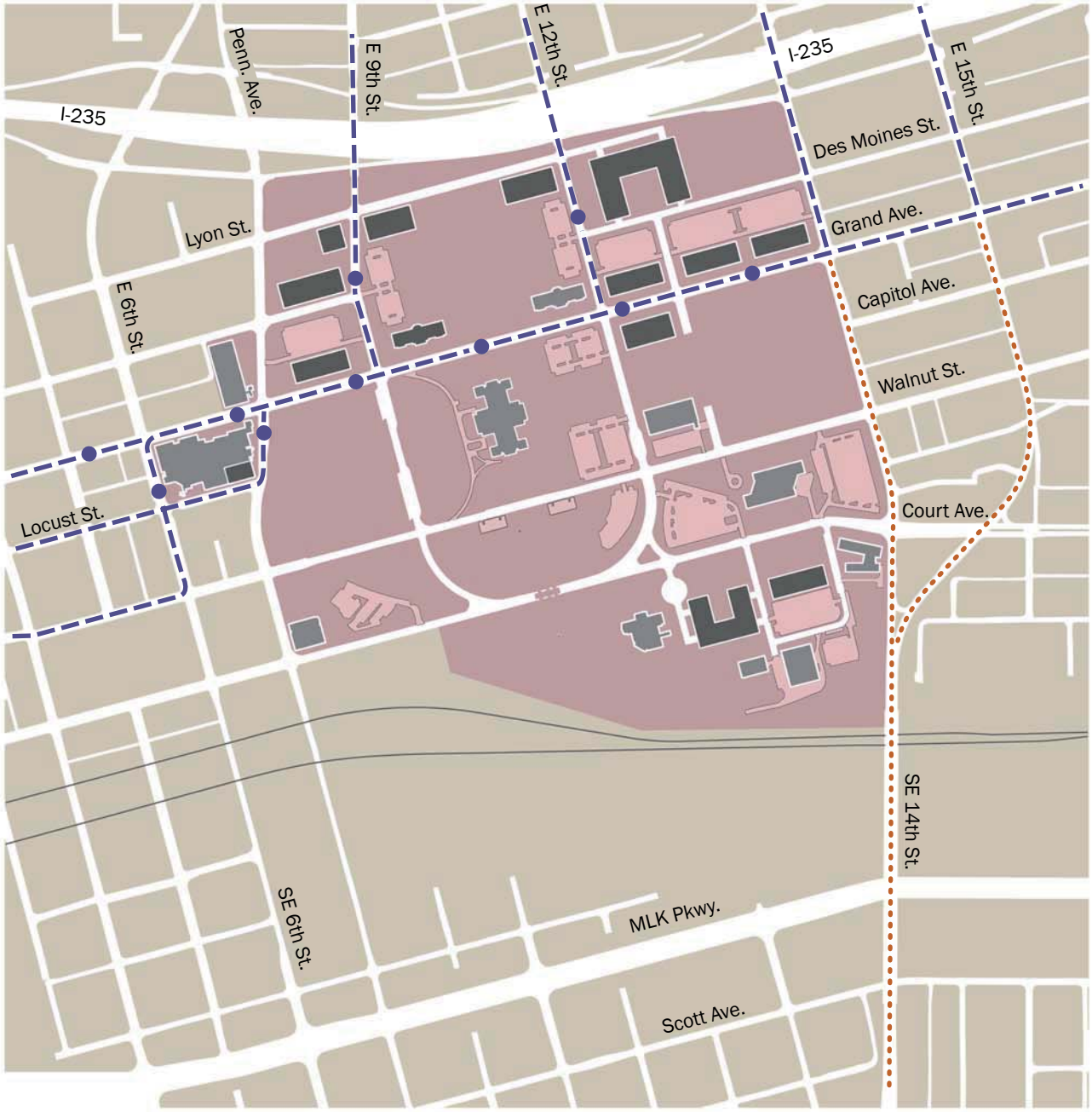
Objective:

Work with the City of Des Moines and the Metropolitan Transit Authority to expand transit service and make it an integral feature of the Capitol Complex.

Guidelines:

- Determine and respond to changes in the daily transit needs of both state employees and visitors to the Capitol Complex
- Provide regular stops along well-traveled regional access streets such as Grand Avenue and East 14th Street to enhance access to the Capitol Complex
- Provide effective weather protection for riders, and post transit information at designated stops
- Integrate transit and shuttle operations in common transit facilities along transit routes
- Work with transit providers to create programs and incentives to promote the use of public transportation, including possible future commuter rail, by state employees
- Review the Transportation Management Plan to aggressively pursue alternative transportation such as transit, commuter rail, shuttles, and ride sharing. Implement a guaranteed-ride-home program and flexible pass options for pass-holders to allow choice in daily travel decisions
- Encourage development of office space in the Capitol Complex close to major transit corridors

Current public transit through the Capitol Complex is provided by the Des Moines Area Regional Transit Authority (DART), as seen by one of their busses above.



Bus Transit

Public transit is an important component of the Capitol Complex for convenient access by residents, visitors, and employees.

Key

- Bus Stop
- Future Bus Route
- Bus Route

0' 200' 400' 800'

Capitol Shuttle/Tram

There is an opportunity to revise the route of the Capitol Shuttle service to operate on a short, counterclockwise loop within the Capitol Complex. This reconfiguration is possible if the City and County are successful in implementing a streetcar service between the Capitol Complex and downtown via Walnut Street and Grand Avenue. The short Capitol Shuttle route would serve as a people-mover linking employees and visitors with parking and destinations within the Capitol Complex. The Capitol Shuttle could also be implemented by revising the existing D-Line service to provide a downtown/East Village loop and a Capitol loop.

Service with headways of ten minutes or less is necessary to capture maximum ridership. Within the Capitol area, the shuttle stops would be a one- to two-block walk from any state building. It is anticipated that the shuttle would stop every two blocks.

During the legislative session, the existing shuttle route connects the parking garage at Grand and Pennsylvania to the west steps of the Capitol, a notable convenience during winter months. With the recommended extension of pedestrian tunnels to connect the garage to the Capitol, the shuttle route can be altered to come closer to more state buildings, improving employee and visitor access while legislators and their staff have a weather protected route.

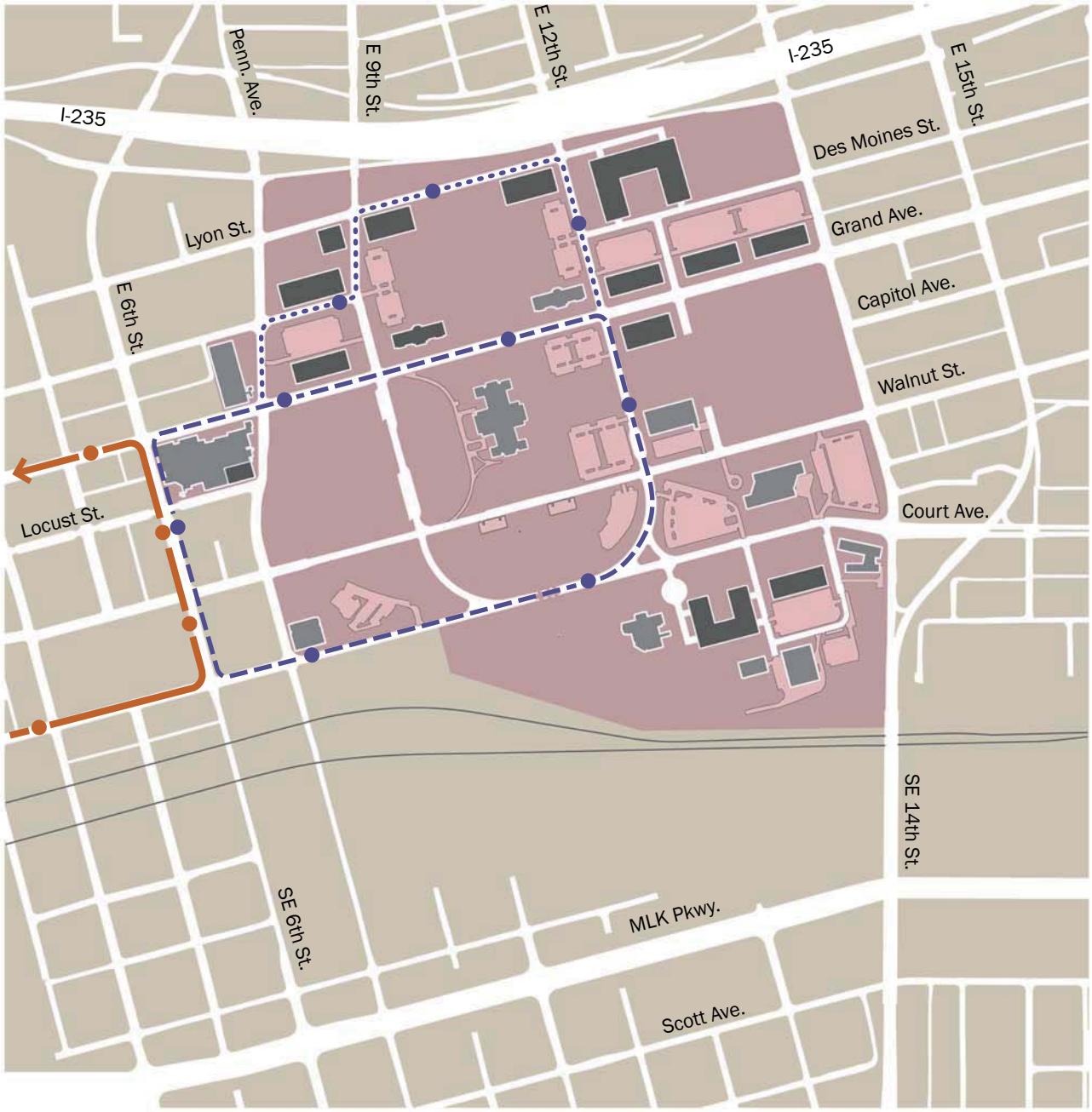
Objective:

Increase mobility during the workday by initiating shuttle service to the Capitol Complex.

Guidelines:

- Operate a simple, clearly defined route. Users should have no doubt as to where the shuttle goes or about their ability to return to their starting point
- Coordinate with DART service to encourage transit ridership to/from the Capitol grounds
- Route the shuttle on Court Avenue eastbound to East 12th Street, north to East Grand Avenue, then west on East Grand Avenue to East 6th Street, returning to Court Avenue (As garages are constructed, consider moving the loop north to pick up pedestrians from the parking garages)
- Serve the route at approximately ten minute intervals. Assume an operating scenario of vehicles operating approximately 11 hours each weekday, 250 days of service
- Operate the shuttle as a free service
- Ensure the vehicle has the ability and durability to start and stop frequently in all weather conditions; this is vital to its success
- Coordinate stops to be at or within sight of major destinations
- Provide convenient passenger boarding and alighting. This means wide doors and low floors, which in turn will minimize dwell time at individual stops. This also better serves people with disabilities
- Provide a high level of passenger comfort once inside. Easy-to reach-seating, ample standing room, and superior outward visibility are essential to meeting passengers' needs for short trips
- Use a relatively small vehicle (15-20 seats)
- Provide shelters at stops (may share public transit bus shelters at some locations)

The easily accessible, modern shuttle buses that are sometimes used for the current D-Line, right, provide a great example of what a Capitol shuttle could look like.



Capitol Shuttle

Shuttle service could increase the mobility of people between state buildings as well as between the Capitol Complex and Downtown Des Moines.

Key

- Streetcar Line
- Capitol Shuttle Line - Future Expansion
- Capitol Shuttle Line
- Proposed Structure
- Existing Structure

0' 200' 400' 800'

Pedestrian and Bicycle Circulation

Pedestrian Circulation

Pedestrian connections are and should continue to be an essential element of the Capitol Complex since they form the initial and final segment of any trip. To the extent that people both live and work in the area, pedestrian facilities take on an increased importance in serving all segments of a trip.

Within the Complex, the Capitol gardens should be a pedestrian area where vehicles are only occasional intruders. Streets bordering the Complex should provide convenient connections to this central pedestrian zone.

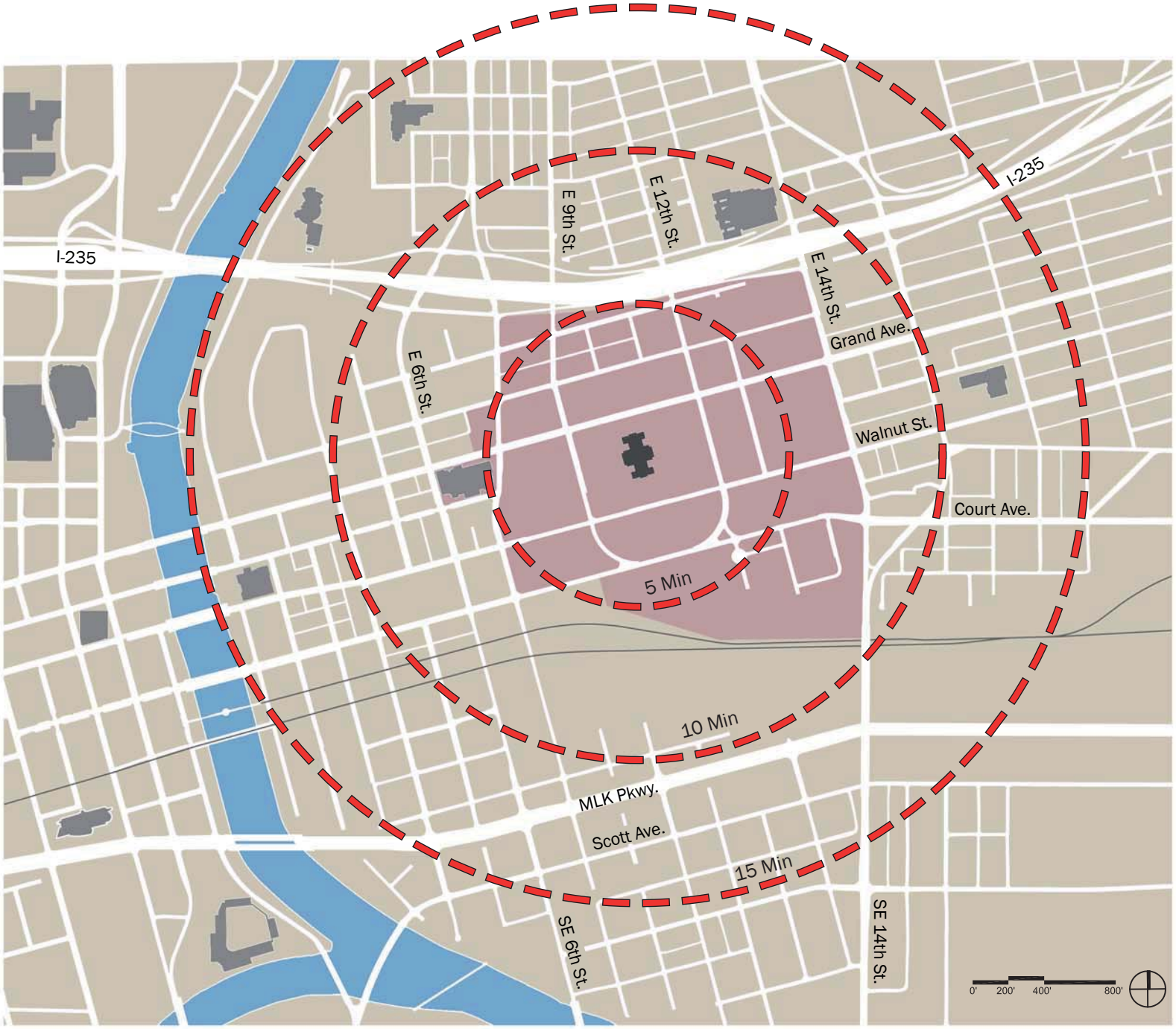
The proximity of the Capitol Complex to the neighborhoods of East Village, Capitol Park, and Capitol East offers many opportunities for state employees who live, seek services, or dine nearby. Nearby neighborhoods can provide services and restaurant choices that draw the patronage of both state employees and visitors to the Capitol Complex. From the Capitol Building, the walking time and distance to the center of adjacent neighborhoods averages 10 to 15 minutes or three-quarters of a mile. (See "Pedestrian Walking Times and Distances," following page.)

Objective:

Enhance the pedestrian environment throughout the Capitol Complex.

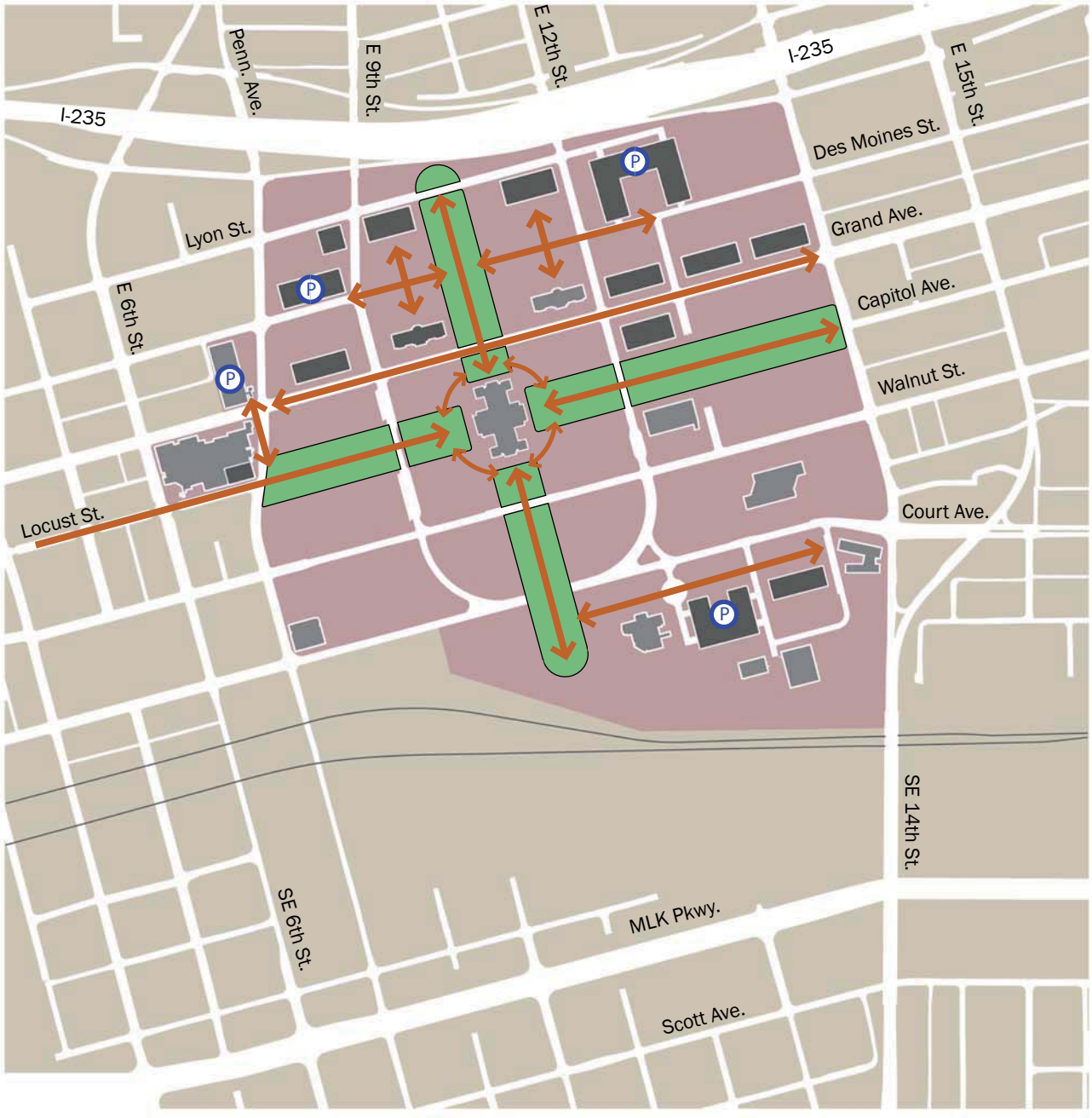
Guidelines:

- Require sidewalks on all streets and install them wherever absent
- Coordinate sidewalk design with lighting, signage, and traffic management
- Maintain clean, safe, and attractive walkways throughout the Capitol Complex
- Clarify circulation patterns through the Capitol Complex
- Direct visitors from parking areas to places of interest within the Capitol Complex
- Designate areas for tour bus drop-offs along Finkbine, East 12th Street, and Walnut Street
- Minimize the number of traffic lanes pedestrians must cross on Capitol area streets, especially Grand and Court avenues. All intersections within and immediately surrounding the Capitol Complex should give priority to pedestrian crossings by design. In select locations pedestrian activated signals are appropriate
- Review and revise design standards for walkways to assure generous width and good lighting, and ADA compliance appropriate to the adjacent land use (residential, commercial, recreational)
- Provide new walkways through blocks if necessary to provide more direct connections between homes, shopping, employment and recreational areas. Walkways needn't only follow street patterns



Pedestrian Walking Times

Walking Times:
2 min = 528 ft.
5 min = 1320 ft.
10 min = 2640 ft.
15 min = 3960 ft.



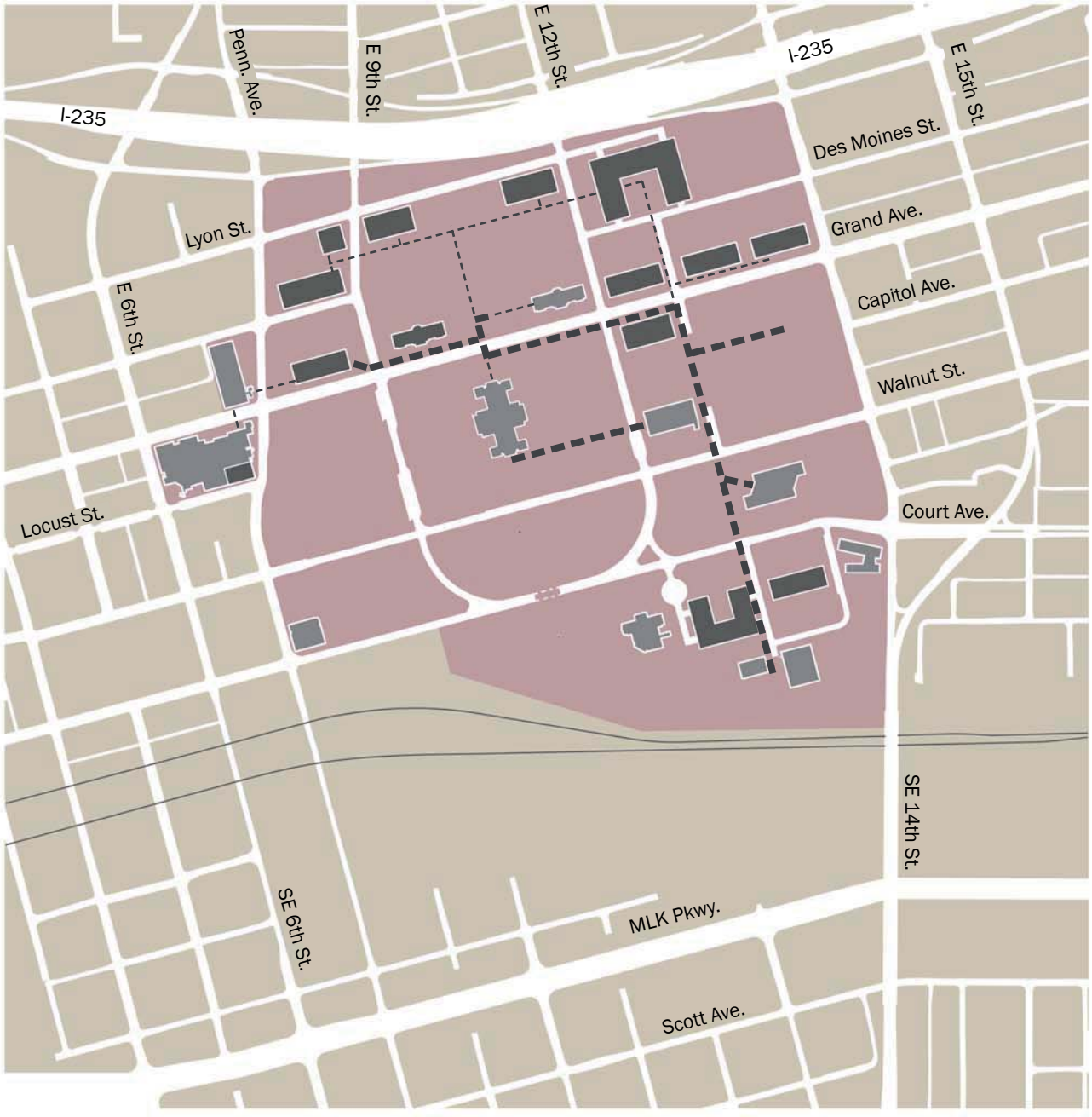
Primary Pedestrian Circulation

The Capitol malls should be reserved primarily for pedestrian circulation, with sidewalk connections to all state buildings and public areas

Key

Parking Garage
Primary Pedestrian Corridors
Capitol Mall (Pedestrian Only)

0' 200' 400' 800'



Pedestrian Tunnel System

New building development should link to existing employee pedestrian tunnel systems when possible

Key

- Existing Structure
- Proposed Structure
- Existing Tunnel System
- Tunnel Extension

0' 200' 400' 800'

Bicycle Routes

The Greater Des Moines region offers numerous trails that accommodate bicycle travel. One notable set of trails in close proximity to the Capitol Complex are the John Pat Dorian and Neal Smith trails which connect up and run 26 miles north from downtown to Saylorville Lake along the Des Moines River. The Capitol Complex is a mere six blocks from the southern terminus of this trail.

From the Capitol Complex, a 15-minute ride will take a cyclist through the adjacent neighborhoods of East Village, Capitol Park, and Capitol East, or easily link up to the East River Trail. Additional trails may be possible along rehabilitated railroad tracks. Bicycle travel provides important transportation and recreational opportunities for area employees and residents.

Objective:

Make bicycle facilities an integral feature of the Capitol Complex area circulation system.

Guidelines:

- Improve bicycle connections to the Capitol Complex to encourage bicycle commuting and use of East Walnut Street and the East River Trail as safe and attractive bicycle connections to the Capitol Complex. This will promote a recreational as well as civic experience of the Capitol

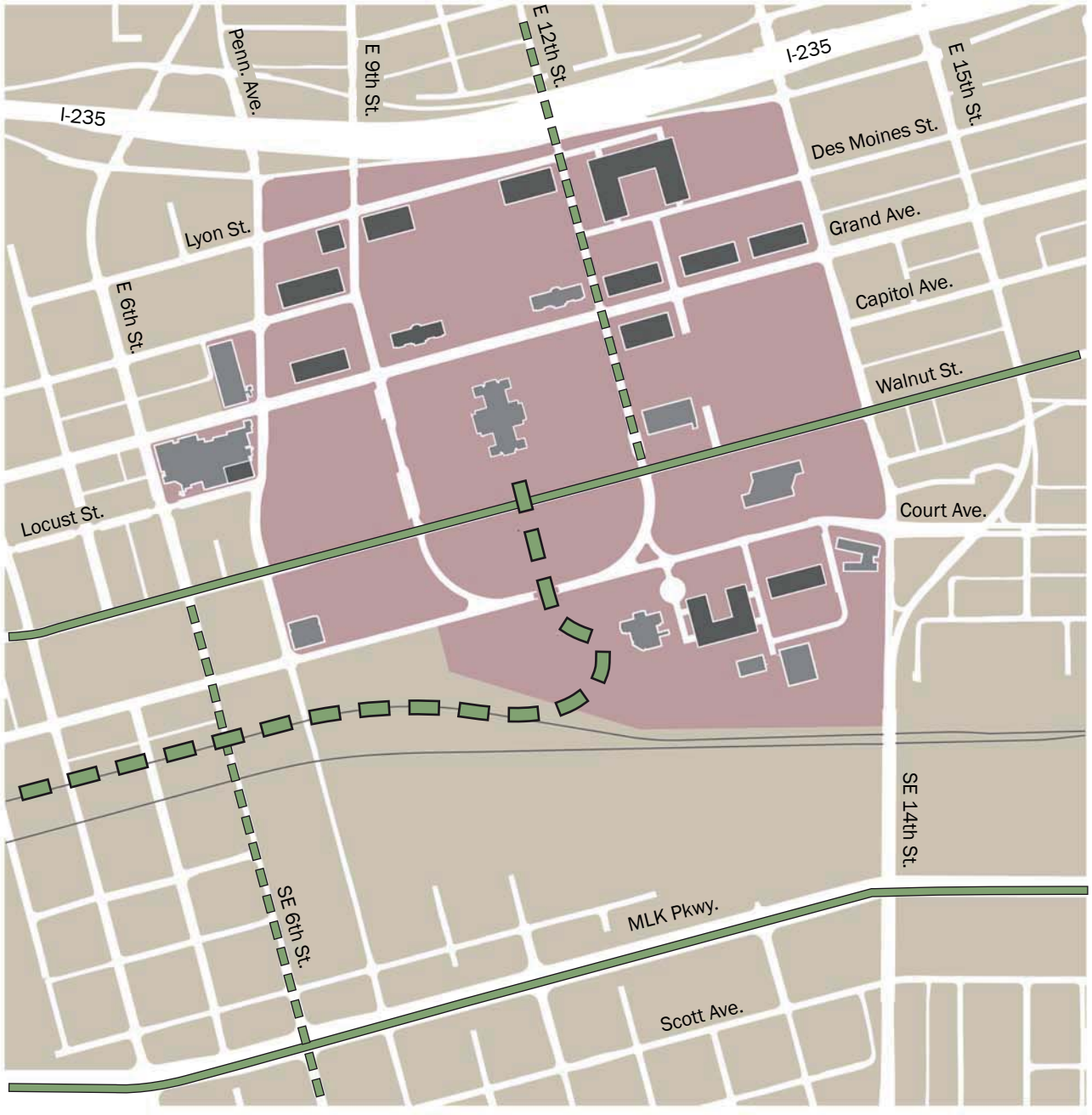
- Cooperate with the City of Des Moines to implement bike lanes on selected streets, use the bicycle plan of the City of Des Moines and Des Moines Area Metropolitan Planning Organization as a guideline

- Provide weather-protected bike racks, showers, and changing facilities at state buildings for employees

Providing greater connections from the Capitol Complex to the numerous urban and regional bike trails would make the Capitol Complex a much more accessible destination to those traveling through the city.

Capitol Bicycle Routes

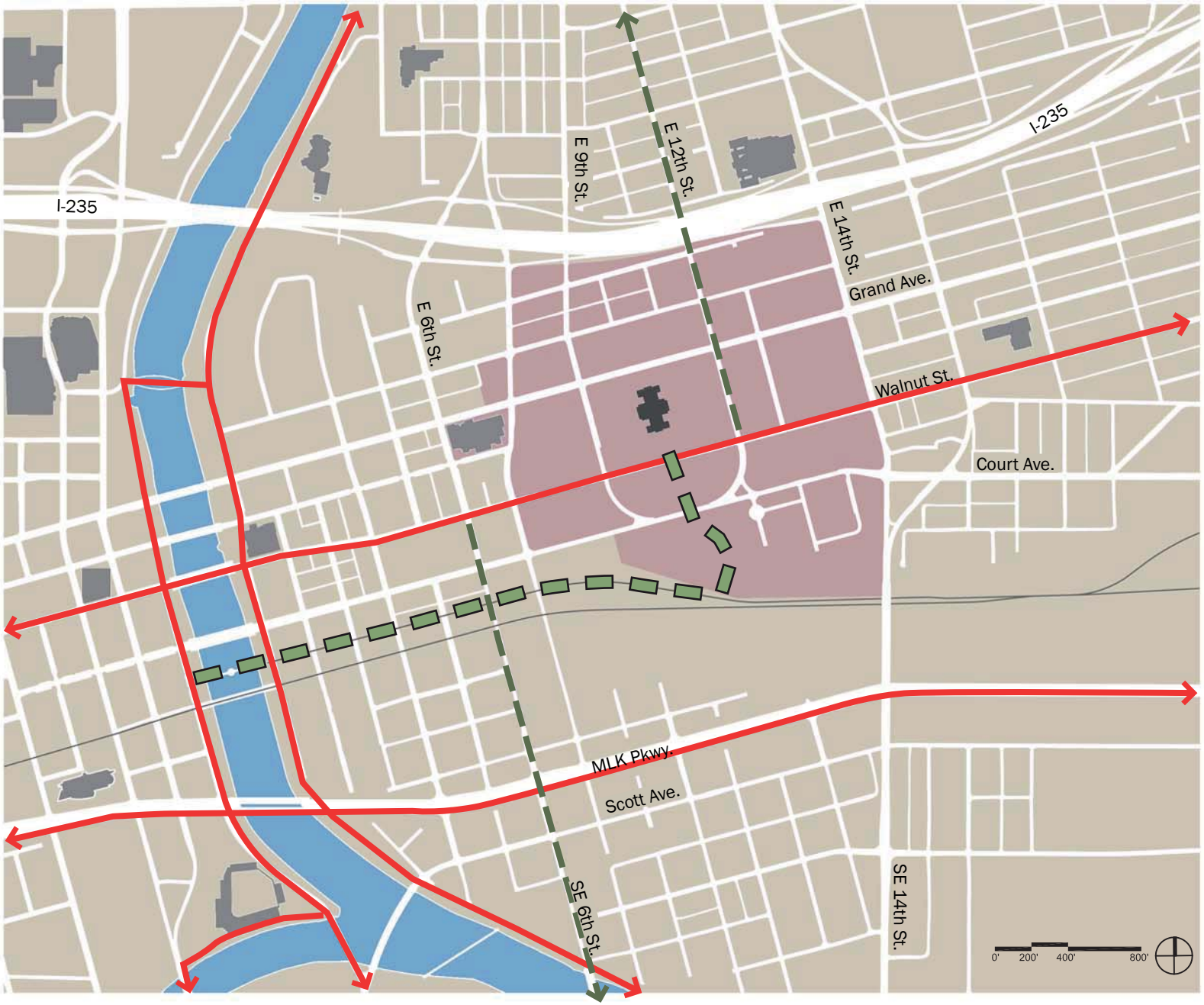
Bicycle travel provides significant transportation and recreation opportunities for area employees and residents.



Key

- RR Trail Connection
- Proposed Bicycle Route
- Existing Bicycle Route

0' 200' 400' 800'



Regional Bike Routes

Key

- Future Route
- RR Trail
- Existing Route

Sustainable Development Principles

The Department of Natural Resources (DNR) and Department of Administrative Services (DAS) share the vision of sustainability for the Capitol Complex by supporting efforts to achieve green building goals. Principles for sustainable development should guide planning for the Capitol Complex and also preserve the dignity, character, and quality of the Capitol and grounds. The Sustainable Development Principles section from the 2000 Capitol Complex Master Plan took the best sustainability principles of the day and organized them along the same lines as the newly introduced LEED green building standard. Many of these forward-thinking guidelines have since become standard practice for well-planned projects. The sustainable development principles in this plan break new ground by blending the following elements together: successful and relevant parts of the 2000 Master Plan Sustainable Development Principles section, elements of LEED, America's most widely recognized green building standard, and new cutting edge sustainable strategies for ensuring responsible power and water management and strong environmental leadership on the Complex.

Objective:

The Capitol Complex Master Plan should guide Des Moines and the State of Iowa into 21st century sustainable practices. The Capitol Complex should become a living laboratory, placing Iowa's most advanced sustainability features where they are highly visible as a state model. These features will use proven renewable energy sources wherever possible, and also create demonstration project that have the potential to take root on a larger scale.

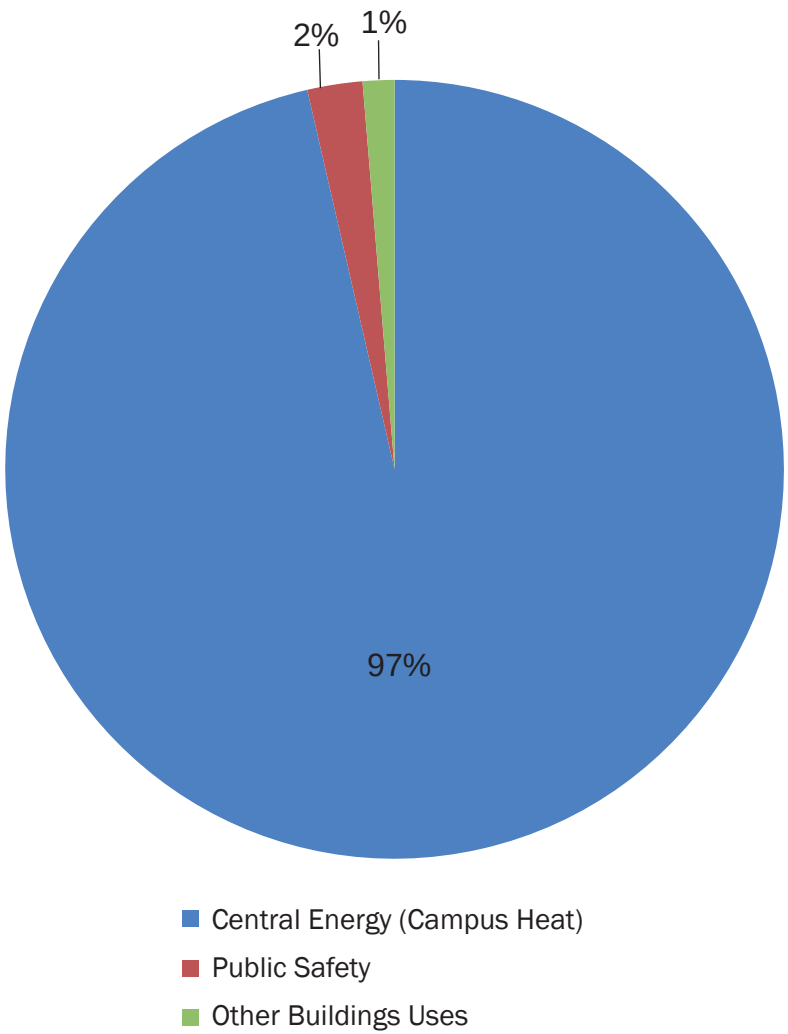
Carbon Footprint

In order to effectively cut carbon emissions at the Capitol Complex, an accurate carbon footprint must be established. DAS has completed a carbon footprint analysis of the Capitol Complex for the year 2008 as part of their cutting-edge practices. This exercise shows the major sources of carbon emissions at the Complex and gives insight into future improvements. According to the 2008 carbon footprint, 79% of all CO_2 output from the Capitol Complex comes from building energy use, so reducing carbon dioxide output depends on greater building energy efficiency. The charts on the following pages give a breakdown of the overall footprint and its major components.

Guidelines:

- Update the Capitol Complex Carbon Footprint on an annual basis
- Account for all possible CO_2 sources
- Use annual results to refine and focus sustainability goals for the Capitol Complex

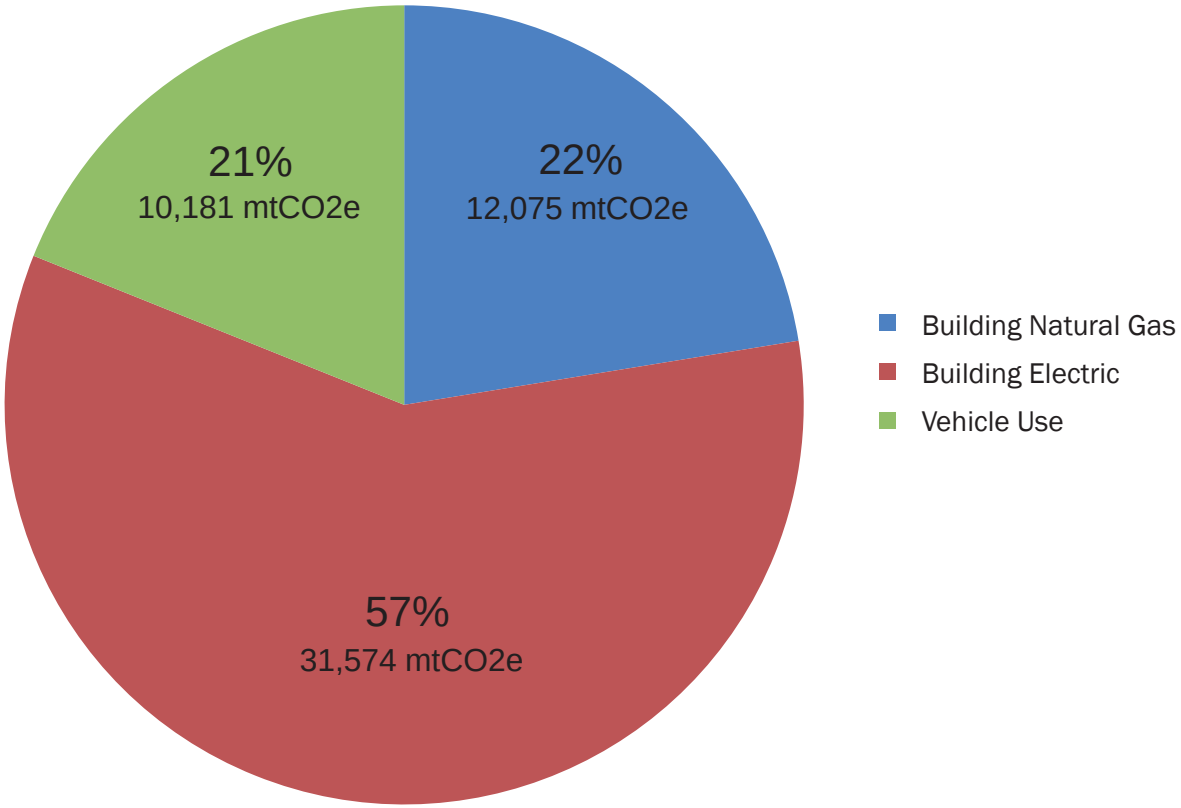
Natural Gas Usage - 12,075 $mtCO_2e$



2009 Existing	Summary of Existing Capitol Complex Transportation Carbon Footprint				
		Number on Complex	Vehicle Miles of Travel		
			Weekday	Weekend	Total
	Staff on Capitol Complex	4,411	15,374,745	221,311	15,596,057
	Legislators in Session	250	116,550	1,850	118,400
	Legislators to/from District	250	1,500,000	-	1,500,000
	Legislative Staff	375	378,162	8,763	386,925
	Visitors, Daily	300	1,993,902	63,274	1,727,176
	Fleet Vehicles	219	-	-	4,300,364
	Total		19,033,360	295,198	23,628,921
				Mean Fuel Consumption (MPG)	20.42
				Fuel Consumed (Gallons)	1,157,149
				CO_2 Emissions (lbs.)	22,448,632
				Metric Ton Equivalent CO_2 ($mtCO_2e$)	10,181

Source: Tilghman Group

Overall Carbon Footprint Breakdown
Iowa State Capitol Complex
Total Carbon Footprint = **53,829** Metric Ton Equivalent CO_2 ($mtCO_2e$)



Building Standards and LEED

Leadership in Energy and Environmental Design (LEED) is an internationally recognized certification system that measures how well a building or community performs across all the metrics that matter most: energy savings, water efficiency, CO_2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. Over the past decade, LEED has become the most widely used green building standard outside of single family construction. Most U.S. municipalities use LEED as a minimum sustainable building standard on all new construction and major renovation projects to ensure optimal performance in the following categories: Sustainable Sites, Energy Efficiency, Water Efficiency, Materials and Resources, Indoor Environmental Quality, and Innovation. For more information visit the U.S. Green Building Council's website: www.usgbc.org.

Guidelines:

- Seek high-level (Gold or better) LEED Certification on all new construction and major renovation projects on the Capitol Complex
- Mandate building all new construction and major renovation projects to LEED Standards if certification is not possible
- Consider LEED for Existing Building certification for all existing buildings on the Capitol Complex
- Consider LEED for Commercial Interiors for all interior renovation and Tenant Improvement projects
- Use the various LEED rating systems as a strategic guide for all building and operations-related projects on the Capitol Complex
- When practical, rehabilitate buildings and reuse existing structural shells

Building Energy

Buildings consume more than 50% of all energy produced in the United States. Reduced energy consumption benefits the Capitol Complex from both environmental and economic standpoints. The Capitol Complex gets power from MidAmerican Energy, which currently generates 51% of its power through burning coal. The Building Energy section of this document strives to support the goals of Governor Culver's sustainability-focused Executive Order No. 6.
http://publications.iowa.gov/6275/1/06-080221[1].pdf

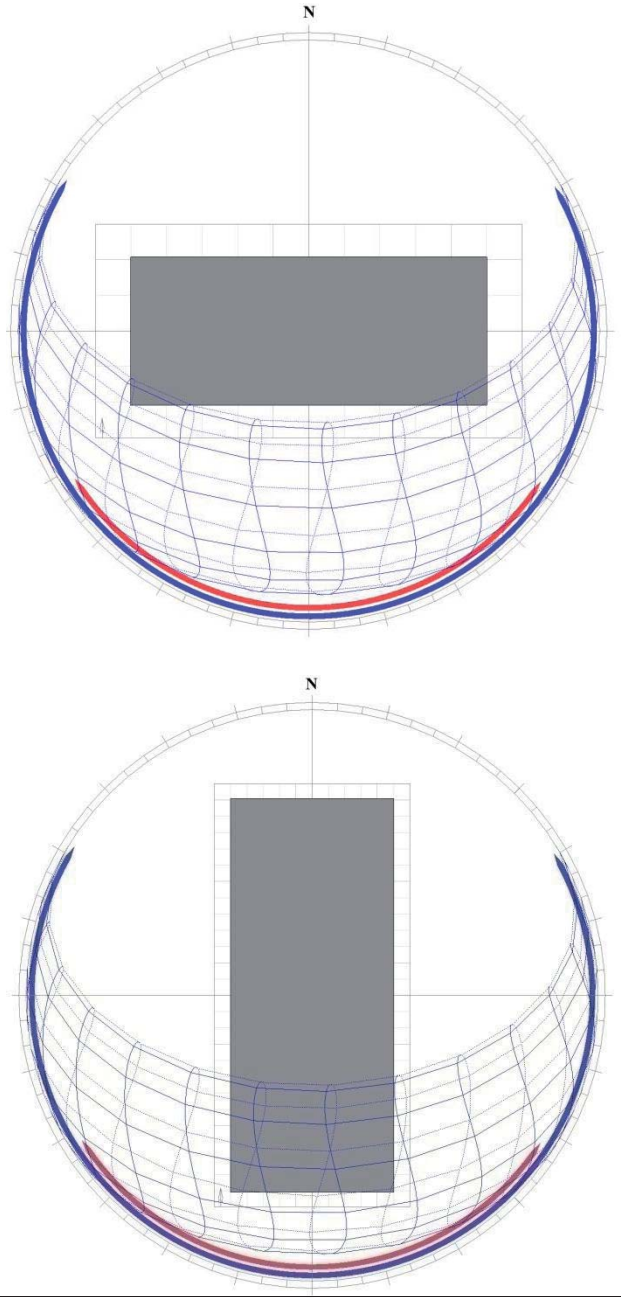
Guidelines:

- Encourage energy-efficient orientation. A building with its long sides facing north-south (opposite page top) will use approximately 6-8% less energy in Des Moines than a building with its long sides facing east-west (opposite page bottom), due to less heat gain in the summer and more in the winter, as shown on the sun path diagrams. These savings continue for the life of the building, and bring proportional savings in mechanical system initial costs because systems are designed for lower peak loads. This measure can translate to $13,000-$17,500 in annual energy cost savings for a 145,000 square foot office building, based on national average office building energy use
- Certify new and existing buildings through Energy Star
- Conduct comprehensive life cycle cost analyses of current energy usage and future needs for each building. Investigate possible economies through resource sharing with other state buildings
- Commission/re-commission all buildings
- Exceed state energy codes where possible
- Consider natural ventilation, heating and cooling during portions of the year
- Consider waste heat recovery systems

- Consider renewable energy sources
- Design new buildings to take full advantage of natural daylight, thereby reducing energy consumption and costs.
- Add detailed metering equipment to monitor building performance and take corrective steps when performance is lagging

Cutting Edge Sustainability

Make the Capitol Complex a guiding light for the City of Des Moines and the State of Iowa by considering the following strategies for areas of the Complex, either as demonstration projects or as large-scale solutions as appropriate. The Iowa Utilities Board & Office of Consumer Advocate Building is scheduled for completion on the Capitol Complex in 2010 as a LEED Platinum certified building. This building utilizes many innovative sustainable design features including: geothermal, solar and wind energy; natural ventilation; water conserving fixtures; stormwater recovery; light shelves; cool roof; high use of recycled materials; shading devices, low workstation panel heights to enhance views and daylighting; high performance building envelope; and an information kiosk and monitoring to record energy savings. This building serves as a model for future new construction. The following guidelines are meant to be considered on a case-by-case basis to determine the appropriateness of their application to specific new construction projects.



The top building orientation uses 6-8% less energy in Des Moines than the bottom due to less heat gain in the summer and more in the winter.

Guidelines:

- Consider alternative energy sources, including: geothermal heating and cooling, solar hot water collectors, small-scale wind generation and photovoltaics

- Consider a "Road Energy System" that functions as a giant solar hot water heater under asphalt, capturing solar energy from the streets for use in buildings, melting snow on roads in winter, greatly increasing pavement life, and eliminating the need for chemical de-icer
http://www.ooms.nl/english/pages/divisie_gww/road_energy_systems.html

- Consider installation of a Living Machine or Membrane Bioreactor to treat wastewater on campus for irrigation and other non-potable purposes

Water Efficiency

- Strive to reduce building water use by 50% from 1992 EPA targets

- Use water-conserving fixtures

- Consider introducing a water recovery system (gray water)

- Consider water-conserving cooling towers

- Seek to use no potable water for irrigation by watering with reclaimed water or eliminating irrigation

Stormwater Management and Site Planning

Des Moines currently gets about three-quarters of its water from the Raccoon and Des Moines Rivers. The remaining one-quarter is groundwater pumped from beneath Water Works Park. The proximity of Des Moines' water source to the city makes water pollution control critically important. This section deals with the closely intertwined issues of Site Planning and Stormwater Management.

- Use potable water for potable needs; use reclaimed water whenever possible for other uses

- Eliminate impervious surfaces wherever possible

- Filter stormwater runoff from buildings, parking lots, and other impervious surfaces using stormwater BMPs like rain gardens, bioswales (as shown in the diagram to the right), and other natural means. Where full infiltration is not possible, filter storm water through a bioswale or rain garden first before draining to a dedicated storm water line

- Review landscape improvements for consistency with the Capitol Complex Master Plan and sustainability goals

- Avoid development of previously undeveloped land, using surface parking lots and infill sites when possible

- Explore means of reducing or eliminating use of chemical de-icer

- Landscape to control erosion, reduce heat island effect (shade trees, light colored materials) and minimize habitat disturbance

- Identify, replace, and repair habitat links

- Utilize alternative transportation facilities (pedestrian, bicycle, carpools, shuttles, commuter rail, public transit). See transportation section

- Encourage mixed land use (trip reduction, walk to work, errands, day care)

- Efficiently site buildings per guidelines in the Building Energy Section
- Support Green Des Moines and the local community in reclaiming their own sustainable goals www.greendm.org

Performance Measurement

Review and update benchmarks to measure progress toward meeting the State's green building goals

- Set aggressive and achievable goals based on the Capitol Complex's carbon footprint, State Sustainability goals, and local sustainability goals
- Review performance relative to these benchmarks on an annual basis to assess effectiveness of implementation
- Review goals periodically to keep them current with State goals and environmental standards

Stormwater runoff from parking lots and other impervious surfaces should be filtered through bioswales, left, or other infiltration methods first before draining to a storm water line.

Chapter 4:
Making the Vision a Reality

Responsibility for the Plan

The mission of the Department of Administrative Services includes maintaining and updating the Capitol Complex Master Plan. The Capitol Planning Commission is charged with the duty of supervising and advising on the type of architecture, location, and construction of buildings to be erected on the Capitol grounds. They are also responsible for advising on the location of monuments, statues, and memorials.

A principal function of the Capitol Complex Master Plan is to articulate a vision for the whole. Safeguarding and implementing this vision requires that the Capitol Planning Commission, through the Department of Administrative Services, its staff and advisors, assume proactive roles with decision-makers, especially the Governor and Legislature. As the Capitol Planning Commission provides design review, it must take "ownership" of the Capitol Complex, promote the vision of the Master Plan, and enter into partnerships with the community for enhancement of the Capitol grounds and the adjoining neighborhoods.

Successful implementation of the Master Plan depends on developing advocacy from the Governor and the Legislature. Many projects are proposed under the Master Plan. With the need to coordinate these projects, it is recommended that the Legislative and Executive branches of government endorse and adopt this plan to provide the framework for setting the course of the future of the Capitol Complex.

Primary responsibility for advancing and implementing the Master Plan should rest with a designated office, such as the Governor. This office would oversee the efforts of the Department of Administrative Services and the Capitol Planning Commission as they jointly carry out the directives issued from that office relative to the Master Plan.

Advancing the Plan

It is recommended that adequate staff of the Department of Administrative Services be assigned the responsibility of monitoring and coordinating the progress and implementation recommendations of the Master Plan. Annual progress assessments should be made and reported to the Capitol Planning Commission and in turn to the Governor. The Master Plan should be a standing agenda item at each Capitol Planning Commission meeting.

An annual conference should be established with representatives of the Department of Administrative Services, the Capitol Planning Commission, the Vertical Infrastructure Committee, the Governor's office, and the Legislature to review and discuss continued development and implementation initiatives. To maintain continuity of the Master Plan in relation to implementation initiatives, it is suggested that the Iowa Capitol Complex Master Plan consultant team be retained in an advisory capacity to guide the ongoing efforts.

Involving the Public

A successful feature of the Master Plan process has been public involvement through a variety of opportunities for participation such as work groups and public forums. The public has shown a desire to be involved in planning, siting, design and environmental issues, and this interest should be emphasized and encouraged. As the Master Plan moves ahead, continued public involvement will help to develop advocacy and "ownership" throughout the community.

Regular communication through newsletters, other media, and public forums will serve to inform interested people and provide opportunities to hear and address concerns. As parts of the Master Plan are carried out, it might be appropriate to form work groups made up of some of the same people who worked on creating this plan to address specific elements of the plan. Public meetings in conjunction with the work groups would provide an opportunity to inform and gather additional input and advocacy while keeping the plan fresh and active. A clear process will be necessary to record and act on public comment.

Surveys (like the one used in the development of this Master Plan) are another means of obtaining public input to the Master Plan implementation process and should be used to determine public preferences and important trends. Standardization of segments of the surveys will make it possible to compare important data from year to year.

Public – Private Partnerships

Realizing the progressive vision of the Master Plan will require effective partnering with the City of Des Moines, private businesses, and neighborhood groups. The State has realized the value of investing in these partnerships, evidenced by this planning effort and the earlier efforts of the 2000 Iowa State Capitol Complex Master Plan and Capitol Gateway East Urban Design Plan. In this same spirit of cooperation, continued partnership through implementation of the Master Plan will benefit the entire community through coordinated planning and concurrent revitalization of downtown Des Moines.

City of Des Moines

The Master Plan defines improvements to the Capitol grounds and adjacent neighboring areas that are in the domain and jurisdiction of the City of Des Moines. Implementing modifications and improvements to Grand Avenue, Court Avenue, and other adjacent city streets will require working closely with the City. Representatives of the City have been actively involved in the development of the Master Plan; continued involvement on their part is essential.

Mixed-use development in the East Village, the Market District of East Village and in the Capitol East neighborhood east of East 14th Street will provide opportunities for employees within the Capitol Complex to walk or take the Capitol Shuttle to nearby retail, restaurants, services and housing opportunities.

Co-location of vehicle maintenance and dispatch and warehousing functions between City and State government should be pursued. This strategy will be cost-effective and ensure an appropriate off-campus location for these facilities.

Des Moines Area Regional Transit Authority (DART)

The Capitol Complex provides a workforce base which, with expanded transit and new shuttle service, could contribute to enlivening the retail business of the east and west commercial business district, especially during the noon hour, and ease the parking demand of the Complex and the entire east side. Partnering with the DART to share the cost of service would financially benefit both the State and the City.

Private Sector

Some functions of state government, such as Commerce, work well in the central business district of the east side of Des Moines. This type of joint project could be a catalyst for the revitalization of the Gateway East business district. Continued participation and involvement of the east side Des Moines business leaders is encouraged.

Neighborhoods

The East Village and Capitol East neighborhood and business groups are key partners in advancing the Master Plan and in developing stronger connections between the Capitol and the community. The liveliness of the Capitol Complex could be enhanced by actively working with the neighbors and community leaders to program events and civic activities for the grounds. Neighbors remember the days when the garden club would assist with the south gardens over the Court Avenue viaduct. The Capitol Planning Commission and Department of Administrative Services should actively participate in a partnership with the adjacent neighborhoods for the revitalization and beautification of the collective east side neighborhood.

Proposed Phasing

The proposed phasing is included in Appendix B. It is understood that funds available and specific needs may adjust the phasing proposed. The phasing provided was derived from the entire Master Plan process and is believed to be the most appropriate path to proceed for this publication date. It is also understood that some 'temporary' projects may need to take place over the years. These projects can take place, but they need to keep the overall vision in mind, in particular, the North, East, South, and West malls.

Acknowledgements

Capitol Planning Commission

Brice C. Oakley, CPC Chair
Cathy Brown, Iowa State University, CPC Vice-Chair
Carl Voss, Creative Resource Group
Scott Brown, Attorney at Law
Ray Walton, DAS Director
Molly Clause, State of Iowa
Elizabeth Isaacson, Past Chief Clerk of the House
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Nadine Hogate, Capitol East Neighborhood Representative
Abra Pulley, East Village Representative
Erin Olson-Douglas, City of Des Moines Representative
Tim Ryburn – DAS/CCM
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In appreciation for their collective efforts and professional contributions to the Master Plan, the Capitol Planning Commission wants to publicly thank the following:

Confluence

Confluence is a professional consulting firm comprised of landscape architects, planners and urban designers, with offices located in Des Moines, Iowa; Kansas City, Missouri; Sioux Falls, South Dakota; and Iowa City, Iowa. They combine design excellence with extensive practical experience in their work with related disciplines as a creative but practical means of merging their client's needs with the environment. The scope of the firm's work includes a wide range of public, educational, institutional, and private sector projects. Their working style is oriented around collaboration and interaction with their clients, consultants and the communities in which they work. Confluence has eleven licensed landscape architects and carries licenses in Iowa, South Dakota, Nebraska, Missouri, Kansas, Wyoming, and Minnesota.

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Zimmer Gunsul Frasca Architects LLP

Zimmer Gunsul Frasca Architects LLP is an architectural, planning, and interior design firm with offices in New York, Portland, Los Angeles, Seattle, and Washington DC. Firmwide staff currently totals 520. These individuals offer a comprehensive range of services in architectural and interior design, master planning, programming, land use planning, urban design, project management, and specifications. For nearly six decades, ZGF has master planned, designed, and built a diverse portfolio of projects across the country, in settings ranging from capitol campuses, college and corporate campuses, to urban centers and rural communities. They have been instrumental in the development of design guidelines and land use policies, programs, and master plans that have provided the framework for hundreds of millions of dollars in public and private investment. Their approach is to look at the unique qualities of each place and to create buildings that respect the existing environment and strengthen or even heal the fabric of which they become a part. Having learned to transfer this capability to other locales and circumstances throughout the world, the firm has adopted the process as a very basic principle in its work, no matter where a project is located.

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Jeffrey Morgan Architecture Studio provides a variety of services in architecture, interior design, programming, planning, and urban design. Their project focus includes residential, corporate, retail and commercial, urban design, downtown revitalization, historic renovation/rehabilitation, mixed-use, urban infill development and master planning. Jeffrey Morgan Architecture Studio works with public and private clients including local governments, non-profits, corporations, individuals, community groups, and real estate developers. They approach each project with the belief that the client and the project context are integral and essential influences on the development of the design solution and aesthetic expression, which unfolds through the design process thereby becoming a representation of the essence of the client and community.

Staff:
Jeffrey Morgan, AIA, NCARB

The Tilghman Group

The Tilghman Group creates transportation solutions that meet the client's needs, fit the environment in which they are built, work reliably and are affordable. As an independent practice, the Tilghman Group provides transportation planning & related development services that include master planning, feasibility analysis, parking development strategy and transportation management plans. The Tilghman Group works nationally with a wide range of land use and development projects for public, private and not-for-profit clients.

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Snyder & Associates, Inc.

Snyder & Associates, Inc. is an Iowa-founded, Iowa-grown, multidisciplinary engineering and planning firm. Established in 1977, Snyder & Associates, Inc. has grown through the successful completion of public and private improvement projects for numerous local governments, the State of Iowa, and private clients. Today they are the largest civil engineering and planning firm in central Iowa, providing full services and solving their client's problems, beyond engineering.

Over the years, Snyder & Associates, Inc. has built strong relationships through the successful completion of projects, plus the indispensable value brought by our "thinking beyond engineering." Today, 93% of their business is repeat clients. They measure their success by the success of their projects, and the success of their clients.

Staff:
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FREE
Downtown Shuttle
STOP
Visitors
Designated
Additional Parking

Appendix A: Transportation Plan

Current Demands and Facilities

Streets & Traffic Volumes

Streets serving the Capitol area remain much as they were in 2000 since the last Master Plan. However, certain important changes have occurred in the meantime:

- Locust Street was converted from one-way to two-way operation, as recommended in the 2000 plan.
- Court Avenue was re-striped for three lanes from its previous four-lane section, a variant of the recommendation for a two-lane with median section in the 2000 plan.
- I-235 was rebuilt to enhance traffic flow and to improve previously awkward ramps and merges.

As a result of those changes, especially the I-235 improvements, traffic volumes have changed in the Capitol area. Figure 1 shows average daily traffic volumes as counted by the Iowa Department of Transportation (IDOT) in 2008, and Figure 2 shows volumes for the afternoon peak hour (4:00 – 5:00 p.m.). Notably, a shift in traffic from local streets to I-235 occurred resulting in lower volumes on many streets in 2008 than in 2000. For instance, Grand Avenue west of East 14th St. carried 9,420 vehicles per day in 2008, down from the 10,700 it carried in 2000, a 12% decrease. I-235 now carries 8% more traffic in the Capitol area than it did in 2000.

Transit

Transit service to the Capitol area has increased since 2000. Nine routes now pass by the Capitol versus four routes previously. New peak-period service has been implemented to serve commuting employees better. Additionally, the D-Line shuttle between the Capitol and downtown Des Moines began service with ten minute frequency, consistent with the recommendation of the 2000 Master Plan.

In 2008, the state began participating in DART's employer-purchased pass, allowing state employees to ride buses simply by showing their employee identification cards. As a result of these actions, and the effect of higher gas prices, more employees now ride the bus to work; it is estimated that approximately 5% of employees ride the bus, nearly double the number riding in 2000.

Ridership on the D-Line shuttle averages approximately 750 boardings per day, of which the Capitol area generates 17% of the total. The shuttle (as of 2009) is funded jointly by the state, the City of Des Moines and the Downtown Community Alliance. The state's share for 2008 was one-third of the total operating cost ($120,000 of $360,000). Annual ridership is approximately 187,500 passengers, so the overall cost per rider is $1.92. Apportioning the state's contribution to Capitol area boardings alone yields a cost per rider of $3.76. It is possible that the state benefits from rides beginning elsewhere and ending near the Capitol area, so that the state's cost per rider would be less than that based on boardings alone. Near the Capitol, the shuttle's most heavily used stops are at East 12th/Walnut, East 6th/Grand, and at East 12th/Grand.

Walking and Biking

The share of employees walking and cycling to work is estimated to be about 1.5%. Sidewalks are typically available on all streets leading to and from the Capitol area. Marked crossings are provided at signalized intersections and at selected mid-block locations on Grand, Walnut and Court. Lights and signs have been added to highlight mid-block crossing, particularly on Court Avenue.

Due to changes in building security, many doors previously opening to walkways are now closed. Pedestrians often need to navigate to open doors that may not be available from the street sidewalk. However, walkways rarely surround buildings, so pedestrians are occasionally left with uncertain paths or directions to reach lobby entrances. The Capitol Building is the most notable example of this limitation on pedestrian access.

With the exception of several downtown blocks of East Walnut Street, cyclists share the road with general traffic. The City of Des Moines is currently preparing a bicycle master plan that will identify future bike routes and facilities.

Figure 1: Year 2008 Average Daily Traffic Volumes Source: IDOT

Figure 2: Year 2008 PM Peak Hour (4-5 PM) Daily Traffic Volumes, Source: IDOT

Employee Commuting

Estimates of employee commuting habits have been made based on observed parking use, transit usage and estimates of total employment. The current patterns are shown in Table 1.

Table 1

Employee Commuting		
Mode	2009 Estimated % of Employees	1996 Estimated % of Employees
Drive Alone	82%	85.1%
Rideshare	11%	9.5%
Transit	5%	2.4%
Walk & Bike	1.5%	3%
Other	0.5%	--
Total	100%	100%

Ridesharing and transit use have increased over the last 13 years, due largely to higher fuel costs in recent years. As a result, fewer employees drive alone to work.

This estimate, while believed to be reasonably accurate, should be verified through an employee travel survey to establish a reliable baseline for future planning. Such a survey could also provide useful information about geographic commuting patterns and offer insights into locations where increases in ridesharing, transit use, walking and biking could occur.

Parking

Parking on the Capitol Complex primarily consists of surface lots and one major parking ramp. The ramp, already planned at the time of the 2000 Master Plan, was subsequently constructed and opened to the public in February 2003. Table 2 lists the number of parking spaces for both on-street and off-street locations in the Capitol Complex. The off-street supply reported here reflects information provided in a state-sponsored parking study from 2006 as well as field observations of street parking. Supply figures have not been updated or validated since 2006.

Table 2

Existing Parking Supply			
	Stalls*	Handicap Stalls	Total Stalls
Off-Street			
Lots	3,344	227	3,571
Garage	862	21	883
Total Off-Street	4,206	248	4,454
On-Street	230		240
Mercy Capitol Hospital	186		186
Grand Total	4,622	248	4,880

* Based on 2006 data - current inventory not verified

Source: Snyder & Associates; Tilghman Group

Visitor Parking

Approximately 500 spaces are designated for visitor parking. This amounts to 11% of the Complex's off-street supply. Additionally, visitors and employees have equal access to another 990 spaces, split between two locations. Figure 3 shows locations of visitor parking. Visitors, of course, can also park on the street.

Figure 3: Current Visitor Parking Locations

Changes to Off-Street Supply

Since 2000, parking supply on the Capitol Complex has increased by approximately 1,100 spaces. This gain is due largely to the parking ramp at Grand/Pennsylvania, expansion of Lot 16, and new lots at the Public Safety Building and the Judicial Building. The recent acquisition of Mercy Capitol Hospital's parking increased parking supply by another 186 spaces.

Parking Utilization

Use of parking was briefly observed on a weekday during April 2009. Based on that sample, Table 3 summarizes parking utilization.

Table 3

Parking Utilization (April 2009)			
	Occupied Spaces	Supply (Spaces)	Utilization
Lots	3,108	3,571	87%
Garage	640	883	72%
Off-Street Total	3,748	4,454	84%
Mercy Capitol Hospital	160	186	86%
On-Street	218	240	91%
Capitol Area Total	4,126	4,880	85%

Source: Tilghman Group

Observed demand included legislative use as the Legislature was in session. It is estimated that legislators and their staff use approximately 400 parking spaces. In other words, legislative use accounted for nearly 10% of total demand, not including lobbyists and other visitors to legislative offices and chambers.

Lots are heavily utilized with use at practical capacity. Practical capacity is the point at which a driver perceives the lot or garage to be full and has difficulty finding the last remaining open spaces. Practical capacity typically occurs when utilization reaches 85% - 90% of capacity in a self-park facility.

The garage operates with ample reserve capacity (243 open spaces), even though it houses motor pool and various departmental vehicles in addition to employee and visitor vehicles. The garage is also open to the general public. Its comparatively low level of use results in part from its location away from most state buildings (the majority of employees work on the east side of the Capitol Complex, whereas the garage is located on the west side). The garage functions as a spillover location when the Legislature is in session. Anecdotally, it is said that some downtown employees use the garage as a park & ride location in order to benefit from free parking and a free shuttle ride downtown.

On-street parking is heavily utilized as it provides a convenient option for both employees and visitors. Vehicles may park on the street for free and generally without time restrictions.

The state has a total of 219 motor pool vehicles for use by state agencies. Typically, 75 of those vehicles are available for daily use, with the remaining 144 assigned on a monthly basis to state agencies. Some agency vehicles are located elsewhere, away from the Capitol Complex. Motor pool vehicles are parked on the 3rd floor of the garage. The motor pool has grown by about 50 vehicles over the last 5 years, due mainly to an increase in demand resulting from higher fuel prices as employees find it less expensive to use a state vehicle than a personal vehicle for work-related trips.

For reference, parking for the Capitol area is provided in these proportions:

Current Parking Ratios	
Vehicles Parked per Employee	0.94
Spaces per Employee	1.01
Vehicles Parked per 1,000 sq. ft.	2.62
Spaces per 1,000 sq. ft.	2.82

Parking and the Capitol's Image

Surface lots located in garden areas create a poor image for the Capitol. In particular, those lots located immediately east of the Capitol and north of the Lucas Building diminish the grandeur of the Capitol and foster the impression of a temporary solution to parking, much like that of a construction zone. Gravel lots along Court Avenue and throughout the North mall need to be paved and enhanced according to the Master Plan to exhibit the civic pride mentioned. It is one thing to have an access road leading to the steps of the Capitol, but quite another to have a vast surface lot paved right to the edge of the steps with vehicles pointed directly at the building. The example of the West Capitol Terrace reclamation shows well the benefit of locating parking in more functionally appropriate areas in order to create more broadly useable public spaces near the Capitol. Indeed, retention of surface parking in the heart of the Capitol's gardens means that the Capitol is not yet fully restored.

Parking Policies

Parking throughout the Complex is provided free of charge and with little restriction of use. A previous system of assigning employee parking to lots based on their work sites was dropped once sufficient parking was provided. While free to the user, the lots and garage incur significant costs to the State to build, operate and maintain. The garage alone requires $101,000 per year to operate, while lots require snow plowing and removal, cleaning, lighting, periodic resurfacing and restriping, as well as security patrols. No parking-related revenue exists to help pay those expenses. These costs represent a taxpayer subsidy to employees and visitors who drive to the Capitol.

The state recently began participating in DART's employer-purchased transit pass, allowing state employees free rides on DART buses simply by showing their ID badges. While a useful benefit to some employees (also subsidized by the taxpayer), the offer of free transit rides is undercut by the policy of providing free parking. Furthermore, free parking provides no inducement to share rides.

Vast amounts of parking at the base of the Capitol Building, above, and large unpaved lots, right, greatly diminish the image of the entire Complex.

Future Needs

Parking

Given anticipated employment growth on the Capitol Complex, Table 4 shows future parking needs, assuming the continuation of current parking policies.

Table 4

Projected Employment and Parking Demand				
	Forecast of Employees by Year*			
	2009	2015	2020	2025
Employees	4,400	5,475	5,710	5,950
	Vehicles Parking -- Current Transportation Policy			
Employees	3,424	4,265	4,448	4,637
Legislature	284	284	284	284
Motor Pool	217	271	282	294
Visitor	100	125	130	135
Total Vehicles	4,026**	4,945	5,145	5,351
Increase over Existing		919	1,119	1,135

* Preliminary projections

** Does not include vehicles currently parking for Mercy Capitol Hospital's activities

Source: ZGF, Tilghman Group

Under current transportation policies, parking demand would grow 33% by 2025. While a manageable amount to accommodate over the next 16 years, opportunities exist to reduce growth in parking, as discussed in the section on Recommendations.

Walking and Biking

An increase in commuting by bicycle and walking can be expected over the next decade. A younger work force more accustomed to cycling and walking to work, and one tending to live closer to work, will increase use of non-motorized modes of commuting. Accordingly, adequate facilities will be needed to meet such demands. Development of regional bike routes is already being examined by the City of Des Moines through a new bicycle master plan, presently underway. On the Capitol Complex, space for bike racks and provision of showers, changing areas and lockers will be needed.

Recommendations

Transportation Demand Management Plan

A principal recommendation of this Master Plan is to implement a Transportation Demand Management Plan for the Capitol Complex. The purpose of the TDM plan is to increase commuting options for employees and reduce the amount of parking to be constructed. Achieving that purpose will result in lower facility construction costs, lower maintenance costs, increased equity in employee commuting benefits, and reductions in the Capitol Complex's carbon footprint.

The TDM plan would offer incentives to reduce driving alone, including:

- Charging for parking. The price of parking is one of the most influential factors in employees deciding how to travel to work. Generally, the price of parking should exceed the price of a transit pass
- Continued provision of discounted bus passes
- Assistance in organizing carpools and vanpools
- A guaranteed ride home in case of emergency
- A flexible transportation pass that allows for a combination of transit and parking use (in which the bus pass can also be used as a parking pass on a limited number of days each month), to address employees' varying commuting needs
- Flexible transportation stipend
- Facilities to support cycling including showers, changing rooms and lockers, as well as secure bicycle storage areas
- Provision of car-sharing vehicles for personal or business use
- Providing customized commute options for new employees so that they know the full range of choices and costs available to them
- Promoting commute options through periodic transportation fairs, employee newsletters and other popular means of communication

A specific goal is to reduce driving alone by 10% over the next 10 years. Less parking would need to be constructed in the future, resulting in significant cost savings. As an illustration of savings, a reduction of 100 parking spaces yields a savings of $2 million in construction cost, and an annual reduction in operating and maintenance costs of at least $12,000.

An employee transportation survey should be administered to establish a reliable baseline for current commuting patterns. The survey should be designed so that response data can be mapped to determine important geographic characteristics as a step in identifying actions to improve commuting options. Follow-up surveys at least every other year, if not annually, would enable measurement of progress in meeting the commuting goals.

Shuttle

Recent experience with the D-Line shuttle demonstrates that demand does exist for short trips between the Capitol, East Village and downtown Des Moines. However, certain improvements could increase its convenience and reliability for Capitol area employees and visitors. Two types of improvements are recommended:

Route Independent Improvements

- Replace the current vehicle with a contemporary low-floor, double-door model for easier boarding for all passengers, including those using wheelchairs.
- Review procedures for providing driver breaks so that shuttle service is constantly maintained.
- Review running time so that more consistent and reliable operation is achieved.

Route Dependent Improvements

- Implement a Capitol Area shuttle, to connect with the proposed downtown tram on East 6th Street. The shuttle would operate in a counterclockwise pattern along East Court Avenue, to East 12th Street, to East Grand and to East 6th Street. This route puts the shuttle within a short distance of all buildings on the Capitol Complex; the counterclockwise circulation recognizes that most employees will be located outside of the shuttle's loop so therefore would not need to cross the street to reach the shuttle if it operates counterclockwise. (This recommendation differs from the one in 2000 by reversing the shuttle's circulation. While the previous version provided for right-turns exclusively, easing the shuttle's trip, it would be better to ease the passenger's trip by reducing the number of people who must cross the street to or from the shuttle.)

The Des Moines downtown tram, if implemented, would run east on Court Avenue, turning north on East 6th Street, and then west on East Grand. A possible extension around the Capitol has also been proposed. The tram would replace the D-Line shuttle.

The Master Plan recommends that the streetcar, if built, turn around on East 6th Street. Bringing the streetcar through the Capitol area would introduce overhead electrical lines and poles in conflict with important views of the Capitol, especially at East 12th/Grand. Service on East 6th would still put the streetcar within an easy walk of the western-most buildings in the Capitol area including the Historical Building, the Wallace Building site and the Public Safety Building.

Car Sharing

The state should investigate implementation of a car-sharing program. The availability of a car at the worksite for personal or business trips during the day (or even overnight) can increase the number of employees choosing to commute by transit, cycling or other modes. While the motor pool makes cars available for daily use, their use is restricted to business purposes. Thus, employees drive personal vehicles to work, then switch to motor pool vehicles for business trips. This results in two vehicles parking on the Complex when only one is really needed. Car sharing could alleviate some parking pressure by allowing employees to use a car when needed for whatever purpose, but then be free to choose the most convenient commute mode that day.

Parking

Parking Locations

Figure 4 illustrates future parking locations. In order to support the expansion of a campus development pattern, parking should follow these guidelines:

- Locate parking near the edges of the Capitol Complex, close to prominent routes of arrival. This means that parking would be clustered at the northwest corner, the northeast corner and the southeast corner to facilitate easy access from regional highways and arterials. Placing parking at the edges also captures traffic at the edges, thereby minimizing the number of vehicles passing through the interior Capitol grounds. This in turn reinforces pedestrian priority within the campus.

- Remove parking lots immediately east of the Capitol on its east axis (Lots 13, 15 and 19). Removing those lots serves two important purposes: 1) it completes the Capitol's restoration by reclaiming the Capitol gardens, and; 2) it creates a genuine campus in the core of the Capitol area, giving pedestrians priority over vehicle storage. Provide modest-sized lots flanking the east axis to serve the Capitol Building (a reconfigured Lot 14 and a relocated and smaller Lot 13). Provide a lot south of the Lucas Building.

- Replace parking removed from the Capitol malls with additional spaces north of Grand.

- Locate parking within a reasonable walking distance, about 800 feet, of buildings. Where possible, provide access to serviceable pedestrian tunnels.

- New buildings on the Complex will mainly be located north of Grand Avenue. Accordingly, most new parking will also need to be built north of Grand Avenue.

- Lyon and Des Moines streets will become primary access routes to parking north of Grand. Given the amount of new parking required under current transportation policies and the relocation of lots from the Capitol gardens, a net increase of approximately 1,220 spaces is anticipated in Phase 1. At buildout, a net increase of 1,960 spaces is anticipated for a total supply of 4,000 spaces located north of Grand Avenue. It is anticipated that Des Moines and Lyon streets will need to provide three-lane cross-sections with improved traffic controls at major arterials to accommodate traffic from expanded parking in this area.

Table 5 shows parking quantities by area for Phase 1 based on projected employment growth. It also accounts for the recommended replacement of parking in the Capitol gardens.

Table 5

Changes in Parking by Area, Phase 1 (Preliminary)			
North of Grand	Existing	Future	Change
Floor Area	860,000	895,000	35,000
Parking Supply	2,050	3,270	1,220
Parking Ratio (Spaces/1000 GSF)	2.38	3.65	
Capitol Gardens (Grand to Walnut)			
Floor Area	939,000	1,209,000	270,000
Parking Supply	710	100	(610)
Parking Ratio (Spaces/1000GSF)	0.76	0.08	
South of Walnut			
Floor Area	566,000	611,000	45,000
Parking Supply	1,690	1,980	290
Parking Ratio (Spaces/1000 GSF)	2.99	3.24	
Totals			
Floor Area	2,365,000	2,715,000	350,000
Parking Supply	4,450	5,350	900
Parking Ratio (Spaces/1000 GSF)	1.88	1.97	

Source: Tilghman Group

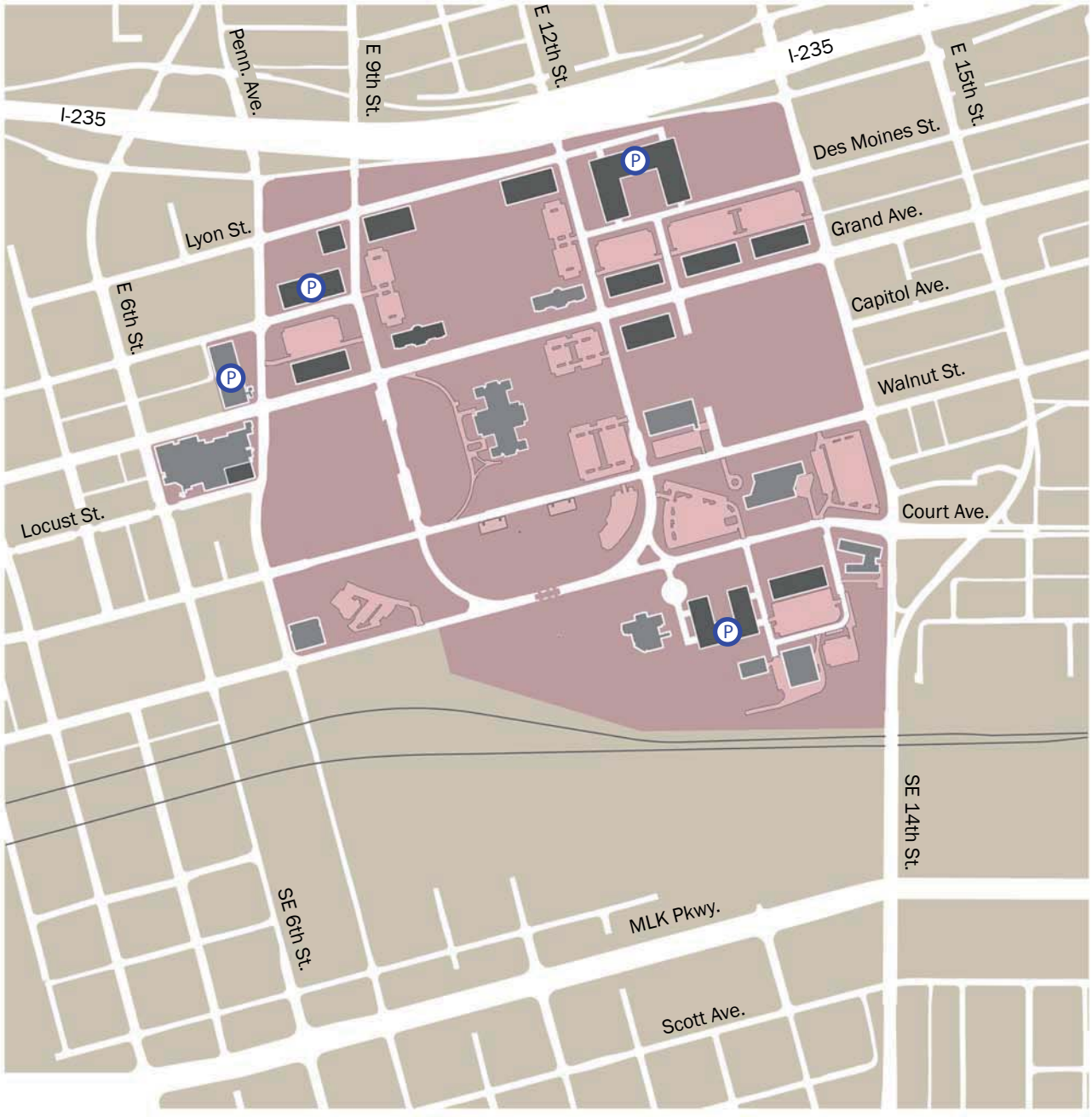


Figure 4: Parking Locations

Key

- Surface Parking Lots
- Parking Structures
- Proposed Structures
- Existing Structures

0' 200' 400' 800'

A shift from predominately surface parking to structured parking will increase the efficient use of land. Existing surface parking lots, essentially land banks, will be developed over time with new buildings and parking structures.

Potential Parking Revenue

A preliminary estimate of revenue from parking fees indicates that over $2 million per year could be generated if monthly parking rates were $50, and visitor rates were $1 per hour. Such rates would be at the lower end of market rates downtown and in the East Village. Those rates are also comparable to rates charged at other state institutions such as Iowa State University and the University of Iowa. Parking revenue would offset the cost of operating and maintaining parking on the Capitol Complex and could contribute funds to support other transportation programs such as the discounted transit pass and shuttle.

Streets

As the Capitol Complex is further developed following campus planning principles, its streets should also reflect more the characteristics of a campus. That entails providing superior pedestrian crossing, landscaping and street widths appropriate to the setting. A balance must be struck between the traffic functions that each street serves and the campus characteristics that they could support.

Grand Avenue

This is historically an important street in Des Moines – it connects the city from east to west and in doing so connects the state fairgrounds and the Capitol to downtown. Its role has been diminished by I-235 and will be again diminished by the extension of Martin Luther King Boulevard (especially once it reaches past East 14th Street).

While Grand does run the breadth of the city, its cross section and capacity vary depending on its location. At its east and west ends, it has two lanes. West of downtown, it has four lanes, as it does past the Capitol between Pennsylvania and Hubbell Avenue. Between East 6th and 2nd Avenue downtown, it has two lanes for westbound traffic and one for eastbound with metered parking on each side. Through downtown, it is one-way westbound with three lanes plus on-street parking. Changes to the regional highway system and accompanying shifts in traffic from surface streets to the highways have left some portions of Grand Avenue oversized for the volume of traffic using it. In particular, the four-lane section through the Capitol Complex carries volumes befitting a two-lane street. Furthermore, the street appears very wide for its neighborhood given the low density of development, its modest traffic volume and limited use of on-street parking.

To strike a balance between maintaining sufficient traffic capacity for future needs, accommodating pedestrians with convenient and less intimidating crossings, and creating a streetscape that makes Grand worthy of its name, it is recommended that Grand be initially modified in these ways:

- Narrow Grand between Pennsylvania and East 14th Street by using 11' wide travel lanes to achieve a 44' street width.

- Provide a pedestrian signal across Grand opposite the Capitol's north door.

To determine a longer-range strategy for Grand Avenue's configuration, the State will have the opportunity to participate in a study proposed for 2010 by the City of Des Moines to develop the future cross-section, signalization, and landscaping for Grand Avenue between downtown and the Capitol area. A district-wide understanding of circulation needs with on-going redevelopment of the East Village would greatly benefit decisions about how to design East Grand Avenue. A coordinated development and circulation plan would foster a comprehensive set of options to address the full range of pedestrian, transit, parking and vehicle needs served by East Grand Avenue.

Court Avenue

Previous recommendations to construct a landscaped median on Court Avenue are seconded by this plan. The median would serve two purposes: 1) to provide a pedestrian refuge when crossing the street; and 2) to enhance the landscape of this prominent street through the Capitol Complex. Left turn lanes will need to be provided for safety and improved function.

Des Moines Street

As the north portion of the campus is developed, Des Moines Street becomes a more important point of access for both vehicles and pedestrians. It already provides primary access to existing parking locations, which now total over 2,000 spaces north of Grand Avenue. By 2025, based on the preliminary land use recommendations, an additional 1,400 to 1,560 spaces would be needed north of Grand Avenue, depending on the effectiveness of recommended transportation demand management actions. It is probable that additional traffic controls would be necessary to accommodate growth in traffic on Des Moines Street where it intersections with East 14th and 15th streets, and with Pennsylvania Avenue and East 6th Street.

The cross-section should reflect the street's likely use. With parking located at the east and west edges of the Capitol Complex along Des Moines Street, vehicles would be captured on the west side before reaching East 9th Street, and on the east side before reaching East 12th Street. The existing pavement width of 36 feet would be sufficient to carry projected traffic loads by providing a three lane cross-section with up to two lanes in one direction. It may be practical to provide one lane entering the Capitol grounds and two lanes exiting the grounds. In this way, Des Moines west of East 9th Street would have one eastbound and two westbound lanes, while east of East 12th Street, it would have one westbound and two eastbound lanes. By capturing vehicles destined for parking at the edges, relatively little traffic would need to pass through the Complex on Des Moines Street. Accordingly, the section between East 9th and East 12th could eventually be eliminated to support creation of the north garden as a purely pedestrian area.

Locust at 7th/Pennsylvania

The existing pedestrian crossing on the north side of this intersection presents awkward and unnerving experiences for people crossing the street from the Historical Building to the Capitol's West Terrace. Due to the intersection's skewed layout, pedestrians must look backwards over their shoulders to see on-coming vehicles from Locust Street. Those vehicles make a broad turn and consequently are able to achieve higher speeds than is typical of many intersections. It is recommended that the north crossing be narrowed by at least one lane by building the curb on the west side. Additional analysis of signal timing and traffic flow in the area could be undertaken as part of district approach to the City's proposed Grand Avenue study, and is recommended to determine whether a different intersection design would be more appropriate to balancing pedestrian and vehicular needs.

Appendix B: Facilities Needs Assessment Summary

Facilities Needs Assessment Summary

This report is an update of the *2000 Iowa Capitol Complex Facilities Needs Assessment Supporting Documentation (Appendix B)* in support of the 2010 Iowa Capitol Complex Master Plan. The report includes the applicable portions of the 2000 document and changes reflecting current conditions. The following is a list of significant changes that have occurred in the 2000-2010 time period:

- Road access and traffic volume changes due to I-235 and Martin Luther King, Jr. Parkway improvements
- East Locust Street streetscape improvements and change to two-way operation
- Public transit service enhancements
- Completion of Capitol Building renovation
- Completion of Judicial Building
- Acquisition of Mercy Capitol hospital and adjacent surface parking
- Construction of Iowa Utilities Board & Office of the Consumer Advocate Building
- Renovation and addition to Records & Property Building as new Public Safety Building with expanded surface parking (Lot 21)
- Completion of West Capitol Terrace and relocation of surface parking
- Completion of parking ramp at Pennsylvania and Grand avenues
- Acquisition of property north of the Capitol between Des Moines and Lyon streets (Lots 22 & 17)
- Proposed 350,000 Gross SF North Office Building and accompanying parking structure between Des Moines and Lyon streets (funding de-appropriated in 2008)
- Landscape and paving improvements to Lot 16
- Implementation of the free “D-Line” shuttle bus connecting the Capitol Complex with downtown
- Proposed upgrading the “D-Line” shuttle to an electric streetcar (“tram”) on Court Avenue and Grand Avenue, better linking the Capitol with downtown and encouraging greater economic development
- Acquisition of East 7th Street and East Locust buildings and construction of Trucking Associations in Iowa and Iowa Association of Community College Trustees buildings southwest of the Capitol Complex

An examination of past changes in staff, equipment and space requirements, and related factors such as state population growth rates and the levels of service provided by state agencies can help project future expectations. Similarly, a historical review of the costs and efficiencies associated with both owned and leased spaces occupied by state government can yield valuable information about the most cost effective and efficient options to pursue in the future.

As part of the master planning process, the consultant team undertook an abbreviated study of these issues to answer two important questions:

- What is the range of space requirements likely to be ten to fifteen years from now?
- Should the State pursue ownership or lease space for its operations?

These two questions have enormous implications for the future of the Capitol Complex, as well as for the Capitol's relationship to the surrounding city.

Beginning with a review of available information on these topics, a series of interviews with key staff in selected state agencies was conducted. These interviews and building tours gave the consultant team first-hand insights into the anticipated future service and personnel needs. The Department of Administrative Services provided current building floor plans, agency layouts and square footages. Peer review of the assembled data was invited to gain a more holistic perspective of anticipated growth, and to identify any necessary adjustments. In addition to the *2000 Iowa Capitol Complex Facilities Needs Assessment Supporting Documentation (Appendix B)*, other resources included:

1. State of Iowa Space Utilization and Building Study for the Department of General Services, October 9, 2000, prepared by Renaissance Design Group, RDG Bussard Dikis Architects
2. State of Iowa North Office Building and Parking Structure Predesign Report, Draft-December 2007, prepared by HGA, Substance Architects

An analysis of the capital, lease, operational and maintenance costs associated with each space occupied by the State was undertaken. Leased space was found to be generally more expensive to the State than owned space. Many state functions at locations remote from the Capitol Complex may occupy leased space because that is all that is available. In addition to the cost consequences of leasing space away from the Capitol Complex, there is the hidden cost of operational inefficiencies due to separation from allied activities. There were also costs and environmental impacts associated with increased travel by automobile, duplication of equipment and labor to operate it, etc.

The 2000 Capitol Complex Master Plan, Appendix B, clearly demonstrated the economic benefits of lease versus state ownership. The cost saving potential was estimated at approximately 20%. To allow the flexibility to accommodate agency swing space and/or short term needs a 15% target was established for leased space out of the total inventory. These findings and recommendations were confirmed by the 2000 RDG Space Utilization and Building Study.

In 2000, leases for off-Complex state office space in metropolitan Des Moines totaled 477,932 rentable square feet with annual rents of $6,262,607 ($13.00 per RSF average). In 2009, leases had gone up 4% to 499,805 rentable square feet with annual rents of $6,486,386 ($13.00 per RSF average). Currently, leased space is 25% of the total rentable square feet. This increase is counter to the goal of reducing leased space to approximately 15% of the total space inventory in order to realize the economic benefits of state ownership. Additional state-owned space within the Capitol Complex should be constructed in the short term to meet this goal and to accommodate agency growth in state-owned space on Complex.

The 2000 Master Plan found that state government had grown at an average annual rate of 1.1% over the preceding 30 years; a period during which state population had averaged 0.06% growth each year. Both the 2000 Master Plan and the 2000 RDG study assumed a 1% per annum growth rate for state employment through 2025. Current figures from the Census Bureau for state population and state government employment indicate more modest growth. However, this report continues to assume a 1% per annum growth rate for state employment through 2025. Actual state employment growth may be lower, therefore postponing a portion of future development. However, a share of the projected space needs (approximately 200,000 Net SF; 250,000 Gross SF) relates to meeting the 15% goal for leased space.

The 2000 Master Plan recommended consolidating Human Services and Public Health, currently in leased space, into a new office building on the Capitol Complex. To meet the 15% goal for leased space this report recommends the addition of Natural Resources and Economic Development. The majority of the current leases for these agencies end within two years, facilitating relocation.

The predesign report for the North Office Building and parking structure included facilities needs programming for the Department of Natural Resources (DNR) and the Department of Agriculture and Land Stewardship (IDALS). This program proposes the consolidation of these two agencies in a 285,000 Gross SF building with staff of 677 (DNR 538 employees; IDALS 139 employees) and an accompanying approximately 855-space parking structure. This report assumes the goal of 220 Net SF/employee and 8 foot x 8 foot workstation module and 3 parking spaces/1000 Gross SF recommended in the 2000 space facilities and building study.

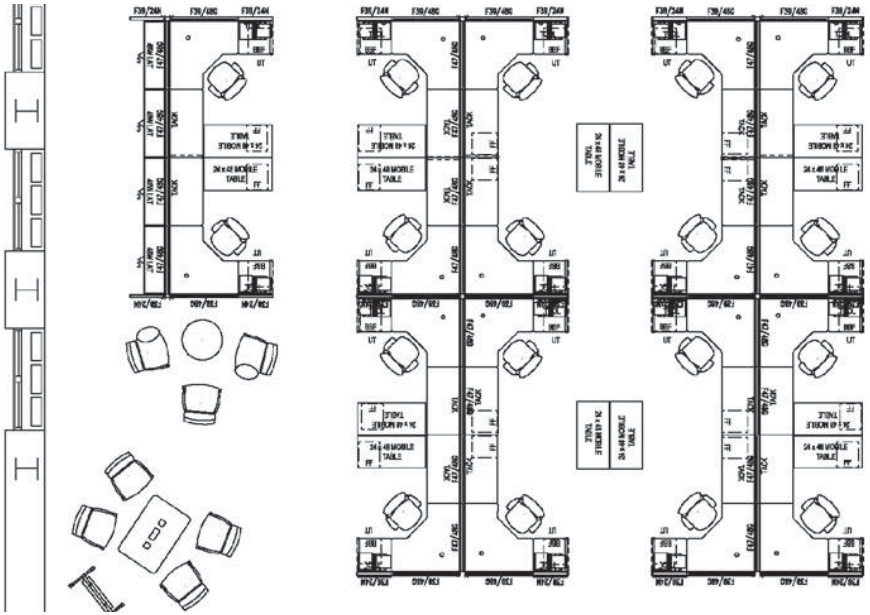
The facilities needs assessment also examined right-sizing state office space. Right-sizing strategies were based upon input from the State's current work station vendor. Efficiencies and enhanced productivity gained from new technologies and sustainability strategies were integrated into the recommendations. Electronic data bases and computer hardware downsizing and portability have reduced the space needed for references and storage. Downsizing workstations and storage spaces will make space available for daylighting and collaboration. Test fit case studies were undertaken of a typical floor of the Lucas Building and two options for a prototypical new office building floor plate. These studies supported the adjusted area factor of 220 sf/staff used in the Estimated Space Allocations and Requirements Spreadsheet at the end of this document. A summary of these test fits follows.

Lucas Building - Right-sizing work environments from 8 x 8 to 6 x 8

- Provides same staff count/floor
- Quality of work/life space
- Reallocate storage space to provide daylighting
- Reduce panel heights for better air flow
- Relocate large office spaces to core

Existing office space at the Lucas Building, below, should be reconfigured to offer a better quality of workspace for employees.

Grouping workstations around each other so that they share circulation space, like the example plan below, not only cuts down on wasted space, it also provides a more open working environment that encourages employee collaboration.



New Office Buildings - Right-sizing work environments from 8 x 10 to 6 x 8

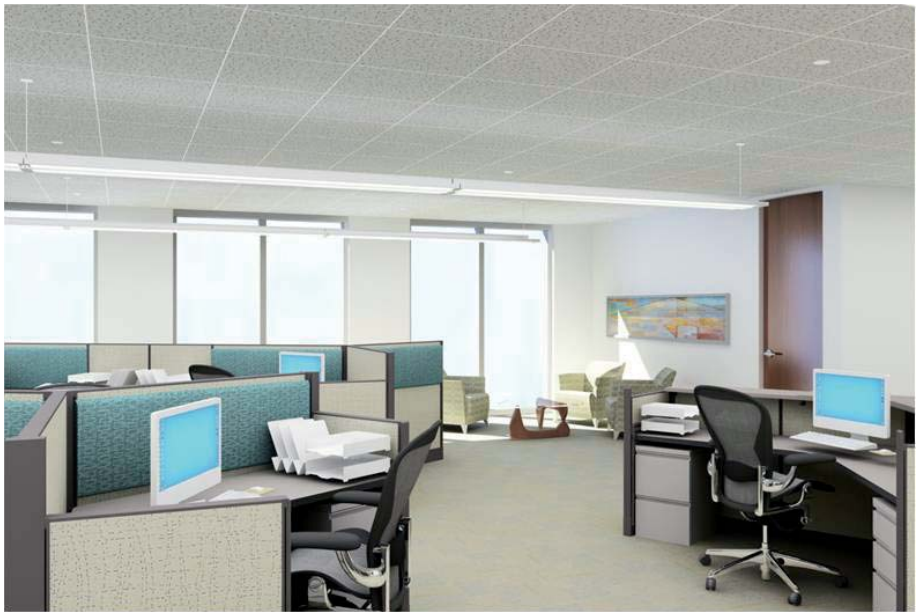
- 136 staff /floor at 176 sf/person
- Quality team and mixed use spaces
- Increased density yet open
- Large offices and work spaces in core

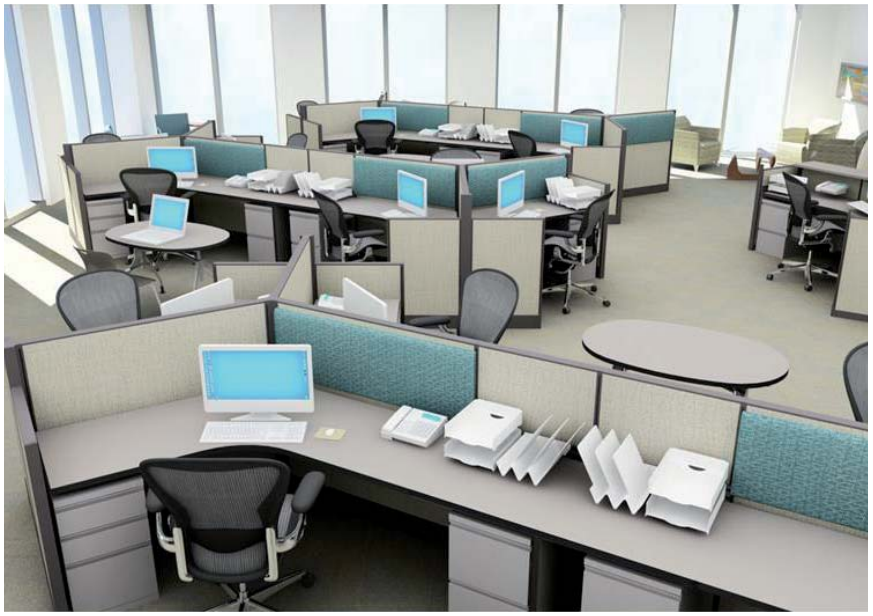
The more open working configuration of this office layout, below and to the right, allow for informal collaborative spaces to form throughout the office where employees can easily share and generate ideas with each other.

New Office Buildings - Right-sizing work environments from 8 x 10 to 6 x 7

- 185 staff/floor at 130 sf/person
- Expanded daylighting
- Enhanced air flow
- Innovative multiuse areas
- Large offices and work spaces in core

Using the same grouped work space concept as the previous layout, this office configuration, below and right, is even more efficient with space by cutting back on the amount of unusable desk space commonly found in the back corners of each work station behind the computer monitors.





Facilities Development Sequence

The strategy proposed is for a long range, five phased development sequence. This recommendation assumes that an evaluation will be undertaken to inform decisions regarding the planned obsolescence of existing buildings. For planning purposes, new office buildings are assumed to be 270,000 gsf, except for the Wallace Building replacement at 300,000 gsf and proposed Legislative Support/ Elected Officials Building at 100,000 gsf.

The overarching principle behind the development sequencing will be to respect and enhance the visual significance of the east-west and north-south axes of the Capitol. For this reason, each phase of development highlights the improvements along the axes in the North, East, West and South malls. While the plan seeks to realize permanent enhancements, it acknowledges the need to make temporary improvements, such as surface parking paving and landscaping, in the interim.

The following criteria were considered in development phasing:

- Accommodate facilities' needs projections (see spreadsheet at end of this Appendix)
- Replace existing buildings if conditions warrant and relocate these agencies within the Complex, when appropriate
- Develop to be perceived as complete with each phase
- Locate buildings with proximity to parking, transit and tunnel connections
- Provide for replacement parking when surface parking lots are redeveloped
- Enhance east-west and north-south axes of the Capitol
- Relocate uses incapable with the image and use of the campus (e.g., motor pool and vehicle dispatch, warehousing, etc.)
- Consider sustainable design principles in all new development

Buildings should not be demolished without first determining capital and operational costs and benefits. A comprehensive study should be undertaken to make such determination. The demolition of the Wallace Building is recommended in Phase 1, based upon such a comprehensive study. Assumptions made concerning additional building demolition in later phases are subject to confirmation.

Facilities' needs in each phase consider the following:

- Appropriateness of a Capitol Complex location
- Relocation of leased space to the Capitol Complex to realize the economies of locating 85% of state agency needs in state-owned space (see spreadsheet at end of Appendix, "Total Leased Space to Move to Capitol Complex")
- Relocation of agencies from demolished buildings on the Capitol Complex
- Projected growth in current Capitol Complex agencies and accommodated leased space in gsf (see spreadsheet at end of Appendix, "Gross Building to Construct - 80%")
- Projected parking at 3 spaces per 1,000 gsf and replacement parking resulting from redevelopment

Establishing and bringing up the North, South and East Malls to at least the same caliber as the recently rebuilt West Mall is one of the principal goals of this Master Plan. Besides being a great source of civic pride, the malls will also help tie together the entire Capitol Complex, provide much needed quality urban green space, and enhance the ecological footprint of the Complex through infiltrating stormwater and possibly incorporating underground geothermal wells to offset utility costs.

Phase One: 2010-2020

The Capitol Complex is a dynamic environment of construction and renovation projects. Under this plan, the Capitol Planning Commission has made it a priority in the first phase to securely establish the four mall concept on each axis of the Capitol Building. These actions include:

North Mall

- Begin to implement the North Capitol Gardens
- Demolish the Wallace Building and build a new office building on the same site
- Continue to acquire property north of Grand Avenue for future expansion
- Complete tunnel connection to parking garage at Pennsylvania and Grand avenues
- Implement trolley and shuttle routes serving the campus and downtown
- Implement a transportation management plan including parking fees

East Mall

- Build the mirror of the Lucas Building as the next major office building on the Complex
- Assess the planned obsolescence of the Grimes Building
- Eliminate plans for underground parking in the East Mall and reconfigure and screen existing surface parking to accommodate the implementation of the East Capitol Gardens

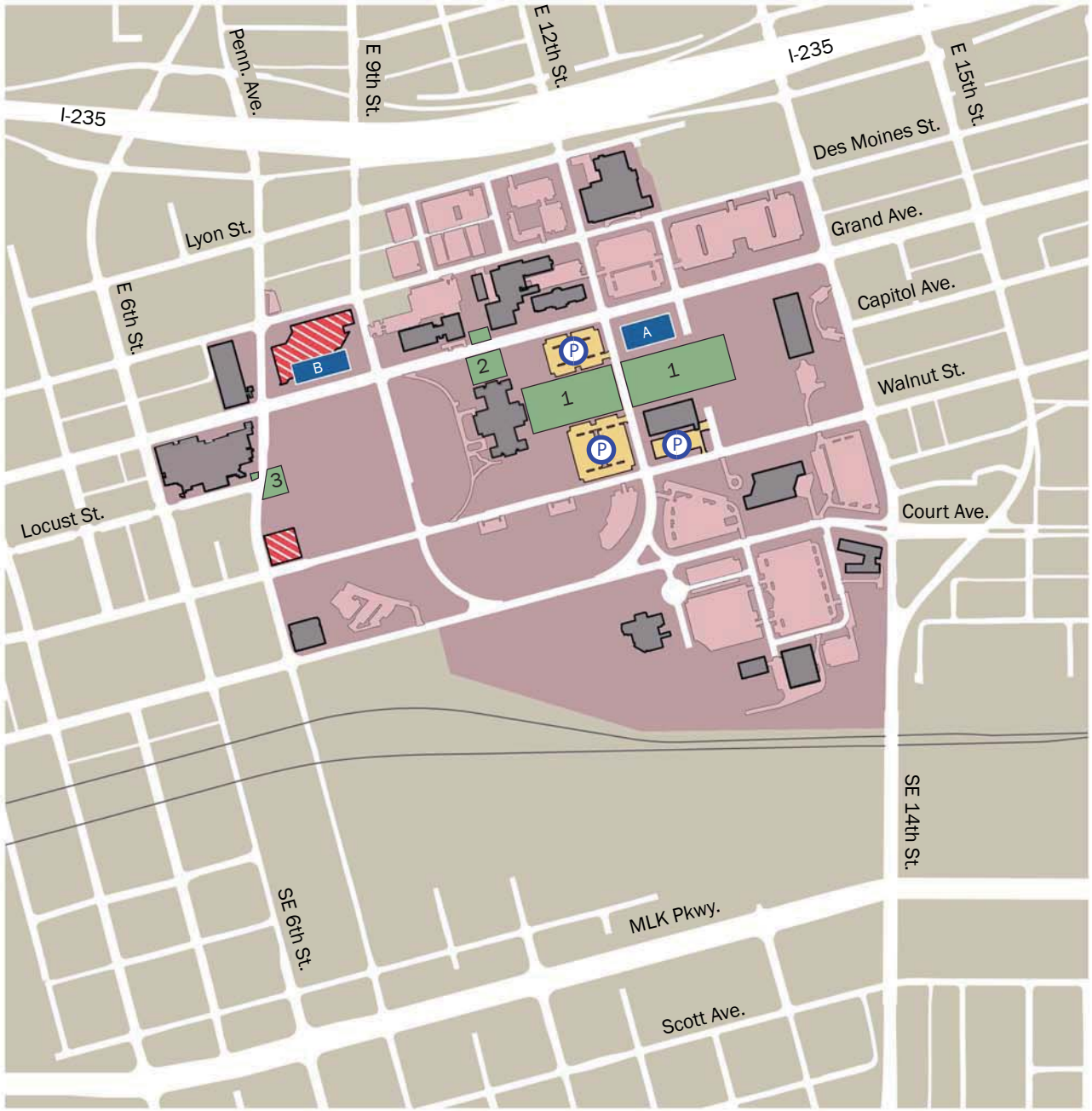
West Mall

- Enhance the pedestrian crossings at Pennsylvania Avenue and Locust Street
- Relocate Vehicle Dispatch to an off-campus location and demolish the building to allow for the completion of the West Capitol Terrace
- Relocate Peace Officers memorial to the southeast corner of Pennsylvania and Locust

South Mall

- Plan for the replacement of the Court Avenue viaduct

Phase One includes the demolition of the Wallace Building and relocation of these agencies to the mirror of Lucas Building when completed. The new office building built on the Wallace Building site will accommodate agencies currently in leased space with the goal of maintaining leased space at the 15% level and fully utilize the existing parking garage at Pennsylvania and Grand. A critical sequence of actions will be needed to enable these committed construction projects to proceed smoothly and without disruption of state business. Each construction project should be assessed in relation to other anticipated building projects and with consideration for temporary and future anticipated parking needs. It would be prudent to hold each project responsible for concurrent development of its employee and visitor parking needs.



Phase One Development

(2010-2020)

Key

A	Replacement Building - 270,000 GSF
B	Replacement Building - 300,000 GSF
1	Build East Gardens to WWII Memorial
2	Start North Gardens
3	Improve Locust Street Pedestrian Crossing

Parking Lots to Add/Redesign
Buildings to Remove
Existing Buildings

0' 200' 400' 800'

Phase Two – 2021-2030

North Mall

- Establish Grand Avenue as a pedestrian-friendly greenway and civic parkway with enhanced pedestrian crossing at the Capitol steps
- Build a building north of Grand Avenue, east of Ola Babcock Miller
- Continue to acquire property north of Grand Avenue for future expansion
- Demolish Mercy Capitol to accommodate future development

East Mall

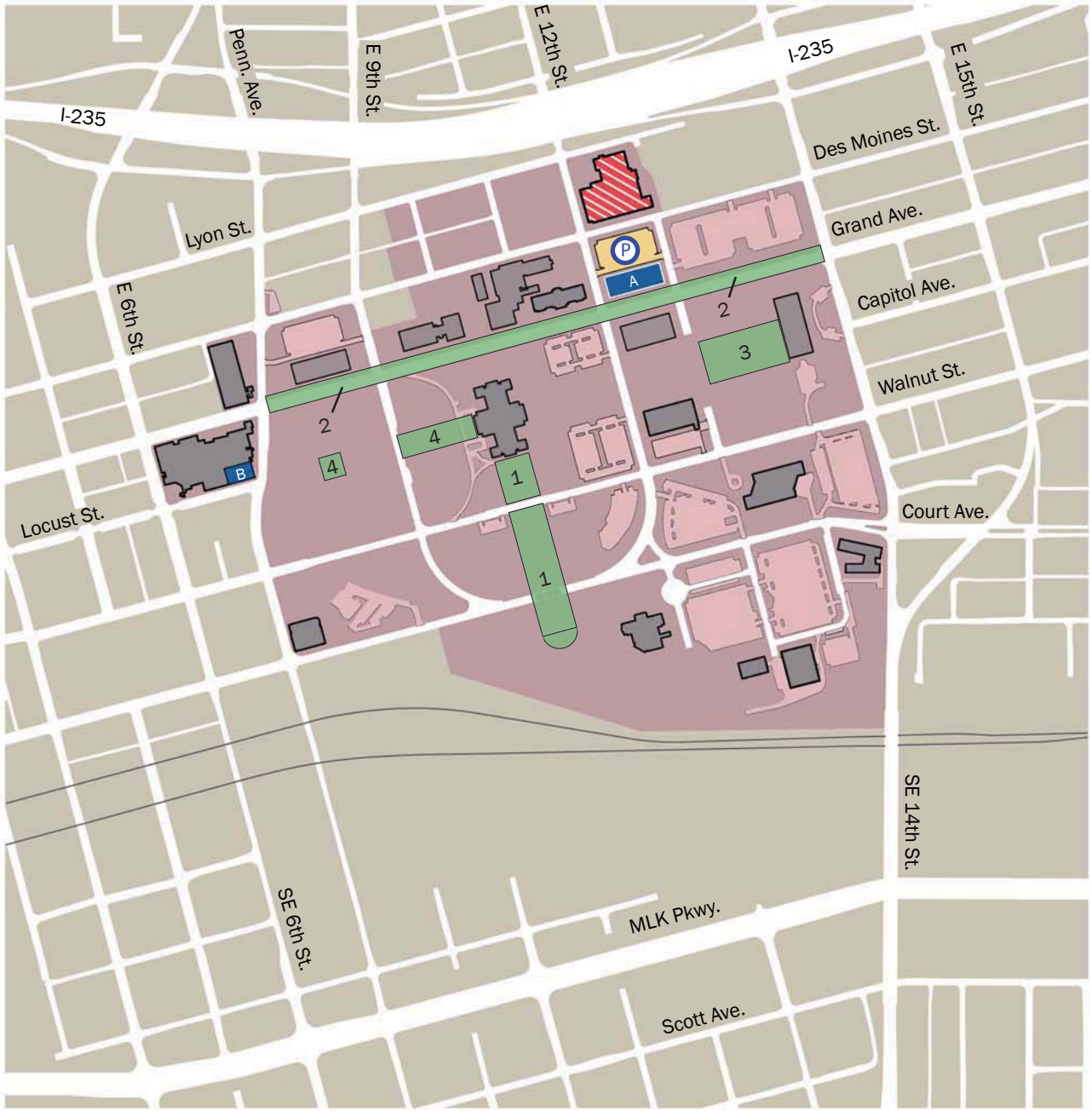
- Continue to enhance East Capitol Gardens

West Mall

- Complete the West Capitol Terrace, including the fountain
- Construct a Visitors Center addition to the Historical Building

South Mall

- Reconstruct Court Avenue viaduct
- Make railroad trail connection to Capitol Complex



Phase Two Development

(2021-2030)

Key

A	Replacement Building - 270,000 GSF
B	New Visitors Center
1	Rebuild Court Avenue Bridge and Improve South Gardens
2	Complete Grand Avenue Streetscape
3	Expand East Gardens
4	Complete West Capitol Terrace, Build Fountain

Parking Lots to Add/Redesign
Buildings to Remove
Existing Buildings

0' 200' 400' 800'

Phase Three – 2031-2040

North Mall

- Construct two buildings fronting Grand Avenue west of East 14th Street
- Demolish Jessie Parker, Workforce Development, and the Carriage House to accommodate future development
- Construct mirror of Ola Babcock Miller Building for Legislative Support and Elected Officials
- Construct parking garage on Mercy Capitol site
- Further develop North Capitol Gardens

East Mall

- Continue to enhance the East Capitol Gardens

West Mall

- Continue to enhance the West Capitol Terrace

South Mall

- Complete Court Avenue streetscape improvements

Phase Three Development

(2031-2040)

Key

A	New Building - Legislative Support / Electeds - 100,000 GSF
B	Replacement Building - 270,000 GSF
C	Replacement Building - 270,000 GSF
1	Continue North Garden Work
2	Complete Court Avenue Streetscape

Parking to Add/Redesign

Buildings to Remove

Existing Buildings

0' 200' 400' 800'

Phase Four – 2041-2050

North Mall

- Construct two office buildings north of Des Moines Street flanking the Capitol axis
- Construct a parking garage west of East 9th Street, north of Des Moines Street
- Construct a new energy plant west of East 9th Street, South of Lyon Street
- Complete the North Gardens to the Interstate

East Mall

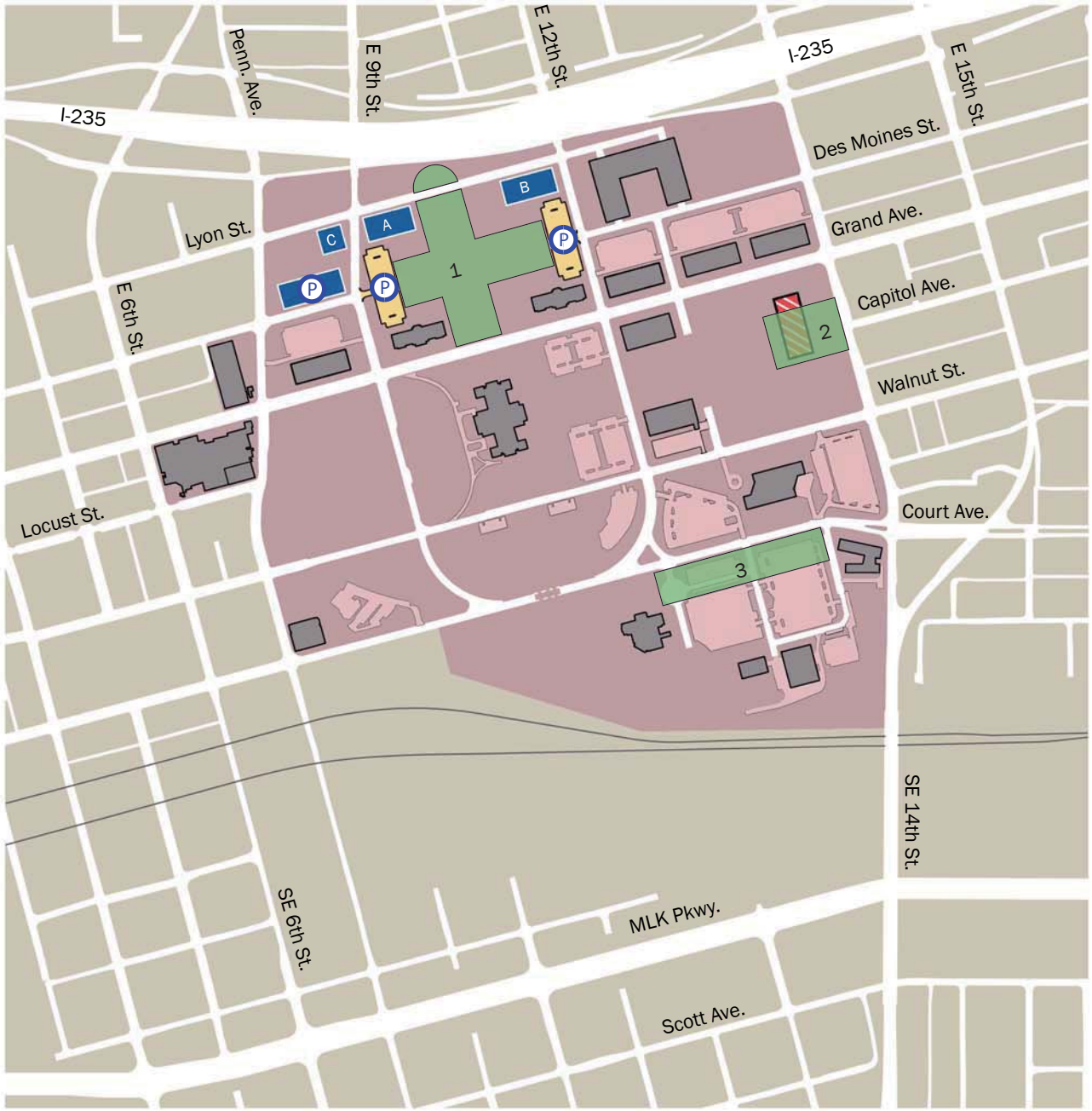
- Demolish the Grimes Building
- Complete the East Mall to East 14th Street

West Mall

- Continue to enhance West Capitol Terrace

South Mall

- Continue to enhance South Capitol Gardens
- Create a landscaped pedestrian plaza between Judicial and the IUB-OCA Building south of East Court Avenue



Phase Four Development

(2041-2050)

Key

A	New Building - 280,000 GSF
B	Replacement Building - 280,000 GSF
C	New Energy Plant
1	Complete North Gardens to Interstate
2	Complete East Gardens
3	Complete Pedestrian Plaza
P	Parking to Add/Redesign
	Buildings to Remove
	Existing Buildings

0' 200' 400' 800'

Phase Five – 2051-2060

North Mall

- Continue to enhance the North Capitol Gardens

East Mall

- Remove all parking from Capitol west of East 12th Street
- Consider relocating the Soldiers and Sailors Memorial (as proposed originally in E. L. Masqueray's 1913 Plan)

West Mall

- Continue to enhance the West Capitol Terrace

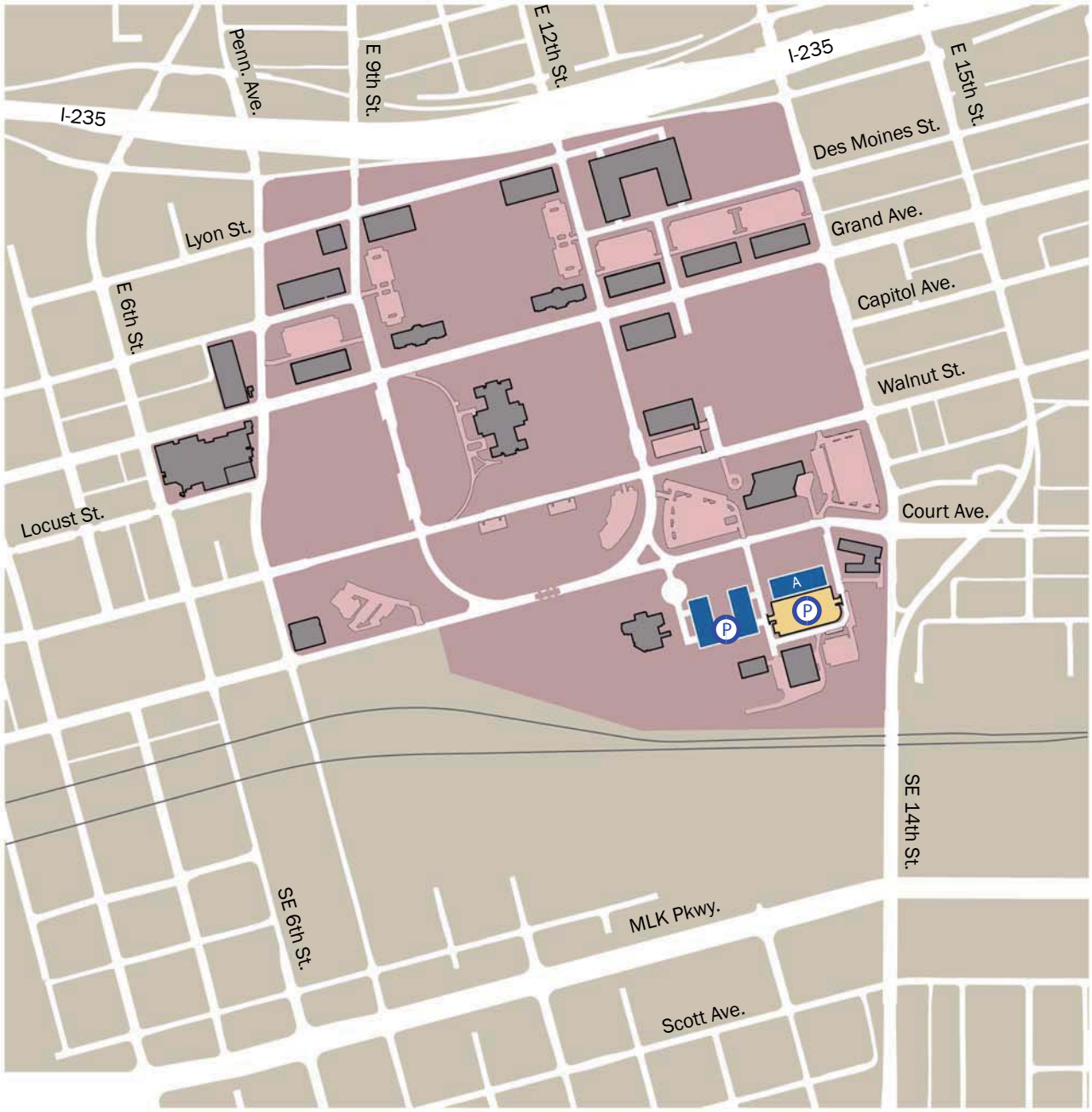
South Mall

- Construct an office building west of the IUB-OCA Building south of Court Avenue
- Construct a parking garage east of the Judicial Building

A Facilities Development Sequencing Schedule should be prepared and regularly updated. This should be viewed as a flexible and living schedule requiring quarterly updating to assess all currently funded and future anticipated projects and the consequences of all projects in relation to the whole.

Facilities Development Sequencing Schedule						
	Phase 1 2010-2020	Phase 2 2021-2030	Phase 3 2031-2040	Phase 4 2041-2050	Phase 5 2051-2060	Total 2010-2060+
New	570,000 gsf	270,000 gsf	640,000 gsf	560,000 gsf	270,000 gsf	2,310,000 gsf
Demo	263,000 gsf	270,000 gsf	264,000 gsf	115,000 gsf	0 gsf	912,000 gsf
Net	307,000 gsf	0 gsf	376,000 gsf	445,000 gsf	270,000 gsf	1,398,000 gsf

With the assistance of the Department of Administrative Services, a facilities needs assessment has been compiled in the Estimated Space Allocations and Requirements Spreadsheet. This spreadsheet includes all state facilities in the metropolitan Des Moines area. This spreadsheet looks at projected office space needs for the Capitol Complex through 2025 assuming existing space remains and leased space is reduced to 15% of the total space in the metropolitan area. The analysis also assumes right size work environments and a growth rate of 1%/yr. The analysis shows a projected demand of new office space on the Capitol Complex by 2025 of 786,000 gsf.



Phase Five Development

(2051-2060)

Key

A New Building - 270,000 GSF

P Parking to Add/Redesign

Buildings to Remove

Existing Buildings

0' 200' 400' 800'

Estimated Space Allocations and Requirements Spreadsheet

BUILDINGS & OCCUPANTS	Fl. Location	Staff	Conf. Loc.	Conf. SQ.FT.	Conf. Capacity	Gross SQ.FT.	Rentable SQ.FT.	Common Sq.Ft.	Usable SQ.FT.	Area Factor Net SF/Staff	Adjusted Area Factor	Annual Growth Rate	STAFF FORECAST				SPACE REQUIRED			
	2009	2009											2009	2015	2020	2025	2009	2015	2020	2025
State Capitol Building		**197**		**6,353**	**424**	**330,950**	**280,614**	**166,549**	**114,065**	**579**			**197**	**207**	**217**	**228**	**114,065**	**119,542**	**125,292**	**131,331**
Legislature	Grd,1,2,3	125	Grd	788	53		203,363	121,490	81,873	655	655	1.00%	125	131	138	145	81,873	85,967	90,265	94,778
Ceremonial	1		Grd	159	11		10,429	6,356	4,073				0	0	0	0	4,073	4,073	4,073	4,073
Governor's Office	Grd, 1	22	Grd	994	66		15,139	9,044	6,095	277	277	1.00%	22	23	24	25	6,095	6,400	6,720	7,056
Department of Management	Grd	23	Grd	582	39		10,355	6,186	4,169	181	181	1.00%	23	24	25	27	4,169	4,377	4,596	4,826
Blind Commission Vending Area	Grd		Grd	1109	74		622	382	240				0	0	0	0	240	240	240	240
Treat America	Grd	5	1	1518	101		8,400	5,080	3,320	664	664	1.00%	5	5	6	6	3,320	3,486	3,660	3,843
Auditor's Office	1	5	2	878	59		6,426	3,839	2,587	517	517	1.00%	5	5	6	6	2,587	2,716	2,852	2,995
Secretary of State	1	7	2	325	22		4,615	2,757	1,858	265	265	1.00%	7	7	8	8	1,858	1,951	2,048	2,151
Treasurer of State	1	7					6,617	2,664	3,953	565	565	1.00%	7	7	8	8	3,953	4,151	4,358	4,576
ITE Administrative Services	2						537	321	216				0	0	0	0	216	216	216	216
Education - State Library	2nd	3					14,111	8,430	5,681	1,894	1,894	1.00%	3	3	3	3	5,681	5,965	6,263	6,576
Judicial Building (New)		**197**	**3**		**122**	**124,000**	**111,005**	**35,522**	**75,483**	**383**		**1.00%**	**197**	**207**	**217**	**228**	**75,483**	**79,257**	**83,220**	**87,381**
Supreme & Appellate Courts		197					0		75,483	383	383	1.00%	197	207	217	228	75,483	79,257	83,220	87,381
Auditorium/Conference			3		66		0		0			1.00%	0	0	0	0	0	0	0	0
Workforce Development		**103**		**1,430**	**95**	**23,442**	**23,442**	**5,137**	**18,305**	**178**			**103**	**108**	**114**	**119**	**23,056**	**24,189**	**25,379**	**26,628**
150 Des Moines Street																				
Workforce Development	B		1	1,430	95		1,724	1,328	396		220	1.00%	0	0	0	0	396	396	396	396
Workforce Development	1	103					21,718	3,809	17,909	174	220	1.00%	103	108	114	119	22,660	23,793	24,983	26,232
Workforce Development		**339**		**5,090**	**339**	**110,800**	**107,732**	**32,995**	**74,737**	**220**			**339**	**356**	**374**	**392**	**74,580**	**78,309**	**82,224**	**86,336**
1000 E. Grand Ave.			Grd	1,277	85															
Workforce Development	Grd, 1,2,3	338	1	2,718	181		106,649	32,663	73,986	219	220	1.00%	338	355	373	391	74,360	78,078	81,982	86,081
Blind Commission Vending Area	B	1	2	802	53		1,083	332	751	751	220	1.00%	1	1	1	1	220	231	243	255
			3	293	20															
Grimes Building		**414**		**5,868**	**391**	**114,724**	**112,683**	**27,573**	**85,110**	**206**			**414**	**435**	**456**	**479**	**93,008**	**97,562**	**102,344**	**107,364**
E. 14th & Grand Ave.																				
ITE Administrative Services	Grd.	12	B	179	12		9,440	2,310	7,130	594	220	1.00%	12	13	13	14	2,640	2,772	2,911	3,056
GSE Administrative Services	Grd.	11	1	1,569	105		2,804	686	2,118	193	220	1.00%	11	12	12	13	2,420	2,541	2,668	2,801
Iowa Communications Network (ICN)	Grd, 1	88	2	1,526	102		24,166	5913	18,253	207	220	1.00%	88	92	97	102	19,360	20,328	21,344	22,412
Blind Commission Vending Area	Grd.		3	2,594	173		2,553	625	1,928		220	1.00%	0	0	0	0	1,928	1,928	1,928	1,928
Civil Rights	1	29					7,762	1,899	5,863	202	220	1.00%	29	30	32	34	6,380	6,699	7,034	7,386
Education	Gr,2,3	274					65,958	16,140	49,818	182	220	1.00%	274	288	302	317	60,280	63,294	66,459	69,782
Ola Babcock Building		**102**		**3,495**	**233**	**90,950**	**72,593**	**16,226**	**56,367**	**553**			**102**	**107**	**112**	**118**	**22,899**	**24,021**	**25,199**	**26,436**
E. 12th & Grand Ave.																				
GSE Administrative Services - Mail	Grd		1	1,283	86		510	114	396		220	1.00%	0	0	0	0	396	396	396	396
Blind Commission Vending Area	Grd		2	698	47		81	18	63		220	1.00%	0	0	0	0	63	63	63	63
Legislature	Gr,1,2,3	75	3	1,514	101		37,280	8,333	28,947	386	220	1.00%	75	79	83	87	16,500	17,325	18,191	19,101
Education State Library	Gr,1,2,3	27					34,722	7,761	26,961	999	220	1.00%	27	28	30	31	5,940	6,237	6,549	6,876
Public Safety Building		**158**		**8,062**	**537**	**139,257**	**107,990**	**28,351**	**79,639**	**504**			**158**	**166**	**174**	**183**	**34,984**	**36,722**	**38,547**	**40,463**
E. 7th & Court Ave.			1	2,583	172							1.00%								
Public Safety	1,2,3,4,5	157	2	1,029	69		107,312	28173	79,139	504	220	1.00%	157	165	173	182	34,540	36,267	38,080	39,984
GSE Administrative Services	1	1	3	2,058	137		374	98	276	276	220	1.00%	1	1	1	1	220	231	243	255
Blind Commission Vending Area	1		4	753	50		304	80	224		220	1.00%	0	0	0	0	224	224	224	224
			5	1,639	109															
Vehicle Dispatch		**6**		**185**	**12**	**34,200**	**18,476**	**570**	**17,906**	**2,984**										
E. 7th & Walnut St.																				
GSE Vehicle Dispatch	1	6	1	185	12		18476	570	17,906	2,984	220	1.00%								
Hoover Building		**1,104**		**13,981**	**932**	**276,250**	**274,552**	**53,482**	**221,070**	**200**			**1,104**	**1,157**	**1,213**	**1,272**	**246,160**	**258,050**	**270,535**	**283,643**
E. 13th & Walnut St.																				
ITE Administrative Services	A,B	132	B	1,028	69		44,075	8,714	35,361	268	220	1.00%	132	139	146	153	29,040	30,492	32,017	33,617
GSE Administrative Services	A	22	A	4,240	283		6,111	1,228	4,883	222	220	1.00%	22	23	24	25	4,840	5,082	5,336	5,603
HRE Administrative Services	A	53	1	3,114	208		14,179	2,846	11,333	214	220	1.00%	53	56	58	61	11,660	12,243	12,855	13,498
SAE Administrative Services	A,3	34	2	1,293	86		7,412	1,482	5,930	174	220	1.00%	34	36	37	39	7,480	7,854	8,247	8,659
Core Administrative Services	A,3	38	3	1,350	90		9,496	1,907	7,589	200	220		38	38	38	38	8,360	8,360	8,360	8,360
Human Services	A,1,5	379	4	1,678	112		78,721	15,256	63,465	167	220	1.00%	379	398	418	439	83,380	87,549	91,926	96,523
Attorney General	1,2	162	5	1,278	85		44,323	8,532	35,791	221	240	1.00%	162	170	179	188	38,880	40,824	42,865	45,008
Blind Commission Vending Area	A,B,1,2,3,4,5	2					2,111	405	1,706	853	240	1.00%	2	2	2	2	480	504	529	556
Revenue	3,4	282					67,899	13,069	54,830	194	220	1.00%	282	296	311	326	62,040	65,142	68,399	71,819
Vacant	0						225	43	182		220	1.00%	0	0	0	0	0	0	0	0

BUILDINGS & OCCUPANTS	Fl. Location	Staff	Conf. Loc.	Conf. SQ.FT.	Conf. Capacity	Gross SQ.FT.	Rentable SQ.FT.	Common Sq.Ft.	Usable SQ.FT.	Area Factor Net SF/Staff	Adjusted Area Factor	Annual Growth Rate	STAFF FORECAST				SPACE REQUIRED			
Lucas Building		**792**	**21**	**9,969**	**665**	**270,229**	**226,002**	**60,198**	**165,804**	**209**			**792**	**832**	**873**	**917**	**175,960**	**184,672**	**193,820**	**203,425**
E. 12th Street																				
Secretary of State	B,Grd,1	36	Grd	1,307	87		11,699	3,116	8,583	238	220	1.00%	36	38	40	42	7,920	8,316	8,732	9,168
Attorney General	B,Grd	36	1	1,303	87		10,930	2,912	8,018	223	220	1.00%	36	38	40	42	7,920	8,316	8,732	9,168
Auditor	B,2	83	2	1,252	83		17,685	4,710	12,975	156	220	1.00%	83	87	92	96	18,260	19,173	20,132	21,138
GSE Administrative Services	B,Grd.	1	3	1,450	97		2,406	641	1,765	1,765	220	1.00%	1	1	1	1	220	231	243	255
ITE Administrative Services	B,Grd.	1	4	1,542	103		1,796	478	1,318	1,318	220	1.00%	1	1	1	1	220	231	243	255
Core Administrative Services	B		5	1,668	111		431	115	316		220	1.00%	0	0	0	0	316	316	316	316
Management	1	10	6	1,447	96		4,730	1260	3,470	347	220	1.00%	10	11	11	12	2,200	2,310	2,426	2,547
Homeland Defense (EMD)	Grd.						853	227	626		220	1.00%	0	0	0	0	626	626	626	626
Human Rights	B,2	70					15,819	4,213	11,606	166	220	1.00%	70	74	77	81	15,400	16,170	16,979	17,827
Public Health	B,Grd,1,4,5,6	357					77,934	20,758	57,176	160	220	1.00%	357	375	394	413	78,540	82,467	86,590	90,920
Public Safety	B,Grd, 1	5					4,585	1,221	3,364	673	220	1.00%	5	5	6	6	1,100	1,155	1,213	1,273
Transportation - DOT	Grd.						616	164	452		220	1.00%	0	0	0	0	452	452	452	452
Iowa Communications Network (ICN)	B, Grd.	5					7,470	1990	5,480	1,096	220	1.00%	5	5	6	6	1,100	1,155	1,213	1,273
Treasurer	B,1	19					7,566	2,015	5,551	292	220	1.00%	19	20	21	22	4,180	4,389	4,608	4,839
Inspections and Appeals	B,Grd,3,4	164					56,310	15,000	41,310	252	220	1.00%	164	172	181	190	36,080	37,884	39,778	41,767
Blind Commission Vending Area	Grd,6						445	119	326		220	1.00%	0	0	0	0	326	326	326	326
Treat America	6	5					4,727	1259	3,468	694	220	1.00%	5	5	6	6	1,100	1,155	1,213	1,273
Jessie M. Parker Building		**276**		**15,701**	**1,047**	**129,418**	**113,365**	**18,438**	**94,927**	**344**		**0**	**276**	**290**	**304**	**320**	**60,720**	**63,756**	**66,944**	**70,291**
E. 9th & Grand Ave.																				
Elder Affairs	B,2	37	LL	4,459	297		11,273	3,152	8,121	219	220	1.00%	37	39	41	43	8,140	8,547	8,974	9,423
Board of Parole	B,2	17	1	7,207	480		11,931	2,979	8,952	527	220	1.00%	17	18	19	20	3,740	3,927	4,123	4,330
PERB	B,1	10	2	4,035	269		6,872	1,921	4,951	495	220	1.00%	10	11	11	12	2,200	2,310	2,426	2,547
Ethics	B,1	6					3,202	896	2,306	384	220	1.00%	6	6	7	7	1,320	1,386	1,455	1,528
Corrections	B,1,2	48					22,245	5,554	16,691	348	220	1.00%	48	50	53	56	10,560	11,088	11,642	12,225
Vacant	B	32					1,038	290	748	23	220	1.00%	32	34	35	37	7,040	7,392	7,762	8,150
Educational Vocational Rehabilitation	B,1,2	125					54,293	3,400	50,893	407	220	1.00%	125	131	138	145	27,500	28,875	30,319	31,835
GSE Administrative Services	B,2	1					2,511	246	2,265	2,265	220	1.00%	1	1	1	1	220	231	243	255
Wallace Building		**523**		**7,560**	**504**	**228,400**	**198,785**	**51,877**	**146,908**	**281**			**523**	**549**	**577**	**605**	**127,081**	**132,834**	**138,875**	**145,217**
E. 9th & Grand Ave.											220	1.00%								
Auditor	3	2	1	192	13		368	96	272	136	220	1.00%	2	2	2	2	440	462	485	509
Agriculture	1,2,3	102	2	2,815	188		38,279	9990	28,289	277	220	1.00%	102	107	112	118	22,440	23,562	24,740	25,977
Public Safety	2	8	3	2,565	171		3,611	942	2,669	334	220	1.00%	8	8	9	9	1,760	1,848	1,940	2,037
ITE Administrative Services	1		4	856	57		467	122	345		220	1.00%	0	0	0	0	345	345	345	345
GSE Administrative Services	1		5	1,132	75		5,570	1454	4,116		220	1.00%	0	0	0	0	4,116	4,116	4,116	4,116
Iowa Communications Network	1						2,331	608	1,723		220	1.00%	0	0	0	0	1,723	1,723	1,723	1,723
Human Services	1,2						2,236	584	1,652		220	1.00%	0	0	0	0	1,652	1,652	1,652	1,652
Natural Resources	1,2,3,4,5	348					86,536	22584	63,952	184	220	1.00%	348	365	384	403	76,560	80,388	84,407	88,628
Rebuild Iowa Office	2	21					9,801	2558	7,243	345	220	1.00%	21	22	23	24	4,620	4,851	5,094	5,348
Economic Development	3						2,950	770	2,180		220	1.00%	0	0	0	0	2,180	2,180	2,180	2,180
Blind Commission Vending Area	1,2,3,4,5						2,711	706	2,005		220	1.00%	0	0	0	0	2,005	2,005	2,005	2,005
Inspections & Appeals	3	24					12,305	3211	9,094	379	220	1.00%	24	25	26	28	5,280	5,544	5,821	6,112
Office of Energy Independence	3	18					4,349	1135	3,214	179	220	1.00%	18	19	20	21	3,960	4,158	4,366	4,584
Vacant	1,2						27,271	7117	20,154		220	1.00%	0	0	0	0	0	0	0	0
Historical Building		**61**		**4,537**	**302**	**222,638**	**222,638**	**39,435**	**183,203**	**3,003**		**1.00%**	**61**	**64**	**67**	**71**	**13,420**	**14,091**	**14,796**	**15,535**
Cultural Affairs	LL,1.2.3.Mezz	61					40,309	7,140	33,169	544	220	1.00%	61	64	67	71	13,420	14,091	14,796	15,535
Ceremonial (Auditorium /Conference)	LL,1,2,3,Mezz		1	2,519	168		182,193	32,271	149,922		220	1.00%	0	0	0	0	149,922	149,922	149,922	149,922
Blind Commission Vending Area	2		3	2,018	135		136	24	112		220	1.00%	0	0	0	0	112	112	112	112
(CCM) Facilities Management Center		**33**		**519**	**35**	**26,400**	**26,254**	**4,480**	**21,774**	**660**		**1.00%**	**33**	**35**	**36**	**38**	**7,310**	**7,676**	**8,059**	**8,462**
Administrative Services GSE - ME & EL	1	11					2,240	383	1,857	169	220	1.00%	11	12	12	13	2,420	2,541	2,668	2,801
Administrative Services GSE - Grounds	1	1	1	519	35		10,954	1,869	9,085	9,085	200	1.00%	1	1	1	1	200	210	221	232
Administrative Services GSE - Locksmith	1	1					289	49	240	240	200	1.00%	1	1	1	1	200	210	221	232
Administrative Services GSE - A&E	1	13					5,575	951	4,624	356	220	1.00%	13	14	14	15	2,860	3,003	3,153	3,311
Administrative Services GSE - Construction	1	3					6,106	1,042	5,064	1,688	250	1.00%	3	3	3	3	750	788	827	868
Administrative Services GSE - Administration	1	4					1,090	186	904	226	220	1.00%	4	4	4	5	880	924	970	1,019
Mercy Capitol			**?**			**270,719**	**266,039**	**110,426**	**155,613**			**1.00%**								
?	B,G,1,2,3,4,5	?	?	?	?		266,039	110,426	155,613		220	1.00%	?							
Iowa Utilities Board and Office of Consumer Advocates Building (IU		**91**		**4,608**	**307**	**44,755**	**43,172**	**10,525**	**32,647**	**359**		**1.00%**	**91**	**96**	**100**	**105**	**32,647**	**34,279**	**35,993**	**37,793**
Iowa Utilities Board	1,2	71	5	3,556	237		33,024	8,051	24,973	352	352	1.00%	71	75	78	82	24,973	26,222	27,533	28,909
Office of Consumer Advocate	1,2	20	6	1,052	70		10,148	2,474	7,674	384	384	1.00%	20	21	22	23	7,674	8,058	8,461	8,884

BUILDINGS & OCCUPANTS	Fl. Location	Staff	Conf. Loc.	Conf. SQ.FT.	Conf. Capacity	Gross SQ.FT.	Rentable SQ.FT.	Common Sq.Ft.	Usable SQ.FT.	Area Factor Net SF/Staff	Adjusted Area Factor	Annual Growth Rate	STAFF FORECAST				SPACE REQUIRED			
Lease Space (499,805)		**1,548**					**499,805**	**0**	**499,805**	**323**			**1,548**	**1,625**	**1,707**	**1,792**	**373,081**	**390,109**	**407,988**	**426,762**
Administrative Services GSE - Fleet*	100 E. 18th	0					0	0	Parking Lot		220	1.00%	0	0	0	0	0	0	0	0
Blind Commission*	920 Morgan , Suite T						7,200	0	7,200		220	1.00%	0	0	0	0	7,200	7,200	7,200	7,200
Commerce - Banking*	200 E. Grand Ave, 3rd floor, Ste. 300	20					7,307	0	7,307	365	220	1.00%	20	21	22	23	4,400	4,620	4,851	5,094
Commerce - Credit Union*	200 E. Grand Ave, 3rd floor, Ste. 370	6					2,267	0	2,267	378	220	1.00%	6	6	7	7	1,320	1,386	1,455	1,528
Commerce - Insurance & Utilities*	300 E. Maple Ste. 330	156					51,878	0	51,878	333	220	1.00%	156	164	172	181	34,320	36,036	37,838	39,730
Corrections - Iowa Prison Industries*	2323 Dean Avenue	5					17,111	0	17,111	3,422	220	1.00%	5	5	6	6	1,100	1,155	1,213	1,273
Cultural Affairs*	920 Morgan Street, Suite M	2					26,710	0	26,710	13,355	220	1.00%	2	2	2	2	440	462	485	509
Economic Development	200 E. Grand Ave	161					40,924	0	40,924	254	220	1.00%	161	169	178	186	35,420	37,191	39,051	41,003
Education - Iowa College Student Aid Commission*	200 10th St - 4th floor	53					12,280	0	12,280	232	220	1.00%	53	56	58	61	11,660	12,243	12,855	13,498
Education - Voc. Rehab. - Disability Determination Serv.*	535 SW 7th	138					36,731	0	36,731	266	220	1.00%	138	145	152	160	30,360	31,878	33,472	35,145
Human Services - Bureau of Collections	400 SW 8th Street	157					24,386	0	24,386	155	220	1.00%	157	165	173	182	34,540	36,267	38,080	39,984
Human Services - Child Support Recovery Unit	525 SW 5th - Suite H	20					4,950	0	4,950	248	220	1.00%	20	21	22	23	4,400	4,620	4,851	5,094
Human Services - Child Support Recovery Unit	6200 Aurora Avenue, Suite 301E	18					5,152	0	5,152	286	220	1.00%	18	19	20	21	3,960	4,158	4,366	4,584
Human Services - Collection Services Center	601 SW 9th, Suites F & M	41					9,938	0	9,938	242	220	1.00%	41	43	45	47	9,020	9,471	9,945	10,442
Human Services - Refugee Services Center	1200 University	24					7,715	0	7,715	321	220	1.00%	24	25	26	28	5,280	5,544	5,821	6,112
Human Services - Governor's Developmental Disabilities Council	617 E. 2nd Street	3					1,864	0	1,864	621	220	1.00%	3	3	3	3	660	693	728	764
Human Services - Income Training Academy	401 SW 7th - Suite G	7					4,819	0	4,819	688	220	1.00%	7	7	8	8	1,540	1,617	1,698	1,783
Human Services - Iowa Medicaid Enterprise	200 Army Post Road - Suite 2	4					1,629	0	1,629	407	220	1.00%	4	4	4	5	880	924	970	1,019
Human Services - Iowa Medicaid Enterprise	200 Army Post Road - Suite 12						1,400	0	1,400		220	1.00%	0	0	0	0	1,400	1,400	1,400	1,400
Human Services - Iowa Medicaid Enterprise	323 SW 8th - Suite 210						950	0	950		220	1.00%	0	0	0	0	950	950	950	950
Human Services - Iowa Medicaid Enterprise	100 E. Army Post Road	330					48,000	0	48,000	145	220	1.00%	330	347	364	382	72,600	76,230	80,042	84,044
Inspections & Appeals - Adult Public Defender's Office*	505 5th Ave., Ste 510	20					5,462	0	5,462	273	220	1.00%	20	21	22	23	4,400	4,620	4,851	5,094
Inspections & Appeals - Juvenile Public Defender's Office*	505 5th Ave., Ste. 345	14					2,873	0	2,873	205	220	1.00%	14	15	15	16	3,080	3,234	3,396	3,565
Inspections & Appeals - Racing & Gaming Commission*	717 E Court, Ste. B	13					4,600	0	4,600	354	220	1.00%	13	14	14	15	2,860	3,003	3,153	3,311
Iowa Workforce Development - Job Services*	430 E. Grand	78					50,000	0	50,000	641	220	1.00%	78	82	86	90	17,160	18,018	18,919	19,865
Iowa Workforce Development*	300 SW 7th Street, Suite F3 & F4						1,209	0	1,209		220	1.00%	0	0	0	0	1,209	1,209	1,209	1,209
Justice - Consumer Advocate's Office*	300 Maple Street	19					9,524	0	9,524	501	220	1.00%	19	20	21	22	4,180	4,389	4,608	4,839
Natural Resources - Administrative Services	323 SW 8th Street Suite 166						400	0	400		220	1.00%	0	0	0	0	400	400	400	400
Natural Resources - Administrative Services	300 SW 7th Street, Suite 405						280	0	280		220	1.00%	0	0	0	0	280	280	280	280
Natural Resources - Environmental Protection Division	7900 Hickman Rd	75					20,942	0	20,942	279	220	1.00%	75	79	83	87	16,500	17,325	18,191	19,101
Natural Resources - Water Supply & FO5	401 SW 7th Street, Ste. I & M	53					13,183	0	13,183	249	220	1.00%	53	56	58	61	11,660	12,243	12,855	13,498
Office of Drug Control Policy*	401 SW 7th - Suite N	8					6,351	0	6,351	794	220	1.00%	8	8	9	9	1,760	1,848	1,940	2,037
Public Health - Centers for Disaster Operations & Response	1901 Bell Avenue - Suite 12						2,330	0	2,330		220	1.00%	0	0	0	0	2,330	2,330	2,330	2,330
Public Health - Centers for Disaster Operations & Response	1901 Bell Avenue - Suite 16						7,000	0	7,000		220	1.00%	0	0	0	0	7,000	7,000	7,000	7,000
Public Health - Emergency Medical Services	300 SW 7th, Ste. 103						1,102	0	1,102		220	1.00%	0	0	0	0	1,102	1,102	1,102	1,102
Public Health - Medical Board	300 SW 7th Street, Ste., 102						350	0	350		220	1.00%	0	0	0	0	350	350	350	350
Public Health - Medical Board	323 SW 8th Street Suite 178						300	0	300		220	1.00%	0	0	0	0	300	300	300	300
Public Health - Medical, Dental, Pharmacy, & Dental Boards	400 SW 8th Street	54					16,296	0	16,296	302	220	1.00%	54	57	60	63	11,880	12,474	13,098	13,753
Public Safety - Fire Marshall & Iowa State Patrol*	4398 121st Street						10,000	0	10,000		220	1.00%	0	0	0	0	10,000	10,000	10,000	10,000
Public Safety*	709 E. 2nd Street	8					4,428	0	4,428	554	220	1.00%	8	8	9	9	1,760	1,848	1,940	2,037
Revenue - Collections Unit*	401 SW 7th Street, Ste. C	46					8,848	0	8,848	192	220	1.00%	46	48	51	53	10,120	10,626	11,157	11,715
Revenue - Property Assessment Appeal Board*	401 SW 7th, Suite D	6					3,011	0	3,011	502	220	1.00%	6	6	7	7	1,320	1,386	1,455	1,528
Revenue - Records Retention*	920 Morgan Street, Suite G	2					16,370	0	16,370	8,185	220	1.00%	2	2	2	2	440	462	485	509
Treasurer - Agricultural Development Authority*	505 5th Ave., Ste 327	7					1,735	0	1,735	248	220	1.00%	7	7	8	8	1,540	1,617	1,698	1,783

BUILDINGS & OCCUPANTS	Fl. Location	Staff	Conf. Loc.	Conf. SQ.FT.	Conf. Capacity	Gross SQ.FT.	Rentable SQ.FT.	Common Sq.Ft.	Usable SQ.FT.	Area Factor Net SF/Staff	Adjusted Area Factor	Annual Growth Rate	STAFF FORECAST				SPACE REQUIRED			
TOTALS-BASE CASE		**5,944**		**87,358**	**5,946**	**2,437,132**	**2,705,147**	**661,784**	**2,043,363**	**747**	**248**	**1%**	**5,938**	**6,233**	**6,543**	**6,868**	**1,474,454**	**1,545,069**	**1,619,214**	**1,697,067**
Total Staff on Capitol Complex		4,396																		
Total Staff in Lease Space		1,548																		
Total Employees		5,944																		
Space Inventory - On campus							2,205,342		1,543,558								1,543,558	1,543,558	1,543,558	1,543,558
Occupied Space (Less Vacant/Construct)									1,866,666											
Lease Space to Remain * (= above * added)																	499,805	157,240	164,182	171,470
New Lease Space To Hold 15% Level																		74,520	78,701	83,090
Total Lease Space Required																	499,805	231,760	242,882	254,560
Total Space Available																	2,043,363	1,775,318	1,786,440	1,798,118
Total Lease Space to Move to Capitol Complex																	0	232,869	243,807	255,292
Building Common Area (43% of Usable SF)																	661,784	664,380	696,262	729,739
Space Deficit (Net Area)																	92,875	434,130	529,036	628,688
Gross Building to Construct (80%)																	116,094	542,663	661,295	785,860
Annual Staff Growth Rate													1.00%	1.00%	1.00%	1.00%				
Area Factor																	248	248	247	247
Percent Lease Space																				

Appendix C: Capitol Complex Planning History

Capitol Master Planning History

1870

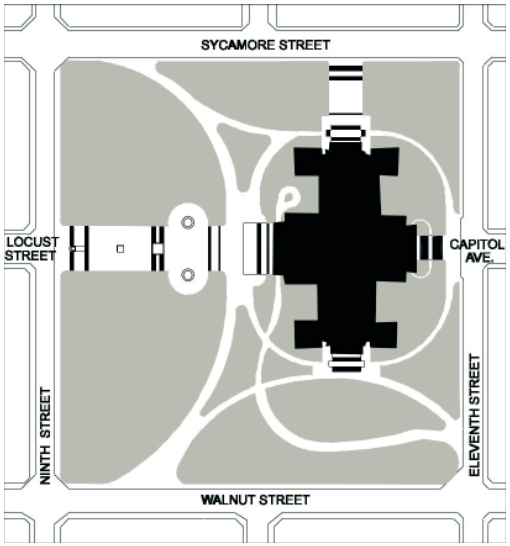
John C. Cochrane and A.H. Piquenard - Architects

The architects of the Capitol Building had the impressive task of building a fitting home for a young state government and for a prideful and spirited pioneering community.

1884

Weidenmann Plan

This plan established the principle of extending the Capitol steps into the landscape by creating the West Mall. The mall was an easy walk to the streetcar serving downtown Walnut Street and Court Avenue. Weidenmann surrounded the Capitol with lawn and a Victorian knot of ornamental walkways to "furnish a setting worthy of the building." After this plan was completed the Old Brick Capitol was demolished and the Soldiers and Sailors Monument constructed in its place.



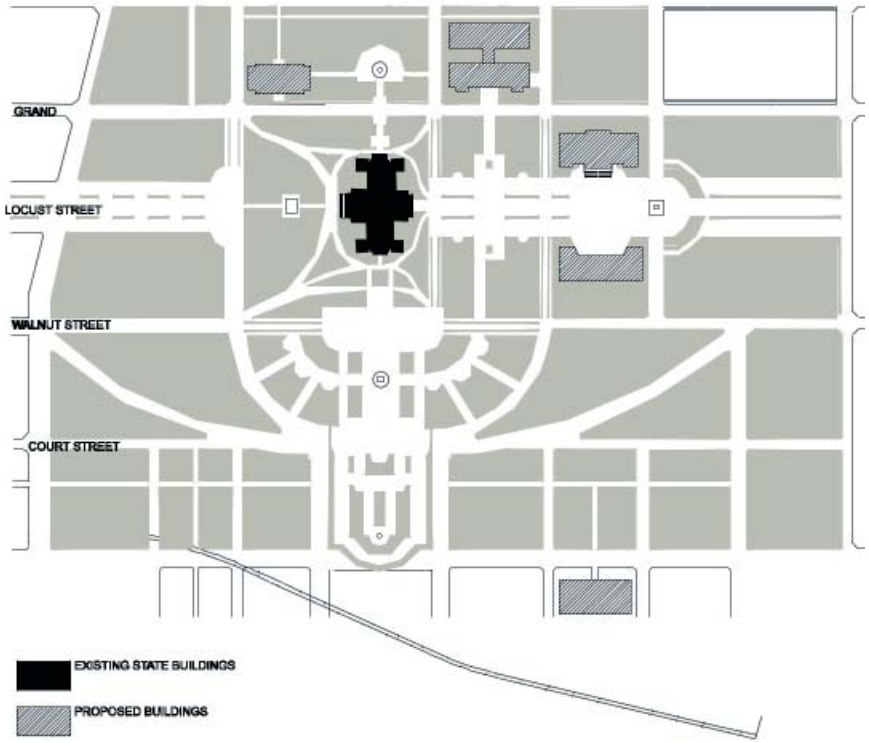
The State Capitol Building under construction, above. The Weidenmann plan, left, was the first plan to address the site around the Capitol Building.

1913

E.L. Masqueray Plan

The most influential plan for the Capitol grounds, this plan dramatically expanded the Capitol grounds from a single block to a 31-acre campus. Comprehensive and far reaching, the plan restored the natural and scenic value of the Capitol site, enhanced the view of the Capitol from the railroad, and sited future buildings and memorials. The plan recommended relocating the Soldiers and Sailors Monument to the East Mall. It also established the vision for the South gardens and the Court Avenue bridge.

The expanded South Mall and bridge over Court Avenue, above, was one of the biggest components to come out of the E.L. Masqueray Plan.



The E.L. Masqueray plan, above, continues to be influential in Capitol Complex planning nearly 90 years after it was created.

1963

“Pinwheel Plan”

Ken Larson developed this plan in collaboration with the Capitol Planning Commission. This plan was completed as a joint effort between the Iowa Chapter AIA architects and the Capitol Planning Commission. It recommended an underground parking garage east of the Capitol Building that would accommodate up to 250 cars. It also exhibited the Grimes building as it is currently located.

A massive state library and archives building was proposed, but never built, north of the Grimes building and Grand Avenue in the 1963 “Pinwheel Plan.”

1964

State Capitol Model

Lucio Savoia was commissioned to complete a model of the future. He was to take the Master Plan completed in 1964 and create a 3-D model of the future 1984 Capitol Complex. Savoia was originally from Rome, but had an office in Chicago. He worked with local architects who furnished him with drawings and photographs to complete the model. This complete model was displayed in the Capitol for many years.

1971-1981

During this time period the state commissioned multiple plans to address immediate needs of office space, legislative needs, and parking.

1971 Jon Crose & Assoc. with Charles Herbert & Assoc.

1973 Barton – Aschman & Assoc.

1974 Hansen, Lind & Meyer and Sasaki, Dawson, DeMay

1977 Hansen, Lind & Meyer and Sasaki, Dawson, DeMay

1981 Bussard Dikis Assoc.

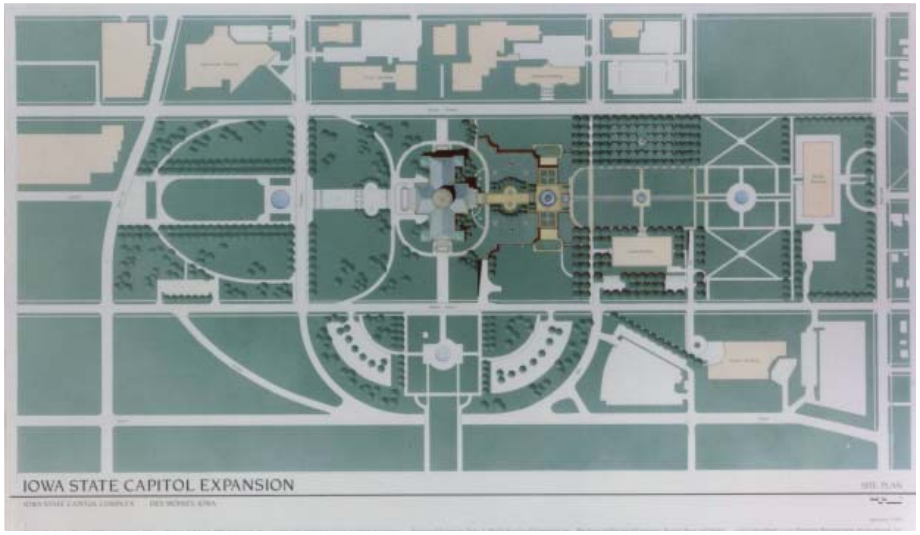
An analysis of the cause and treatment of severe stone deterioration on the State Capitol building was prepared, resulting in a multiyear Master Plan for the restoration of the building exterior surfaces. Restoration work began in 1983 and continues to the present. The scope of restoration was later expanded to include the interior as well as the grounds immediately surrounding the Capitol.

Work on restoring the Capitol Building continues, below, in this image taken in 1999 from the State Historical Building.

1988-89

Bussard Dikis Assoc

This plan began to look at long-range needs, location criteria, and enhancements to the grounds. The main focus was to recommend a location and then prepare concept design and cost projections for an underground addition to the Capitol to provide offices for the Legislature. The resulting plan, after considering all 4 sides of the Capitol, focused on the East Mall, including the replacement of surface parking with underground parking, landscaping, and space for legislative and office needs. In 1989, plans were submitted to the state by Bussard Dikis Assoc./ BRW Architects/Crose Gardner Assoc. for underground legislative offices, meeting rooms, services, cafeteria, and parking east of the Capitol. This plan had a green roof concept that added a plaza and park to the East mall. In continuing dialogue with the Capitol Planning Commission, recommendations included improvements to the tunnel system, a Master Plan for the Capitol Complex, a Monuments Master Plan, protection of major view corridors, conversion of the “front door” west parking areas to a landscaped mall, and advocating a strengthening of the Masqueray Plan by enhancing the symmetry elements of the major and minor axes, including an addition to the Grimes Building.

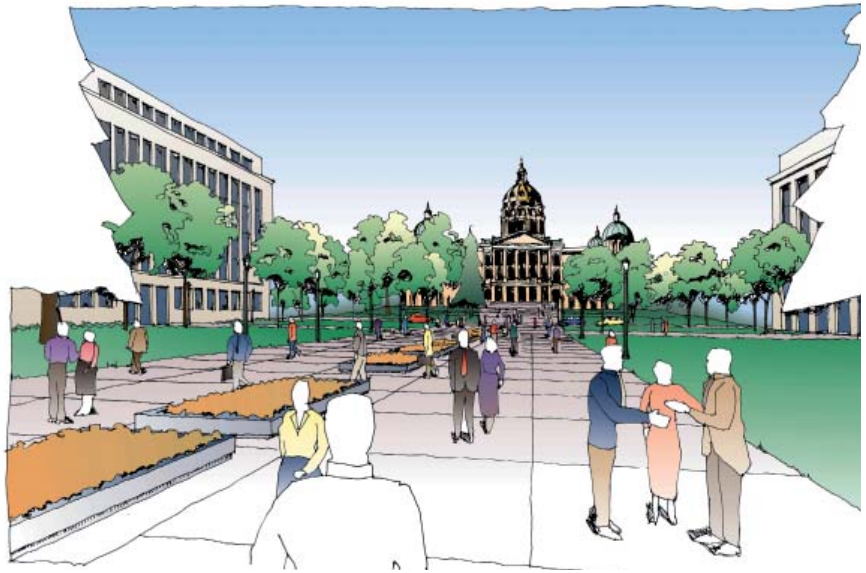


Restoring dignity to the West, South, and East malls was a major component of the 1989 Plan

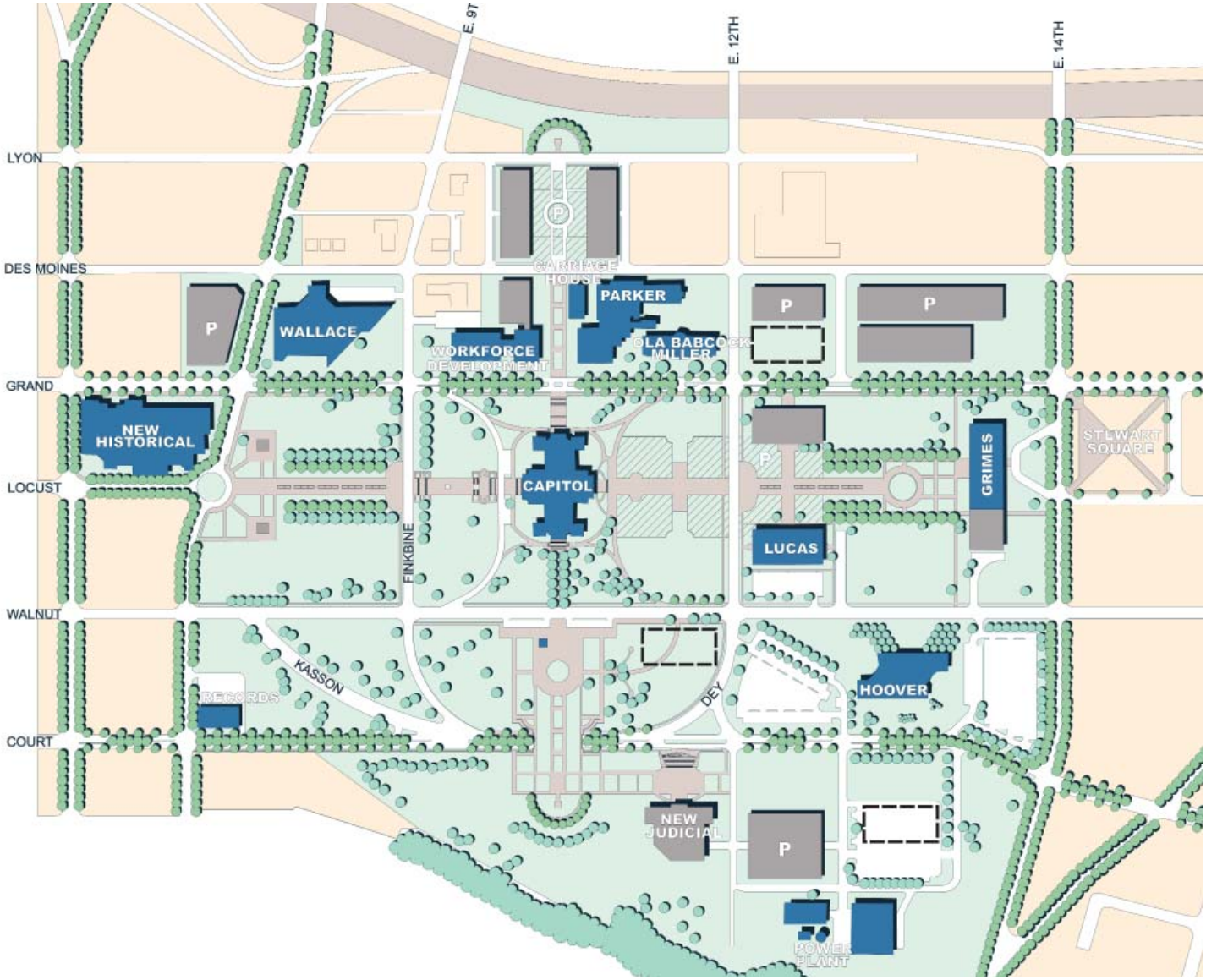
2000

Brooks Borg Skiles – Zimmer Gunsul Frasca Partnership

The 2000 Iowa Capitol Complex Master Plan was prepared by Brooks Borg Skiles Architecture Engineering in association with Zimmer Gunsul Frasca Partnership. SGS Group provided facilities planning and TDA Illinois, Inc provided transportation planning. As the first comprehensive master plan since the 1913 E.L. Masqueray plan, it provided a design and strategy for the future physical development of the Capitol Complex and remains a resource for making decisions regarding restoration and preservation of existing buildings and grounds, additional buildings, landscaping, statues, fountains, and memorials.



The 2000 Master Plan continued with the long tradition of plans that proposed parking be removed from the East and West axis and then suggesting that they be converted into grand pedestrian malls.



The 2000 Master Plan's expanded North Mall extended much further out then past plans by going all the way to the Interstate.

2000

RDG Bussard Dikis - Comprehensive Facilities Study

The State of Iowa Space Utilization and Building Study was completed in late 2000, building upon the Capitol Complex Master Plan. This recommended priorities for the timing and concepts for new construction, renovations and relocations. The comprehensive study included recommendations for additional land acquisition, including Des Moines General Hospital (now knows as Mercy Capitol); best space utilization and "rightsizing"; capacity of the Capitol Complex for growth; establishment of key planning ratios of 220 NSF per staff; 75% net to gross target building efficiency; parking at 3 spaces per 1,000 GSF; and suggestions for some additional building sites beyond the Master Plan. Based on historical information, a growth rate of 1% per year in staff was predicted. This study was a key factor in breaking an impasse on moving ahead with the proposed parking garage at E. Grand Avenue and Pennsylvania Avenue. Several recommendations of the study were subsequently carried out, including conversion of the old Records & Property building to use as the Dept. of Public Safety headquarters, abandonment of the old Kasson Drive link between E. Court and E. Walnut, relocation of the motor pool operations, and conversion of the west mall from parking to a landscaped mall.