Master Planning Council, May 2019
• Parking and Transportation Plan: Rebecca White, Julia Monteith
• Darden Update: Alice Raucher
• Emmet-Ivy Task Force Summary: Mary Hughes
Agenda

1. Schedule, Scope, Findings
2. Preferred Scenario
3. Implementation Strategies
4. Marketing & Education/Program Evaluation
5. Discussion
Revised Schedule

Hybrid scenario with progressive lean was selected as preferred direction in December.
Engagement

▪ **Steering Committee**
  - Project oversight
  - Membership
    - Alice Raucher, OAU
    - Colette Sheehy, VP Operations
    - Rich Kovatch, Business Operations
    - Tom Harkins, Health System
    - Bryan Garey, Human Resources
    - Nancy Rivers, Athletics
    - Anda Web, Provost
    - Jess Wenger, TP Committee
    - Pat Lampkin, Student Life
    - Fred Missell, UVA Foundation
    - Peter Norton, Faculty Senate Representative
    - Ellen Yates, Student Representative
    - UVA Project Team
Parking and Transportation Plan Scope and Purpose

- Establishes a vision and strategic approach to meet the evolving parking and transportation needs of students, faculty, and staff, patients, and visitors
- Ten-year planning horizon (2018 – 2028)
- Study area includes:
  - Central Grounds (including the Health System), North Grounds, West Grounds
  - Fontaine Research Park
  - Northridge
- Updates the 2007 and 2011 plans
- Includes extensive outreach effort
Findings of Analysis

- In the next ten years:
  - UVA’s population is expected to increase by 15%, or ~5,700 individuals
    - 29% increase in staffing for Health System
  - Capital projects will result in short-term loss of 1,100 spaces, long-term loss of 600 spaces
  - Convenient parking will be provided to accommodate visitors for events (John Paul Jones Arena, Athletics) and HS services

- Challenge: University will experience increase in parking demand concurrent with decrease in parking supply

Projected to reach 100% parking occupancy as early as 2020 if no changes are made
Approach and Recommendations

- Plan recommends a hybrid approach that combines building new parking supply and implementing alternative transportation strategies

- Approach prioritizes parking supply increase to address 2020 parking demand
  - Building additional supply
  - Improving parking efficiency, which may impact where individuals park
  - Establishing remote/shared parking with community partners

- Plan success depends on education, marketing, and funding

**SHORT TERM**
1-3 YEARS
- Build parking supply: Build new facilities
- Enhance accessibility to Grounds: Provide additional bicycling amenities
- Develop remote/share parking options
- Improve efficiency of existing parking supply
- Strengthen TDM incentives
- Revamp permit fee structure

**MID TERM**
4-6 YEARS
- Build parking supply: Evaluate need for additional facilities
- Enhance accessibility to Grounds: Collaborate with CAT and Jaunt to improve service to Grounds
- Use technology to enhance parking operations

**LONG TERM**
7-10 YEARS
- Enhance accessibility to Grounds: Offer University-run commuter shuttle service
Overview

Evaluate Parking and Transportation Funding model

HYBRID MODEL

Progressive
1. Revamp permit fee structure
2. Strengthen TDM Incentives
3. Use technology to enhance parking operations
4. Develop remote/shared parking opportunities
5. Enhance accessibility to Grounds

Traditional
1. Build parking supply
2. Improve efficiency of existing parking supply
<table>
<thead>
<tr>
<th>#</th>
<th>Strategy</th>
<th>Progressive/Traditional</th>
<th>Cost</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improve efficiency of existing parking supply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reorganize commuter and storage parking to reduce event impact and enhance commuter service</td>
<td>Traditional</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase parking efficiency</td>
<td>Traditional</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distribute patient scheduling across day as possible</td>
<td>Traditional</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relocate some HS Clinics off Central Grounds</td>
<td>Traditional</td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Develop remote/share parking opportunities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish intercept parking sites</td>
<td>Progressive</td>
<td>$$$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Form additional community parking &amp; rides lots and encourage use</td>
<td>Progressive</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Build parking supply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Build new parking facilities in the near term</td>
<td>Traditional</td>
<td>$$$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Build new parking facilities in the long term</td>
<td>Traditional</td>
<td>$$$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Revamp permit fee structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reallocate permit pricing to encourage use</td>
<td>Progressive</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implement Pay-as-you-go parking</td>
<td>Progressive</td>
<td>$-$$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Use technology to enhance parking operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Real time communication of parking availability</td>
<td>Progressive</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Enhance accessibility to Grounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encourage bike riding through amenities</td>
<td>Progressive</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expand transit accessibility and introduce technology</td>
<td>Progressive</td>
<td>$$$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work with CAT &amp; Jaunt to enhance service to Grounds</td>
<td>Progressive</td>
<td>$-$$$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Strengthen TDM incentives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Create cash-out incentives for multi-modal commuters</td>
<td>Progressive</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encourage carpooling via incentives and technology</td>
<td>Progressive</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Achieve higher use of flex hour/telecommuting</td>
<td>Progressive</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continue and strengthen TDM support programs</td>
<td>Progressive</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Planned Transportation Initiative Detail
## Improve Efficiency of Existing Parking Supply

<table>
<thead>
<tr>
<th>#</th>
<th>Strategy</th>
<th>Progressive / Traditional</th>
<th>Cost</th>
<th>Short-Term</th>
<th>Mid-Term</th>
<th>Long-Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Re-organize commuter and storage parking to reduce event impact and enhance commuter service</td>
<td>Traditional</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Increase parking efficiency</td>
<td>Traditional</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Distribute patient scheduling across day as possible</td>
<td>Traditional</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Relocate some HS Clinics off Central Grounds</td>
<td>Traditional</td>
<td>TBD</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Develop remote/share parking opportunities

<table>
<thead>
<tr>
<th>#</th>
<th>Strategy</th>
<th>Progressive / Traditional</th>
<th>Cost</th>
<th>Short-Term</th>
<th>Mid-Term</th>
<th>Long-Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Establish intercept parking sites</td>
<td>Progressive</td>
<td>$$$</td>
<td>Year 1 2018</td>
<td>Year 2 2019</td>
<td>Year 3 2020</td>
</tr>
<tr>
<td>6</td>
<td>Form additional community Park &amp; Ride lots and encourage use</td>
<td>Progressive</td>
<td>$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Year 1: 2018
- Year 2: 2019
- Year 3: 2020
- Year 4: 2021
- Year 5: 2022
- Year 6: 2023
- Year 7: 2024
- Year 8: 2025
- Year 9: 2026
- Year 10: 2027
<table>
<thead>
<tr>
<th>#</th>
<th>Strategy</th>
<th>Progressive / Traditional</th>
<th>Cost</th>
<th>Short-Term</th>
<th>Mid-Term</th>
<th>Long-Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Build new parking facilities in the near term</td>
<td>Traditional</td>
<td>$$$$</td>
<td>Year 1 2018</td>
<td>Year 2 2019</td>
<td>Year 3 2020</td>
</tr>
<tr>
<td>8</td>
<td>Build new parking facilities in the long term</td>
<td>Traditional</td>
<td>$$$$</td>
<td>Year 5 2022</td>
<td>Year 6 2023</td>
<td>Year 7 2024</td>
</tr>
</tbody>
</table>

**Build parking supply**

- **Year 1**: 2018
- **Year 2**: 2019
- **Year 3**: 2020
- **Year 4**: 2021
- **Year 5**: 2022
- **Year 6**: 2023
- **Year 7**: 2024
- **Year 8**: 2025
- **Year 9**: 2026
- **Year 10**: 2027
<table>
<thead>
<tr>
<th>#</th>
<th>Strategy</th>
<th>Progressive / Traditional</th>
<th>Cost</th>
<th>Short-Term</th>
<th>Mid-Term</th>
<th>Long-Term</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Revamp permit fee structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Reallocate permit pricing</td>
<td>Progressive</td>
<td>$</td>
<td>Year 1 2018</td>
<td>Year 6 2023</td>
<td>Year 10 2027</td>
</tr>
<tr>
<td>10</td>
<td>Implement Pay-as-you-go parking</td>
<td>Progressive</td>
<td>$-$ $$</td>
<td></td>
<td>Year 4 2021</td>
<td>Year 7 2024</td>
</tr>
</tbody>
</table>
## Use technology to enhance parking operations

<table>
<thead>
<tr>
<th>#</th>
<th>Strategy</th>
<th>Progressive / Traditional</th>
<th>Cost</th>
<th>Short-Term</th>
<th>Mid-Term</th>
<th>Long-Term</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Year 1 2018</td>
<td>Year 2 2019</td>
<td>Year 3 2020</td>
<td>Year 4 2021</td>
</tr>
<tr>
<td>11</td>
<td>Real time communication of parking availability</td>
<td><strong>Progressive</strong></td>
<td>$$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use technology to enhance parking operations

1. Real time communication of parking availability: Progressive, Cost: $$
<table>
<thead>
<tr>
<th>#</th>
<th>Strategy</th>
<th>Progressive / Traditional</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Enhance accessibility to Grounds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Encourage bike riding through amenities</td>
<td>Progressive</td>
<td>$</td>
</tr>
<tr>
<td>13</td>
<td>Expand transit accessibility and Introduce technology</td>
<td>Progressive</td>
<td>$$</td>
</tr>
<tr>
<td>14</td>
<td>Work with CAT &amp; Jaunt to enhance service to Grounds</td>
<td>Progressive</td>
<td>$$-$$$$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2019</td>
<td>2020</td>
<td>2021</td>
<td>2022</td>
<td>2023</td>
<td>2024</td>
<td>2025</td>
<td>2026</td>
<td>2027</td>
</tr>
</tbody>
</table>
## Strengthen TDM incentives

<table>
<thead>
<tr>
<th>Strengthen TDM incentives</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create cash-out Incentives for multi-modal commuters</td>
<td>Progressive $2</td>
</tr>
<tr>
<td>Encourage carpooling via incentives and technology</td>
<td>Progressive $1</td>
</tr>
<tr>
<td>Achieve higher use of flex-hour/telecommuting</td>
<td>Progressive $1</td>
</tr>
<tr>
<td>Continue and strengthen TDM support programs</td>
<td>Progressive $1</td>
</tr>
</tbody>
</table>
Marketing and Education

**Education is critical to changing culture and attitudes towards travel.**
- Regular, annual communication recommended due to student turnover and employee expansion
- Link everyday commute choice to larger values – health, environment, social connection (i.e., health insurance discounts, etc.)
- Engage a communications firm to create an educational program

**Consider expanding TDM resource/team to support program.**
- shows level of commitment to goals
- offers faculty, and staff a dedicated resource they can contact for guidance
- provides additional support to maximize chances for program success
What makes a successful TDM program?

- Compelling Vision
  - Limited parking availability
  - High cost of constructing more centrally located parking
  - Sustainability
- Clear purpose
- Comprehensive program offering
Program Evaluation

**Establishing a clearly-defined goal drives program success:**

- Suggested Goals: Reduce employee SOV driving by 10% over 10 years.
- Reduce the parking spaces/FTE ratio from 0.49 to 0.45.

**Evaluation efforts**

- Evaluate permits sales annually
- Continue to conduct travel survey every 2 years
- Include students in travel survey
- Publish evaluation findings through annual report, available to public
- Report enhances credibility of program and provides support for long-term investment
Discussion
Close-In Parking

Access and Pricing to Parking
Politics in Priority parking
Technology – Real time info

Wait list takes forever
Need more convenient parking, shift based permits and underground parking in the Health System
Expand temporary parking permit options
Fees – monthly or pay as use
Events are inconvenient
Running errands is difficult

Remote Parking

Explore Park & Ride opportunities in the Region

Fee Structure
Amenities nearby (bathrooms, child care)
Emergency ride connection to remote lots
Frequent shuttles to remote lots
Covered waiting areas
Express shuttle service
15 minute transfer between Grounds and remote lot is acceptable
Perception of remoteness could be a negative

Transit

Approach to service delivery: Continuous service to meet the demand or schedule based

Hours and Frequency of UTS service (not early enough or late enough, summer/holiday schedules)
Underserved areas (Fontaine, Northridge, Old Ivy, Culbreth, Darden)
Real time information and map availability issues
Regional System – CAT/UTS/JAUNT
Focus Group Summary

**Biking**
- Facilities:
  - Connectivity of Bike Lanes
  - Covered racks, showers, lockers
  - Lack of Bike Facilities (racks, and lanes) at Corner Safety
- Better education and enforcement for bikers and drivers
- Bike share @ parking areas – free
- Workplace policy
- Covered racks, showers, lockers
- Barriers to riding

**Walking**
- 15 – 20 min walk limit
- Pedestrian safety
  - Workplace Policy (showers, dress code)
  - Railroad is a barrier (Emmet/Ivy – Athletics, Old Ivy Road, Grove/Cherry)
  - Distracted, Security, Lighting, Intersections
  - Wayfinding on Grounds – Walking map
- Connectivity Challenges (Ivy to Boar’s Head, Old Ivy, Fontaine, Corner to HS, JPJ to Hospital, Milmont, Rivanna Trail across Ivy)

**Alternative Transportation**
- Telework/Alternative work schedules
- Carpool Match tool
- Pay as you go Parking
- No Incentive for using other modes
  - Time Saving is incentive
  - Monorail (Epcot)
  - Real time – Slugging
  - Transit accessibility from home
  - Efficiency of commute time
  - Lyft Car pool
  - BlancRide and other carpool apps
Master Planning Council Presentation
May 15, 2019
SITE LOCATION PLAN

Charlottesville / UVA Grounds

NORTH GROUNDS

CENTRAL GROUNDS

DOWNTOWN MALL

DARDEN SCHOOL OF BUSINESS

COOPER CARRY

UNIVERSITY OF VIRGINIA
AREAS OF DEVELOPMENT

- PRESERVE 3.37 AC (33% of total site)
- RESTORE 3.12 AC (31% of total site)
- REDEVELOP 3.61 AC

LEGEND
- Hotel Site
- Arboretum Site
- Existing Inn to Remain