SALEM STATE UNIVERSITY

CAMPUS PARKING STUDY

Analysis and Alternatives – Executive Summary

May 2 2018
Campus Community
SSU Neighborhood Advisory Committee
**Phase 1 | Discovery & Data Collection**
- Conduct site reconnaissance & review available data
- Meet with Neighborhood Liaison Group
- Meet with administrative staff
- Collect comprehensive occupancy data
- Meet with the SSU Neighborhood Advisory Committee

**Phase 2 | Analysis**
- Develop projections of future parking need over a five-year period and a ten-year period
- Evaluate SSU’s parking impact on the surrounding neighborhood
- Meet with the SSU Neighborhood Advisory Committee
- SSU & Neighborhood Survey

**Phase 3 | Plan Development**
- Develop alternative plans for parking development
- Meet with faculty & staff
- Review alternatives with Client Team
- Discuss TDM Options with NSTMA
- Review alternatives with President’s Executive Cabinet

**Phase 4 | Plan Documentation**
- Present to the Internal & External Community
- Final report: Data collection, analysis, findings, and recommendations
OUTREACH and INFORMATION GATHERING

• Stakeholder meetings
  • Students
  • Faculty/Staff and Union representatives
  • Adjacent neighborhoods
  • Elected officials

• Joint SSU/Neighborhood Survey

• Data collection & research
  • Parking policies & administration
  • Parking inventory
  • Campus parking occupancy
  • On-street parking
  • Enrollment projections
  • Space moves
  • Class scheduling
OVERVIEW

• SSU is a fragmented urban campus, sited in the midst of established residential neighborhoods. Parking policies and investments must address both the University’s needs and neighborhood concerns.

• The overlap of campus and neighborhood makes competition for parking inevitable. In designing a parking system that works well for faculty, staff, and students, SSU must also endeavor to keep their cars within campus bounds or in facilities under SSU control.

• The existing system, managed and regulated by both SSU and the City of Salem, provides a solid foundation for a successful accommodation of SSU’s parking needs.
OVERVIEW

SSU lies among established residential neighborhoods. Its parking problems are different from those of similarly-sized college campuses.
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We surveyed
• the neighborhood around SSU
• the SSU community: commuter students, resident students, and faculty & staff.

The two groups were asked questions targeting their specific parking experiences.
WHAT WE HEARD  SSU Community Feedback

Community Meeting Concerns

Concerns

• Parking permits are too expensive, so students are choosing to park on neighborhood streets
• Exact ratio of available parking permits for available parking spaces is unclear
• Changed move-times for student parking resulted in more neighborhood parking
• Restrictions on overnight commuter student parking cause more students to park in neighborhood

Parking Ideas Given by Participants in Meetings on Campus

• Mobile App to track available parking managed by SSU
• Expansion of Free Bike Program
• Parking Brochure that summarizes parking information and discourages bringing cars to campus
• Quantify shuttle occupancy to determine utilization
• More commuter student parking on Central Campus
• Upper South Campus parking should be made available when current permit-holders are moved to North Campus
WHAT WE HEARD Neighborhood Feedback

Community Meeting Concerns

Concerns

• Commuter students, resident students, and staff without permits park on Loring Ave during the week
• Traffic is disrupted where pedestrians do not use crosswalks to get across Lafayette St and Loring Ave
• Neighborhood parking restrictions (at certain times of day) creates a domino effect – after using up the 4-hour limit on one neighborhood street, students drive to another
• Resident students without permits stay parked on neighborhood streets from Monday to Friday
• The cost of resident parking passes has driven some students to find creative solutions to residence parking, placing more cars on neighborhood streets at night

Parking Policy Suggestions Presented by the Neighborhood Group

• Sophomore resident students should have more restrictive parking policies, such as limiting the ability of residential sophomores to bring cars to campus
• Address long permit waitlist which discourages others from signing up
• South Campus
  Residential/academic zone – adequate supply; long-term remote parking reservoir

• Central Campus
  Primarily residential (Atlantic lot) – traffic issues limit potential for more intense parking use

• North Campus
  Prime destination – parking used to capacity by commuters students & employees

• North-of-Loring
  Peripheral parking – relatively accessible but underused
**PARKING USAGE & NEED North-of-Loring**

- North-of-Loring holds more spaces than North Campus
- Occupancy in the North-of-Loring lots peaks at 11:00 AM, at 72% of capacity
- Students identified walking conditions and distance as a deterrent to using
- Loring itself is a barrier

Commuter Student Capacity: 654
Employee Capacity: 276
Resident Student Capacity: 100
Other Capacity: 

Effective Capacity on district-wide basis: 85%

Hourly occupancy by permit
WALKING CONDITIONS

• O’Keefe, Canal/Weir and Stanley lots are perceived as too far away, but are a few minutes’ walk from the cores of both North and Central campuses.

• Conditions that increase the perceived distance include:
  o Crossing Loring Ave.
  o Lighting
  o Pavement conditions on Linden/Atlantic Sts.
  o Traffic on Canal St.
  o Grade change
  o Winter weather
  o Leaving the campus
Enrollment is projected to increase 2% per year
FUTURE CONDITIONS  Pending Space Moves

- Moving Criminal Justice & Nursing from South Campus will add to parking demand on the other campuses.

- Peak occupancy:

<table>
<thead>
<tr>
<th>Location</th>
<th>F</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harrison</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Bates/CIE</td>
<td>2</td>
<td>173</td>
</tr>
<tr>
<td>Harrington</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td>Alumni</td>
<td>18</td>
<td>280</td>
</tr>
</tbody>
</table>

- If this parking demand is added to North, Central and North-of-Loring, current peak occupancy there increases from 78% to 88%.
### FUTURE PARKING NEED

#### ALL SSU CAMPUSES:

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Parking Need</td>
<td>2,342</td>
<td>2,389</td>
<td>2,437</td>
<td>2,485</td>
<td>2,535</td>
<td>2,586</td>
<td>2,637</td>
<td>2,690</td>
<td>2,744</td>
<td>2,799</td>
<td>2,855</td>
</tr>
<tr>
<td>+15% Cushion</td>
<td><strong>2,693</strong></td>
<td>2,747</td>
<td>2,802</td>
<td>2,858</td>
<td>2,915</td>
<td>2,974</td>
<td>3,033</td>
<td>3,094</td>
<td>3,156</td>
<td>3,219</td>
<td>3,283</td>
</tr>
<tr>
<td>Existing</td>
<td><strong>2,924</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

#### CAMPUS CORE (NORTH, CENTRAL AND NORTH-OF-LORING):

**Impact Of Alumni Affairs, Criminal Justice & Nursing Moves**

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Parking Need</td>
<td>2,069</td>
<td>2,110</td>
<td>2,152</td>
<td>2,196</td>
<td>2,239</td>
<td>2,284</td>
<td>2,330</td>
<td>2,377</td>
<td>2,424</td>
<td>2,473</td>
<td>2,522</td>
</tr>
<tr>
<td>+15% Cushion</td>
<td><strong>2,379</strong></td>
<td>2,427</td>
<td>2,475</td>
<td>2,525</td>
<td>2,575</td>
<td>2,627</td>
<td>2,679</td>
<td>2,733</td>
<td>2,788</td>
<td>2,843</td>
<td>2,900</td>
</tr>
</tbody>
</table>

+ *280 when schools move*

| Existing | **2,408** | | | | | | | | | | |

**Assuming 2% annual growth**

Base parking needs include 189 for parking currently taking place off-campus
FINDINGS

• Uncontrolled parking within the neighborhood is a challenge

• Current total Supply is adequate to meet current Demand; however

• Shifts in parking patterns are necessary to prevent over-subscription of particular facilities and to bring off-campus parking onto campus

• 5-year horizon: at 2% per year growth (but without taking space moves into account), SSU parking capacity is sufficient until 2022

• 10-year horizon: at 2% per year growth, campus-wide demand exceeds practical capacity by over 400 spaces

• Space moves: Absent other measures, moving Criminal Justice, Nursing & Alumni Affairs will increase parking need on North, Central and North-of-Loring by up to 280 spaces, beyond existing practical capacity (occupancy + 15%)
SOLUTIONS will involve:

- Transportation Demand Management
- Campus and Urban Design
- Assignment and Pricing of SSU Parking
- Parking Capacity Enhancement
- Enforcement by both SSU and the City
- Strong Communication
RECOMMENDATIONS

- Permits and Space Allocations
- Parking facilities
- Parking Access
- Demand Management
- Enforcement & Administration
RECOMMENDATIONS  Permits & Space Allocation

Principles

• Park once
• More lot-specific permits
• Use pricing as a demand management tool
• Encourage and facilitate use of Canal/Weir, Stanley & O’Keefe
• Parking regulations must be enforced both within SSU and the neighborhood
Potential Measures

- Evaluate current parking and adjust as needed
- Maximize parking supply – structure may be required to support campus consolidation and expanded enrollment
- Consider limiting permit eligibility for resident sophomores
- Improve pedestrian access: wayfinding, lighting, defined walking routes
Options to Explore

1. Garage on buildable portion of O’Keefe lot
2. Garage on Canal/Weir lot
3. Garage on Stanley lot
4. Garage on Atlantic lot
5. New Atlantic Hall lot
# ALTERNATIVES Parking Facilities

<table>
<thead>
<tr>
<th>Candidate</th>
<th>Spaces/Level (approx.)</th>
<th>Levels</th>
<th>Net Spaces</th>
<th>Cost*</th>
<th>Pro</th>
<th>Con</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garage on buildable portion of O'Keefe lot</td>
<td>155</td>
<td>4</td>
<td>465</td>
<td>$16.3 M</td>
<td>Serves athletic complex.</td>
<td>Longer term Further away</td>
</tr>
<tr>
<td>Garage on Canal/Weir lot</td>
<td>80</td>
<td>4</td>
<td>240</td>
<td>$11.2 M</td>
<td>Well located for Central Campus access.</td>
<td>Triangular site is not ideal Site may have a better use</td>
</tr>
<tr>
<td>Garage on Stanley lot</td>
<td>80</td>
<td>4</td>
<td>240</td>
<td>$11.2 M</td>
<td>Works with redevelopment of Stanley building.</td>
<td>Site is barely 120' wide; might require reconfiguration of drainage swale</td>
</tr>
<tr>
<td>Garage on Atlantic lot</td>
<td>120</td>
<td>4</td>
<td>360</td>
<td>$16.8 M</td>
<td>Maximizes parking utility.</td>
<td>Traffic impacts</td>
</tr>
<tr>
<td>New Atlantic Hall lot</td>
<td>160</td>
<td>1</td>
<td>160</td>
<td>$1.1 M</td>
<td>Doesn't displace existing parking.</td>
<td>Wetlands, open space impacts Traffic impacts</td>
</tr>
</tbody>
</table>

* Cost assumptions:
  - Garage space: $35,000
  - Surface space: $7,000
Walkability is Key

- Winter Conditions
- Defined pedestrian routes
- Lighting
- Loring Ave.
- Cooperation between SSU and the City of Salem
- Sidewalk at garage lot
PATHS TO PARKING
PATHS TO PARKING

Loring Ave. crosswalk
PATHS TO PARKING

Linden & Atlantic Streets
PATHS TO PARKING  Canal St. at O’Keefe lot
ALTERNATIVES  Potential Improvements

O’Keefe

- Improvements to existing streets
- Additional paths
- Additional lights & signage
ALTERNATIVES  Loring Ave.

- Pedestrian signal for major Loring Ave. crossing at Linden St.
- Upgrade crosswalks for pedestrian and driver visibility
ALTERNATIVES  Linden/Atlantic St.

- Mirror for increased visibility around tight curves
- Traffic-regulation signage at Linden/Atlantic/Day St. intersection
- More effective pavement markings for pedestrian and driver visibility
ALTERNATIVES O’Keefe Lot Improvements

Lighting in O’Keefe Lot to enhance perception of safety
ALTERNATIVES    Paths to O’Keefe

Create path from O’Keefe Lot to Canal St.

Better lighting enhances perception of safety

Maintain pedestrian-friendly route from O’Keefe to SSU along Canal Street
ALTERNATIVES Paths to O’Keefe

Open path along edge of football field, to Canal St.

Better lighting
ALTERNATIVES Potential Improvements
Stanley & Canal St./Weir

- Improvements to existing streets
- Additional greenery
- Additional lights & signage

STANLEY

CANAL ST/WEIR
ALTERNATIVES Stanley Lot

- Enhanced pavement to improve accessibility
- Additional signage, lighting, & entryway to guide & protect pedestrians
**ALTERNATIVES**  
**Canal St./Weir Lot**

- Entrance signage, to direct drivers to parking and pedestrians to campus
- Additional lighting
- Crosswalks to slow traffic and enhance pedestrian safety
- Additional permit signage to better direct SSU drivers to their correct parking locations
- Enhanced & additional directional arrows to guide traffic
ALTERNATIVES Canal St./Weir & Stanley

Highlight connection between Stanley & Canal St./Weir Lots

Additional signage to guide visitors and SSU newcomers between lots and campuses

Bike Path
ALTERNATIVES Canal St./Weir & Stanley Access

- Additional signage to guide drivers and pedestrians
- Upgrade crosswalks for pedestrian and driver visibility
- Renovate sidewalks
ALTERNATIVES Loring Ave. Streetscape

Enhanced sidewalks to improve accessibility

Add trees to shelter walk from Central Campus to Weir & Stanley Lots
ALTERNATIVES Pavement Guide Precedents
ALTERNATIVES Streetlamp Precedents
**RECOMMENDATIONS** Demand Management

- Principles and Expectations
- Services
- Incentives
- Flextime
- Telecommuting
- Bicycling – bikeshare & facilities (City streets)
- NSTMA
- Messaging & communication

- Transit – South Salem station (long-term)
  - South campus shuttle
RECOMMENDATIONS Enforcement & Administration

• Strict enforcement by both SSU and City police
• Coordinate enforcement and public improvements
• Ongoing parking need evaluation
THANK YOU