State of Washington
Capitol Campus
Transportation and Parking Study
FINAL REPORT (9/18/14)

Prepared for:
Washington State Department of Enterprise Services

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EXECUTIVE SUMMARY
STATE OF WASHINGTON CAPITOL CAMPUS TRANSPORTATION AND PARKING STUDY

Parking and transportation access at the Washington State Capitol Campus is complex and often challenging; particularly during periods when the State Legislature is in session. The Capitol Campus maintains approximately 6,095 parking stalls located in 28 locations, providing employee, visitor and vendor/service access. Parking is distributed in a number of ways, ranging from assigned/reserved stalls, zoned/general access, employee restricted to visitor only. The system is also a mix of garages, surface parking lots and on-street parking. The state also provides its employees access to programs that support transportation options such as free use of transit on the Thurston County transit system, on-campus bike parking, the State Agency Free Emergency (SAFE) Ride Home Program, teleworking and flexible work hours.

In 2009, a parking study was performed that evaluated parking resources within the Capitol Campus. The genesis of the 2009 parking study was to assess resource capacity within the parking supply to respond to three then planned building projects on campus. In 2014, planning for the 1063 Block project led to the need for a reassessment of parking capacity and system management and the role of transportation demand management (TDM) to efficiently accommodate access demand (Section VI).  

With the 1063 Block development, the question of effective parking and transportation demand management becomes critical to maintaining the daily ebb and flow of trips coming to the Capitol Campus. Refinement and enhancement of current access management programs and the development and implementation of new programs, strategies and methods to maximize “access capacity” (parking and alternative modes) will improve efficiencies and save costs; particularly the cost of parking development.

To this end, the state engaged in a comprehensive review and analysis of the Capitol Campus parking system as a means to update the 2009 study and to look at parking, transit, bike and rideshare options and opportunities; grounded in current state goals for commute trip reduction by state employees. The work scope for the 2014 Parking and Transportation Study include five broad task areas. These include:

- Assess existing dynamics of parking within the supply of parking in the Capitol Campus.
- Translate those dynamics into useful information to support strategic decision making related to the 1063 Block project and parking management within the Capitol Campus.
- Provide recommendations that will maximize existing parking resources and better integrate with alternative transportation options.
- Evaluate current parking management systems and practices as well as current efforts and programs related to Transportation Demand Management.
- Recommend refinements, changes and/or enhancements.

Transportation Demand Management (TDM) is the application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), or to redistribute this demand between modes or other periods of time.
A. KEY THEMES

The consultant team was provided with, and reviewed, a number of materials and reports regarding Capitol Campus goals and objectives for parking, trip reduction and transportation demand management. The consultant team also met five times with an internal team of DES staff members responsible for parking and access management and with representatives from the Department of Transportation (DOT), Intercity Transit and Thurston Regional Planning Council. The meetings were conducted in a work session and brainstorming format on January 24, April 10, May 15 (by conference call) and May 22, 2014 (with internal staff and the Capitol Campus Design Advisory Committee). A final review of the document was conducted on August 18, 2014 (by conference call). These sessions were structured to educate the consultants, define issues, understand existing realities and test new concepts and approaches. Internal staff also prepared a written summary of “Reviewer’s Comments” that consolidated recommendations for revisions and/or requests for additional information or clarifying language.

Based on this input, a series of themes emerged that are best described as key challenges that internal staff sees as barriers to moving forward with both better parking management and alternative mode growth. These themes represent challenges to overcome and provide a framework against which data from the parking study was evaluated (Section V) and solutions and strategy recommendations were developed (Sections VII, IX and X).

Key themes derived from the study included:

- How to manage parking to its highest and best use.
- Alternative mode infrastructure needs to be improved and leveraged
- The state needs to invest in technologies that maximize use of existing parking supplies.
- There needs to be targeted and aggressive commitment to the Commute Trip Reduction (CTR) Law.

Based on internal stakeholder input, there is high level of concern that the existing parking supply is nearing its “practical capacity.” ² Under status quo conditions and operations this will create high constraints, inefficiencies and conflict with state goals for alternative modes (i.e., CTR). This also means that new growth (e.g., 1063 Block, visitors, employees) will be very difficult to accommodate. The consequences of not pursuing changes to the current systems are very high costs in new parking development and/or the inability to cost effectively build out the campus over time. Better management of the existing parking supply and significant improvements in CTR performance are the best options to pursue.

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² Practical capacity: The occupancy level or number of vehicles that can be parked in a facility or area before it becomes difficult for a driver to find a space; causing inconvenience, congestion and increased travel times.
B. PARKING STUDY

The purpose of the 2014 transportation and parking study was to derive a comprehensive and objective understanding of actual use dynamics and access characteristics associated with parking at the Capitol Campus. The full parking study analysis and findings can be found in Section V of this report.

1. Methodology

A complete survey of parking use (occupancy) was conducted on three “typical days” representing parking activity when the State Legislature was in session and when not in session – Thursday, January 9, 2014 (not in session) and Thursday, January 30 and Wednesday, February 4, 2014 (in session).

2. Study Area and Supply

Parking on the Capital Campus is self-contained, with little or no remote off-campus supply. The map below provides a layout of the campus and parking locations. Employees are generally assigned to available parking as close as possible to their offices. In total, there are 6,095 parking stalls on campus located in 28 facilities, separated into 35 “areas,” depending on whether the parking is associated with long-term employee use or visitor parking. Ninety percent of the aggregate parking supply (5,517 stalls) is associated with employee parking. The remainder, 578 stalls is devoted to visitor access.
3. **Current access patterns**

Approximately 71% of employees drive alone to the campus each day, with another 15% arriving in a high occupancy vehicle (car/vanpool). The remaining 14% arrive by a combination of transit, bike, walk, telework and/or flexible hours.

4. **Use of the supply – Legislature NOT in session**

- Combined supply reaches 74.6% occupancy at peak.
- Visitor supply reaches 53.1% occupancy at peak.
- Employee supply reaches 76.9% occupancy at peak.
- Parking activity is strong but not severely constrained.
- Only nine of 35 facilities have parking constraints.

When the legislature is not in session there are reasonable opportunities to park on campus, though not necessarily as proximate to a worksite as some might want.

<table>
<thead>
<tr>
<th>NON-SESSION</th>
<th>Stalls</th>
<th>Peak Hour</th>
<th>Vehicles Parked</th>
<th>Unused Stalls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Supply</td>
<td>6,095</td>
<td>74.6% (10AM - 11AM)</td>
<td>4,549</td>
<td>1,546</td>
</tr>
<tr>
<td>Employee</td>
<td>5,517</td>
<td>76.9% (10AM – 11AM)</td>
<td>4,242</td>
<td>1,275</td>
</tr>
<tr>
<td>Visitor</td>
<td>578</td>
<td>53.1% (10AM – 11AM)</td>
<td>307</td>
<td>271</td>
</tr>
</tbody>
</table>

5. **Legislature IN session**

- Combined supply reaches 84.2% occupancy at peak.
- Visitor supply reaches 84.9% occupancy at peak.
- Employee supply reaches 84.1% occupancy at peak.
- Parking is constrained when the legislature is in session. The constraint is campus wide (east and west campus).
- Over half (20) of all parking areas approach or exceed practical capacity.
  - Visitor parking facilities are particularly constrained with eight of 11 facilities exceeding practical capacity.
  - Twelve of 24 (50%) of employee facilities approach or exceed practical capacity and parking is generally tight throughout the campus.

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3Source: Derived from 2013 State of Washington Commute Trip Reduction (CTR) data for combined Capitol Campus employees. For more detail see Section VII of this report.
During the legislative session, the Capitol Campus is nearing a point of combined practical capacity, indicating that new parking demands generated by future employee growth or new development could adversely affect circulation to and within the campus unless mitigation measures are implemented (e.g., improved CTR performance and/or new parking supply on or off-campus).

### In Session: Consolidated Summary

<table>
<thead>
<tr>
<th>IN SESSION</th>
<th>Stalls</th>
<th>Peak Hour</th>
<th>Vehicles Parked</th>
<th>Change from Baseline</th>
<th>Unused Stalls (in session)</th>
<th>Unused Stalls - Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Supply</td>
<td>6,095</td>
<td>84.2%</td>
<td>5,131</td>
<td>+582 (+13%)</td>
<td>964</td>
<td>1,546</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10AM - 11AM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>5,517</td>
<td>84.1%</td>
<td>4,640</td>
<td>+398 (+9.4%)</td>
<td>877</td>
<td>1,275</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10AM – 11AM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visitor</td>
<td>578</td>
<td>84.9%</td>
<td>491</td>
<td>+184 (+60%)</td>
<td>87</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10AM – 11AM)</td>
<td></td>
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</table>

### Peak Hour Parking In-Session
C. POTENTIAL IMPACTS OF 1063 BLOCK REPLACEMENT PROJECT

1. Framework Challenge

A new project on the West Capitol Campus known as the 1063 Block Replacement Project (1063 Block Project) is slated to begin in late 2014 through the Design Build process. As currently envisioned the project will remove the existing General Administration (GA) and Capitol Park (CP) Garages. This will result in the removal of 261 parking stalls; and there is no plan to replace parking removed by the project. Additionally, it is estimated that once the 1063 Block Building is complete, 400 net new employees will relocate in the new 1063 Block building from other state agencies located off-campus. As such, for purposes of this analysis, approximately 400 net new employees were modeled against the available parking supply. The full analysis of the 1063 Block Replacement Project can be found in Section VI of the full report.

2. Model outcomes

The impact during periods when the legislature is not in session is felt most in existing employee parking areas, rising from 77% to 85% in the peak hour. While short of the defined practical capacity for employee parking (90%); it is significantly more constrained than current levels (77%). However, visitor areas could be “repurposed” during non-legislative seasons to mitigate this situation for employees. Nonetheless, the overall combined supply of parking in the non-legislative season (83%) would be similar to demand totals now evident during the legislative session (84%).

Given current rates of vehicle access on the campus, the loss of the GA and CP garage and the addition of up to 400 new employees will push parking occupancy levels above practical capacity during the legislative session unless status quo drive alone trips are transitioned to other modes (e.g., transit, bike, walk) or moved off-campus (e.g., remote lots and/or telework and flexible hours). The functional efficiency of the campus parking access system would be compromised and create significant difficulty and frustration to find a parking space; causing inconvenience, congestion and increased travel times. Similarly, movement/circulation and safety could be adversely affected.

Overall, the 1063 Block Project will have demonstrable impacts on parking demand under the current development scenario. Parking will become more constrained. To mitigate this, more strategic management of the entire supply is needed to ensure full maximization of parking resources. To avoid and/or reduce the need to provide more parking supply, parking management and transportation demand management will need to be provided at levels that exceed current programs and systems.
D. TRANSPORTATION DEMAND MANAGEMENT (TDM) AND ALTERNATIVE MODE INFRASTRUCTURE ON THE CAPITOL CAMPUS.

1. Transportation Demand Management (TDM) and the Commute Trip Reduction (CTR) Rule

TDM can increase transportation options, provide financial savings to the state, and reduce traffic congestion, parking problems, and pollution emissions. An effective TDM Plan and program can also become an important strategy for creating more efficient land use patterns that will benefit the Capitol Campus’ growth and expansion plans over time. These benefits can be significant because traffic and parking costs tend to be particularly high and the impacts to on-campus resources as well as adjacent residential/business districts become extremely expensive without a package of multiple solutions, as opposed to a “just build more parking” approach.

In 1991 the Legislature passed the Commute Trip Reduction (CTR) Law. The law calls on employers to encourage their workers to drive alone less often, reduce carbon emissions and keep the busiest commute routes flowing. The law requires public and private employers in the nine most populated counties that have 100 or more employees in a single worksite to implement a program designed to reduce the number of drive-alone vehicles commuting to the worksite.

Pertinent to the Capitol Campus, the law requires state agencies located in the urban growth areas of Olympia, Lacey, and Tumwater to participate in a “Joint Comprehensive CTR Plan” designed to reduce the drive-alone commute trips and vehicle miles traveled (VMT) to state agency worksites. The Joint Comprehensive CTR Plan was adopted by the Interagency CTR Board on March 24, 2011. The Joint Comprehensive CTR Plan set a goal for state agencies to reduce drive alone rates by 10 percent from baseline rates within four years.

Based on 2013 CTR data for the combined Capitol Campus, current drive alone rates would need to drop from an average of approximately 70.9% to 63.81% by 2015 (a 10% reduction) to meet the 2015 goal established in the Joint Comprehensive CTR Plan.

2. Capitol Campus

For the Capitol Campus, an effective and targeted TDM program can generate meaningful shifts in commute patterns, resulting in capacity improvements in existing parking supplies as fewer employees drive to work, thus creating parking availability in already built supply; the concept of new capacity through “parking not built.” By transitioning existing parkers to alternative modes, additional capacity is created within the parking supply that can be applied to net new visitor and employee growth and/or new buildings.
The full analysis of TDM on the Capitol Campus as well as identification of infrastructure gaps and recommendations for strengthening the relationship between parking and TDM can be found in Sections VII, VIII and Attachment B of the full report.

E. ELEMENTS OF A NEW ACCESS MANAGEMENT PLAN FOR THE CAPITOL CAMPUS

Based on information developed in Sections III – VIII of the full report, the following issues are evident within the context of current programs and services:

- Campus parking is approaching its practical capacity; particularly during periods when the legislature is in session.
- New growth on campus (e.g., 1063 Block Project), will challenge the parking situation. The functional efficiency of the campus parking access system may be compromised and create difficulty in finding a parking space. This may cause inconvenience, congestion and increased travel times without active mitigation. Similarly, movement/circulation and safety could be adversely affected.
- Progress toward meeting CTR goals for alternative mode access has been static for a number of years. The role that successful attainment of CTR goals can play in access and capacity management can be significant for campus efficiency and cost of future access infrastructure.

To this end, the 2014 Transportation and Parking Study provides a very detailed set of recommendations formatted into framework/structure and schedule that provides the basis of an implementation plan. This Access Management Plan is crafted to develop an integrated and comprehensive program that supports the continued vitality and growth of the Capitol Campus within the context of clear policy direction. The recommendations in the plan also serve as a template for action strategies that the state and affected stakeholders (i.e., agencies, staff and the community) can use to move forward strategically; under the leadership of a Campus Access Manager supported by the campus based ETC network.

This Implementation Plan is structured around three action levels: (1) policy, (2) organization and (3) operations. The success of this plan and the approach outlined is based on establishing an organization that consolidates parking services and CTR program delivery for the campus and is focused on access management.

1. Policy Level Actions

The state’s Joint Comprehensive CTR Plan for Thurston County was forward thinking and envisions strategies that are designed to encourage state employees to consider other means of commuting to work besides driving alone. As demonstrated in Section VII, successful realization of the CTR Plan goals will create significant efficiencies within the campus parking supply. The Plan also recognizes the role parking management plays in CTR and encourages parking guidelines and programs that help actualize CTR goals. As the Plan states, “parking management is a key component of any CTR program.” The reality of the
current system is that certain key objectives necessary to fully actualize policies are not in place. Without high level management support and aggressive coordination of access management; CTR goals will not be met across all agencies or the broader campus. Key policy level actions include:

- Engage Executive and Senior Management in a process that reaffirms the goals, objectives and targets of the Joint Comprehensive Commute Trip Reduction Plan.
- Develop and adopt a parking rate policy that would require rate adjustments based on demand or market and keyed to meeting operating and debt costs.
- Establish a clear policy (written and formally approved) on reserved stalls and why they are needed and when and how they are allocated.
- Commit adequate and sustainable funds to ensure the long-term implementation and success of the Campus Access Management Plan.

2. Organization: Consolidation of Parking and CTR Services

The success of any multi-faceted access system is dependent on the ongoing administration, management, and communication of both the parking and CTR parking programs; structured to achieve specific access goals and outcomes. This includes day to day management of individual parking facilities, oversight of third party vendors (as necessary), financial accounting and reporting, marketing/communications, customer service, strategic and capital planning and integrated coordination of CTR programs and services on Capitol Campus and at and within each campus based state agency. Key organization level actions include:

- Create within the Department of Enterprise Services an Access Management unit that consolidates the delivery of CTR and Parking Services;
- Establish a quasi-Transportation Management Association (TMA), charged with interacting directly with campus based agencies for parking and CTR compliance.
- Consolidate the management and administration of Parking and CTR Services for the Capitol Campus under an individual Campus Access Manager.
- Establish and initiate a Capitol Campus “Employee Transportation Coordinators’ (ETC) committee” to serve as a quasi-Board of Directors for the Campus Access Manager. The ETC committee would be charged with assisting in implementation and review of the Campus Access Management Plan.

3. Operations

To the highest degree possible, recommended strategies are laid out in each category in a manner that is iterative or “checklist” in presentation. Actions are intended to follow a logical progression of implementation, with each preceding action providing the ground work necessary to move to a subsequent action. All recommendations are assigned a timeline or “phase,” which includes:

Immediate (0 – 12 months)
Phase 1 (12 – 24 months)
Phase 2 (24 – 36 months)
Phase 3 (36+ months)

Key operations level actions include:

- Within 15 months initiate and complete evaluation of parking rates and adjust rates by demand; most likely seasonally and by area.
- Promote telework/flexible work schedule programs, including the use of incentives.
- Provide personalized trip planning services with assistance of IT to all campus employees through ETC’s and the Campus Access Management Program.
- Create additional visitor parking through a combination of strategic reductions in reserved stalls and employee zoned parking.
- Consider valet parking as a means to “stack” vehicles to maximize/increase stall capacity; particularly during legislative session.
- Procure/acquire remote parking supply that is connected by Intercity Transit or other transportation option to Capitol Campus versus new supply built on campus.
- Evaluate options before considering construction of new supply.
- Evaluate Deschutes Parkway as a nearby “remote” on-street parking opportunity that could be improved for bike, walk and transit/shuttle connections.
- Enhance vanpool subsidies to increase utilization (a targeted form of parking cash out).
- Engage in a comprehensive review of capital planning to include evaluation of the need for new or expanded parking facilities on campus. Research should include consideration of anticipated employee growth and the assumed role that achieving TDM/CTR targets identified in Policy Section A will have on overall parking demand and timing of supply growth.

In total there are 36 specific policy, organization and operations related strategy recommendations. A summary matrix of the entire parking strategy implementation plan is provided in Sections IX, X and Attachment A of the full report.

F. SUMMARY

The Washington State Capitol Campus access system (parking and alternative modes) is large and complex. The state’s TDM and CTR goals for the Capitol Campus are aggressive and intended to serve as a model for the rest of the state. Demands for parking are growing, leading to potential constraints within the parking system and competing demands for access (between visitors and employees). The Capitol Campus Access Management Plan contained in this report endeavor’s to recommend comprehensive “best in class” programs and systems for maximizing existing supplies of parking and elevating CTR performance as the key desired outcome for minimizing the need for new parking over time.
The Plan also envisions very active, hands on involvement in access management as a key component of program success. At present, the state’s existing resources for administering parking and CTR do not appear to be structured to delivering the type of access system envisioned by the Plan.

The strategy recommendations provided in this report are intended to serve as a “check list” of actions that answer the question that might be asked of “where do we start?” Strategies herein are intended to structure actions in a manner that is iterative and strategically ordered. Actions are also separated into categories of policy, consolidation of access management services, operations and funding. Over time, with active support of campus leadership and coordinated by a Campus Access Manager, goals and objectives in this Plan will be realized.

Overall, this report should serve as a template for rigorous discussion of work products, task assignments, roles and responsibilities and coordinated partner. Ultimately, the outcome will be a more efficient, accessible and sustainable system for accessing the Capitol Campus.
STATE OF WASHINGTON CAPITOL CAMPUS TRANSPORTATION AND PARKING STUDY

I. BACKGROUND AND OVERVIEW

Parking and access at the Washington State Capitol Campus is complex and often challenging; particularly during periods when the State Legislature is in session. The Capitol Campus maintains approximately 6,095 parking stalls located in 28 locations, providing employee, visitor and vendor/service access. Parking is distributed in a number of ways, ranging from assigned/reserved stalls, zoned/general access, employee restricted to visitor only. The system is a mix of garages, surface parking lots and on-street parking. The state provides its employees access to programs that support transportation options such as free use of transit on the Thurston County transit system, on-campus bike parking, the State Agency Free Emergency (SAFE) Ride Home Program, teleworking and flexible work hours.

A parking study was performed in 2009 that evaluated parking resources within the Capitol Campus. The genesis of the study was to assess resource capacity within the parking supply to respond to three then planned building projects on campus. In 2014, planning for the 1063 Block project led to the need for a reassessment of parking capacity and system management and the role of transportation demand management (TDM) to accommodate trips to the campus. As envisioned, the 1063 Block project will remove 261 existing parking stalls from the Capitol Campus supply, removing the existing General Administration (GA) and Capitol Park (CP) parking garages. The 1063 Block Project will not provide parking for the new 1063 Block building. Current parkers will be redistributed into the remaining supply and up to 400 net new employees will likely be added to the Capitol Campus employee base.

With the 1063 Block development, the question of effective parking and transportation demand management becomes critical to maintaining the daily ebb and flow of trips coming to the Capitol Campus. Refinement and enhancement of current parking and CTR programs and the development and implementation of new programs, strategies and methods to maximize “access capacity” (parking and alternative modes) will improve efficiencies and save costs; particularly the cost of parking development.

To this end, the state engaged in a comprehensive review and analysis of the Capitol Campus parking system as a means to update the 2009 study. Also of interest was a more comprehensive look at parking, transit, bike, walk and rideshare options and opportunities; based on current state goals for commute trip reduction by state employees. The work scope for the 2014 Transportation and Parking Study include four broad task areas. They include:

- Assess existing dynamics of parking within the supply of parking in the Capitol Campus.
- Translate those dynamics into useful information to support strategic decision making related to the 1063 Block project and parking management within the Capitol Campus.
- Provide recommendations that will maximize existing parking resources and better integrate with alternative transportation options.

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• Evaluate current parking management systems and practices as well as current efforts and programs related to Transportation Demand Management.
• Recommend refinements, changes and/or enhancements.

The findings of this review are contained within this report and are intended to provide the state with an implementable Parking and Transportation Management Plan for the Capitol Campus.
II. REPORT FORMAT

This report contains a combination of findings based on a comprehensive review of existing policies, programs and services. Extensive data collection efforts were conducted within the parking system during one “typical” day when the legislature was not in session and two “typical” days when the session was underway. A number of recommendations for moving forward are provided in an implementation plan format. To present information in a logical order, the following topic areas will be addressed.

- Problem Statements – Study Questions
- Framing the Work – The Capitol Campus
- Summary of Parking Study
- Potential Impacts of 1063 Block Replacement Project
- Transportation Demand Management – The Role of TDM and Parking on the Capitol Campus
- Review of Transportation Infrastructure (non-auto modes)
- Elements of an Access Management Plan
- Strategy Recommendations (Implementation Plan and Schedule)

The goal for the Parking and Transportation Management Plan is to develop an integrated and comprehensive program that supports the continued vitality and growth of the Capitol Campus within the context of clear policy direction. The recommendations in the Plan also serve as a template for action that the State and affected stakeholders (i.e., internal departments and agencies) can use to move forward strategically while balancing, managing and coordinating access and growth.
III. PROBLEM STATEMENTS

A. Policy Background

The consultant team was provided with, and reviewed, a number of materials and reports regarding Capitol Campus goals and objectives for parking, trip reduction and transportation demand management. Background documents and references included:

- **2008 Thurston Region Commute Trip Reduction Plan.** This Plan addresses the region’s transportation and land use context, sets regional goals for commute trip reduction, describes how to measure progress, develops strategies to meet the goals, and presents a sustainable financial plan.

- **2009 Washington State Capitol Campus Parking Study.** This study provided a comprehensive look at the Capitol Campus parking inventory and utilization in 2009. At that time, three major new campus projects were in the planning or design stages and the study was intended to assess the impacts those projects would have on the parking supply should they move forward. The study also provides excellent background material provided by the Department of Enterprise Services (DES) regarding employee totals and parking system protocols.

- **2009 Capital Community Moving Forward – Regional High Capacity Transportation Study.** This study provides a broad view of how visitors and state employees travel to, around, and between state facilities in Thurston County. Commissioned by the State Legislature in 2008-2009, it looks at the way state facilities are managed, located, and built, with an eye to meeting Commute Trip Reduction goals and improving options for multimodal travel.

- **2008 – 2011 City of Olympia Commute Trip Reduction Plan.** A collection of jurisdiction-adopted goals and policies, facility and service improvements and marketing strategies about how the City of Olympia will help make progress for reducing drive alone trips and vehicle miles traveled over a four year period.

- **2013 Commute Trip Reduction results (and historical performance).**

- **Executive Order 14-02 regarding expansion of telework and flexible hours programs to help reduce traffic congestion and improve quality of life.**

- **Information related to the 1063 Block project (provided by the 1063 Block Project development team).**

- **2013 Report to the Legislature, Washington State Commute Trip Reduction Board, Demand Management: The Path to Greater Efficiency.** This report provides a summary of efforts by state agencies to reduce drive alone rates and vehicle miles travelled (VMT) since 2007.

All of these documents and references point to a clear intent by the state to engage in efforts to reduce drive alone commute trips, promote alternative mode use by state agencies/employees and improve multimodal access to and from the Capitol Campus.
B. **Internal Review**

The consultant team also met five times with an internal team of DES staff members (as well as interested staff from other agencies) responsible for parking and access management. The meetings were conducted in a work session and brainstorming format on January 24, April 10, May 15 (by conference call) and May 22, 2014 (with internal staff and the Capitol Campus Design Advisory Committee). A final review of the document was conducted on August 18, 2014 (by conference call). These sessions were structured to educate the consultants, define issues, understand existing realities and test new concepts and approaches. Internal staff also prepared a written summary of “Reviewer’s Comments” that consolidated recommendations for revisions and/or requests for additional information or clarifying language.

Participants in internal meetings and in preparation of reviewers’ comments included:

- Dennis Bloom – Intercity Transit
- Rick Browning – DES
- Keith Cotton, WSDOT, Facilities
- Bob Covington -DES
- Debra Delzell -DES
- Darlena Heglund – DES
- Shelley Sadie-Hill – DES
- Steve Holloway, WSDOT
- Kathy Johnston – CTR/ WSDOT
- Lenore Miller - DES
- Karen Parkhurst – Thurston Regional Planning Council
- Deanna Price - DES
- Trina Regan - DES
- Michael Van Gelder – DES
- Jack Zeigler - DES

Based on this input, a series of themes emerged that are best described as key challenges that internal staff sees as barriers to moving forward with both better parking management and alternative mode growth. These themes are summarized here and intended to provide a framework against which data from the parking study can be evaluated and solutions can be developed.

**Theme 1: Parking is not managed to its highest and best use**

Parking on the Capitol Campus is highly constrained, especially during the legislative session.\(^5\) Parking is managed in a manner that encourages driving to the campus (both through low rates and reserved parking). Large supplies of parking are restricted to reserved use, which is inefficient and leaves

\(^5\) See Section V: Summary of Parking Study Findings.
meaningful portions of the supply unused (empty) during the day. Similarly, a number of parking areas are used for non-vehicle storage, which is an inefficient use of what could be additional parking capacity. A large number of parking stalls are used for motor pool and agency cars, prompting a need to assess what supply should be made available or what other options there are for access to these vehicles.

Visitor parking needs greater visibility or consolidation so it is easier to find. If the Campus is to avoid building costly new supply in the future, there will need to be greater integration of parking management and creation of meaningful options for employees to choose to get to work (i.e., transit, bike, walk, telework, etc.).

**Theme 2: There needs to be targeted and aggressive commitment to Commute Trip Reduction (CTR)**

The Capitol Campus has not met its CTR performance goals for many years. A high percentage of “alternative mode” use is in carpools versus transit, bike, walk or telework, which is commendable but not as efficient a way to free up parking stalls on campus. Agencies are left to their own devices for CTR performance as opposed to a coordinated campus program for reducing drive alone trips. This makes planning, performance reporting and budgeting difficult. CTR is monitored every two years, without any program(s) that routinely and continuously pursue strategies to influence trip behavior every day, year around. The state needs to take a leadership role in CTR as required by state policy. Based on historical evidence, staying with the status quo is not a recommended option. The passivity of current programs presents real barriers to CTR and parking solutions.

**Theme 3: Alternative mode infrastructure needs to be improved and leveraged**

There needs to be a complete review of transit, bike and walk infrastructure on the campus to identify any improvements that would make using alternative modes more feasible and attractive to state employees. Also, the state should identify off-campus sources of parking that can be linked to transit and/or shuttles in –lieu of building new and costly supply on campus. This review needs to be done within the context that increasing non-auto commute modes is a priority of senior management and agency leadership.

**Theme 4: Technology and communications**

The state needs to invest in technologies that maximize use of existing parking supplies. These include space finding and directional (guidance) information for visitors. There also needs to be greater use of communications technology to provide employees and visitors with information on alternative modes of access. Current systems of communications (particularly for CTR and alternative modes) should be centralized and integrated.
Based on internal stakeholder input, there is high level of concern that the existing parking supply is nearing its “practical capacity." Under status quo conditions and operations this will create high constraints, inefficiencies and conflict with state goals for alternative modes (i.e., CTR). This also means that new growth (e.g., 1063 Block, visitors, employment) will be very difficult to accommodate. The consequence of not pursuing changes in current systems is very high costs in new parking development and/or the inability to cost effectively build out the campus over time. Better management of the existing parking supply and significant improvements in CTR performance is are the best options to pursue.

Sections V through VIII below will provide additional validation of the problem statements developed here. Sections IX and X will provide strategy recommendations that, if implemented, would serve as solutions and result in a more efficient and robust access system.

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6 Practical capacity: The occupancy level or number of vehicles that can be parked in a facility or area before it becomes difficult for a driver to find a space; causing inconvenience, congestion and increased travel times.
IV. FRAMING THE WORK – THE CAPITOL CAMPUS

The Capitol Campus study area is comprised of 103 acres; home to 20 buildings housing over 60 agencies and offices. On-campus employment is estimated at approximately 5,211. Figure A provides a map of the Capitol Campus area included in this study with building and parking locations.

Figure A
Study Area - Capitol Campus

A. Access Patterns

Approximately 71% of employees drive alone to the campus each day, with another 15% arriving in a high occupancy vehicle (car/vanpool). The remaining 14% arrive by a combination of transit, bike, walk, telework and/or flexible hours.

Source: Derived from 2013 State of Washington Commute Trip Reduction (CTR) data for combined Capitol Campus employees. For more detail see Section VII of this report.
The number of visitors to the Capitol Campus averages between 2,100 (non-session) and 6,500 (in-session) each month. During the legislative session visitor demand can bring nearly 500 cars to the campus during the peak hour.  

B. Parking Supply

Parking on the Capital Campus is self-contained, with little or no remote off-campus supply. Employees are generally assigned to available parking as close as possible to their offices. In total, there are 6,095 parking stalls on campus located in 28 facilities, separated into 35 “areas,” depending on whether the parking is associated with long-term employee use or visitor parking. Table 1 provides a breakout of the parking supply and the 35 “areas.”

As the Table suggests, about 90% of the aggregate parking supply (5,517 stalls) is associated with employee parking. The remainder, 578 stalls is devoted to visitor access. In general parking is divided into three different types:

Reserved Parking
Reserved parking is paid for by a State Agency or organization for use (at their discretion) for fleet vehicles, staff, or visitors. Reserved stalls are also available to some employees in particular areas, such as the Legislative Lot, Capitol Court Lot and Temple Lot. Employees assigned to a reserved stall typically pay the associated fees through payroll deduction. Stalls are also reserved for car/vanpool parking, disabled employee, disabled visitor, motorcycle and service parking. The Parking Office assigns reserved stalls at the request of the agency transportation coordinator based on agency need and available space.

Zoned Parking
Zoned parking is parking that is not reserved. Rather than an assigned space for each individual; zoned parking is open to all employees assigned to a particular parking lot or garage. The

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Table 1
Capitol Campus Parking Facilities

<table>
<thead>
<tr>
<th>Parking Facility</th>
<th># Stalls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia Street Garage</td>
<td>245</td>
</tr>
<tr>
<td>Columbia Street Garage - WSP Visitor</td>
<td>16</td>
</tr>
<tr>
<td>GA Surface Lot</td>
<td>68</td>
</tr>
<tr>
<td>GA Surface Lot- Visitors</td>
<td>48</td>
</tr>
<tr>
<td>GA Garage</td>
<td>159</td>
</tr>
<tr>
<td>GA Garage - Visitor Level</td>
<td>76</td>
</tr>
<tr>
<td>Capitol Park Garage (1063 BLDG)</td>
<td>26</td>
</tr>
<tr>
<td>Pro Arts Lot</td>
<td>57</td>
</tr>
<tr>
<td>Flag Circle</td>
<td>80</td>
</tr>
<tr>
<td>Capitol Court Lot</td>
<td>98</td>
</tr>
<tr>
<td>Archives Lot</td>
<td>4</td>
</tr>
<tr>
<td>North Diagonal - Visitors</td>
<td>53</td>
</tr>
<tr>
<td>South Diagonal - Visitors</td>
<td>32</td>
</tr>
<tr>
<td>South Diagonal - Assigned Stalls</td>
<td>2</td>
</tr>
<tr>
<td>Mansion Lot</td>
<td>275</td>
</tr>
<tr>
<td>Temple Lot</td>
<td>102</td>
</tr>
<tr>
<td>Legislative Lot</td>
<td>100</td>
</tr>
<tr>
<td>Cherberg North</td>
<td>15</td>
</tr>
<tr>
<td>Cherberg/O’Brien</td>
<td>62</td>
</tr>
<tr>
<td>Pritchard Lot</td>
<td>116</td>
</tr>
<tr>
<td>Water Street</td>
<td>44</td>
</tr>
<tr>
<td>Newhouse Lot</td>
<td>62</td>
</tr>
<tr>
<td>Visitor Info Center</td>
<td>23</td>
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<tr>
<td>Visitor Info Center - Visitors</td>
<td>59</td>
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<tr>
<td>Insurance Lot</td>
<td>40</td>
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<tr>
<td>Plaza Garage</td>
<td>2,360</td>
</tr>
<tr>
<td>IBM Lot</td>
<td>13</td>
</tr>
<tr>
<td>IBM Lot - Visitors</td>
<td>13</td>
</tr>
<tr>
<td>Maple Park Lot - Visitors</td>
<td>51</td>
</tr>
<tr>
<td>Jefferson Surface Lot - Visitors</td>
<td>17</td>
</tr>
<tr>
<td>Jefferson Lot - Passenger Loading</td>
<td>5</td>
</tr>
<tr>
<td>Jefferson Garage</td>
<td>256</td>
</tr>
<tr>
<td>NRB Employee Garage</td>
<td>1,030</td>
</tr>
<tr>
<td>NRB Garage - Visitors</td>
<td>206</td>
</tr>
<tr>
<td>DOT Garage</td>
<td>282</td>
</tr>
<tr>
<td>- EMPLOYEE STALLS</td>
<td>5,517</td>
</tr>
<tr>
<td>- VISITOR STALLS</td>
<td>578</td>
</tr>
<tr>
<td>AGGREGATE TOTAL STALLS</td>
<td>6,095</td>
</tr>
</tbody>
</table>

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Source: 2014 parking data collection for Capital Campus parking occupancy. See also, Section V of this report.  
RWC found minor discrepancies in parking stall counts in some facilities. Most notably RWC physically counted 256 stalls in the Jefferson Garage versus 295 stalls that the state shows in its records. This may be a discrepancy in what a site plan shows for the site and what was actually striped when built. RWC elected to go with the actual physical count on the survey day for this analysis. The variance (39 stalls) is marginal (less than 1%) in the overall campus supply total and does not affect statistical outcomes.
Parking Office allocates zoned parking based upon the building location where the employee is assigned and the date the employee requests the parking. The employee can park in any zoned space in that lot. Employees may purchase a monthly pass or a sticker that permanently adheres to their vehicle window.

Visitor Parking
Visitor parking is provided at 11 different locations, which includes a passenger loading area at the Jefferson Lot. Visitor parking cost $1.50 per hour weekdays from 8 a.m. to 5 p.m., but is free on evenings and weekends.

Parking Enforcement
Ticketing of campus parking violations is the responsibility of the Washington State Patrol. If parking rules are violated, a fine may be assessed by the municipal court. Vehicles may be impounded and/or towed. If repeated violations occur, parking privileges may be lost.

C. Shuttle options

The free Dash shuttle service provided Intercity Transit runs throughout the day, from Capital Campus into downtown Olympia. There are convenient locations to access the Dash Shuttle within the Capitol Campus at Jefferson and Maple Park, Visitor Information Center, Profession Arts Lot and the Natural Resources Building.

Shuttle frequencies vary depending on whether the legislature is in session.

Non-Legislative session:

- Every 15 minutes from 7AM-6PM.

Legislature in session

- Every 15 minutes, following the same pattern from 7:10 AM-8:55 AM.
- Every 12 minutes, following the same pattern from 9:06 AM - 4:54 PM
- Every 15 minutes, following the same pattern from 5:10 PM – 5:55 PM
V. SUMMARY OF PARKING STUDY

A. Intent

The State of Washington does not routinely conduct inventory and capacity studies for its Capitol Campus parking assets. The last complete study was conducted in 2009. To that end, the state engaged a study in 2014 to update the 2009 study. Key findings from that study are summarized and presented in this section.

The intent of the 2014 inventory and occupancy analysis is to:

- Understand the current use dynamics of parking and access during legislative and non-legislative sessions.
- Support current parking management on the Capitol Campus.
- Assess opportunities to improve capacity management in a manner that creates efficiencies within the existing supply of parking to serve employees, visitors and services users.
- Better coordinate parking with alternative mode and Commute Trip Reduction (CTR) goals (i.e., transit, bike, walk, rideshare, telework and flexible schedules).
- Assess impacts of potential new growth (e.g., 1063 Block) on the parking supply.

The purpose of this parking occupancy study is to derive a comprehensive and objective understanding of actual use dynamics and access characteristics associated with parking in the Capitol Campus. The purpose of these endeavors is to provide the state objective and comparable information regarding the dynamics of parking within the campus and to assess the variability of parking utilization as influenced by the legislative cycle. Ideally, the information provided here will assist the state as it begins to examine more focused and strategic management of the valuable parking resources within this unique Campus setting.

B. Methodology

To ensure the ability to compare results between two legislative cycles in an “apples-to-apples” context, data collection was structured to account for activity during a period when the legislature was not in session (a baseline) and two periods when it was in session (a peak). Important elements of the analysis include:

(1) Development of an up-to-date data template (inventory) for all parking in the study area. An inventory of every facility and on-street space within the Capitol Campus was conducted to verify parking stall counts by facility as well as type of stall (e.g., visitor, reserved, motorcycle, etc.). Table 1 above (page 9) provides a consolidated summary.
A complete survey of parking use (occupancy) on three “typical days” representing parking activity when the State legislature is in session and when not in session – Thursday, January 9, 2014 (not in session) and Thursday, January 30 and Wednesday, February 4, 2014 (in session).

Analysis of parking utilization included hourly parking counts by facility and zone, and included:

- Quantification of total study area parking inventory.
- Hourly occupancy counts for each stall in the inventory over a 10 hour period (8AM – 6 PM).

Identification of parking surpluses and constraints within the Capitol Campus parking supply.

Comparative analysis of data between survey days.

C. **Metric of Constraint – Practical Capacity**

For purposes of analysis, the data collection effort is targeted toward identifying constraints and surpluses within the parking system, for both employee and visitor parking areas. The consultant team used data collected to identify areas where the “practical capacity” of a facility or of the system is reached and/or exceeded. Practical capacity is the occupancy level or number of vehicles that can be parked in a facility or area before it becomes difficult for a driver to find a space; causing inconvenience, congestion and increased travel times.

Within the parking industry, 90% peak hour occupancy is considered the practical capacity of a supply of parking intended for employee use. For visitor parking, practical capacity is considered to be 85% peak hour occupancy. The reason employee parking has a higher practical capacity is that parkers who routinely park in an area (“habituated parkers”) are experienced with the parking environment and are more capable of finding a stall and less affected by a routine “parking constraint” than a visitor (“transient parker”) whose knowledge of, and experience with, an access system is limited.

D. **Findings**

1. **Legislature NOT in session**

As stated earlier, a “baseline” data set was created using a typical day scenario during a period when the legislature was not in session. In consultation with the Department of Enterprise Services (DES), Thursday, January 9, 2014 was selected. All parking on the Capitol Campus was evaluated over a 10 hour day, with hourly occupancy counts taken in 35 areas within the 28 parking facilities.

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10 During the survey days, public schools were still in session and no abnormal or atypical events were scheduled for the Capitol Campus area beyond legislative activity in January or February. On days when the legislature was in session, there was strong parking activity and normal traffic related to citizen rallies, bus traffic, etc.

11 Employee parking was seen as an aggregated source of parking. As such, occupancy counts within employee supply were not differentiated between zoned or reserved stalls.
a. Combined Supply

Overall, parking activity in the combined parking system is strong throughout the operating day, and not seriously constrained. **Figure B** provides an hourly summary of occupancy over the course of the day for the combined employee/visitor parking supply. As the figure indicates, peak occupancy reaches 74.6% (10AM – 11AM) for all parking (employee and visitor). At this hour, 4,549 vehicles are parked and 1,546 stalls are not in use.\(^{12}\)

**Figure B**

**Hourly Occupancy: Combined Supply (Non session)**

b. Employee versus Visitor Supply

Within the 5,517 stall employee parking supply, peak occupancy reaches 76.9% between 10AM and 11AM. At this hour, 4,242 vehicles are parked and 1,275 stalls are unused. The smaller visitor parking supply (578 stalls) reaches 53.1% occupancy at its peak hour (between 10AM and 11AM). At this time, 307 visitor vehicles are parked and 271 stalls are unused. **Figure C** provides an hourly comparative summary of occupancy over the course of the day for each unique supply, employee and visitor. **Table 2** provides a consolidated summary of occupancies when the legislature is not in session. The non-session is considered “baseline.”

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\(^{12}\)It should be noted that within reserved parking areas stalls are not in use, but they are also “not available” because of the reserved nature of the stall. In other words, the stall is being held empty for a reserved user and not available to any other parking users (or parking demand).
Within the larger inventory of 28 parking facilities, there are a few areas where parking does reach practical capacity; posing a constraint within specific facilities. Nine of the 35 surveyed parking areas listed in Table 1 reach or exceed practical capacity when the legislature is not in session. Four of these are visitor facilities, five are employee facilities. Table 3 provides a listing of those facilities and a breakout of peak occupancy for each affected facility. Figure D provides a “heat map” of occupancy for all facilities in the Capitol Campus at the combined peak hour. Again, practical capacity for visitor facilities (shaded yellow in Table 3) is defined 85% and 90% for employee facilities.
Key employee facilities nearing or at practical capacity include the 1,030 stall NRB employee (87%); Jefferson (87%) and DOT garages (92%). Key visitor facilities include the Visitors Information Center Lot (88%), Maple Park Lot (92%) and South Diagonal (100%).

Table 3
Non-session: Constrained Facilities (Practical Capacity)

<table>
<thead>
<tr>
<th>Description</th>
<th>Stalls</th>
<th>8AM</th>
<th>9AM</th>
<th>10AM</th>
<th>11AM</th>
<th>12PM</th>
<th>1PM</th>
<th>2PM</th>
<th>3PM</th>
<th>4PM</th>
<th>5PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archives Lot</td>
<td>4</td>
<td>50%</td>
<td>75%</td>
<td>75%</td>
<td>100%</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>South Diagonal - Visitors</td>
<td>32</td>
<td>47%</td>
<td>94%</td>
<td>100%</td>
<td>94%</td>
<td>84%</td>
<td>78%</td>
<td>88%</td>
<td>84%</td>
<td>63%</td>
<td>13%</td>
</tr>
<tr>
<td>Cherberg North</td>
<td>15</td>
<td>47%</td>
<td>73%</td>
<td>87%</td>
<td>80%</td>
<td>73%</td>
<td>87%</td>
<td>80%</td>
<td>73%</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>Visitor Info Center - Visitors</td>
<td>59</td>
<td>46%</td>
<td>75%</td>
<td>88%</td>
<td>83%</td>
<td>61%</td>
<td>51%</td>
<td>36%</td>
<td>32%</td>
<td>20%</td>
<td>12%</td>
</tr>
<tr>
<td>Maple Park Lot - Visitors</td>
<td>51</td>
<td>43%</td>
<td>59%</td>
<td>71%</td>
<td>76%</td>
<td>69%</td>
<td>76%</td>
<td>88%</td>
<td>92%</td>
<td>82%</td>
<td>10%</td>
</tr>
<tr>
<td>Jefferson Surface Lot - Visitors</td>
<td>17</td>
<td>41%</td>
<td>41%</td>
<td>71%</td>
<td>71%</td>
<td>82%</td>
<td>59%</td>
<td>76%</td>
<td>88%</td>
<td>59%</td>
<td>24%</td>
</tr>
<tr>
<td>Jefferson Garage</td>
<td>256</td>
<td>60%</td>
<td>86%</td>
<td>88%</td>
<td>89%</td>
<td>68%</td>
<td>82%</td>
<td>83%</td>
<td>82%</td>
<td>63%</td>
<td>70%</td>
</tr>
<tr>
<td>NRB Employee Garage</td>
<td>1,030</td>
<td>70%</td>
<td>84%</td>
<td>86%</td>
<td>87%</td>
<td>83%</td>
<td>83%</td>
<td>83%</td>
<td>82%</td>
<td>71%</td>
<td>19%</td>
</tr>
<tr>
<td>DOT Garage</td>
<td>282</td>
<td>84%</td>
<td>89%</td>
<td>92%</td>
<td>87%</td>
<td>75%</td>
<td>90%</td>
<td>86%</td>
<td>79%</td>
<td>58%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Figure D
Peak Hour Parking Non-Session
d. Summary Findings: Legislature Not in Session

- Combined supply reaches 74.6% occupancy at peak.
- Visitor supply reaches 53.1% occupancy at peak.
- Employee supply reaches 76.9% occupancy at peak.
- Parking activity is strong but not severely constrained.
- Only nine of 35 facilities have parking constraints.
- There are reasonable opportunities to park on campus, though not necessarily as proximate to a worksite as some might want.

2. Legislature IN session

Two “typical day” scenarios were evaluated during a period when the legislature was in session. In consultation with the Department of Enterprise Services (DES), Thursday, January 30, 2014 and Tuesday, February 4, 2014 were selected for survey purposes. In analyzing the two in-session data sets, overall occupancy totals were very similar. As such, for purposes of this discussion, the two data sets were blended to create an in-session average. As with the January 9, 2014 baseline counts, all parking on the Capitol Campus was evaluated over a 10 hour day, with hourly occupancy counts taken in 35 areas within the 28 parking facilities.

a. Combined Supply

Overall, parking activity in the combined parking system is very strong throughout the operating day. Figure E provides an hourly summary of occupancy over the course of the day for the combined employee/visitor parking supply.

As the figure indicates, peak occupancy reaches 84.2% (10AM – 11AM) for all parking (employee and visitor). At this hour, 5,131 vehicles are parked and 964 stalls are not in use. Compared to the baseline (non-legislative session), an additional 582 vehicles are parked on the Capitol Campus as a result of the legislative session; a 13% increase in the peak hour.
b. Employee versus Visitor Supply

Within the 5,517 stall employee parking supply, peak occupancy reaches 84.1% between 10 AM and 11AM. At this hour, 4,640 vehicles are parked and 877 stalls are unused. This represents an increase of 398 vehicles (9.4%) using employee stalls versus the non-legislative session.

The smaller visitor parking supply (578 stalls) reaches 84.9% occupancy at its peak hour (between 10AM and 11AM). At this time, 491 visitor vehicles are parked and 87 stalls are unused. This represents an increase of 184 vehicles (60.0%) using visitor stalls versus the non-legislative session.

Figure F provides an hourly comparative summary of occupancy over the course of the day for each unique supply, employee and visitor. Table 4 provides a consolidated summary of occupancies when the legislature is in session, with comparative information to the baseline.
Table 4 indicates visitor parking reaches practical capacity (84.9%) during the in session, leaving just 87 stalls of “buffer” for visitor parking. Employee parking has yet to reach the 90% threshold but as Figure F suggests, employee parking demand is strong (80%+) for a sustained period between 9AM and 3PM.
c. Points of Practical Capacity

When individual parking areas are evaluated, the number of areas where employee or visitor parking demand approaches or exceeds practical capacity nearly doubles when compared to the baseline (non-session). Data shows that 20 of the 35 parking areas surveyed are constrained.

Eight of the 11 visitor parking areas are severely constrained, parked well in excess of 85%. This includes the North (92%) and South (100%) Diagonals, the Visitor Information Center (95%) and Maple Park Lot (104%).\(^\text{13}\)

Twelve of the 24 employee parking areas operate very near to in excess of practical capacity. These include the Mansion Lot (90%), Newhouse Lot (98%) and NRB Employee Garage (90%). Other key facilities like the Jefferson Garage (89%) and Plaza Garage (85%) operate with high volumes. Table 5 provides a listing of those facilities and a breakout of peak occupancy for each affected facility. Figure G provides a “heat map” of occupancy for all facilities in the Capitol Campus at the combined peak hour.

### Table 5

<table>
<thead>
<tr>
<th>Description</th>
<th>Stalls</th>
<th>8AM</th>
<th>9AM</th>
<th>10AM</th>
<th>11AM</th>
<th>12PM</th>
<th>1PM</th>
<th>2PM</th>
<th>3PM</th>
<th>4PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA Surface Lot - Visitors</td>
<td>48</td>
<td>67%</td>
<td>88%</td>
<td>91%</td>
<td>88%</td>
<td>80%</td>
<td>88%</td>
<td>82%</td>
<td>73%</td>
<td>52%</td>
</tr>
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<td>GA Garage - Visitor Level</td>
<td>76</td>
<td>46%</td>
<td>71%</td>
<td>89%</td>
<td>89%</td>
<td>81%</td>
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<td>34%</td>
</tr>
<tr>
<td>Flag Circle</td>
<td>80</td>
<td>73%</td>
<td>88%</td>
<td>94%</td>
<td>88%</td>
<td>84%</td>
<td>86%</td>
<td>81%</td>
<td>80%</td>
<td>79%</td>
</tr>
<tr>
<td>North Diagonal - Visitors</td>
<td>53</td>
<td>56%</td>
<td>83%</td>
<td>92%</td>
<td>90%</td>
<td>84%</td>
<td>88%</td>
<td>82%</td>
<td>68%</td>
<td>55%</td>
</tr>
<tr>
<td>South Diagonal - Visitors</td>
<td>32</td>
<td>72%</td>
<td>100%</td>
<td>95%</td>
<td>100%</td>
<td>98%</td>
<td>95%</td>
<td>95%</td>
<td>95%</td>
<td>75%</td>
</tr>
<tr>
<td>South Diagonal - Assigned Stalls</td>
<td>2</td>
<td>75%</td>
<td>75%</td>
<td>50%</td>
<td>50%</td>
<td>25%</td>
<td>100%</td>
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<td>275</td>
<td>51%</td>
<td>82%</td>
<td>90%</td>
<td>87%</td>
<td>82%</td>
<td>83%</td>
<td>84%</td>
<td>80%</td>
<td>76%</td>
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<td>Legislative Lot</td>
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<td>87%</td>
<td>83%</td>
<td>87%</td>
<td>77%</td>
<td>77%</td>
<td>73%</td>
<td>73%</td>
<td>70%</td>
</tr>
<tr>
<td>Cherberg/O’Brien</td>
<td>62</td>
<td>55%</td>
<td>73%</td>
<td>83%</td>
<td>89%</td>
<td>79%</td>
<td>89%</td>
<td>86%</td>
<td>87%</td>
<td>86%</td>
</tr>
<tr>
<td>Newhouse Lot</td>
<td>62</td>
<td>67%</td>
<td>93%</td>
<td>98%</td>
<td>85%</td>
<td>81%</td>
<td>98%</td>
<td>89%</td>
<td>85%</td>
<td>81%</td>
</tr>
<tr>
<td>Visitor Info Center</td>
<td>23</td>
<td>43%</td>
<td>87%</td>
<td>100%</td>
<td>89%</td>
<td>78%</td>
<td>93%</td>
<td>93%</td>
<td>87%</td>
<td>67%</td>
</tr>
<tr>
<td>Visitor Info Center - Visitors</td>
<td>59</td>
<td>80%</td>
<td>92%</td>
<td>95%</td>
<td>95%</td>
<td>91%</td>
<td>94%</td>
<td>94%</td>
<td>93%</td>
<td>74%</td>
</tr>
<tr>
<td>Plaza Garage</td>
<td>2,360</td>
<td>71%</td>
<td>81%</td>
<td>85%</td>
<td>83%</td>
<td>76%</td>
<td>80%</td>
<td>82%</td>
<td>75%</td>
<td>67%</td>
</tr>
<tr>
<td>IBM Lot - Visitors</td>
<td>13</td>
<td>58%</td>
<td>92%</td>
<td>92%</td>
<td>92%</td>
<td>65%</td>
<td>92%</td>
<td>77%</td>
<td>62%</td>
<td>54%</td>
</tr>
<tr>
<td>Maple Park Lot - Visitors</td>
<td>51</td>
<td>85%</td>
<td>100%</td>
<td>101%</td>
<td>101%</td>
<td>82%</td>
<td>103%</td>
<td>104%</td>
<td>103%</td>
<td>71%</td>
</tr>
<tr>
<td>Jefferson Surface Lot - Visitors</td>
<td>17</td>
<td>35%</td>
<td>74%</td>
<td>85%</td>
<td>76%</td>
<td>71%</td>
<td>94%</td>
<td>94%</td>
<td>91%</td>
<td>74%</td>
</tr>
<tr>
<td>Jefferson Garage</td>
<td>256</td>
<td>59%</td>
<td>89%</td>
<td>89%</td>
<td>89%</td>
<td>73%</td>
<td>85%</td>
<td>86%</td>
<td>84%</td>
<td>67%</td>
</tr>
<tr>
<td>NRB Employee Garage</td>
<td>1,030</td>
<td>71%</td>
<td>85%</td>
<td>90%</td>
<td>89%</td>
<td>81%</td>
<td>86%</td>
<td>86%</td>
<td>84%</td>
<td>69%</td>
</tr>
<tr>
<td>DOT Garage</td>
<td>282</td>
<td>84%</td>
<td>89%</td>
<td>88%</td>
<td>82%</td>
<td>76%</td>
<td>86%</td>
<td>82%</td>
<td>77%</td>
<td>58%</td>
</tr>
</tbody>
</table>

\(^{13}\) This lot was parked at greater than 100%. This was the result of vehicles parked in un-striped areas illegally.
d. Summary Findings: Legislature In Session

- Combined supply reaches 84.2% occupancy at peak.
- Visitor supply reaches 84.9% occupancy at peak.
- Employee supply reaches 84.1% occupancy at peak.
- Parking is constrained when the legislature is in session. The constraint is campus wide (east and west campus).
- Over half (20) of all parking areas approach or exceed practical capacity.
- Visitor parking facilities are particularly constrained with eight of 11 facilities exceeding practical capacity.
- Twelve of 24 (50%) of employee facilities approach or exceed practical capacity and parking is generally tight throughout the campus (see Figure G).
- The Capitol Campus is nearing a point of combined practical capacity, indicating that new parking demands generated by future employee growth or new development could adversely affect circulation to and within the campus unless mitigation measures are implemented (e.g., improved CTR performance and/or new parking supply on or off-campus).
VI. POTENTIAL IMPACTS OF 1063 BLOCK REPLACEMENT PROJECT

A new project on the West Capitol Campus known as the 1063 Block Replacement Project (1063 Block Project) is slated to begin in late 2014 through the Design Build process. As currently envisioned the project will remove the existing General Administration (GA) and Capitol Park (CP) Garages. This will result in the removal of 261 parking stalls; as there is no plan to replace parking removed by the project. Additionally, it is estimated that once the 1063 Block Building is complete 400 net new employees will relocate in the new 1063 Block building from other state agencies located off-campus. As such, for purposes of this analysis, approximately 400 net new employees are modeled against the available parking supply.

This section provides an analysis of scenarios for both the legislative and non-legislative seasons using data derived from the parking study, background assumptions for the 1063 Block Project provided by DES (e.g., new employment estimates) and information on employee vehicle trip behavior derived from 2013 CTR data (further elaborated in Section VII, below).

A. Analysis

The purpose of this analysis is to estimate the impact that loss of parking supply and an increase in employees will have on the Capitol Campus parking supply if no new parking is added to replace that removed as a result of the 1063 Block Project or improvements in status quo CTR performance are realized.

The best analytic is an estimate of the relationship of employees to parking spaces – an auto or vehicle trip rate; the very close approximation of the number of parking stalls needed on site to accommodate employees arriving by vehicle based on existing mode splits for drive alone, carpools and vanpools. Each vehicle arriving on campus is assumed to need a parking stall. For the Capitol Campus, estimates of parking need for net new employees were factored using 2013 CTR consolidated data for all campus agencies. This data indicates:

- Drive alone mode split of 70.9% - with an assumed 1.0 occupants per vehicle.
- Carpool mode split of 12.5% - with an assumed 2.2 occupants per vehicle.
- Vanpool mode split of 2.6% - with an assumed 7 occupants per vehicle.

When these mode splits are factored together the auto/vehicle trip rate for the Capitol Campus is 77%.

Again, this factor is derived as a relationship of type of vehicle arriving (drive alone, carpool, vanpool) and occupants assumed per vehicle. Table 6 illustrates this.

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14 The auto trip rate calculator used by the consultant team uses the same methodology as used by the Oregon Department of Environmental Quality in its Employee Commute Options (ECO) Rule survey analysis.
Table 6
Calculating Auto/Vehicle Trip Rate

<table>
<thead>
<tr>
<th>Commute Mode Choice</th>
<th>Commute Mode Split (2013)</th>
<th>Employees Per Vehicle</th>
<th>Parking Stalls Needed (@ occupants per vehicle)</th>
<th>Trip Rate Stalls Needed as Percentage of all Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>70.90%</td>
<td>1.0</td>
<td>284</td>
<td>71.0%</td>
</tr>
<tr>
<td>Carpool</td>
<td>12.50%</td>
<td>2.2</td>
<td>23</td>
<td>5.6%</td>
</tr>
<tr>
<td>Vanpool</td>
<td>2.60%</td>
<td>7.0</td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td>Bus</td>
<td>3.80%</td>
<td>0.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bicycle</td>
<td>1.90%</td>
<td>0.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Walk</td>
<td>2.90%</td>
<td>0.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Telework</td>
<td>1.80%</td>
<td>0.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Flexible hours</td>
<td>1.40%</td>
<td>0.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>2.20%</td>
<td>0.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>308</td>
<td>77%</td>
<td></td>
</tr>
</tbody>
</table>

B. Key Assumptions

- Currently there are 6,095 built stalls on the Capitol Campus; 5,517 employee and 578 visitor stalls.
- With removal of the GA and CP garages for 1063 Block Replacement Project construction, the existing built supply of parking on campus will drop by 261 stalls to 5,833 combined stalls. Of those remaining stalls, 5,332 will be employee stalls and 502 will be visitor stalls.
- Though the supply of parking associated with the GA and CP garages will be lost, the employee demand currently parked in those facilities will need to be redistributed into the remaining supply.
- All existing employees are assumed to continue arriving as they do currently.
- 400 net new employees are added as tenants of the 1063 Block Building\(^\text{15}\)
- 400 new employees added to the Capitol Campus employee pool translates to 308 new vehicles seeking parking in the available supply; an employee auto/vehicle trip rate of 77%.
- For purposes of this analysis, visitor trips were held constant.

\(^{15}\) This is of course an estimate for modeling purposes. Final employee totals for the 1063 Block Project and definite estimates of near to mid-term employee growth are not available. The modeling done here is based on the best information and input that the State has at this time. We believe the assumptions herein are reasonable and will provide the State with valuable information with which to evaluate the campus parking and access system in light of the 1063 Block Project. This number only considers employee growth associated with the 1063 Block Project and does not assume for other demand growth that could be associated with normal net employee growth or the impact of other on campus development projects that might influence the size of the employee population. Modifications to the model can be easily made as new or more accurate employment numbers are developed.
C. **Findings: Legislature IN Session**

*Table 7* below provides a summary of the 1063 Block Project analysis for parking during the legislative session. Findings are as follows:

- **Current peak hour** occupancies reach 84% in the peak hour for the combined supply; employee parking reaches 84% and visitor parking reaches 86%. At the peak hour, there are 964 unused parking stalls on the Capitol Campus.

- The loss of the GA and CP garages redistributes existing employees into the remaining parking supply, which drops from 6,095 to 5,833 stalls. This transition (without net new employees) will raise combined peak hour occupancy to 88%: 87% in the employee supply and 98% in the visitor supply. At this point, unused stalls on campus drop from 964 combined stalls to 702. Only 11 stalls would be left unused to accommodate visitor demand, which would be significantly in excess of practical capacity for visitor parking (reach 98%).

- The addition of 400 net new employees to the campus employment pool will increase peak hour parking demand from 5,131 vehicles to 5,439 vehicles. This assumes 308 new peak hour vehicles at an employee auto trip rate of 77% (see *Table 6*).

- At the point that 400 net new employees were deployed on campus, peak hour parking demand would reach 93% in the combined supply (with 394 empty stalls). Employee occupancy by itself is 93% (with 383 empty stalls). Visitor occupancy remains at 98% (with 11 empty stalls).

- Employee and visitor parking supplies are likely to exceed practical capacity under these conditions unless current status quo drive alone patterns to the Capitol Campus change.

### Table 7
**Estimated Parking Impact: 1063 Block Replacement Project**

*Legislature IN Session*

<table>
<thead>
<tr>
<th>Stall Totals (current)</th>
<th>Combined Supply Total stalls</th>
<th>Combined Supply Total occupied (peak hour)</th>
<th>Combined Supply Total Empty Stalls (peak hour)</th>
<th>Total employee stalls</th>
<th>Employee occupied (peak hour)</th>
<th>Employee Stalls Empty (peak hour)</th>
<th>Total visitor stalls</th>
<th>Visitor Stalls Occupied (peak hour)</th>
<th>Visitor Stalls Empty (peak hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,095</td>
<td>5,131</td>
<td>964</td>
<td>5,517</td>
<td>4,640</td>
<td>877</td>
<td>578</td>
<td>491</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>Peak Hour Occupancy (current)</td>
<td>84%</td>
<td>84%</td>
<td>86%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA &amp; CP Garage Stalls removed and existing peak hour demand (parked vehicles) redistributed back into remaining supply</td>
<td>5,833</td>
<td>5,131</td>
<td>702</td>
<td>5,331</td>
<td>4,640</td>
<td>692</td>
<td>502</td>
<td>491</td>
<td>11</td>
</tr>
<tr>
<td>Peak Hour Occupancy (w/o GA &amp; CP Garage stalls)</td>
<td>88%</td>
<td>87%</td>
<td>98%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate: 400 net new campus employees @ .77 trip rate</td>
<td>5,833</td>
<td>5,439</td>
<td>394</td>
<td>5,331</td>
<td>4,948</td>
<td>383</td>
<td>502</td>
<td>491</td>
<td>11</td>
</tr>
<tr>
<td>Peak occupancy (w/ new employees)</td>
<td>93%</td>
<td>93%</td>
<td>98%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. Findings: Legislature NOT in Session

Table 8 below provides a summary of the 1063 Block Project analysis for parking during the non-legislative session. Findings are as follows:

- **Current peak hour** occupancies reach 75% in the peak hour for the combined supply; employee parking reaches 80% and visitor parking reaches 61%. At the peak hour, there are 1,546 unused parking stalls on the Capitol Campus.
- The loss of the GA and CP garages redistributes existing employees into the remaining parking supply, which drops from 6,095 to 5,833 stalls. This transition (without net new employees) raises the combined peak occupancy to 78%; 80% in the employee supply and 61% in the visitor supply. At this point, unused stalls on campus drop from 1,546 combined stalls to 1,284.
- The addition of 400 net new employees to the campus employment pool will increase peak hour parking demand from 4,549 vehicles to 4,857 vehicles. This assumes 308 new peak hour vehicles at an employee auto trip rate of 77%.
- At the point that 400 net new employees were deployed on campus, peak hour parking demand would reach 83% in the combined supply (with 976 empty stalls). Employee occupancy rises to 85% (with 781 empty stalls). Visitor occupancy remains at 61% (with 195 empty stalls).
- Overall, employee parking becomes more constrained at 85%, but visitor parking remains low, creating potential opportunities to shift employee parking demand seasonally.

<table>
<thead>
<tr>
<th>Data based on 2013 non-session parking occupancy counts</th>
<th>Combined Supply Total stalls</th>
<th>Combined Supply Total occupied (peak hour)</th>
<th>Combined Supply Total Empty stalls (peak hour)</th>
<th>Total employee stalls</th>
<th>Employee occupied (peak hour)</th>
<th>Employee Stalls Empty (peak hour)</th>
<th>Total visitor stalls</th>
<th>Visitor Stalls Occupied (peak hour)</th>
<th>Visitor Stalls Empty (peak hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stall Totals (current)</td>
<td>6,095</td>
<td>4,549</td>
<td>1,546</td>
<td>5,517</td>
<td>4,242</td>
<td>1,275</td>
<td>578</td>
<td>307</td>
<td>271</td>
</tr>
<tr>
<td>Peak Hour Occupancy (current)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GA &amp; CP Garage Stalls removed and existing peak hour demand (parked vehicles) redistributed back into remaining supply</td>
<td>5,833</td>
<td>4,549</td>
<td>1,284</td>
<td>5,331</td>
<td>4,242</td>
<td>1,089</td>
<td>502</td>
<td>307</td>
<td>195</td>
</tr>
<tr>
<td>Peak Hour Occupancy (w/o GA &amp; CP Garage stalls)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate: 400 net new campus employees @ .77 trip rate</td>
<td>5,833</td>
<td>4,857</td>
<td>976</td>
<td>5,331</td>
<td>4,550</td>
<td>781</td>
<td>502</td>
<td>307</td>
<td>195</td>
</tr>
<tr>
<td>Peak occupancy (w/ new employees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
E. Summary - Considerations

Given current rates of vehicle access on the campus, the loss of the GA and CP garage and the addition of up to 400 new employees will push parking occupancy levels above practical capacity during the legislative session unless status quo drive alone trips are transitioned to other modes (e.g., transit, bike, walk) or moved off-campus (e.g., remote lots and/or telework and flexible hours). Though a total of 394 unused stalls are spread throughout the Capitol Campus, the functional efficiency of the campus parking access system would be compromised and create significant difficulty and frustration to find a space; causing inconvenience, congestion and increased travel times. Similarly, movement/circulation and safety could be adversely affected.

The impact during periods when the legislature is not in session is felt most in existing employee parking areas, rising from 77% to 85% in the peak hour. While short of the defined practical capacity for employee parking (90%); it is significantly more constrained than current levels (77%). However, visitor areas could be “repurposed” during non-legislative seasons to mitigate this situation for employees. Nonetheless, the overall combined supply of parking in the non-legislative season (83%) would be similar to demand totals now evident during the legislative session (84%).

It is important to note that the scenarios developed here assume that current vehicle access patterns and behaviors will continue. The auto/vehicle trip rate calculated for this analysis was assumed at 77% (total trips for drive alones, carpools and vanpools – which need parking spaces), based on 2013 CTR data. This is a very high vehicle trip rate, particularly in light of state CTR goals for agencies located on the campus. These goals (when aggregated for all campus based agencies) target an employee drive alone rate of 63.81% versus the current rate of 70.9%. In other words, success in attaining this goal would meaningfully decrease parking demand. Also, goals outlined in the Governor’s Executive Order 14-02 for increasing teleworking to 9% and flexible schedules to 40% of all state employees would have mitigating effects on parking demand for the campus. The role of alternative modes is explored further in Section VII.

Overall, the 1063 Block Project will have demonstrable impacts on parking demand under the current development scenario. Parking will become more constrained. To mitigate this, more strategic management of the entire supply is needed to ensure full maximization of parking resources. To avoid and/or reduce the need to provide more parking supply, parking management and transportation demand management will need to be provided at levels that exceed current programs and systems.

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16 Donald Shoup, in his book The High Cost of Free Parking noted that as much as 30% of traffic congestion in an area can be attributed to “people cruising for parking.” As stated, this creates angst on the part of the driver, but also creates a tremendous amount of gratuitous carbon emissions. In the case of the Capitol Campus, Shoup’s call for better parking management and integration of alternative modes is an example of how such programs would support the Governor’s carbon reduction goal as well as improving access on the Campus and furthering CTR goals.

17 See Section VII below.
VII. TRANSPORTATION DEMAND MANAGEMENT – THE ROLE OF TDM AND PARKING ON THE CAPITOL CAMPUS

Transportation demand management or travel demand management (both TDM) is the application of effective strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), or to redistribute this demand in space or in time. TDM efforts are targeted in a way that strives to balance the relationship, in both convenience and cost, between driving alone and using “alternative modes,” which include transit, biking, walking and/or car-sharing.

The most successful TDM programs are (a) directed toward meeting clear targets or goals for trip choice across all modes and (b) tailored to the unique qualities and factors that distinguish an area or supply.

A. Why do TDM?

TDM can increase transportation options, provide financial savings, and reduce traffic congestion, parking problems, and pollution emissions. An effective TDM Plan and program can also become an important strategy for creating more efficient land use patterns that will benefit the Capitol Campus’ growth and expansion plans over time. These benefits can be significant because traffic and parking costs tend to be particularly high and the impacts to on-campus resources as well as adjacent residential/business districts become extremely expensive without a package of multiple solutions, as opposed to a “just build more parking” approach.

For the Capitol Campus, an effective and targeted TDM program can generate meaningful shifts in commute patterns, resulting in capacity improvements in existing parking supplies as fewer employees drive to work, thus creating parking availability in already built supply. This exemplifies the concept of new capacity through “parking not built.” By transitioning existing parkers to alternative modes, additional capacity is created within the parking supply that can be applied to net new visitor and employee growth and/or new buildings.

An effective TDM Plan should be an important component of an overall parking and access management plan. The reasons for pursuing measurable gains in TDM include:

- Create more options for users of an access system
- Lower transportation costs for state employees.
- Contribute to and meeting environmental and sustainability goals.
- Mitigate congestion.
- Reduce constraints on existing parking supplies.
- Lower parking development costs (“right sizing parking”).
- Leverage existing resources (e.g., transit systems, bike lanes, shuttles, park & ride lots, etc.).
• Minimize displacement of land (by parking facilities) that might have supported development of new government buildings, consistent with the “highest and best use” concept enshrined in the Capitol Master Plan.
• Enhance visitor and pedestrian experience on the campus.
• Improve the aesthetic quality of the Capitol Campus.

B. Commute Trip Reduction (CTR) Law

In 1991 the Legislature passed the Commute Trip Reduction (CTR) Law. The law calls on employers to encourage their workers to drive alone less often, reduce carbon emissions and keep the busiest commute routes flowing. The law requires public and private employers in the nine most populated counties that have 100 or more employees in a single worksite to implement a program designed to reduce the number of drive-alone vehicles commuting to the worksite. Originally, state agencies were designated as “the employer”, rather than “the state”. This meant that even if a number of state agencies occupied a building, only those that had a hundred or more employees were considered “affected”. Over the past two decades the CTR Law has resulted in significant shifts of employees (public and private) from drive alone commuting to greater use of alternative modes – transit, bike, walking, rideshare and telework/flexible schedules.

In 2006 the Legislature passed the CTR Efficiency Act re-defining “affected” worksites as those with 100 or more state employees, regardless of how many agencies are co-located at the site. In 2009 the Legislature again strengthened the law with the CTR for State Agencies Act that aims to increase the leadership role of state agencies. The Legislature recognized the state's crucial leadership role in establishing and implementing an effective commute trip reduction program, and set the policy that directs agencies to aggressively develop programs to reduce commute trips by state employees.18

Pertinent to the Capitol Campus, the law requires state agencies located in the urban growth areas of Olympia, Lacey, and Tumwater to participate in a “Joint Comprehensive CTR Plan” designed to reduce the drive-alone commute trips and vehicle miles traveled (VMT) to state agency worksites. The Joint Comprehensive CTR Plan was adopted by the Interagency CTR Board on March 24, 2011. The Joint Comprehensive CTR Plan sets a goal for state agencies to reduce drive alone rates by 10 percent from baseline rates within four years.19 [NOTE: The drive alone rate referred to here should not be confused with the auto/vehicle trip rate (77%) calculated in Section VI as regards impacts of new employee growth on the available parking supply.]

18 See also, RCW70.94.547 whereby the legislature recognizes the state’s crucial leadership role in establishing and implementing effective commute trip reduction programs. It is the policy of the state that the department of transportation and other state agencies, including institutions of higher education, aggressively develop substantive programs to reduce commute trips by state employees.
Based on 2013 CTR data for the combined Capitol Campus, current drive alone rates would need to drop from an average of approximately 70.9% to 63.81% by 2015 (a 10% reduction) to meet the 2015 goal established in the Joint Comprehensive CTR Plan.

C. Current Capitol Campus TDM Programs

The state provides a range of TDM programs on the Capitol Campus intended to influence and manage employee travel demand. These include agency based employee transportation coordinators (ETC’s), paid parking, transit incentives, shuttles, bike parking and car/vanpool friendly parking pricing (free). A summary of key TDM programs include:

- **State Agency Rider Program - STAR Pass**: All Thurston County based state employees receive fare free service on Thurston County’s public transit system. This program, administered by WSDOT, is provided through a partnership between the state and Intercity Transit. State employees assigned to a worksite in Thurston County utilize their agency ID card – that has a STAR Pass sticker – to ride any local and inter-County express route. The program is paid for by using parking fees collected by the Department of Enterprise Services (see: [http://www.ctr.wa.gov/employees/starpass.htm](http://www.ctr.wa.gov/employees/starpass.htm))

- **Bike Parking**: Employees can register for complimentary bicycle parking access in any of the maintained facilities on campus. There are seven bike cages located on the campus. ([http://www.ctr.wa.gov/employees/bike.htm](http://www.ctr.wa.gov/employees/bike.htm))

- **SAFE Ride**: The State Agency Free Emergency (SAFE) Ride Home program provides a taxi ride to employees who, on a given workday, did not drive to work but must leave unexpectedly due to an emergency. ([http://www.ctr.wa.gov/employees/saferide.htm](http://www.ctr.wa.gov/employees/saferide.htm))

- **Parking fees**: A portion of revenues generated through Capitol Campus parking fees supports two critical components of the state agency CTR program: the State Agency Rider (STAR) Pass and State Agency Free Emergency (SAFE) Ride Home. The balance of the funds raised through the Capitol Campus parking program supports but does not fully pay for maintenance and operation of the parking facilities.

- **Employee Pre-Tax Funds**: The passage of Substitute House Bill 1456 during the 2013 legislative session has allowed employees to pay for transit and parking with pre-tax funds.

- **RideshareOnline.com**: RideshareOnline.com is available to Capitol Campus employees as a tool to assist commuters by providing free carpool, vanpool and bicycle ride-matching services, bus/rail

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20 Rick Williams Consulting was provided 2013 CTR survey results for all agencies on the Capitol Campus. This individual agency performance data was “blended” into a composite performance rate for the entire campus. Some state agencies meet the 63.81% drive alone goal, many do not and are far above the target goal and the campus average. At present, there is no single source available for calculating campus-wide performance.
options, SchoolPool carpooling programs for parents, and information about the benefits of teleworking from home. In 2011, WSDOT reported it would begin using RideshareOnline.com to manage, track and monitor its CTR program.

As the Capitol Campus grows, additional demands on parking supply and roadway systems will challenge existing constraints described in Sections V and VI. This will make the need to enhance and augment current TDM strategies and programs more obvious. As such, continued and on-going strategic action directed toward creating efficient, meaningful and cost effective access options makes good business and management sense for the state and the Capitol Campus.

D. **CTR - Capitol Campus Goals and Performance**

Specific goals for CTR have been established for the Capitol Campus through the 2011 Joint Comprehensive CTR Plan. Information developed as a component of this study can assist in evaluating performance in meeting those goals.

1. **Capitol Campus - CTR Goals**

Specific goals for the Capitol Campus include:

- The CTR Law requires a 10% reduction in employee drive alone trips by 2015; consolidated for all agencies on the campus that would require moving from 70.9% drive alone rate – DAR - (2013) to 63.81% DAR (2015).
- The Governor’s Executive Order 14-02 states that “the goal shall be that by 2017, an average of at least nine percent of all state employees across all agencies will be teleworking and at least 40 percent of all state employees will be using flexible work hours.

2. **Capitol Campus – CTR Performance**

Table 9 summarizes historical CTR performance for the Capitol Campus. Estimates for the years 2003, 2005 and 2007 were derived from information and documentation provided to the consultant team by the state. At present, there is not a centralized source that tracks or develops “campus wide” CTR performance in a manner that is both routine and replicable. The consultant team developed 2013 estimates for the Capitol Campus using CTR data sheets for each campus based agency.

In 2013, CTR survey data reported drive alone rates (DAR) of 70.9% for all campus agencies (60+ agency offices). Car/vanpooling represented about 15% of all commute trips, with bus trips averaging 3.8%. Bicycling and walking combine for about 4% and telework and flexible work hours account for another 3.2%. When contrasted to previous years, Table 9 reveals that overall successes in reducing drive alone trips and increasing use of alternative modes within the campus has been static for some time.
Conclusion

CTR performance is not sufficient to meet established goals or, from a parking management perspective, reducing campus demand for parking. Moving forward, the impetus to better meet CTR goals will contribute to state goals for VMT, sustainability and greenhouse gas emissions. It will also serve as a mitigating factor for managing employee growth as it pertains to parking supply (and potential future costs related to such growth). Accomplishing this will be challenging and complex, requiring a dedicated and routine level of support, coordination, commitment, data analysis/reporting, and resource identification that goes beyond what is currently in place.

3. CTR Potential – “Parking Not Built”

There are numerous public policy objectives that are achieved in meeting CTR goals for trip reduction. There are also economic and efficiency reasons to do so as well. The analysis below provides insights into the potential forward progress that can be made in the area of parking management as CTR employee drive alone commute goals are met. Table 10 summarizes possible scenarios.

<table>
<thead>
<tr>
<th>Drive Alone Rate</th>
<th>Estimated Number of Employees</th>
<th>Employees Driving Alone</th>
<th>Peak Employee Parking Occupancy (non-session)</th>
<th>Peak Employee Parking Occupancy (in-session)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 70.9% - Current Use Rate</td>
<td>5,211</td>
<td>3,695</td>
<td>77%</td>
<td>84%</td>
</tr>
<tr>
<td>2 63.81% (2015 CTR Goal – No Employee Growth)</td>
<td>5,211</td>
<td>3,325</td>
<td>70%</td>
<td>77%</td>
</tr>
</tbody>
</table>
The current employee population is estimated at 5,211 (Column B, Rows 1 & 2). Successful achievement of CTR goals for employee drive alone commuting (63.81%) would significantly reduce existing parking demand and peak hour constraints. For periods when the Legislature is not in session, peak hour occupancies in the employee parking supply would drop from 77% (Column D, Row 1) to 70% (Column D, Row 2). During periods when the Legislature is in session, peak occupancies would drop from 84% (Column E, Row 1) to 77% (Column E, Row 2).

The 1063 Block Project is estimated to increase campus employees by 400, rising to 5,611 (Column B, Rows 4 & 5). At these employee levels, peak hour parking occupancies would drop from 85% (Column D, Row 4) to 78% (Column D, Row 5) if CTR goals were met during non-sessions. For periods when the legislature was in session, peak occupancies would drop from 93% (Column E, Row 4) to 85% (Column E, Row 5).

More efficient use of the existing parking supply also brings economic “value” from meeting CTR goals. This ranges from $14.8 million (Row 3) to $15.9 million (Row 6). This would be the cost of new parking supply if it was pursued as a strategy necessary to relieve peak occupancy constraints. This is based on an estimate of $40,000 per stall construction cost; a northwest average. This number could be higher or lower depending on type of facility and other factors (e.g., underground/above grade structure, soil conditions, design and how the cost of land is allocated to a parking project).

Conclusion

As Table 10 illustrates, the impact of meeting CTR goals for employee drive alone commute trips is significant. It will mitigate constraints within the supply of parking and bring significant economic value

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21 400 net new employees moving from a drive alone trip rate of 70.9% to 63.81% saves 28 stalls from the 370 stalls in the baseline scenarios developed in Section VI.

22 As with previous year CTR data referenced on page 28 above, the consultant team estimated campus employment based on agency information provided by the state. There does not appear to be a readily available source for validating actual campus employment.
as an avoided cost for new parking, which could run into the millions of dollars if the state were attempting to meet parking demand at status quo levels.

E. **Considerations – Capitol Campus CTR**

The role that TDM can play in mitigating parking demand and increasing access options for users of the Capitol Campus is clear. Review of historical CTR performance for the Capitol Campus indicates that limited progress has been made in reducing demand in the area of employee drive alone trips and more aggressively diversifying trips into other modes. This is not to downplay the fact that several individual agencies have made very positive strides, but the collective goal for all campus based state agencies has not been met.

A review of the Joint Comprehensive CTR Plan demonstrates that the state has provided a meaningful toolbox of strategies to support CTR, but it appears that what is lacking is a hands-on, day-to-day commitment to creating awareness of CTR within agencies and among employees and producing effective results. The current agency-based approach appears to be policy heavy and passive; lacking active, frequent and sustained efforts to “move the dial” on meeting specific numerical targets upon which policies are based (i.e., drive alone mode splits, telework and flexible schedule goals). Success in this area will require coordination, leadership and commitment from the top-of each agency, as well as the Governor’s Office and the Legislature.

Given that CTR performance is flat, it is important to step back and reassess key components of the Joint Comprehensive CTR Plan that were deemed essential to its success and consider how to accomplish the intent of the Plan. Recommendations in this regard are outlined more specifically in Section IX and focus on the need for:

- A more sustained commitment to CTR within agencies by top management.
- More active participation and empowerment of the role of ETC’s in delivering CTR tools to agencies and their employees.
- Greater integration of CTR with parking management.
- Greater support in both leadership and resource commitment at levels that exceed current programs and systems.
- Support from all levels of management, the Governor’s Office and the Legislature to creating a centrally coordinated “access management” approach for the entire campus.
In 1991, the Washington State Legislature passed the Commute Trip Reduction (CTR) Law to address traffic congestion, air pollution, and fuel consumption. Legislators subsequently built upon early successes by passing the CTR Efficiency Act in 2006 which required all state agencies in urban areas to implement CTR programs for co-located employment sites with over 100 employees. All state agencies in the Olympia, Lacey, and Tumwater area, no matter what size, are required to implement CTR programs. At the Capitol Campus in Olympia, WA, commute reduction goals are supported, and made more critical by the large amount of commuters who drive alone to campus. This campus access challenge as well as the cap on future parking development drives the need for a more balanced transportation network for people accessing and circulating within the campus; a campus that is well served by high quality non-single occupant vehicle (SOV) travel options.

The Capitol Campus aims to meet its CTR goals by encouraging greater use of alternative modes like transit, bicycles, walking, and teleworking or taking advantage of flexible schedules. Shifting commute behavior will necessitate both an expansion of transportation infrastructure as well as an increase in the quality of the infrastructure. It will also require greater promotion, education and incentives.

To meet the State’s CTR goals, the Capitol Campus must reduce the percentage of employees who commute by SOV by nearly 10% in the next two years; a drive alone rate of 63.81%. To achieve this rate campus-wide, a robust alternative transportation program or suite of mobility options is needed. This Section (VIII) identifies the existing conditions on campus for those who ride transit, bicycles, in carpools or vanpools, or walk to and within campus. The Section also provides a blueprint for achieving the 10% shift in non-SOV access by capitalizing on strategic opportunities and recommendations to further expand the use of alternative modes.

A. Existing Conditions

Each day approximately 5,200 employees access the Capitol Campus. On average, an additional 95 visitors access campus each day, increasing to nearly 300 per day during the legislative session.²⁴ Visitors and

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²³ This section was developed by Nelson/Nygaard Consulting Associates (N/N) for Rick Williams Consulting. N/N participated in the project as a sub-consultant to RWC.

employees have several travel options, including driving alone, carpooling, vanpooling, taking local or regional transit (including the downtown Capitol Campus Dash shuttle), walking, or riding a bicycle. The ease and quality of experience when accessing and circulating through campus varies across travel modes. The following sections highlight key issues and existing conditions that impact employee and visitor commute behavior, preferences, and on-campus comfort and safety.

1. **Campus Access**

The Capitol Campus is two distinct campuses, West Campus with legislative and judicial buildings and the East Campus with state agency buildings. The entire campus is located in central Olympia, bordered on a bluff above Capitol Lake and on the east by Interstate 5 with residential homes to the northeast, south and southeast. North of campus is downtown Olympia and south of campus are established low density neighborhoods. The campus is highly accessible via the interstate, with interchanges connecting to 14th Avenue SE that takes one almost directly to the heart of campus. Two other roadways serve as primary access points to the Campus: Capitol Way and Jefferson Street SE.

Capitol Way is a north-south four-lane arterial that bisects the campus and offers primarily vehicle access to the campus. Jefferson Street SE parallels Capitol Way along the edge of the east campus. It also has four travel lanes with bike lanes in each direction. The remainder of the transportation network accessing the campus consists of a grid of lower volume streets, typically two-lane or narrow un-striped residential streets. The design of these primary campus access portals plays a role in the decision to access campus on foot, bicycle, transit or car.

![Employee Commute Mode Share, 2013](chart)

Note: The commute data reflects responses to the 2013 State of Washington Commute Trip Reduction Survey, which are conducted every two years.

As of 2013, CTR survey data finds that nearly three quarters of all employees drive alone to campus. Use of no-auto commute modes, such as riding transit, bicycles or walking is minimal. While
vanpooling has steadily grown over the years, bus ridership has decreased since its peak of 5.8% in 2007, and bicycling and walking have largely stagnated. There are many factors that contribute to these trends, including the underpricing and under-management of parking supply. Highway connections that restrict non-motorized access further increase the convenience of driving. At the same time, downtown Olympia and other adjacent neighborhoods are within convenient walking or bicycling distance, but do not offer diverse housing types.

Automobile access is engrained in the culture of the campus. Although the campus has transit access and nearby bicycle trails, transit and alternative transportation mode shares are minimal. This could be attributed to a lack of information for employees on travel options, or a lack of confidence in using other modes. Commuters may consider shifting their travel modes if non-SOV modes are made more attractive through a focus on campus access supported by better service levels, ease and clarity of on-campus connections, quality of facilities and pricing parking to demand. These four characteristics will determine the level of comfort in using each of these modes.

Convenient and time-competitive non-auto access to the Capitol Campus is often the most important determinant in catalyzing behavior change. This can include how long it takes to get there (trip length, transit frequency and reliability, transfer requirements, directness of travel routes, etc.), how convenient the campus is if you’re not in an automobile, how much parking costs, and how (or if) non-motorized arrivals are supported by end-of trip facilities (like showers, lockers, secure long- and short-term bike parking, bicycle repair stations, etc.). Similarly, if there is no overall coordination or funding for these elements, the results will continue to be poor.

The following sections will describe existing access conditions for those who commute by walking, or riding bicycles and/or riding transit. Figure 2 summarizes existing conditions related to alternative transportation access to the Capitol Campus and movement through campus.
2. **Arriving/departing via public transit**

Several transit options are available with varying levels of service. Visitors and employees have access to the campus via several local and regional fixed route transit lines and a free Dash shuttle. Capitol Way, which bisects east and west campus, is designated as a 15-minute service corridor. While the Dash shuttle focuses operation during regular work hours, the local and inter-county express service routes serve the campus between approximately 6am and 11pm. Although headways on local service are frequent throughout the day (between 15 and 30 minutes), they become less frequent after 7:30 pm.

- **The Dash provides free, frequent service between the campus and downtown Olympia.** The shuttle specifically serves as a circulator during the State Legislative Session (January 13- March 14, 2014); the DASH operates from 7am-6pm on weekdays with headways of 15 minutes. When out of session, the DASH operates with headways of 12 minutes from 9am to 5pm, and every 15 minutes
between 7-9am and 5-6 pm. Between April and the end of August, the DASH also runs on Saturdays with buses arriving every 10 minutes and serving the west campus. There are 17 Dash stops on campus, with a stop near every government building.

- **Capitol Way is a frequent transit corridor.** Capitol Campus is served by local service buses, including routes 12, 13, and 68. Each serves Tumwater Square, the Olympia transfer center and state agency complexes. Route 68 operates along major arterials between Olympia, Tumwater and terminating at the Lacey Transit Center. The routes provide service every 8-15 minutes on weekdays between downtown Olympia Transit Center and Tumwater Square Transfer Center. The transit centers in Olympia and Lacey serve as major transfer points between regional express routes.

- **Direct connections to transit centers ease regional travel.** Routes 592, 603, 605, 609, 612 and 620 are express routes originating in Downtown Olympia and serving regional destinations and park and ride lots. The routes operate on Capitol Way between I-5, the Campus and downtown Olympia. There 15 express stops around campus, serving the whole of campus.

**Connections between the Campus and the Olympia Transit Center are convenient.** For transit riders, connections between Capitol Campus and regional transit centers are convenient. Intercity Transit offers frequent service and direct connection to both Olympia Transit Center and Tumwater Transfer Station. The transit centers in Lacey and Tacoma also act as transfer points to other major cities, including Lakewood, Tacoma and Seattle.

**Regional transit connectivity is limited to the South Puget Sound.** While connectivity between Olympia/ Lacey and Lakewood/Tacoma is good, one identified challenge to commuting by bus is difficult connections between Olympia and Seattle. Currently Sound Transit route 592 operates directional peak service to downtown Seattle between 4:12am and 6:42am. Sound Transit does not run reverse buses in the morning. This route operates peak afternoon service (every 30 minutes) between 3:07 and 5:37 to Olympia. This serves residents of Thurston County who work in Seattle well, but does not meet the needs of state employees who may live in Seattle and wish to take transit directly to Olympia. Instead, these commuters must board Sound Transit buses or the Sounder commuter rail to Tacoma and transfer to Intercity Transit. This forced transfer and the need for multiple transit passes (i.e., ORCA passes do not extend past Central Puget Sound) makes it a less desirable transit choice. Additionally, the transit benefits provided to State employees (the STAR pass) is not accepted by Sound Transit, Pierce Transit, or King County Metro.

**Capitol Way is a key transit corridor, but is currently designed primarily for auto traffic.** Capitol Way is a fifteen minute transit service corridor. The corridor bisects the Capitol Campus, which ensures that no campus employee is more than a quarter-mile from frequent bus service during regular work hours. During legislative session, both the Dash shuttle and Intercity Transit run on fifteen minute or less headways along Capitol Way. Outside of legislative session the Dash runs on fifteen minute frequencies. The transit stops are located approximately every two blocks along Capitol Way. They
vary in quality for riders and there are long stretches of roadway without at-grade crossings for pedestrians. This can make it difficult for transit riders to access the stops, or reach their destinations if they must cross the busy roadway to do so. People accessing transit tend to use the shortest distance route, even if that means using an unmarked crossing location at midblock.

Figure J

Local and regional fixed route transit network serving the Capitol Campus

Source: Intercity Transit
The quality of transit facilities and passenger amenities varies. Between downtown Olympia and the Capitol campus, bus stops include semi-enclosed shelters with benches to protect riders from inclement weather. Posted schedules provide transit information for users. Intercity Transit stops vary in terms of quality, from covered shelters and benches along Capitol Way to traditional bus stop poles. Some stops with lower ridership have fewer amenities, such as lack of benches, protection from weather, or fixed route schedule information. Key stops have printed information, but may benefit from real-time arrival information at the stops. Numerous studies have demonstrated that transit riders often perceived wait times in a non-linear fashion, perceiving wait times to be about 30% longer when relying on traditional arrival information rather than real-time information. Intercity Transit promotes the use of mobile applications for real-time transit service, linking to the “One Stop Away” app providing transit information for the Puget Sound area.

Gaps in Transit Access & Connections:

- Employees may not know about the STAR Pass or how to access transit options to meet their travel needs. Utilization of the STAR pass is currently not monitored by worksite coordinators, so it is difficult to assess the barriers employees face. However real time arrival information on display boards in buildings, and at transit stops have been shown to improve the quality of the transit experience.
- While local routes provide service to Tumwater and Lacey campus employees, the Dash shuttle does not serve these campuses. Some transportation coordinators noted that this may deter intra-campus travel by transit by employees.
- Employees living in Seattle do not have a one-seat (without transfer) ride to the campus.
- Some bus stops, such as stop number 6 and 54 on Capitol Way have no crosswalks spanning the four travel lanes to serve the stop. Because pedestrians generally avoid out of direction travel, they may engage in unsafe crossing at 15th Ave and Capitol Way to access these stops.
- Some bus stops have lower quality or no amenities that could contribute to passenger comfort.

3. Arriving on foot

Pedestrian access is high quality near the campus perimeter. The Capitol Campus has good pedestrian access, with sidewalks and trails connecting to the perimeter and interior of the campus. The sidewalks are generally in good condition and have curb ramps to allow pedestrians, or those with wheelchairs, or other mobility devices to easily mount sidewalks. Employees and visitors arriving from Olympia may choose to walk via Capitol Way, or use trails along Capitol Lake Park. Portions of the Capitol campus have high quality pedestrian infrastructure, where recent investments have resulted in highly visible crossings. Curb ramps and bulb outs, pedestrian crossing alert signs, and median pedestrian refuges both increase pedestrian comfort and slow vehicle speeds to create a safer pedestrian environment. At high-conflict, high volume intersections, such as the 14th Avenue and Jefferson Street roundabout, high-quality pedestrian treatments are provided. User-activated rapid flashing beacons alert motorists when pedestrians desire to cross and refuges between each roundabout leg allow for safer, two stage crossings.

Pedestrian travel from adjacent neighborhoods is pleasant. From the south, pedestrians can access the Campus via sidewalks on quiet, shaded residential streets. Pedestrians traveling from neighborhoods east of campus have sidewalk coverage along residential streets, and quality crosswalks with pedestrian refuges in the medians on Jefferson Street.
Pedestrian facilities in areas northeast of campus do not provide comfortable conditions for pedestrians. Pedestrians traveling along Jefferson Street north of 11th Avenue face a less welcoming environment than areas closer to the campus. Sidewalks are narrow, approximately 4.5-5 feet wide with long blocks without street trees or active street uses. Pedestrian buffers from travel lanes are not offered. Although the street is three lanes, instead of the four lanes closer to campus, the removal of the landscaped street median, street trees and other pedestrian infrastructure presents an auto-oriented landscape.

**Gaps in Pedestrian Access & Connections:**

- While pedestrian infrastructure exists northeast of campus, it is narrow, unattractive, and results in unpleasant walking conditions.
- The existing trail link between Capitol Lake and the campus is challenging due to steep grades.
- The NE quadrant of campus features grades changes, stairs and confusing routing for employees and visitors.

**4. Arriving by bicycle**

**Bicycle connections between downtown and the campus are limited.** Employees and visitors accessing the Capitol Campus by bicycle experience a wide range in the quality and comfort of bicycle infrastructure. The Campus is bracketed by low-volume, calmed residential streets to the south, and Heritage Park and downtown Olympia to the north. The north-sound bound streets connecting the Campus to the heart of the Olympia commercial district do not have bike lanes or shared lane markings, leading many to use trails along Heritage Park.

**5th Avenue rapid flashing beacons encourage safe connections.** Reaching Capitol Lake from downtown involves crossing 5th Avenue where sensors activated by pedestrians or people on bicycles result in flashing beacons. These crossings are particularly convenient for those who travel east over the Olympia Yashiro Friendship Bridge, connecting through parking lots off Minckler Street to reach the park.26 The Thurston County Bike map has identified the Heritage Park Trail as the bicycling and pedestrian connection from the Capitol Lake Park, the steep grade accommodated by a series of nine switchbacks is a very arduous connection for the average cyclist, particularly one commuting to work. Input from state staff indicates that bikers get dangerously tight along 5th Avenue at the dam and access is awkward from 5th Avenue and Deschutes Parkway to Harrison Avenue and the 4th Avenue roundabout.

**A gentler connection between the campus and Heritage Park is needed.** The more sensible connection to downtown and the west is via Columbia Street SW, accessible from the 7th Avenue SW from the park. This street is low-volume and contains a far more manageable grade, connecting to campus at

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26 Minckler Street is the City-owned street connection located immediately east of the Yashiro Friendship Bridge that is designed to parking lot standards.
11th Avenue SW. While the traffic volume appears to be low, adding shared roadway markings to the narrow travel lane could help remind automobiles to share the road and indicate to bicycle riders that it’s a good choice of route.

**On-street facilities bracket the district, but don’t extend into nearby neighborhoods.** Near the Capitol, there are three roadways with on-street bike facilities which surround campus. Jefferson Street has high wide lanes and wayfinding signs for navigating the 14th street roundabout using pedestrian crossings. For east-west travel, 11th Avenue and the westbound lane of Maple Park Ave each have a 5-foot bike lane. However in each case, the bike lane only exists for a few blocks in the vicinity of the campus. While this may help commuters with safe access once they nearly reach their destination, safe access via bicycling infrastructure should extend along popular existing routes to reach the campus.

**The 14th Avenue roundabout balances access for all modes well.** The roundabout at Jefferson Street SE and 14th Ave SE has several conflict points and high traffic exposure due to vehicles exiting the campus and accessing I-5. Here, the bicycle infrastructure is high-quality, with ramps up to the sidewalk at the intersection approach so that people on bicycles are more visible to motorists. The pedestrian and bicycle crossing points have pedestrian activated rapid flashing beacons, with refuges between each roundabout leg. This allows for a relatively smooth transition through the roundabout, between bike lanes on Jefferson Street SE and to connect to the Olympia Woodland Trail.

**Connections to regional trails are unclear.** The Olympia Woodland Trail can act as a high-quality bicycle and pedestrian access route to the Capitol, with the ten foot wide path paralleling the I-5 corridor between Martin Way in Lacey and 14th Avenue. The path has on and off ramps at major streets making it highly accessible. However, the lack of wayfinding signs can make it difficult for commuters to locate the connections to the trail from the campus.

**There is limited wayfinding information to end-of-trip facilities.** Once a bicycle commuter reaches the Capitol Campus, there is limited wayfinding information helping them access end-of-trip facilities such as locker rooms, showers, and secure bike racks. Many of the west campus buildings have end of trip facilities, with lockers in O’Brien, Cherberg and Newhouse and bike racks located at Pritchard and between Obrien and Cherberg in the tunnel. The tunnel parking may be challenging for new
commuters to locate, and accessing it requires bringing bicycles through marble hallways and down shared elevators. Some employees may feel burdened doing this, particularly during busy legislative periods.

Public bike parking is limited. External bike racks for visitors are located throughout the campus and identified on some campus maps, while left off of other maps such as those distributed at the visitor center. The racks are located near building entrances, but are dated and typically only have a space for a few bicycles. It can be particularly difficult to find public spaces in west campus. One outdoor rack boasts weather protection via a gondola design, and is popular during legislative session. Building shelters or installing additional outdoor racks under cover can protect bikes from rust and keep seats dry for riders, lending a more pleasant bicycle experience.

Gaps in Bicycle Access & Connections:

- Bike lanes or shared lane markings are needed along popular routes leading to campus.
- A clear route linking downtown Olympia and the Capitol Campus should be identified.
- Wayfinding signs directing travelers to the campus and its end-of-trip facilities should be located throughout campus and on visitor information materials such as a website.
- End-of-trip facilities should be expanded to all buildings with large employee base, and outdated facilities should be upgraded.
- Short-term bicycle parking should be increased and made more visible.

5. Available Transportation Demand Management (TDM) Programs

Inconsistent benefits programs across campus. Transportation demand management programs vary across agencies. All state employees are eligible for the free STAR pass for Intercity Transit use, but usage is not tracked and promotions and events are not widespread.

Some agencies have offered commute benefits that reward employees with cash benefits for walking and riding bicycle to work, while others offer these employees preferential access to long-term lockers in high-quality shower facilities on campus. Other agencies offer no incentives for alternative modes.

Information on ridesharing is limited. Ridesharing through carpooling and vanpooling is encouraged by the State of Washington under its CTR program. Many employers offer pre-tax benefits to help pay for vanpooling fees, as well as priority parking and fee waivers at the workplace. Carpooling is the second most popular mode-choice for employees commuting, while vanpools are less popular. Vanpools and carpool do have prime parking places near the front of some of the agency buildings, and in the case of DES, free parking. However, treatment of vanpools is not standardized across the campus. Information sharing, including the ability to find van or carpool partners are limited, and coordination between worksites throughout the campus is missing. Capitol Campus employees interested in vanpooling can access the statewide ridesharing database, www.rideshareonline.com through Washington’s Commute
Trip Reduction webpage. The online database will link riders to each other or their local transit service provider who keep an ongoing list of existing vanpools.

**No existing Olympia vanpools advertise service to the campus.** Currently, there are 44 vanpools that travel to Olympia from 6 different counties around western Washington. Although 2.6% of campus employees commute by vanpool, it is notable that none of the vanpools are specifically identified as destined for Capitol Campus. This may indicate that the vanpools pull riders from multiple employers in Olympia. One potential barrier is that employees must live at least ten miles from their workplace.

**Gaps in TDM Programming:**

- Some agencies have no budget to support the program.
- Some ETCs do not receive support from their directors/agency.
- Use of incentive programs such as the STAR pass is not tracked and employees are not routinely polled about their transportation choices. This makes it difficult to pinpoints barriers to participation in all TDM programs.
- Promotion of existing programs and benefits is inconsistent across worksites. Related, no online information clearinghouse exists for employees interested in learning where all of the showers, lockers, and secure bicycle parking are located across campus.
- Undermanaged parking leaves little incentive for employees to seek out non-drive alone modes of travel. Previous efforts to offer financial incentives to employees who commute by mode other than driving have been discontinued in some agencies. Some agencies still provide financial incentives, although this has declined in recent years due to legislative direction for general fund agencies to cease incentives to employees.
- Limited information exists for employees seeking ridesharing options. Information pages on accessing campus primarily focus on driving and parking without offering information on availability of rideshare services or finding existing carpools or vanpools.
- Access to on-demand ridesharing through websites such as zimride could help those with irregular schedules or travel needs, such as visitors, find shared rides. On-campus access to shared vehicles, such as Zipcars, can support employees who carpooled to work, but may need a vehicle for mid-day personal travel. Convenient locating of state fleet vehicles will make work-related travel convenient for those who do not drive to campus.

6. **Campus Circulation**

The Capitol Campus is home to 20 buildings on 103 acres. While spread out and covered with lush lawns and public plazas, the campus is compact enough for able bodied employees and visitors to travel on foot or by bicycle. However, some gaps in intra-campus travel exist.

**Pedestrian paths and other infrastructure encourage walking on campus.** There are few physical barriers, such as fences or gates which impede pedestrian access to campus buildings. Some buildings,
such as the Natural Resources Building, provide direct pedestrian paths and entrances for employees and visitors. These paths connect directly to the sidewalks along Jefferson Street near transit stops and allow people to avoid out-of-direction travel. Campus planners have installed stairways to promote more direct connections on foot in areas where significant slope requires lengthy paths at gentler grades for wheelchairs, bikes or other mobility assisting devices.

**Pedestrian paths serve east-west travel through campus.** Employees and visitors have many pathways to cut down on vehicle travel through campus. These pathways cut through large lawns on the west side of campus, and link open space above the east plaza garage on the east side. They also serve as shortcuts to buildings north and south, and sometimes connect to destinations such as Dash shuttle stops.

**Grade changes and obscured sight lines may impede pedestrian and bicycle travel.** While stairs and ramps help navigate the grade changes, particularly in east campus, the lack of clear sight lines can cause confusion for travelers on foot or bike. Paths and connections may be hard to locate and could be better utilized through wayfinding signs.

**Capitol Way acts as a barrier to pedestrian and bicycle connections.** The most critical barrier to cross campus movement is Capitol Way, which has two travel lanes in each direction, left turn lanes, and, in some cases right-turn slip-lanes. The five lane roadway section has a long stretch without at-grade pedestrian crossings in the middle of the campus. This allows cars to pick up speed and can lead to uncomfortable crossings for pedestrians at intersections such as 15th Avenue SW and Capitol Way S. Crossing at this intersection and at the nearby SE 14th Avenue SE and Sid Snider Avenue SW intersection is discouraged by design.

In addition to “no crossing” signs, the roadway does not include pedestrian signals or a marked crosswalk. Instead, there is a pedestrian bridge that connects the East Plaza to the Visitor Center parking lot. While the bridge offers a conflict-free crossing between the east and west sides of the campus, it does require out-of-direction travel that can be difficult for those with mobility impairments. Additionally, it signals a prioritization for vehicle mobility through the Capitol Way corridor.

On-campus pedestrian connections vary in quality and pedestrian priority. While highly visible crosswalks facilitate crossings, other features like the Capitol Way pedestrian bridge necessitate out-of-direction travel for pedestrians to arrive at campus destinations. Source: Nelson\Nygaard
Stairways facilitate pedestrian movement where steep grades are present. In several places throughout campus, stairways have been built to create vertical shortcuts for pedestrians avoiding longer travel via sloping pathways or sidewalks. These could be made more useful by introducing wheel channels for bicycle riders to roll their bicycle up the stairway as they walk.

West campus has less developed pedestrian facilities. In west campus, the quality of pedestrian facilities varies. Some sidewalks are narrow, and in other cases, pedestrians compete with vehicles for travel space. In two areas of west campus with high levels of pedestrian movement, lines have been painted indicating pedestrians paths through the middle of parking lots, or alongside travel lanes. In the latter case, pedestrians move between nose-in parked cars and the roadway. This can lead to dangerous conflicts as vehicles enter and exit the parking spaces with pedestrians walking behind the spaces.

Dash shuttle provides excellent circulation for primary campus only. The free Dash shuttle provides excellent circulation throughout the Capitol Campus, especially for mobility limited individuals with frequent service. However the shuttle does not serve state facilities in Tumwater and Lacey, which can make inter-campus travel more difficult. For meetings across campus, employees can use local routes, drive, or ride a bicycle.

Gaps in Campus Circulation:

- Bicycle facilities ring the perimeter, but do not permeate the campus
- Pedestrian crossings are missing at street level in the center of campus, requiring pedestrians to travel out-of-direction to use a pedestrian bridge connection. Pedestrian rapid flashing beacons could be added to street level intersections to interrupt traffic only when pedestrians are waiting to cross.
- Pedestrian pathways in west campus, particularly behind the Cherberg and Newhouse Buildings create conflicts with vehicles
- People on bicycles traveling through campus from north to south have trouble navigating a clear route and would benefit from wayfinding
- Limited service coverage discourages use of Dash shuttle for intra-campus circulation
- Stairways are helpful for pedestrians, but could be better utilized if they included accommodation for bicycles

B. Summary

More strategic effort needs to be given to integrating existing programs and systems for both parking and TDM to maximize access capacity to and within the campus and to meet established goals for employee commute trip reduction. Gaps have been identified within this section. Policies, programs and projects to address these gaps are outlined in detail in Sections IX and X of this report. Additionally, a detailed
summary of Alternative Transportation Actions are provided in a technical memorandum contained within this report as Attachment B.
IX. ELEMENTS OF AN ACCESS MANAGEMENT PLAN

Based on information developed in Sections III – VII, the following issues are evident within the context of current programs and services:

- Campus parking is approaching its practical capacity; particularly during periods when the legislature is in session.
- New growth on campus (e.g., 1063 Block Project) will challenge the parking situation. The functional efficiency of the campus parking access system may be compromised and create difficulty in finding a parking space. This may cause inconvenience, congestion and increased travel times without active mitigation. Similarly, movement/circulation and safety could be adversely affected.
- Progress toward meeting CTR goals for alternative mode access has been static for a number of years. The role that successful attainment of CTR goals can play in access and capacity management can be significant for campus efficiency and cost of future access infrastructure.

To this end, the 2014 Transportation and Parking Study provides a very detailed set of recommendations formatted into framework/structure and schedule that provides the basis of an implementation plan. This Access Management Plan is crafted to develop an integrated and comprehensive program that supports the continued vitality and growth of the Capitol Campus within the context of clear policy direction. The recommendations in the plan also serve as a template for action strategies that the state and affected stakeholders (i.e., agencies, staff and the community) can use to move forward strategically; under the leadership of a Campus Access Manager supported by the campus based ETC network.

This Access Management Plan is structured around three action elements: (1) policy, (2) organization and (3) operations. The success of this plan and the approach outlined is based on establishing an organization that consolidates parking services and CTR program delivery for the campus and is focused on access management of Capitol Campus as an employment center and as a visitor destination.

A. Policy Level Actions

The state’s Joint Comprehensive CTR Plan for Thurston County was forward thinking and envisions strategies that are designed to encourage state employees to consider other means of commuting to work besides driving alone. As demonstrated in Section VII, successful realization of the Plan goals will create significant efficiencies within the campus parking supply. The Plan also recognizes the role parking management plays in CTR and encourages parking guidelines and programs that help actualize CTR goals. As the CTR Plan states, “parking management is a key component of any CTR program.” The reality of the current system is that certain key objectives necessary to fully actualize policies are not in place. Without high level management support and aggressive coordination of access management; CTR goals will not be met across all agencies or the broader campus. Section A provides a detailed summary and timeline of recommendations for refinement and reaffirmation of current policy.
B. **Organization: Consolidation of Parking and CTR Services**

The success of any multi-faceted access system is dependent on the ongoing administration, management, and communication of both the parking and CTR parking programs; structured to achieve specific access goals and outcomes. This includes day to day management of individual parking facilities, oversight of third party vendors (as necessary), financial accounting and reporting, marketing/communications, customer service, strategic and capital planning and integrated coordination of CTR programs and services at and within each campus based state agency.

It is recommended that the responsibility for administering the Capitol Campus’ access management system - and implementation of the individual elements of the recommendations outlined below - be consolidated into a single unit’s portfolio of duties. This person, a “Campus Access Manager,” would lead in the coordination of parking and CTR services on-campus; daily operations of the system and strategic implementation of policies, programs and planning for growth. The concept recommended here is to create a Transportation and Parking Management Association-like (TPMA) organization for the Capitol Campus. **Section B** recommends strategies necessary to consolidate Parking and CTR services.

C. **Operations**

**Section C** details a range of operational enhancements recommended for implementation of the proposed Capitol Campus Access Management Plan. This Section provides a succinct understanding of the most critical elements of the plan and an overall framework that supports the very detailed management strategies and implementation schedule to follow. Operations will include systems (parking and CTR), infrastructure, information gathering and technology.

To the highest degree possible, recommended strategies are laid out in each category in a manner that is iterative or “checklist” in presentation. Actions are intended to follow a logical progression of implementation, with each preceding action providing the ground work necessary to move to a subsequent action. As indicated, actions are delineated between policy, organization, and operations. Operations are further segmented into recommendations for demand, supply, infrastructure and information. All recommendations are assigned a timeline or “phase,” which includes:

- Immediate (0 - 12 months)
- Phase 1 (12 – 24 months)
- Phase 2 (24 – 36 months)
- Phase 3 (36+ months)

It is likely that additional refinement and decision-making around timing, cost and resources will likely evolve after internal staff/state review and as Plan implementation unfolds. A summary matrix of the entire parking strategy implementation plan is provided in **Attachment A**.
X. IMPLEMENTATION PLAN AND SCHEDULE

Overall, the implementation of the Access Management Plan recommendations outlined below is intended to be logical and ordered in a manner that responds to changes in demand and ensures a continuing sense that the methods for accessing the Capitol Campus (whether through parking or other modes) are easy to use and understand. This implementation is complex, requiring a dedicated and routine level of support, coordination, commitment and resource identification that goes beyond what is currently in place. The recommendations outlined below are broad ranging and will likely be refined, modified and “sorted” through internal plan review and approval processes. The intent here is to create a comprehensive list of strategies and options for the state to pursue in its effort to manage parking supply and reduce commute trips.

It is important to note that the recommendations for later phases could be accelerated based on organizational capacity, emerging priorities or need. The outline here merely suggests an order that structures both discussion and strategic direction for effective implementation.

A. POLICY

This Access Management Plan begins with a recommended set of Guiding Principles that underscore the state’s intent to:

- Manage the Capitol Campus parking supply in a manner that keeps peak hour occupancies within “practical capacity,” 85% for visitor parking and 90% for employee parking.
- Aggressively develop programs and strategies that result in a substantive reduction in drive alone commute trips by state employees.
- Provide best-in-class comprehensive commute benefits and financial incentives for alternate commutes for state employees.
- Reduce the need to build parking on the Capitol Campus.
- Make transit, bicycling, and walking the preferred ways to commute to the Capitol Campus.
- Advance regional and state leadership in combating climate change.
- Facilitate the integration of parking management and transportation demand management.

“Therefore, it is the policy of the state that the department of transportation and other state agencies shall aggressively develop substantive programs to reduce commute trips by state employees.”

Source: RCW 70.94.549 Transportation Demand Management – Intent – State Leadership

This Access Management Plan recommends a policy, supporting organization and program format that manages a limited and valuable parking supply to its highest and best use, thereby maximizing resources, convenience and choice for the user (employees and visitors). Progress in meeting state CTR goals for the Capitol Campus should be substantive and demonstrable. To this end, the following should be considered.
**Recommendation (A.1)**
Engage Senior Management (led by the Department of Enterprise Services) in a process that reaffirms the goals, objectives and targets of the Joint Comprehensive Commute Trip Reduction Plan. Include endorsement (and/or enhancement) of the Guiding Principles outlined on page 49 of this Access Management Plan as additional framework for efforts moving forward.

**Implementation: Immediate (0 – 12 months)**

Based on findings of this study, it is apparent that current efforts on the Capitol Campus to achieve the trip reduction targets set forth in the CTR Law have not been achieved, nor has there been meaningful change from baseline results for many years. It is also clear that forward strides in meeting CTR goals will create significant efficiencies for capacity and long-term cost savings in the parking supply.

As the Joint Comprehensive Commute Trip Reduction Plan stressed, a key pillar to the success of CTR is management leadership. Given the static nature of access patterns at the Capitol Campus, it is imperative that Senior Management reaffirm its commitment to meeting stated goals and outcomes for access. This will require a recognition that more aggressive and targeted programs are necessary, at levels (staff and resources) that currently do not exist. Existing resources need to be restructured and augmented. The Department of Enterprise Services should lead a process to engage campus and legislative leaders in moving this Plan forward.

This does not mean that existing programs are not viable. The bottom line is that status quo approaches to delivering both parking management and CTR/TDM are not facilitating the goals of access management as outlined in the Joint Comprehensive CTR Plan and the Commute Trip Reduction Law. Without the active support and involvement of Senior Management to embrace a new and more comprehensive access management plan, it is doubtful that significant changes in access patterns to the Capitol Campus will be realized. DES can serve as a convener to bring leadership together, but agreement and commitment of all campus agencies and from the Governor and Legislature is essential for success.

**Recommendation (A.2)**
Develop and adopt a parking rate policy for hourly parking that would require rate adjustments based on demand by legislative season. Administrative authority would be given to the Capitol Campus Access Manager (see Recommendation B.1, below) to adjust hourly rates upward or downward within a pre-approved rate range based on an 85% Occupancy Standard (Visitor Parking).

**Implementation: Immediate (0 – 12 months)**

It does not appear that there are policies and procedures in place that allow for rate adjustments to be made that are correlated to occupancy/demand or allowances for rate differentials by location or zone. It is recommended that criteria for administrative authority to adjust rates be developed for implementation by a Capitol Campus Access Manager. Criteria would include a minimum schedule for updating inventory/occupancy and rates within the confines of reasonable rate ranges.
For instance, the state should also establish a rate range of $0.25 - $3.00 per hour. This range is reflective of (a) the low end of current rates in the Olympia area and (b) a high end that provides enough range to create diversity (by demand) within the system of hourly parking. The high end recommendation is also high enough above the current market that new rate ranges do not need to be established for several years. In other words, the high end does not necessarily reflect today’s market, but allows flexibility in the range of rates to be somewhat enduring before the issue of rates needs to come back to Senior Management. It is expected that over time rates will move up and down within this range as demand for hourly parking fluctuates (e.g., by location and/or by season). Changes in this regard would make it easier to conveniently and promptly make adjustments that are responsive to demand by area and location.

**Recommendation (A.3)**

Develop and adopt a parking rate policy for permit parking that would require rate adjustments based on demand by legislative season. Administrative authority would be given to the Capitol Campus Access Manager (see Recommendation B.2, below) to adjust permit rates upward or downward within a pre-approved rate range based on a 90% Occupancy Standard (Employee Parking).

**Implementation: Immediate (0 – 12 months)**

The intent of a demand based pricing approach is consistent with CTR goals that encourage consideration of other modes of access. Price is used as a response to parking constraints, with higher parking constraints represented by higher parking rates. As parking rates increase, they are balanced with cost effective (lower priced) alternative mode options.

The current permit pricing program is not dynamic, demand based or well integrated into the broader policy intent for CTR focused demand management. **Table 11** summarizes some key rate categories for existing permit users.27

Monthly permit rates of $25 (general zoned) and $35 (reserved) are low when contrasted against parking constraints that have been identified in the system. This is particularly true during the period when the legislature is in session. Similarly, even with transit and bike/walk options available to employees at no charge, the current differential between the cost of parking and other options does not appear to be incentive enough to effect changes in desired CTR mode categories.

At minimum, the state should establish permit rate schedules that are seasonal, which reflects the demand differentials that are evident from the 2013 data collection effort (in-session versus non-session). Also, based on the policy related to management leadership in CTR, the rate currently allowed for executive management ($200/year) should be reevaluated as to its consistency with trip reduction goals. Finally, the rate currently assessed to non-state personnel that charges the same monthly rate ($75) for reserved or general zoned parking does not establish a premium for reserved parking, which is less efficient from a

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27 This is a partial list of key rate categories. For a complete listing of permit types and rates see: http://www.des.wa.gov/SiteCollectionDocuments/TravelCarsParking/ParkingFeeSchedule.pdf
capacity management perspective. Reserved parking should be more expensive than general zoned parking.

Table 11
Current Rate Schedule – Capitol Campus Permit Parking (partial listing)

<table>
<thead>
<tr>
<th>TYPE OF PARKING</th>
<th>RATE</th>
<th>ALLOWED USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpool (3+)/vanpool</td>
<td>$0 month</td>
<td>Parking in any general zone or in an assigned carpool/vanpool stall.</td>
</tr>
<tr>
<td>Rideshare (2) – (general zoned)</td>
<td>$25 month</td>
<td>Allows 2 employees who ride to the Capitol Campus in the same vehicle to park in a zoned parking area in a specific garage or lot.</td>
</tr>
<tr>
<td>Motorcycle (general zoned/reserved)</td>
<td>$15 month</td>
<td>Parking in a zoned parking area in a specific garage or lot.</td>
</tr>
<tr>
<td>Disabled employee (reserved)</td>
<td>$25 month</td>
<td>Parking in an accessible parking stall.</td>
</tr>
<tr>
<td>State employee (general zoned)</td>
<td>$25 month</td>
<td>Parking in a zoned parking area in a specific garage or lot.</td>
</tr>
<tr>
<td>State employee (reserved)</td>
<td>$35 month</td>
<td>Allows an employee to park in an assigned stall.</td>
</tr>
<tr>
<td>Agency assigned (reserved)</td>
<td>$75 month</td>
<td>For use by state agency owned vehicles, their visitors, and limited use by off-campus staff.</td>
</tr>
<tr>
<td>Agency Director</td>
<td>$200 per year, Agency Director ($16.66 per month)</td>
<td>Allows executive management parking in metered visitor stalls, employee zoned parking areas, or in Visitor Center stalls labeled for agency directors.</td>
</tr>
<tr>
<td>Non-state personnel (general zoned or reserved)</td>
<td>$75 month</td>
<td>Used by people not employed by the state who routinely conduct business on the Capitol Campus; allows parking in an assigned or reserved stall.</td>
</tr>
</tbody>
</table>

The state should establish a rate range of $30 - $125 per month at this time. This range is reflective of (a) a low end that can be used to encourage use of underutilized facilities during non-legislative seasons and (b) a high end that provides enough range to create diversity (by demand) within the parking system. The high end recommendation is also high enough above the current market that new rate ranges do not need to be established for several years. It is expected that over time rates will move up and down within this range as demand for off-street permits fluctuate by location.

New policy would also include the 90% Occupancy Standard, clarity as to administrative authority to adjust rates appropriately, a minimum schedule for updating the parking inventory and occupancies, and routine rate reviews that are performance/demand based. This will eliminate the static rate schedule now in place on the Capitol Campus.
**Recommendation (A.4)**
Establish a clear policy (written and formally approved) on reserved stalls and why they are needed and when and how they are allocated. Parking availability on campus is significantly reduced due to the large number of reserved stalls.

**Implementation: Phase 1 (12 – 24 months)**

Currently, approximately 1,600 stalls on the Capitol Campus are reserved parking. This represents 26% of the total parking supply. The 2008 Parking Study estimated that vacancies in reserved stalls ranged from 15% to as high as 45% during peak hours. Visual observations during the 2013 data collection effort found similar patterns in reserved stalls. At 15%, that means 240 stalls sit empty during peak times because the stall is reserved for a single user rather than for general shared use. At 25%, the stall total would be 400 stalls.

Unused reserved stalls means stalls are empty but not available, which further exacerbates periods when the general parking supply is constrained. In short, reserved stalls are highly inefficient in systems where capacity management is critical. Based on the 2009 and 2013 parking studies, the state should develop a more rigorous policy on allowing and allocating reserved parking. New criteria should be developed that requires specific instances by which some individuals or agencies have access needs that are more important/strategic than other general users and are valid reasons for allowing the inefficiency that reserved stalls create.

One place to begin might be in setting new criteria within the context of a campus wide cap of 15% for reserved stalls. This would reduce existing reserved stalls from about 1,600 (26%) to 914 (15%). At this level, more flexibility and elasticity in the system would be added into the current system and the capped supply would create a more realistic “market” for reserved stalls that is reflective of their “importance” to specific user groups. [NOTE: This policy would not pertain to parking for disabled users.]

**Recommendation (A.5)**
Set annual trip reduction targets (six years) for drive alone commute trips that are correlated to current CTR goals.

**Implementation: Immediate to Phase 3 (0 –36+ months)**

At times, the transitioning of employees from drive alone commuting to alternative modes can seem daunting, particularly within the context of aggressive goals that strive for significant shifts in commute patterns. This is even more intimidating when confronted with a very large and diverse employee base, like that of the Capitol Campus. However, breaking out goals into annual targets allows for a more focused and targeted approach, with outcomes that are achievable and measurable. Many Transportation Management Associations (TMA’s) set goals in this manner, which allows them to focus on a specific number of employees as opposed to a long-term goal that is many years down the road. For instance, both the TMA effort in Vancouver, WA (Destination Downtown) and Tacoma, WA (Downtown: On the Go!) structured their commute trip reduction efforts in this manner.
Based on information provided to the consultant team, it is estimated that there are approximately 5,211 employees on the Capitol Campus, representing over 60 state agencies. To achieve current CTR goals for drive alone trips (63.81%) just over 90 employees per year would need to be transitioned into other commute modes (preferably transit, bike, walk or telework if parking is to be minimized). Table 12 summarizes this.

<table>
<thead>
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<tbody>
<tr>
<td>5,211</td>
<td>3,695</td>
<td>3,601</td>
<td>3,512</td>
<td>3,418</td>
<td>3,325</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drive Alone Rate (Target)</th>
<th>Employees Transitioned Each Year (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.9%</td>
<td>94</td>
</tr>
<tr>
<td>69.1%</td>
<td>89</td>
</tr>
<tr>
<td>67.4%</td>
<td>94</td>
</tr>
<tr>
<td>65.6%</td>
<td>93</td>
</tr>
<tr>
<td>63.81%</td>
<td>93</td>
</tr>
</tbody>
</table>

(a) Assumes preceding year goal is met and gross employee base remains constant.

This example does not account for new employee growth and assumes 2018 as the target year of goal attainment. However, it does demonstrate that small forward progress can reap significant rewards. In this case, goal attainment and the potential to “capture” 370 parking stalls within the existing inventory. Also, this example can help focus efforts and define resource allocations necessary to facilitate such transitions. Goals established in this manner are easy to communicate and set a standard that most agencies would see as reasonable and achievable.

It is recommended that the state establish clear, achievable and reasonable trip reduction targets for the Capitol Campus and empower access management staff and Employee Transportation Coordinators to work directly with individual state agencies to assess each agency’s role in contributing to the success of the access management plan and campus trip reduction goal.

**Recommendation (A.6)**
Continue to allocate parking funds to an employee access fund to underwrite access improvements that benefit employee commuters and are supporting CTR programs and goals.

**Implementation: Immediate to Phase 3 (0–36+ months)**

A portion of revenues generated through Capitol Campus parking fees supports two critical components of the state agency CTR program: the State Agency Rider (STAR) Pass and State Agency Free Emergency (SAFE) Ride Home. The balance of the funds raised through the Capitol Campus parking program supports maintenance and operation of the parking facilities.
Changes recommended in this Access Management Plan may result in increased parking revenue as rates become more closely calibrated to actual demand over time. A growing portion of additional revenues generated as a result of such efforts should continue to be targeted to all elements of the access plan, particularly in funding the function of the Capitol Campus Access Manager. This Plan is heavily contingent on (a) executive management level commitment and (b) direct outreach and interaction between the Access Manager, individual state agencies and Employee Transportation Coordinators. Parking revenue provides a stable source of revenue for such activities, especially in the context of “parking not built” and the broader economic advantages to the state of more efficiently managing existing supplies.

Recommendation (A.7)
Commit adequate and sustainable funds to ensure the long-term implementation and success of the Campus Access Management Plan.

Implementation: Immediate to Phase 3 (0–36+ months)

The comprehensive program of strategies recommended in this Plan will require a commitment of resources that exceeds resources currently in place. Funding for the implementation of the Joint Comprehensive CTR Plan should be sustainable; reducing the need for each agency to budget for CTR.

Some programs (particularly new infrastructure) may exceed the capacity of the near to mid-term capacity of the parking fund described in A.6, above. There will need to be a commitment to fund new programs and provide the necessary staff and organizational support necessary to successfully activate and sustain this Plan. This could include augmenting parking revenues with other funding sources available to the state (general fund, grants, etc.).

B. ORGANIZATION: CONSOLIDATION OF PARKING AND CTR SERVICES

Recommendation (B.1)
Create within the Department of Enterprise Services an Access Management unit that consolidates the delivery of CTR and Parking Services as well as is responsible for developing and implementing TDM strategies campus-wide, charged with interacting directly with campus based agencies for parking and CTR compliance. In addition, the unit should develop and implement a quasi-Transportation Management Association (TMA) to assist campus agencies in implementing effective CTR/TDM measures and serve as a liaison with Intercity Transit and TRPC.

Implementation: Immediate – Phase 1 (0–24 months)

As stated earlier, it appears the existing campus CTR program is somewhat passive, with specific policy directives, but little in terms of a directed and coordinated program of campus-wide efforts. Similarly, the role of parking operates separately from CTR. In other words, agencies are “complying” individually rather than collectively within the context of an active and strategic access management process.
The Capitol Campus is very much like a small business district; a “district” of over 5,000 employees, 60+ “businesses” and a diverse mix of visitors, events and activities. In this context, many campuses provide consolidated programs for directing and delivery of access management services. Relevant examples in Washington include the University of Washington and Seattle Children’s Hospital, organizations that view access management as necessarily pro-active and strategic. Each is managed to maximize the efficiency of parking supplies and meet established goals for trip reduction. Similarly, public/private partnerships in district based TMA’s provide direct one-on-one services to businesses; developing tailored access plans for unique businesses and their employees. Examples in Washington are Commute Seattle (Seattle), Downtown: On the Go! (Tacoma) and the Greater Redmond TMA (Redmond).

What distinguishes these campuses and TMA’s is that they proactively deliver access management and trip reduction services to businesses and employees; recognizing that each business is unique and successful access management needs to be tailored for each “client.” This is in contrast to trip reduction mandates that assume individual businesses (or state agencies) have the time, resources or technical capacity to achieve established goals on their own.

In this regard, the recommended Access Management unit will serve the Capitol Campus in the capacity of managing a quasi-Transportation Management Association (TMA), charged with interacting directly with campus based agencies for parking and CTR compliance. It is further recommended that the Access Management Division be led by a Campus Access Manager (see Recommendation B.2) supported by the existing network of Capitol Campus Employee Transportation Coordinators (ETC’s) serving as a “Board of Directors” for the Access Management Division (see Recommendation B.3).

Recommendation (B.2)
Consolidate the management and administration of Parking and CTR Services for the Capitol Campus under an individual Campus Access unit. The new position of Campus Access Manager (1.0 FTE) will be charged with leading efforts to maximize the parking supply and achieve adopted CTR mode split goals. The current campus Parking Manager would fall under the new Campus Access Manager as would all resources/staff currently assigned to coordinating campus related CTR functions.

Implementation: Immediate (0 – 12 months)
Currently, parking services are provided through the Department of Enterprise Services (DES). DES manages information and product services related to parking for visitors, employees and agencies. Permits, web site information, and daily management of activity are DES’s responsibility. A campus Parking Manager is in place that is responsible for integrating legislative requirements with existing program and service policies, as well as developing new policy or policy changes to meet requirements of legislative actions. This position provides data and knowledge for capital projects, new construction parking survey analysis, and recommendations to the State commute trip reduction programs. The campus Parking Manager also provides recommendations for legislative parking and session planning.
Given the significant complexity and size of the campus parking system, there is little time or resources provided to the current Parking Manager for strategic planning for the integration of parking and access systems. As presently structured, it appears that campus CTR efforts occur within the policy framework established in the Joint Comprehensive CTR Plan on an agency by agency basis. There does not appear to be active, routine and strategic coordination of CTR for the campus as a whole.

The position of Campus Access Manager will require a range of skills and experience. A sample “job description” might include:

General Responsibilities

- Coordinate and facilitate Employee Transportation Coordinators.
- Formalize the organizational structure that will guide the formation of the Access Management Division.
- Reaffirm and finalize goals, targets, and visioning for what will uniquely become the strategic work plan for the division. This includes implementation of the Access Management Plan.
- Put together collaborative teams to deliver key elements of the strategic work plan and CTR plan and goals.
- Assist each state agency on the Capitol in defining its role in the larger campus CTR effort and designing (tailoring) strategies that ensure that each agency is contributing to the attainment of campus access goals.
- Prepare budgets and progress reports.

Organizational Operation

- Establish Access Management office and manage day-to-day operation of the division.
- Organize routine meetings of the ETC network and provide staffing support network groups and potential ensuing committees.
- Expand and diversify resources to grow the scope of access management projects/programs and accelerate development and attainment of consensus goals and targets.
- Collaborate routinely and individually with each campus-based state agency to ensure all partners remain engaged, informed and supportive of the broader access management initiative.
- Manage a baseline assessment of current programs, services, and performance with additional input from ETC’s and agency leadership.
- Create a multi-year strategy roadmap that includes priority projects and expected outcomes, refining and revising recommendations in the Access Management Plan.
- Develop and/or manage baseline and ongoing surveys, tracking, monitoring and other methods to understand access patterns and transportation preferences, with the aim of supporting established access goals.
- Develop protocols for ongoing performance monitoring to inform partners and measure success.
- Monitor and report real-time peak season and event related traffic challenges and communicate these to affected users through various social media outlets, reader boards, web updates, etc.
• Determine what other communications tools will benefit users, then develop and implement these new tools.

Information/Advocacy

• Manage and nurture key partnerships and stakeholder relationships in a transparent manner.
• Serve as a liaison for the Access Management Division with campus agencies, adjacent business/residential communities, City/regional agencies and other potential partners.
• Collaborate with other area and regional TMA’s to share ideas and to build on TMA models of success.

Recommendation (B.3)
Establish and initiate an “Employee Transportation Coordinators’ (ETC) Advisory Committee” to serve as a quasi-Board of Directors for the Campus Access Manager. The ETC Advisory Committee would be charged with assisting in implementation and review of the Campus Access Management Plan.

Implementation: Immediate through Phase 3 (0 – 36+ months)

The state should develop and approve a process through which all existing ETC’s routinely assist the Campus Access Manager in the review and on-going implementation of the Access Management Plan.

The ETC Advisory Committee will: (a) assist the Access Manager/Coordinator in the implementation of the access management plan; (b) review parking and CTR goal related issues over time; and (c) advise the Access Manager and other relevant decision-making bodies within campus based state agencies on strategy implementation.

Once the Access Manager is appointed and established, the process of review, evaluation and decision-making with ETC input for access management on the campus should be initiated. A consistent and routine schedule of meetings should be established as well as use of this plan as a template for discussion of access management and strategy implementation with the ETC Advisory Committee.

C. OPERATIONS

DEMAND

The following strategies are directed at influencing demand or how users choose to access the Capitol Campus via driving or another mode:

Recommendation (C.1)
Within 15 months initiate and complete evaluation of hourly rates as called for in Recommendation A.2 above. Rates should be adjusted no later than July 31, 2015 after taking into account inflationary
impacts, system needs (as well as plan implementation) and demand. This is also consistent with Recommendation A.2 above.

**Implementation: Immediate – early Phase 1 (0 – 24 months)**

This would be the initial re-calibration of hourly rates based on demonstrated demand and seasonality.

**Recommendation (C.2)**

Within 15 months, re-calibrate permit rates as a function of (a) demand by area and season (b) the need to ensure visitor access and (c) to provide an incentive for employees to park in underutilized areas or to utilize alternative modes. Rates should be adjusted no later than July 31, 2015. This is also consistent with Recommendation A.3 above.

**Implementation: Immediate – early Phase 1 (0 – 24 months)**

This would be the initial re-calibration of permit rates based on demonstrated demand and seasonality.

**Recommendation (C.3)**

Promote telework/flexible work schedule programs, including the use of incentives.

**Implementation: Immediate – early Phase 1 (0 – 24 months)**

It is important to recognize that eliminating unnecessary or inefficient trips is as important as shifting trips to alternative modes. To this end, one of the most aggressive elements of the state’s goals for TDM is embedded in the Governor’s Executive Order 14-02 for telework and flexible work schedules. The Governor’s goal is to achieve an average of at least nine percent of all state employees across all agencies in teleworking and at least 40 percent of all state employees using flexible work hours by 2017. Currently, the combined mode split for Capitol Campus employees is 1.8% and 1.4% for teleworking and flexible work hours, respectively. In teleworking in particular, the employees vehicle stays home and out of the supply.

Telework can be effective for specific types of employee groups. However, time would need to be given to this strategy to understand work types, situations and other work/job related implications that might apply. Nonetheless, telework and flexible work hours programs can significantly reduce demand on limited parking supplies and reduce overall weekly auto trip rates, which would reduce emissions and vehicle miles travelled and contribute to broader sustainability goals. The Campus Access Manager and the ETC Forum should pick up this initiative early in their work and actively engage individual agencies in realizing these goals.

**Recommendation (C.4)**

Evaluate and consider implementing a parking cash out program or other financial subsidies to support commute trip reduction, paying employees to not drive alone.
**Implementation: Phase 1 (12–24 months)**

State law (RCW 43.01.230) allows agencies to develop and implement a financial subsidy program that encourages trip reduction among its employees. Agencies may use internal funds or parking fees collected from owned or leased facilities to fund the CTR subsidies. Per the RCW a taxable cash subsidy (for commuting by carpool, walking, or bicycling) is allowed.

According to Best Work Places for Commuters℠, parking cash out programs are one of the most effective means to encourage employees not to drive alone to work, establishing a better means of allocating scarce parking and/or managing a growing demand for more parking. In Washington, Seattle Children’s Hospital provides such a benefit to employees (underwritten through parking revenue). In the two years between 2004 and 2006, the hospital reduced the percentage of its daytime employees who commute via single-occupant vehicle (SOV) from 50% to 38%, using incentives for carpools, transit, bicycling, and walking that included a cash subsidy to employees choosing not to drive alone.

The state should evaluate the feasibility of such a program for the Capitol Campus, possibly as a pilot that would consist of a full cash out to all employees. Given the static performance of CTR results, a program of this nature could create meaningful shifts in employee commute choices, particularly when combined with increased monthly permit pricing (Recommendation A.3 and C.2).

**Recommendation (C.5)**

Enhance vanpool subsidies to increase utilization (a targeted form of parking cash out).

**Implementation: Phases 1-2 (12–36 months)**

Vanpools are very “parking efficient.” A vanpool of seven riders uses just one parking stall, rather than the seven stalls it would take to accommodate the same number of riders driving alone. Currently, the campus vanpool mode split is just 2.6%. Offering cash incentives to riders of vanpools could result in increased interest in vanpools and matching programs necessary to form vanpools. Increased vanpooling would also reduce overall campus employee parking demand. If the state was not to fully implement Recommendation C.3, this type of incentive program could be piloted for vanpools.

**Recommendation (C.6)**

Provide “pay out” to bike and/or walk commuters – e.g. “20 trips, 20 bucks.”

**Implementation: Phases 1-2 (12–36 months)**

Bicycling and walking are very cost effective and healthy forms of commuting. Organizations like Seattle Children’s Hospital (Seattle) and Nike (Portland, OR) have realized significant increases in bike/walk

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28 See: http://www.bestworkplaces.org/pdf/ParkingCashout_07.pdf
29 Seattle Children’s Hospital, Comprehensive Transportation Plan (2008), page 4.
commuting through programs that provide a cash incentive for biking or walking to work. Currently, the campus mode split for bike and walk commuting is 1.9% and 2.9%, respectively. If the state was not to fully implement Recommendation C.3, this type of incentive program could be piloted for bike commuting and/or through a Healthy Steps’ campaign (e.g., Walk to work, track it and be rewarded).

**Recommendation (C.7)**

Provide personalized trip planning services to all campus employees through ETC’s and the Campus Access Management Program.

**Implementation: Phases 1-3 (12 – 36 months)**

Many employees have considered shifting from drive alone commuting to another mode, but fail to do so because of lack of information or understanding of how to use a different mode. Personalized trip planning provides direct one-on-one service to interested employees that provide them with a tailored “map” for how to use a new mode (transit, bike, walk) that takes them “front-door to front-door.” This includes such information as when and where to catch a bus, the safest bike/walk route, availability of amenities (e.g., lockers, showers, etc.), support systems, matching programs and necessary equipment (e.g., shoes, fenders, helmets, protective clothing, etc.). This is a service that is provided by many TMAs, including Commute Seattle (Seattle) and Go Lloyd (Portland, OR). The primary elements of these programs is to provide affected employees personal contact and direct one-on-one assistance; education, promotion, incentives and routine follow-up.

**Recommendation (C.8)**

Enhance the campus “new employee” orientation process to ensure that alternative access options are strongly encouraged, with a support and mentoring network in place to assist, educate and incentivize.

**Implementation: Phases 1-3 (12 – 36 months)**

Per the Joint Comprehensive CTR Plan, agencies are required to provide new employees with information about the agency’s CTR program and specific alternative modes for the worksite. This does not ensure, however, that the information is provided in any other context than written materials, web information, etc.

It is recommended that the state enhance its new employee orientation program to ensure that information and personalized assistance regarding access options (see Recommendation C.6) is provided early in a new employee’s experience with the Capitol Campus. It is recommended that the new employee orientation program be re-evaluated as a component of the coordinated work that will be structured through the Campus Access Manager and ETC Forum. The state should ensure that new employee

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30 See for instance: http://www.golloyd.org/personalized-support
orientation is proactive, personalized and mentored. Human Resources will need to be a strong partner in this effort as the benefits of such will improve employee recruitment, retention and morale.

Research demonstrates that decisions on access options are more difficult to influence once a user has initiated a specific choice (e.g., auto). Programs that couple early information, with incentives and mentoring will bolster the state’s ability to achieve trip choice goals established with this Plan. Ensuring that information about transit, bike/walk, rideshare, telework, education/assistance and other access options is provided - before a new employee makes his or her first work trip to the Capitol Campus - should be a goal of the TDM program. As an example, the Oregon Health Sciences University (OHSU) conducts monthly Transportation Options orientations which outline all of the benefits to employees prior to their first day at work.

**Supply**

The following strategies are directed at influencing the supply of parking on or for the Capitol Campus:

*R *Recommendation (C.9)*

Create additional visitor parking through a combination of strategic reductions in reserved stalls and employee zoned parking. This should be coordinated with Recommendation A.4 and supplemented by information derived on parking occupancies from the 2013 Parking Study data collection effort.

*Implementation: Immediate – early Phase 1 (0 – 24 months)*

Visitor parking is currently at or above practical capacity when the legislature is in session. Additional visitor parking access is needed during the session and could be created through strategic reformatting of existing employee supply (reserved and zoned). This should be strategically coordinated using available occupancy information from the 2013 parking study.

*R *Recommendation (C.10)*

Consider valet parking as a means to “stack” vehicles to maximize/increase stall capacity; particularly during legislative session. Consider engaging valet operators through an RFI process to determine the feasibility, appropriate locations and costs associated with this strategy.

*Implementation: Phase 1 (12 - 24 months)*

Valet parking is a commonly used strategy in areas where parking is constrained. Valet staff park cars for patrons in designated lots/areas. Vehicles are parked in “tandem” stalls called stacking, which maximizes a parking area in a manner that could not be accomplished in a self-park facility. Valet parking can be used for both employee parking and visitor parking. The state should consider engaging valet operators through an RFI process to determine the feasibility, location and costs associated with such a strategy.
**Recommendation (C.11)**

Restripe the Plaza Garage. Engage a parking facility/striping firm to create a more detailed evaluation of potential stall and striping efficiencies as a means to increase stall capacity in this key facility.

**Implementation: Immediate to early Phase 1 (0 – 24 months)**

The Plaza Garage is a very large facility with stalls that are approximately 9 feet in width. Strategic downsizing of parking stalls to an urban standard of 8 feet/6 inches could result in an effective way to add stalls into the existing parking system. The consultant team was able to derive a very rough estimate of 100 potential stalls through restriping. To validate this, the state should engage a parking facility vendor/striping company to conduct and evaluation of opportunities to more efficiently strip this facility.

**Recommendation (C.12)**

Develop “real time” parking capacity/availability analysis at major Intercity Transit park and rides and communicate to state employees as means to get employees into “satellite” locations that serve as transit feeders to the Capitol Campus.

**Implementation: Immediate to early Phase 1 (0 – 24 months)**

The state should partner with Intercity to develop counter and occupancy technology that communicates the availability of parking at Intercity park and ride lots in real time. This information would support on-campus efforts to encourage and incent employees to use transit as a means to access the Capitol Campus. The reliability (or unreliability) of parking availability at remote sites (park and rides) is often times cited by commuters as a reason to drive alone to work.

**Recommendation (C.13)**

Procure/acquire remote private parking supply connected to Intercity Transit or other circulator option versus new supply built on campus. Also evaluate Deschutes Parkway as a nearby “remote” on-street parking opportunity that could be improved for bike, walk and transit/shuttle connections. Evaluate this option before considering construction of new supply.

**Implementation: Phase 1 (12 - 24 months)**

The scope of work for this study did not include evaluation of off-site parking opportunities. However, the cost of engaging new supply that is “already built” is much more cost effective than moving immediately to strategies that would result in construction of new supply on the Capitol Campus. The state should evaluate shared use opportunities with existing owners of parking near campus and/or sites near circulator/transit service. Similarly, options to purchase off-street parking at remote locations should be explored, particularly where such sites could be conveniently linked to the Capitol Campus by transit.

Similarly, supply on-street adjacent to the campus should be evaluated. For instance, a large supply of parking could be made available along Deschutes Parkway. A 2001-02 state analysis tallied approximately
340 stalls along the Deschutes Parkway. Interviews with staff indicate that the state had used Deschutes Parkway in the past as visitor/employee parking area during the Legislative session. The area was connected with shuttle vans to move parkers between Deschutes Parkway and the Legislative buildings. The shuttle program was suspended due to funding cuts and lack of demand. Given current estimated demand constraints during the Legislative session; re-considering this area (augmented by bike, pedestrian and shuttle improvements) because of its large (340 stall) potential may be a short-term solution until the TDM efforts shift employees behaviors and mitigate peak parking demands. Figure L provides a map of this opportunity area.

These types of opportunities should be explored before moving to supply options that would require construction of new facilities on campus.

Figure L
Remote Parking Opportunity – Deschutes Parkway (340 stalls estimated)
Recommendation (C.14)
Investigate implementation of telematics-type fleet management system to better utilize current fleet vehicles that park on campus and “right size” the fleet.

Implementation: Phase 1 (12-24 months)
Fleet Telematics is effectively the exchange of information from an active fleet to a central operator or office. Increases in telematics technology and the need for fleets to become more efficient have resulted in huge improvements in how commercial and public fleets are tracked. The data that is tracked by fleet telematics allows organizations to see areas where they can save money and run their fleets more cost effectively. The tracking devices are normally hard wired into each vehicle and the fleet operator can view all of the vehicles through a central website. Such a system could be effective for the state in determining the optimal size and configuration of its fleet. Reducing overall fleet vehicles could save money and, for the Capitol Campus, reduce the amount of parking needed for fleet vehicles.

Recommendation (C.15)
Engage in a comprehensive review of capital planning to include evaluation of the need for new or expanded parking facilities on campus. Research should include consideration of anticipated employee growth and the assumed role that achieving TDM/CTR targets identified in Policy Section A will have on overall parking demand and timing of supply growth.

Implementation: Phases 1-2 (12-36 months)
Consideration of new on-campus parking supply has both strategic and financial implications. Few planning efforts for parking strategically assess and integrate the relationship of perceived parking demand (which is often based on existing patterns of access) and goals, objectives and targets for mode access across a planning horizon. Within the context of this Plan, new strategies for managing parking supply and attainment of CTR goals will have significant impacts on parking capacity. To this end, time and strategic thinking/planning needs to be invested to evaluate the range and complexity of long-term parking need for the Capitol Campus.

INFRASTRUCTURE

Recommendation (C.16)
Evaluate and pilot a program to test the capability, accuracy, functionality and cost of lot and/or stall parking sensor systems, which could be coupled with future information systems to track and communicate occupancy/utilization by area and facility.

Implementation: Immediate through Phase 1 (0-24 months)
Stall sensor systems are currently being piloted in many cities along the west coast (e.g., Vancouver, WA, Los Angeles, Redwood City and San Mateo, CA) to track utilization of individual parking stalls “in real time.” The Portland International Airport deploys overhead stall sensors with a red light/green light display to
both count vehicles and alert users to available stalls (green light), which has improved circulation and congestion issues in its very large garages (i.e., garages very much like the state’s Plaza Garage).

These systems have proven to be very dynamic and can generate a wealth of data, which can translate into databases that facilitate decision-making related to rates/demand and communicate beneficial information to users. These systems also have significant “directed enforcement” applications with interfaces to most major handheld vendors using open systems. This feature can improve the effectiveness of parking enforcement, reducing overall enforcement costs and/or increasing citation efficiency.

It must be recognized, however, that this technology is still evolving and has not been fully proven in large-scale environments; for reliability and return on investment. Issues that are still being addressed include sensor accuracy, detection and transmission latency (i.e., delays in transmission), interference from other electrical sources, and the ability to handle all types of spaces (parallel, diagonal, and perpendicular) and all types of vehicles (motorcycles, oversized trucks, etc.). At present, the greatest obstacle to wide adoption of sensors is cost. Sensors have both substantial upfront and ongoing per-space costs. And the cost/benefit has not been conclusively demonstrated in a large-scale application, although that dynamic may become clearer over the next few years.

The state may want to evaluate the usefulness of such systems in a smaller facility through a pilot and use that information to determine the efficacy, type and interface that such sensors can provide to data collection, rate and enforcement functions for the state to the benefit of its access management program.

**Recommendation (C.17)**

Continue to provide and enhance safe points of access and internal circulation for bikes and pedestrians and better coordinate external infrastructure with on-campus improvements (e.g., bike lanes, lighting and safety, sidewalks, connectivity, transit facilities).

**Implementation: Phases 1 - (12 – 36 months)**

The State cannot in many cases control the external bike or walking environment (e.g., bike lanes, sidewalks, crossings, etc.); particularly if they are on City streets. However, access portals into the campus and the system of internal circulation on campus should favor pedestrians and cyclists. The campus should be evaluated to ensure clear directional signage and way finding and safe passages for pedestrians and cyclists through parking areas and between work sites. Involvement of the Campus Access Manager in external public processes that plan for on-street bike way systems should be initiated.
Recommendation (C.18)
Ensure adequate amenities to support alternative commutes – shower and locker facilities.

Implementation: Phases 1 - (12 – 36 months)

All programs that support/encourage biking and walking to work will require adequate amenities to support them. Campuses with quality and convenient showers and lockers have much higher usage rates than those that do not. This recommendation should be incorporated into C.14 above and D.1 below.

Recommendation (C.19)
Partner with Intercity and DASH Transit to display real-time bus arrival times in designated bus shelters and also in strategic campus building lobbies.

Implementation: Phases 1 - (12 – 36 months)

Providing real-time bus arrival information is a customer/employee amenity that can reduce uncertainty and angst associated with riding transit. Flat panel displays should be located in transit shelters targeted for visitor use and larger displays should be located in building lobbies for employee use. Transit riders can comfortably wait in the building lobby during inclement weather without fear of missing their bus. In Portland, OR, through a relationship between Go Lloyd (TMA) and TriMet (Transit Agency), real-time transit trackers have been placed in all bus shelters along the main transit corridor through the Lloyd District (NE Multnomah Street) and in numerous building lobbies.

The Campus Access Manager would have to work in cooperation with the information technology departments at Intercity and DASH Transit to program the displays with the arrival times. The displays can also be used to communicate scheduling changes (weather related, holidays, special festivals, etc.) or emergency information through a scrolling ticker at the bottom of the screen.

Recommendation (C.20)
Explore the feasibility of installing a Capitol Campus Bikeshare system and/or expand the Department of Commerce’s Employee Bike Loaner Program to the entire Capitol Campus.

Implementation: Phases 1 - 2 (12 – 36 months)

Bikeshare systems are in operation in several major cities across the United States and have been running overseas for years. Originally designed as a downtown visitor amenity, usage data has revealed that employees use them at an equal or higher rate than visitors. The Department of Commerce launched its loaner bicycle program for employees in April 2013. The program is part of the agency’s efforts to reduce
its greenhouse gas emissions by offering alternative travel options. The idea was identified in the agency’s sustainability plan in 2012. Three bicycles are available for business or personal trips.

These programs are typically installed, managed and operated by third party vendors. Each bike station (rack and kiosk) would be located conveniently near the main entrances to each campus building. The system can be customized exclusively for employee use or can be made available to public/visitor. Employees could “check out” a bike using their state ID card for intercampus trips between buildings or for lunchtime trips to nearby eateries. A system like this could help to reduce secondary trips (midday non-commuter trips) and help to achieve sustainability goals by reduce vehicle miles travelled.

**Recommendation (C.21)**

After completion of Recommendation C.15, evaluate integration of garage and lot counter systems to provide real time display of available stalls, particularly in visitor parking areas. Information would be translated to exterior parking facility signage, roadway information guidance signage and/or website and app tools.

**Implementation: Phase 2 through Phase 3 (12 -36 months)**

Examples: Roadway, interior and exterior parking facility information and guidance systems

With successful completion of Task C.15, prepare a funding and transition plan and strategy for upgrading the technology system for parking (counting/information/guidance).

**Recommendation (C.22)**

Add net new parking supplies on campus when determined necessary by technical staff, campus leadership and at a time when sustainable funding is secured.

**Implementation: Phase 3 (36+ months)**

Auto access will continue to be an important means of access now and into the future on the Capitol Campus. Similarly, as growth plans are developed and implemented and employee and visitor populations grow, new parking supply may be necessary. The ultimate balance of new parking supply will be directly correlated to the effectiveness of TDM strategies employed and available users (existing and new). It should
be the goal of the Access Management Plan to only provide parking as necessary, moderated by the states aggressive commitment to TDM and non-SOV programs and incentives.

The need for parking expansions should be determined, based on reasoned analysis and consideration of the likelihood that TDM programs can capture increased proportions of access demand to the campus. It is reasonable to assume as well that funding for parking expansions will need to be secured in advance, as determined by the State and campus leadership. Overall, this Plan recommends that the provision of additional parking be accomplished in a manner that avoids a net per capita increase in SOV trips to the campus in order to be consistent with CTR and state sustainability initiatives.

As with work related to Recommendation C.9, the City and the Downtown Parking Manager should use the pilot results to determine the efficacy, type and interface that such sensors can provide to data collection, rate and enforcement functions for the City.

**INFORMATION**

**Recommendation (C.23)**
Equip leadership with key messages to promote TDM on a consistent basis.

**Implementation: All Phases (on-going)**

In developing this Access Management Plan, we must acknowledge the importance of support and interest from Capitol Campus senior management and leadership in the overall success of the Plan. Communicating the “TDM and sustainability message from the top down” is critical. With help from the Campus Access Manager and the ETC Forum, a series of messages, information pieces and communications should be developed that can be delivered to agencies and employees from leadership. These leadership based communications should be disseminated routinely and reinforced throughout the year.

**Recommendation (C.24)**
Initiate a geocode process through IT that is as comprehensive as possible to display Capitol Campus employee residential origins. Use this information to inform and coordinate bike, walk, transit and other strategic planning for TDM program improvements.

**Implementation: Phases 1 - 2 (12 - 36 months)**

Geo-codes are a very powerful planning tool that plots employee home addresses onto a map, which then is overlaid with bike, transit and walk information to assist planning for bike routes, “recalibration of transit service and/or determining the “best for the dollar” TDM programs. As Figure M from Portland’s Lloyd District illustrates, employee home addresses are plotted on a map, with “isocron” circles drawn in 2, 5 and 10 mile circles. If high clusters of employee residents are found to be within 2 miles of the work site, there is high probability that bike and walk programs would be successful. Within 5 miles, transit and (again) bikes would be worth supporting. Transit agencies can overlay routes onto a geocode to determine
the proximity of employee clusters to transit routes/park and rides/shelters, etc. Beyond 10 miles, planning for transit and car/vanpools become strong strategic options.

Lloyd District (Portland) and Downtown: On the Go! (Tacoma) have used geocodes to great effect. In the Lloyd District, several transit routes were “recalibrated” to bring service closer to areas with high employee clusters and bike routes were strategically correlated to geo-code information. The high clustering of employees within 2 miles led to establishment of a targeted walk commute program that saw a 46% increase in walk commuting over a two year period. Tacoma used their geocodes to assess the proximity of park and rides with available parking capacity to employees, working to get more employees to park and rides (and transit) before an auto trip reached the downtown.

The state should pursue the opportunity to geocode its campus based employees. The information derived from geocodes will provide very powerful and strategic information that can support effective access management planning and decision-making.

**Figure M**
Example: Employee Origins Geocode Map (Lloyd District, Portland, Oregon)
Recommendation (C.25)
Until such time as equipment/technology upgrades are financially feasible and allow for more frequent and locational counting; commit to bi-annual parking occupancy counts within the Capitol Campus to inform rate adjustments and to measure impacts of recommendations within this Plan.

Implementation: Phase 2 (24 – 36 months+)

The recently completed analysis of the Capitol Campus parking inventory provides excellent information on the dynamics of parking activity. Moving forward, elements of this recommended Plan will have been implemented (parking and CTR) and potential new development on campus will be absorbed. The need for this data is very important as a foundation piece for determining actions to maximize parking supply and assess alternative mode improvements. Periodic monitoring of parking activity will allow the state to (a) better coordinate decision-making, (b) assure maximum utilization based on intended uses and (c) provide solid evidence for the need to move to higher and/or more aggressive levels of parking management and CTR/TDM program delivery.

It is recommended that a parking inventory analysis be conducted at least every two years. Information from these updates would be forwarded to the Campus Access Manager and the ETC Forum for review, evaluation and strategy implementation.

D. Funding

Recommendation (F.1)
Research and develop the most feasible and appropriate funding plan based on the best “package” of funding necessary to support long-term system needs outlined in the Access Management Plan.

Implementation: Immediate – Phase 1 (0 - 24 months)

The Access Management Plan recommended here is comprehensive, complex and intended to be supported at levels not currently in place on the Capitol Campus. It is expected that review of the plan will result in revisions, refinements and improvements gleaned from input from a range of affected stakeholders. Ideally, review will lead to both a desire to move forward with a Final Plan and energy and resources to realize the goals set forth for access management and trip reduction.
XI. SUMMARY

The Washington State Capitol Campus access system (parking and alternative modes) is large and complex. The state’s TDM and CTR goals for the Capitol Campus are aggressive and intended to serve as a model for the rest of the state. Demands for parking are growing, leading to potential constraints within the parking system and competing demands for access (between visitors and employees). The Capitol Campus Access Management Plan contained in this report endeavors to recommend comprehensive “best in class” programs and systems for maximizing existing supplies of parking and elevating CTR performance as the key strategies for minimizing the need for new parking over time.

The Plan also envisions very active, hands on involvement in access management as a key component of program success. At present, the state’s existing resources for administering parking and TDM do not appear to be structured to deliver the type of access system envisioned by the Plan.

The strategy recommendations provided in this report are intended to serve as a “check list” of actions that answer the question that might be asked of “where do we start?” Strategies herein are intended to structure actions in a manner that is iterative and strategically ordered. Actions are also separated into categories of policy, consolidation of access management services, operations and funding. Over time, with active support of campus leadership and coordinated by a Campus Access Manager, goals and objectives in this Plan will be realized.

Overall, this report should serve as a template for rigorous discussion of work products, task assignments, roles and responsibilities and coordinated partnerships. Ultimately, the outcome will be a more efficient, accessible and sustainable system for accessing the Capitol Campus.
ATTACHMENT A

ACTIONS AND IMPLEMENTATION SCHEDULE
CAPITOL CAMPUS ACCESS MANAGEMENT PLAN
## A. POLICY

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Immediate (0 – 12 months)</th>
<th>Phase 1 (12 – 24 mos.)</th>
<th>Phase 2 (24 – 36 mos.)</th>
<th>Phase 3 (3+ years)</th>
<th>Comment</th>
</tr>
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<tbody>
<tr>
<td><strong>1</strong> Engage Senior Management (led by DES) in a process that reaffirms the goals, objectives and targets of the Joint Comprehensive Commute Trip Reduction Plan. Include endorsement (and/or enhancement) of the Guiding Principles outlined on page 49 of this Access Management Plan as additional framework for efforts moving forward.</td>
<td>✓</td>
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<td></td>
<td>Current efforts on the Capitol Campus to achieve the trip reduction targets set forth in the CTR Law have not been achieved. Without the active support and involvement of Senior Management to embrace a new and more comprehensive access management plan, it is doubtful that significant changes in access patterns to the Capitol Campus will be realized. The Department of Enterprise Services should lead this effort to engage campus and legislative leadership to move this Plan forward.</td>
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<tr>
<td><strong>2</strong> Develop and adopt a parking rate policy for hourly parking that would require rate adjustments based on demand by legislative season. Administrative authority would be given to the Capitol Campus Access Manager (see Recommendation B.2, below) to adjust hourly rates upward or downward within a pre-approved rate range based on the 85% Occupancy Standard (Visitor Parking).</td>
<td>✓</td>
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<td>Changes in this regard would make it easier to conveniently and promptly make adjustments that are responsive to demand by area and location.</td>
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<tr>
<td><strong>3</strong> Develop and adopt a parking rate policy for permit parking that would require rate adjustments based on demand by legislative season. Administrative authority would be given to the Capitol Campus Access Manager (see Recommendation B.2, below) to adjust permit rates upward or downward within a pre-approved rate range based on a 90% Occupancy Standard (Employee Parking).</td>
<td>✓</td>
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<td>As with hourly rates, changes in this regard would make it easier to conveniently and promptly make adjustments that are responsive to demand by area and location.</td>
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<td><strong>4</strong> Establish a clear policy (written and formally approved) on reserved stalls and why they are needed and when and how they are allocated. Parking availability on campus is significantly reduced due to the large number of reserved stalls.</td>
<td>✓</td>
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<td>Reserved parking is currently not priced to influence effective use of stalls and overall efficiency and capacity potential of the supply is reduced. Unused reserved stalls means stalls are empty but not available, which further exacerbates periods when the general parking supply is constrained. In short, reserved stalls are highly inefficient in systems where capacity management is critical.</td>
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<td><strong>5</strong> Set annual trip reduction targets (six years) for drive alone commute trips that are correlated to current CTR goals.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>It is recommended that the state establish clear, achievable and reasonable trip reduction targets for the Capitol Campus and empower access management staff and Employee Transportation Coordinators to work directly with individual state agencies to assess each agencies role in contributing to the success of the access management plan and campus trip reduction goal.</td>
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<tr>
<td><strong>6</strong> Continue to allocate parking funds to an employee access fund to underwrite access improvements that benefit employee commuters and are supporting CTR programs and goals.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Changes recommended in this Access Management Plan may result in increased parking revenue as rates become more closely calibrated to actual demand over time. A growing portion of additional revenues generated as a result of such efforts should continue to be targeted to all elements of the access plan, particularly in funding the function of the Capitol Campus Access Manager.</td>
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<tr>
<td>Recommendation</td>
<td>Immediate (0 – 12 months)</td>
<td>Phase 1 (12 – 24 mos.)</td>
<td>Phase 2 (24 – 36 mos.)</td>
<td>Phase 3 (3+ years)</td>
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<td>7 Commit adequate and sustainable funds to ensure the long-term implementation and success of the Campus Access Management Plan.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>The comprehensive program of strategies recommended in this Plan will require a commitment of resources that exceeds resources currently in place. Some programs (particularly new infrastructure) may exceed the capacity of the near to midterm capacity of the parking fund described in A.6, above.</td>
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<tr>
<td>B. ORGANIZATION: CONSOLIDATION OF PARKING SERVICES</td>
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<tr>
<td>1 Create within the Department of Enterprise Services an Access Management unit that consolidates the delivery of CTR and Parking Services as well as is responsible for developing and implementing TDM strategies campus-wide, charged with interacting directly with campus based agencies for parking and CTR compliance. In addition, the unit should develop and implement a quasi-Transportation Management Association (TMA) to assist campus agencies in implementing effective CTR/TDM measures and serve as a liaison with Intercity Transit and TRPC.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>The recommended Access Management Division will serve the Capitol Campus in the capacity of a quasi-Transportation Management Association (TMA), charged with interacting directly with campus based agencies for parking and CTR compliance.</td>
</tr>
<tr>
<td>2 Consolidate the management and administration of Parking and CTR Services for the Capitol Campus under an individual Campus Access unit. The new position of Campus Access Manager (1.0 FTE) will be charged with leading efforts to maximize the parking supply and achieve adopted CTR mode split goals. The current campus Parking Manager would fall under the new Campus Access Manager as would all resources/staff currently assigned to coordinating campus related CTR functions.</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>The complexity of parking and access will increase as the Capitol Campus grows through redevelopment and increased demand for access. A single person should be assigned to oversee and manage all aspects of campus access, better enabling a direct integration of parking management and Commute Trip Reduction efforts.</td>
</tr>
<tr>
<td>3 Establish and initiate an &quot;Employee Transportation Coordinators' (ETC) Advisory Committee&quot; to serve as a quasi-Board of Directors for the Campus Access Manager. The ETC Advisory Committee would be charged with assisting in implementation and review of the Campus Access Management Plan.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>It is recommended that agency leadership formally appoint members to the ETC Advisory Committee, charged initially to assist the Access Manager in establishing success measures for the access system, serving as a liaison and conduit to the agencies and providing input and guidance for the implementation of the Access Management Plan.</td>
</tr>
<tr>
<td>C. OPERATIONS</td>
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<td>DEMAND</td>
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<tr>
<td>1 Within 15 months initiate and complete evaluation of hourly rates as called for in Recommendation A.2 above. Rates should be adjusted no later than July 31, 2015 after taking into account inflationary impacts, system needs (as well as plan implementation) and demand. This is also consistent with Recommendation A.2 above.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>This adjustment would be correlated with Recommendation A.2 above and with occupancy/turnover data derived for demand (by area and parking facility.)</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Immediate (0 – 12 months)</td>
<td>Phase 1 (12 – 24 mos.)</td>
<td>Phase 2 (24 – 36 mos.)</td>
<td>Phase 3 (3+ years)</td>
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<tr>
<td>2 Within 15 months, re-calibrate permit rates as a function of (a) demand by area and season (b) the need to ensure visitor access and (c) to provide an incentive for employees to park in underutilized areas or to utilize alternative modes. Rates should be adjusted no later than July 31, 2015. This is also consistent with Recommendation A.3 above.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>This adjustment would be correlated with Recommendation A.3 above and with occupancy/turnover data derived for demand (by area and parking facility.)</td>
</tr>
<tr>
<td>3 Promote telework/flexible work schedule programs, including the use of incentives.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>One of the most aggressive elements of the state’s goals for TDM is embedded in the Governor’s Executive Order 14-02 for telework and flexible work schedules. The Governor’s goal is to achieve an average of at least nine percent of all state employees across all agencies in teleworking and at least 40 percent of all state employees using flexible work hours by 2017. Currently, the combined mode split for Capitol Campus employees is 1.8% and 1.4% for teleworking and flexible work hours, respectively. The Campus Access Manager and the ETC Forum should pick up this initiative early in their work and actively engage individual agencies in realizing these goals.</td>
</tr>
<tr>
<td>4 Evaluate and consider implementing a parking cash out program or other financial subsidies to support commute trip reduction, paying employees to not drive alone.</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>Cash out programs are an effective means of allocating scarce parking or managing a growing demand for more parking.</td>
</tr>
<tr>
<td>5 Enhance vanpool subsidies to increase utilization (a targeted form of parking cash out).</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>Vanpools are very “parking efficient.” A vanpool of seven riders uses just one parking stall, rather than the seven stalls it would take to accommodate the same number of riders driving alone. Currently, the campus vanpool mode split is just 2.6%. Offering cash incentives to riders of vanpools could result in increased interest in vanpools and matching programs necessary to form vanpools. Increased vanpooling would also reduce overall campus employee parking demand.</td>
</tr>
<tr>
<td>6 Provide “pay out” to bike and/or walk commuters – i.e. “20 trips, 20 bucks.”</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>Bicycling and walking are very cost effective and healthy forms of commuting. Organizations like Seattle Children’s Hospital (Seattle) and Nike (Portland, OR) have realized significant increases in bike/walk commuting through programs that provide a cash incentive for biking or walking to work. Currently, the campus mode split for bike and walk commuting is 1.9% and 2.9%, respectively.</td>
</tr>
<tr>
<td>7 Provide personalized trip planning services to all campus employees through ETC’s and the Campus Access Management Program.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>Personalized trip planning provides direct one-on-one service to interested employees that provide them with a tailored “map” for how to use a new mode (transit, bike, walk) that takes them “front-door to front-door.”</td>
</tr>
<tr>
<td>8 Enhance the campus “new employee” orientation process to ensure that alternative access options are strongly encouraged, with a support and mentoring network in place to assist, educate and incentivize.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>It is recommended that the state enhance its new employee orientation program to ensure that information and personalized assistance regarding access options (see Recommendation C.6) is provided very early in a new employee’s experience with the Capitol Campus. Research demonstrates that decisions on access options are more difficult to influence once a user has initiated a specific choice (e.g., auto). Programs that couple early information, with incentives and mentoring will bolster the state’s ability to achieve trip choice goals established with this Plan.</td>
</tr>
<tr>
<td>SUPPLY 9 Create additional visitor parking through a combination of strategic reductions in reserved stalls and employee zoned parking. This should be coordinated with Recommendation A.4 and supplemented by information derived on parking occupancies from the 2013 Parking Study data collection effort.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>Visitor parking is currently at or above practical capacity when the legislature is in session. Additional visitor parking access is needed during the session and could be created through strategic reformatting of existing employee supply (reserved and zoned). This should be strategically coordinated using available occupancy information from the 2013 parking study.</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Immediate (0 – 12 months)</td>
<td>Phase 1 (12 – 24 mos.)</td>
<td>Phase 2 (24 – 36 mos.)</td>
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<tr>
<td>10</td>
<td>Consider valet parking as a means to “stack” vehicles to maximize/increase stall capacity; particularly during legislative session. Consider engaging valet operators through an RFI process to determine the feasibility, appropriate locations and costs associated with this strategy.</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>Valet parking is a commonly used strategy in areas where parking is constrained. Valet staff park cars for patrons in designated lots/areas. Vehicles are parked in “tandem” stalls called stacking, which maximizes a parking area in a manner that could not be accomplished in a self-park facility.</td>
</tr>
<tr>
<td>11</td>
<td>Restripe the Plaza Garage. Engage a parking facility/striping firm to create a more detailed evaluation of potential stall and striping efficiencies as a means to increase stall capacity in this key facility.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>Strategic downsizing of parking stalls to an urban standard of 8 feet/6 inches could result in an effective way to add up to 100 stalls to the existing parking system. The state should engage a parking facility vendor/striping company to conduct and evaluation of opportunities to more efficiently strip this facility.</td>
</tr>
<tr>
<td>12</td>
<td>Develop “real time” parking capacity/availability analysis at major Intercity Transit park and rides and communicate to state employees as means to get employees into “satellite” locations that serve as transit feeders to the Capitol Campus.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>The state should partner with Intercity to develop counter and occupancy technology that communicates the availability of parking at Intercity park and ride lots in real time. This information would support on-campus efforts to encourage and incent employees to use transit as a means to access the Capitol Campus.</td>
</tr>
<tr>
<td>13</td>
<td>Procure/acquire remote private parking supply connected to Intercity Transit or other circulator option versus new supply built on campus. Also evaluate Deschutes Parkway as a nearby “remote” on-street parking opportunity that could be improved for bike, walk and transit/shuttle connections. Evaluate this option before considering construction of new supply.</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>The cost of engaging new supply that is “already built” is much more cost effective than moving immediately to strategies that would result in construction of new supply on the Capitol Campus. The state should evaluate shared use opportunities with existing owners of parking near campus and/or sites near circulator/transit service. Similarly, options to purchase off-street parking at remote locations should be explored, particularly where such sites could be conveniently linked to the Capitol Campus by transit.</td>
</tr>
<tr>
<td>14</td>
<td>Investigate implementation of telematics-type fleet management system to better utilize current fleet vehicles that park on campus and “right size” the fleet.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>Telematics would allow the state better information against which to “right size” the number of fleet vehicles currently parking on campus.</td>
</tr>
<tr>
<td>15</td>
<td>Engage in a comprehensive review of capital planning to include evaluation of the need for new or expanded parking facilities on campus. Research should include consideration of anticipated employee growth and the assumed role that achieving TDM/CTR targets identified in Policy Section A will have on overall parking demand and timing of supply growth.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>Few planning efforts for parking strategically assess and integrate the relationship of perceived parking demand (which is often based on existing patterns of access) and goals, objectives and targets for mode access across a planning horizon. Within the context of this Plan, new strategies for managing parking supply and attainment of CTR goals will have significant impacts on parking capacity. To this end, time and strategic thinking/planning needs to be invested to evaluate the range and complexity of long-term parking need for the Capitol Campus.</td>
</tr>
<tr>
<td>16</td>
<td>Evaluate and pilot a program to test the capability, accuracy, functionality and cost of lot and/or stall parking sensor systems, which could be coupled with future information systems to track and communicate occupancy/utilization by area and facility.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>These systems have proven to be very dynamic and can generate a wealth of data, which can translate into databases that facilitate decision-making related to rates/demand and communicate beneficial information to users.</td>
</tr>
<tr>
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<td>Continue to provide and enhance safe points of access and internal circulation for bikes and pedestrians and better coordinate external infrastructure with on-campus improvements (e.g., bike lanes, lighting and safety, sidewalks, connectivity, transit facilities). The State cannot in many cases control the external bike or walking environment (e.g., bike lanes, sidewalks, crossings, etc.); particularly if they are on City streets. However, access portals into the campus and the system of internal circulation on campus should favor pedestrians and cyclists. The campus should be evaluated to ensure clear directional signage and way finding and safe passages for pedestrians and cyclists through parking areas and between work sites. Involvement of the Campus Access Manager in external public processes that plan for on-street bike way systems should be initiated.</td>
</tr>
<tr>
<td>18</td>
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<td>Ensure adequate amenities to support alternative commutes — shower and locker facilities. A system/network of convenient shower and locker facilities should be established across campus to effectively support programs that encourage biking and walking.</td>
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<tr>
<td>19</td>
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<td>Partner with Intercity and DASH Transit to display real-time bus arrival times in designated bus shelters and also in strategic campus building lobbies. Providing real-time bus arrival times is a customer/employee amenity that can reduce uncertainty and angst associated with riding transit.</td>
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<td>Explore the feasibility of installing a Capitol Campus Bikeshare system and/or expand the Department of Commerce’s Employee Bike Loaner Program to the entire Capitol Campus. Originally designed as a downtown visitor amenity, usage data has revealed that employees use them at an equal or higher rate than visitors. Employees could “check out” a bike using their state ID card for intercampus trips between buildings or for lunchtime trips to nearby eateries. A system like this could help to reduce secondary trips (midday non-commuter trips) and help to achieve sustainability goals by reduce vehicle miles travelled.</td>
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<td>21</td>
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<td>After completion of Recommendation C.15, evaluate integration of garage and lot counter systems to provide real time display of available stalls, particularly in visitor parking areas. Information would be translated to exterior parking facility signage, roadway information guidance signage and/or website and app tools. With successful completion of Task C.15, prepare a funding and transition plan and strategy for upgrading the technology system for parking (counting/information/guidance).</td>
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<tr>
<td>22</td>
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<td>Add net new parking supplies on campus when determined necessary by technical staff, campus leadership and at a time when sustainable funding is secured. The need for parking expansions should be determined, based on reasoned analysis and consideration of the likelihood that TDM programs can capture increased proportions of access demand to the campus. It is reasonable to assume as well that funding for parking expansions will need to be secured in advance, as determined by the State and campus leadership. Overall, this Plan recommends that the provision of additional parking be accomplished in a manner that avoids a net per capita increase in SOV trips to the campus in order to be consistent with CTR and state sustainability initiatives.</td>
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<tr>
<td>INFORMATION</td>
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<td>23 Equip leadership with key messages to promote TDM on a consistent basis. In developing this Access Management Plan, we must acknowledge the importance of support and interest from Capitol Campus senior management and leadership in the overall success of the Plan. Communicating the “TDM and sustainability message from the top down” is critical. With help from the Campus Access Manager and the ETC Forum, a series of messages, information pieces and communications should be developed that can be delivered to agencies and employees from leadership. These leadership based communications should be disseminated routinely and reinforced throughout the year.</td>
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<td>24 Initiate a geocode process through IT that is as comprehensive as possible to display Capitol Campus employee residential origins. Use this information to inform and coordinate bike, walk, transit and other strategic planning for TDM program improvements. Geo-codes are a very powerful planning tool that plots employee home addresses onto a map, which then is overlaid with bike, transit and walk information to assist planning for bike routes, “recalibration of transit service and/or determining the “best for the dollar” TDM programs.</td>
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<tr>
<td>Recommendation</td>
<td>Immediate (0 – 12 months)</td>
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<td>25</td>
<td></td>
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<td>✓</td>
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<td>It is recommended that a parking inventory analysis be conducted at least every two years. Information from these updates would be forwarded to the Campus Access Manager and the ETC Forum for review, evaluation and strategy implementation.</td>
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<tr>
<td>D. FUNDING</td>
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<td>1</td>
<td>✓</td>
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<td>The Access Management Plan recommended here is comprehensive, complex and intended to be supported at levels not currently in place on the Capitol Campus. It is expected that review of the plan will result in revisions, refinements and improvements gleaned from input from a range of affected stakeholders. Ideally, review will lead to both a desire to move forward with a Final Plan and energy and resources to realize the goals set forth for access management and trip reduction.</td>
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</table>
ATTACHMENT B

Recommended Alternative Transportation Actions for the Olympia Capitol Campus
MEMORANDUM
To: Rick Williams, Rick Williams Consulting
From: Evan Corey and Kate Drennan, Nelson\Nygaard
Date: January 1, 2014
Subject: Recommended Alternative Transportation Actions for the Olympia Capitol Campus

This memo presents recommended actions for the Olympia Capitol Campus related to alternative modes of transportation. The recommended actions presented below serve as a realistic blueprint to achieve a 10 percent reduction in single-occupant vehicle (SOV) use as required by the Commute Trip Reduction (CTR) law. Recommended actions have been identified and selected largely based on leading practices in transportation demand management (TDM) and the experience of other campuses and large employment sites that aggressively encourage a shift toward greater use of alternative transportation to and within campus. The actions respond directly to existing conditions and gaps, opportunities observed during site reconnaissance, stakeholder focus group input, and stated goals and targets for campus access. Gaps to safe, comfortable and high quality access to and circulation within campus were highlighted as part of the existing conditions analysis. The identified gaps represent opportunities for multi-phase programmatic and infrastructure strategies.

Recommendations are organized by the type of action, phase of implementation, general order-of-magnitude of cost, and necessary coordination with external stakeholders (such as the City of Olympia, Thurston County, Intercity Transit, and the Olympia Downtown Association, among others). The recommendations are grouped by policies, projects and programs and implementation time frames include immediate (within a year), near-term (1-3 years) and long term (3-10) years.

- **Policies:** Policy recommendations will guide investments in programs and infrastructure projects. They should be considered for adoption into Master Plans or other guiding documents that dictate priorities for campus work plans and annual departmental budgets on the Capitol Campus.

- **Projects:** Project recommendations reflect infrastructure investments that will require capital funds and strong partnerships amongst various local and regional stakeholders. The recommended projects regarding transit stop amenities will require agreement and support by Intercity Transit. Similarly, the Capitol Campus will need to coordinate with the City of Olympia to pursue changes in the right-of-way on city-owned streets. In other cases, the proposed projects are entirely on Capitol
Campus property or within agency buildings and may require legislative approval or inclusion in long-term capital planning documents.

- **Programs**: Programmatic recommendations reflect include actions and investments that create awareness, increase excitement about new ways to access the campus, and disseminate knowledge about multimodal travel options and commuter incentives. In particular, these actions focus on building a robust set of resources, including the human capital needed to promote and leverage the investments made through policies and infrastructure.

The level of human capital dedicated to administering and marketing investments made in alternative transportation programs and infrastructure projects is often closely tied to the success of program goals. Focusing efforts on the immediate tasks of building staff capacity and access to information—such as hiring a dedicated campus-wide CTR coordinator and creating an intranet website as a one-stop-shop for employees—will help ensure that staff is ready and able to robustly market subsequent investments.

**Recommended Immediate, Near- and Long-Term Actions**
Figure 1 summarizes the recommended actions for alternative modes on the Olympia Capitol Campus.

<table>
<thead>
<tr>
<th>Type</th>
<th>Action</th>
<th>Phase</th>
<th>Cost/Coordination Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Prioritize commuting by alternative modes for employees (i.e. set annual trip reduction targets)</td>
<td>Immediate</td>
<td>Cost: Low</td>
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<td>Coordination: State Agencies</td>
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<tr>
<td>Policy</td>
<td>Include information on how to access meeting locations by alternative modes on all agency meeting agendas and notices</td>
<td>Immediate</td>
<td>Cost: None</td>
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<td>Coordination: State Agency Employee Transportation Coordinators (ETCs)</td>
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<tr>
<td>Policy</td>
<td>Establish requirements for end-of-trip facilities (lockers, showers, changing rooms, key access long-term bike parking, bicycle maintenance support, etc.) with all new or rehabilitated building projects</td>
<td>Immediate</td>
<td>Cost: Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Coordination: State Agencies, Facilities Staff</td>
</tr>
<tr>
<td>Policy/Program</td>
<td>Work with area transit service providers to maintain and eventually improve service frequency of the Dash and Intercity Transit bus lines. Any reductions in frequency of service would be detrimental to efforts to build ridership.</td>
<td>Immediate/Near-term</td>
<td>Cost: High</td>
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<td>Coordination: Intercity Transit</td>
</tr>
<tr>
<td>Policy</td>
<td>Adjust parking pricing to reflect market realities and make alternative modes more affordable</td>
<td>Near-term</td>
<td>Cost: Low</td>
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<td>Coordination: High, only</td>
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<td>Type</td>
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<td>Phase</td>
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| **Policy** | Eliminate collisions on or through campus by 2020 | Long-term | Cost: Low (achieving policies requires high cost design solutions, education, and enforcement)  
Coordination: City of Olympia, Olympia Police Department, Washington State Patrol |
| **Program** | Conduct comprehensive TDM study that tailors TDM actions based on updated data (including employee home locations and utilization of existing programs). | Immediate | Cost: Low  
Coordination: Multiple Departments, City of Olympia, Intercity Transit |
| **Program** | Contract with Zimride to create a database that encourages ride sharing between campus employees and even downtown employees. | Immediate | Cost: Medium  
Coordination: Potentially a regional effort between the Capitol Campus with Thurston County and City of Olympia. |
| **Program** | Create an intranet website that manages and centralizes campus transportation services (e.g., STAR Pass dissemination, parking purchases, bicycle monitoring and incentives). Intranet website acts as an information clearinghouse for employees, visitors, and administrators with information on accessing campus, employee transportation benefits, and so on. The website includes pages targeted to each segment type, with links to transportation resources such as transit trip planning, ride matching information for vanpools and carpools (including ZimRide, if pursued), bicycling route information, and commuter | Immediate | Cost: Medium to develop; Low to operate  
Coordination: Information sharing between agency worksites, CTR office, Intercity Transit, etc. |

price-competitive. Adjust parking pricing based on demand (e.g., during legislative session) when parking pressures are at their highest. (Note: May need to be coupled with a Residential Permit Zone for adjacent neighborhoods) if an RPZ is pursued.
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<tbody>
<tr>
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<td>costs calculators. A case study example of this type of investment in Seattle is included at the end of this memo.</td>
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</table>
| Program | Ensure that employees have access to shared-vehicles or company fleets when leave their cars at home but occasionally need access to an automobile to reach mid-day or evening meetings. Locate shared fleet vehicles in prime parking locations. (The Campus could consider contracting with a car share service like Zip Car to reduce costs and improve program marketing). | Immediate | Cost: Low  
Coordination: None |
| Program | Administer ‘transit competitions’ between agencies in the vein of “bike commute challenge month”. | Near-term | Cost: None  
Coordination: Interagency |
| Program | Conduct a survey of STAR pass holders identifying transit improvements that would increase the likelihood of use amongst employees. | Near-term | Cost: None  
Coordination: None |
| Program | Include information or trip counseling to all employees at the time of hire, transfer or work milestones, including information about the STAR pass, Emergency Ride Home, and all infrastructure that supports non-SOV commuting. | Near-term | Cost: Low  
Coordination: High, only if an RPZ is pursued. |
| Program | Improved promotion and visibility of STAR pass, vanpool, and guaranteed ride home program. | Long-term | Cost: Low  
Coordination: Intercity Transit |
| Program | Link intranet to Intercity database for employees interested in vanpooling. Subsidize vanpooling subscriptions for employees who participate. | Long-term | Cost: Low-med  
Coordination: Intercity Transit |
| Program | Conduct non-SOV trip training for employee transportation coordinators and Commuter Trip Reduction administrators at each worksite. | Long-term | Cost: Low  
Coordination: State CTR program |
| Program | Enable ongoing communication between ETCs | Long-term | Cost: Low |

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<th>Phase</th>
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<tbody>
<tr>
<td></td>
<td>and CTR liaisons through email list-servs, regular meetings, and other</td>
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<td>Coordination: None</td>
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<td>avenues to coordinate and share ideas such as and easily implementable</td>
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<td>programs and incentives. Encourage the sharing of best practices, and</td>
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<td>offer financial rewards to coordinators who achieve outstanding results.</td>
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<tr>
<td></td>
<td><strong>Program</strong></td>
<td><strong>Long-term</strong></td>
<td>Cost: Medium</td>
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<tr>
<td></td>
<td>Incentivize commute by alternative modes through financial rewards such</td>
<td></td>
<td>Coordination: None</td>
</tr>
<tr>
<td></td>
<td>as parking cash out, walking or bicycling commuter checks, and continued</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>transit subsidies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Projects</strong></td>
<td><strong>Near-term</strong></td>
<td>Cost: Medium</td>
</tr>
<tr>
<td></td>
<td>Improve transit stops by installing shelters with benches, lighting,</td>
<td></td>
<td>Coordination: Intercity</td>
</tr>
<tr>
<td></td>
<td>and weather protection.</td>
<td></td>
<td>Transit</td>
</tr>
<tr>
<td></td>
<td><strong>Projects</strong></td>
<td><strong>Near-term</strong></td>
<td>Cost: Low</td>
</tr>
<tr>
<td></td>
<td>Evaluate the demand and need to extend the Dash Shuttle to satellite</td>
<td></td>
<td>Coordination: Intercity</td>
</tr>
<tr>
<td></td>
<td>campuses Tumwater and Lacey serving State employees.</td>
<td></td>
<td>Transit</td>
</tr>
<tr>
<td></td>
<td><strong>Projects</strong></td>
<td><strong>Near-term</strong></td>
<td>Cost: Low</td>
</tr>
<tr>
<td></td>
<td>Install wayfinding signs directing commuters to end of trip facilities</td>
<td></td>
<td>Coordination: None</td>
</tr>
<tr>
<td></td>
<td>within campus buildings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Projects</strong></td>
<td><strong>Near-term</strong></td>
<td>Cost: Low</td>
</tr>
<tr>
<td></td>
<td>Utilize pavement markings such as paint and symbols to designate a</td>
<td></td>
<td>Coordination: City of</td>
</tr>
<tr>
<td></td>
<td>north-south bicycle path through the campus for bicyclists, including</td>
<td></td>
<td>Olympia</td>
</tr>
<tr>
<td></td>
<td>highlighting connections to downtown Olympia and from the Capitol Lake</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>via Columbia St.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Projects</strong></td>
<td><strong>Near-term</strong></td>
<td>Cost: Low</td>
</tr>
<tr>
<td></td>
<td>Utilize wayfinding signs to direct bicycle riders and pedestrians to</td>
<td></td>
<td>Coordination: City of</td>
</tr>
<tr>
<td></td>
<td>popular connections, such as pedestrian paths, regional trails or low-</td>
<td></td>
<td>Olympia</td>
</tr>
<tr>
<td></td>
<td>volume roadways.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Projects</strong></td>
<td><strong>Near-term</strong></td>
<td>Cost: Medium</td>
</tr>
<tr>
<td></td>
<td>Expand access to end-of-trip facilities by installing more lockers,</td>
<td></td>
<td>Coordination: None</td>
</tr>
<tr>
<td></td>
<td>particularly in existing buildings with high demand.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Projects</strong></td>
<td><strong>Near-term</strong></td>
<td>Cost: Low</td>
</tr>
<tr>
<td></td>
<td>Expand short-term and visitor access to campus by bicycle by installing</td>
<td></td>
<td>Coordination: None</td>
</tr>
<tr>
<td></td>
<td>additional racks outside of buildings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Projects</strong></td>
<td><strong>Near-term</strong></td>
<td>Cost: High</td>
</tr>
<tr>
<td></td>
<td>Install at-grade crossing at the intersection of Capitol Way and 15th</td>
<td></td>
<td>Coordination: City of</td>
</tr>
<tr>
<td></td>
<td>Avenue with flashing.</td>
<td></td>
<td>Olympia</td>
</tr>
<tr>
<td>Type</td>
<td>Action</td>
<td>Phase</td>
<td>Cost/Coordination Partners</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------------------------</td>
<td>-------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Projects</td>
<td>beacon, striping, and a mid-roadway pedestrian refuge to help pedestrians trying to access transit stops on Capitol Way.</td>
<td>Near-term</td>
<td>Olympia</td>
</tr>
<tr>
<td>Projects</td>
<td>Include real time arrival information at the most heavily used transit stops.</td>
<td>Near-term</td>
<td>Cost: Medium Coordination: Intercity Transit</td>
</tr>
<tr>
<td>Projects</td>
<td>Redesign Cherberg and Newhouse parking areas where pedestrian pathways currently bisect roadway and parking spaces. One option could be to slightly raise the pedestrian pathway and use alternate pavers to delineate the pedestrian paths and create a speed table equivalent to ensure that vehicles cross the path at very slow speeds. A second option could entail widening the existing sidewalk fronting the buildings and pushing the parking closer to the existing travel way and eliminating the existing painted path.</td>
<td>Near-term</td>
<td>Cost: Medium Coordination: None</td>
</tr>
<tr>
<td>Projects</td>
<td>Build wheel channels (&quot;runnels&quot;) alongside pedestrian staircases so that bicyclists can utilize existing pedestrian infrastructure for improved campus circulation.</td>
<td>Near-term</td>
<td>Cost: Low Coordination: None</td>
</tr>
<tr>
<td>Projects</td>
<td>Implement a 4-to-3 lane road diet on Capitol Way from State Avenue NE to just south of the campus to create a more multimodal street that promotes safe movement for all travel modes.</td>
<td>Long-term</td>
<td>Cost: High Coordination: City of Olympia, Intercity Transit</td>
</tr>
<tr>
<td>Projects</td>
<td>Build a centrally located, high-quality, staffed bike station to serve the campus, offering retail and repair services.</td>
<td>Long-term</td>
<td>Cost: High Coordination: Partner with local bike shop or entrepreneur to serve as the operator</td>
</tr>
<tr>
<td>Projects</td>
<td>Coordinate with Sound Transit to run buses from Seattle directly to Olympia in the morning, potentially as return trips on the buses currently operating from Olympia to Seattle during morning peak. Run reverse commute buses from Olympia back to Seattle in the evening.</td>
<td>Long-term</td>
<td>Cost: High Coordination: Intercity Transit, Sound Transit, Thurston County, and City of Olympia</td>
</tr>
</tbody>
</table>
General Trip Reduction Impacts of TDM Measures

Many of the recommended policy, programs, and projects fall under the generalized TDM measures presented in Figure 2. Trip reduction impact will vary depending on several measures, including existing urban form and level of investment in the programs. These impact numbers reflect a campus-like development scenario and are based on case studies and industry knowledge. A future TDM study that utilizes data on employee commute sheds and existing use of various TO programs could help refine these numbers. The parking space estimates are based on mode shifts from the current mode split of 71% of employees driving alone to the campus each day.

**Figure 2 Common TDM Measures and General Trip Reduction Impacts**

<table>
<thead>
<tr>
<th>TDM Measure</th>
<th>Description</th>
<th>Trip reduction</th>
<th>Freed-up Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unbundled parking</td>
<td>Separating parking spaces from employee positions. In unbundled scenarios, parking spaces are purchased separately.</td>
<td>5-10%</td>
<td>185-370</td>
</tr>
<tr>
<td>Parking Cash-Out</td>
<td>Paying employees a bonus for giving up their parking space.</td>
<td>5-10%</td>
<td>185-370</td>
</tr>
<tr>
<td>Universal Pass Program</td>
<td>Subsidizing transit passes for employees.</td>
<td>10-15%</td>
<td>370-555</td>
</tr>
<tr>
<td>Dedicated Rideshare Spaces</td>
<td>Offering vanpools and carpools free or reduced parking spaces and close proximity to buildings.</td>
<td>3-5%</td>
<td>111-185</td>
</tr>
<tr>
<td>On-Site Bicycle Accommodation</td>
<td>Including public racks outside buildings, as well as end-of-trip facilities for employees such as secure indoor parking, showers and lockers.</td>
<td>3-5%</td>
<td>111-185</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>Guaranteed Ride Home Programs</td>
<td>Program for employees who use alternative modes that offers free taxi rides in the event of emergency (sick child outside of carpool hours, flat tire, etc.)</td>
<td>Limited²</td>
<td>--</td>
</tr>
<tr>
<td>Dedicated Spaces for Car-sharing</td>
<td>Siting carsharing vehicles, such as zip car, on campus where employees can utilize for personal errands.</td>
<td>2-4%</td>
<td>74-148</td>
</tr>
<tr>
<td>Transit Operational Enhancements</td>
<td>Increased frequency and expanded service for Intercity Transit and Dash Shuttle.</td>
<td>2-4%</td>
<td>74-148</td>
</tr>
</tbody>
</table>

¹ Capitol Campus already has a universal pass program (STAR Pass), but does not widely advertise or track the usage of it. Greater marketing and promotional events will likely increase usage, but may not result in as large of a shift as stated in this table.

² Mode shift impacts of Guaranteed Ride Home programs are negligible, but are necessary supportive elements of a SOV trip reduction program.