This memorandum provides a summary of the Fall 2019 Mobility & Accessibility Workshop, held in support of the Long Range Development Plan (LRDP) and Campus Master Plan. Mobility – how people get to campus, and how they get around campus, and how they make those choices – is a major element of the physical environment, and is an important factor in how cohesive and connected the campus feels. Decisions about mobility networks have impacts on other aspects of the physical environment, including land use and sustainability.

Workshop Purpose and Format

The purpose of the workshops was to provide an opportunity for the campus community to provide feedback on their campus experience, and engage in active problem-solving and brainstorming for the future of the campus. The workshop format was chosen to provide opportunity for robust and in-depth discussion, complementary to past and future town hall events. The Mobility & Accessibility workshop discussions complement the data analysis that the master planning team is conducting for multiple modes of transportation, towards the goal of coordinating mobility and land use decisions for a wide range of constituencies with different mobility needs.

The LRDP and Campus Master Plan workshops included students, faculty and staff with a diverse range of perspectives, reflecting the complexity and significance of physical planning decisions. The workshops were by invitation, based on the venues’ capacity and on staffing resources. Each workshop was facilitated by Physical & Environmental Planning staff and the master planning consultant team, and followed the same basic format:

- LRDP and Campus Master Plan Overview (see attached summary slides)
- Planning Context (see attached summary slides)
- Breakout Activity, including these key questions:
  - How do you get to campus?
  - How do you get around campus once you arrive, and what are your primary destinations throughout the day?
  - What opportunities and challenges would arise if vehicle parking were moved to the periphery of campus, and the Campus Park were prioritized for pedestrians and bikes? Where would you relocate the affected parking?
- Report Back and Next Steps

Key themes and takeaways from the ideas and solutions discussed in the workshop are documented here. They will be circulated to the campus community as well as to the LRDP and Campus Master Plan Advisory and Working Groups, for consideration as these two plans progress. The workshop themes and takeaways will be combined with LRDP/Campus Master Plan survey analysis and other sources of feedback, into Emerging Themes documents that reflect themes and priorities to be addressed in the LRDP and Campus Master Plan.

Workshop Themes and Takeaways

The themes and takeaways summarized below represent the discussion from the workshop, and may not include all of the challenges and opportunities documented through different modes of LRDP/Campus Master Plan engagement. The summary below may also include conflicting perspectives, reflecting the diversity of ideas generated in the workshop.
Connectivity & Wayfinding

1. **Campus circulation and wayfinding can be challenging, even for the able-bodied.**
   - Topography and distance between locations makes it challenging to get things done, especially coupled with decentralized functions (e.g. student services, proctoring)
   - There is a general lack of markings and signage to direct different modes (pedestrians, bikes, scooters, service vehicles, etc)
   - There is not always enough time to travel from one class to the next
   - Streets along the edges of the campus, as well as between the campus and residence halls, should be friendly to bikes, pedestrians, and transit
   - Campus gateways could be reinforced with active program

2. **Consider strategies for improving commuting and reducing vehicle traffic, from telecommuting to transit subsidies.**
   - Telecommuting is an important component of the overall mobility strategy for the campus
   - Use of satellite facilities (e.g. Richmond Field Station, Clark Kerr Campus) could reduce commuting needs
   - Monthly parking permits incentivize parking for convenience – consider more variable passes (e.g. day permits only)
   - Utilize analysis of commute patterns and origin locations to identify underserved locations
   - Some campus units generate traffic because they are located off campus, but do a significant portion of their work on campus; relocating these units could be considered
   - Faculty and staff commuting needs are different and should be taken into account

3. **Shared pathways and roadways affect the potential for conflicts.**
   - Vehicle access to internal campus roads can conflict with pedestrian, bike, and scooter routes
   - Bikes and scooters, pedestrians, and vehicles should be separated as much as possible
   - Consider enlarging the dismount zone for bikes in the Campus Park, in order to reduce the potential for bike-pedestrian conflicts

Pedestrian and Bicycle Network

1. **Walking is the most convenient way to get around, once you’re on campus.**
   - However, topography can make traversing the campus a significant challenge
   - Gayley Road is a good cross-campus route relative to topography and efficiency, but is not friendly for pedestrians or bikes
   - Walking is also a source of exercise and downtime
   - Walking routes between Clark Kerr and the Campus Park could be improved
   - The campus circulation network could consider pedestrian-priority improvements such as woonerfs or road diets, where appropriate
   - Pedestrian priority should be balanced with necessary vehicle access (emergency and service vehicles, ADA parking)
   - Construction activity should minimize impacts to pedestrian movement
2. A continuous bike network that coordinates and connects campus bike routes, City of Berkeley bike boulevards, and bike share stations should be emphasized.
   - Bicyclists would like efficient routes to and across campus
   - Continuity of bicycle routes is important – some key routes (e.g. cycle track on Bancroft Way) are not continuous; north-south routes are the most challenging
   - Bike routes through the Campus Park can be challenging due to topography, meandering pathways, and the volume of pedestrians
   - Students do use bike share stations, based on cost and convenience
   - Biking behavior may change during the rainy season

3. Bicycle boulevards are better utilized when they provide direct routes to destinations; one-way streets are difficult to navigate and inconvenient for bikes.
   - Separated bike lanes are preferred to sharrows, in order to minimize conflicts and improve safety
   - Bike routes should be separated from ADA paths, to the extent possible
   - Lack of bike lanes makes Gayley Road an uncomfortable biking experience

4. Bike routes could be reinforced through signage.
   - Bike routes are generally not clearly marked on campus, or are not obvious to the rider
   - Routes do not necessarily need to be specifically delineated, but should be logical
   - Consider the current dismount zone and how to balance convenience with minimizing pedestrian-bike conflicts

5. Secure bike storage is limited around campus; more storage could be provided to support biking as a mode of transportation to and around campus.
   - Bike theft is an issue on campus, and secure bike storage could help alleviate the problem
   - Bike storage inside buildings is often limited after hours to those with key card access
   - Secure bike storage could be integrated into the campus at key locations, and clearly indicated on campus maps
   - Bike storage should accommodate different types of bikes, including e-bikes

6. Micromobility vehicles (e.g. scooters) are increasing in popularity.
   - The campus does not have clear routes to accommodate micromobility – consider Bancroft Way as a designated route
   - Addition of scooters to pedestrian and bike network may increase the potential for conflicts
   - Some parts of campus may be too hilly for e-scooters
   - As more people bring scooters to campus, there will be an increasing need to accommodate scooter parking and storage
   - Many people are not aware of the existing policies for bringing scooters to campus
Accessibility Relative to Mobility

1. Navigating the campus can be challenging for people with disabilities.
   - Accessible building entrances are not always directly connected to accessible paths
   - Accessible campus routes are not always well signed
   - Students with disabilities often schedule classes to move downhill across campus, then take the bus/shuttle back up the hill, which may not run frequently
   - People with an emergent need (e.g. injury, counseling) need an option to get to their destination quickly

2. LOOP shuttle ridership demonstrates the demand for this program, which could be expanded.
   - Expanding the program could allow for more timely and dependable service
   - The LOOP only serves the Campus Park, which excludes key destinations for its users (e.g. Tang Center, residence halls, campus events, BART stations)
   - Requesting a ride on the LOOP shuttle requires a cell phone

3. Although the campus has more ADA parking than required, ADA parking spots are at capacity
   - ADA parking in the Campus Park should remain, even if there is a restriction on general vehicular access

Transit Network

1. Transit isn’t always convenient, although it allows people to get to campus without having to park.
   - Reliability of transit schedules is a major factor in transit choices; travel times vary significantly based on traffic and peak ridership
   - Consider additional shuttles connecting the campus and key locations such as Downtown Berkeley BART, 1608 4th Street, and Richmond Field Station

2. Safety concerns can impact transit behavior at night, since those taking transit need to walk home from the bus stop or BART station.

Vehicular and Parking Network

1. People choose to drive to campus for a range of reasons, including convenience, distance from transit, childcare
   - Housing affordability and access to transit impact travel choices, especially for staff
   - Transit is not always a practical option; variable schedules can make ride-sharing difficult
   - Longer commute times impact time that could be spent with family or at work
   - People also drive between the Campus Park and satellite locations (Richmond Field Station, 2000 Carleton, Hill Campus) – consider the location of key campus functions when making land use decisions

2. Vehicle drop-off locations should be designated around campus, in order to reduce vehicular conflicts with key pedestrian routes (e.g. Barrows Lane, Schlessinger Way).
3. **Managing parking demand should be prioritized before providing additional capacity.**
   - Use sensors to communicate parking availability – this could help reduce congestion caused by cars circling the Campus Park while looking for parking
   - Removal or relocation of parking could be phased to minimize impact on mobility
   - Distribution of parking could be better aligned with distribution of people; some make choices about their parking location based on their destination at the end of the day
   - Assess the viability of shared use of nearby parking lots (e.g. churches, satellite lots)
   - Faculty and staff are the primary users of campus parking
   - Permit parking can cost less in the City of Berkeley than on campus, but the savings is offset by the cost of housing in Berkeley

4. **New or relocated parking could be located at the periphery or adjacent to the Campus Park.**
   - Structured or underground parking are better uses of limited land resources than surface parking, but should be designed to maintain attractive and welcoming campus edges
   - Parking could be considered as a component of mixed-use developments (e.g. mobility hubs paired with academic space, office space, or recreation/athletics space)
   - New parking could have EV charging stations
   - Consider satellite parking locations, although shuttle connections must be timely and reliable to make them feasible options

5. **Restricting vehicle access to campus could have several benefits.**
   - Relocating parking to the periphery of the Campus Park could make land available for additional academic, research, and student services space
   - Restricting vehicle access could allow more space for bike and pedestrian circulation; campus roadways could be converted to primary bike routes
   - A more robust e-cart system could be considered as a service to aid intracampus travel
   - Limited vehicle access could help the campus meet its sustainability goals, and reduce the potential for conflicts between different modes of transportation
   - If vehicle access is restricted in the Campus Park, access for people with disabilities, for service and emergency vehicles, and for events (e.g. intercollegiate Athletics, Cal Performances) would still need to be provided
   - Consider making Gayley Road a campus road to improve pedestrian access

6. **Transportation Network Companies (TNCs) like Uber and Lyft need designated drop-off locations, in addition to the existing designated pick-up locations.**
   - Designated pick-up and drop-off locations should be selected to minimize potential congestion and conflicts with other modes of transportation
   - Consider defined staging areas where drivers can wait – some TNC drivers seem to be waiting for rides in peripheral parking spaces at the edge of the Campus Park
   - TNC vehicles should be restricted from driving into the Campus Park
Attachment A

LRDP and Campus Master Plan Overview Presentation Slides
Long Range Development Plan and Campus Master Plan

LRDP and Campus Master Plan Workshops
October 1-3, 2019
Berkeley has a long history of campus planning
Berkeley has a long history of campus planning

1956

1962

1990

2005

Long Range Development Plan and Campus Master Plan
LRDP and Campus Master Plan Workshops | October 1-3, 2019
### Long Range Development Plan

- Program-level plan (land use plan) that guides the long-term physical development of the campus
- Required by law
- Requires an Environmental Impact Report (EIR)
- Can be long term
- Regents approval required

### Campus Master Plan

- Aspirational ten-year plan with specific projects to address priorities, such as housing, seismic, sustainability, academic instructional space
- **Not** required by law
- **Does not** require an EIR
- Living document: can be short or long term
- Regents approval **not** required

### Differences

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<tr>
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<th>Campus Master Plan</th>
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### Similarities

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<th>Long Range Development Plan</th>
<th>Campus Master Plan</th>
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<tbody>
<tr>
<td>• Aligned with the Strategic Plan</td>
<td>• Build campus consensus around a shared vision</td>
</tr>
<tr>
<td>• Employ an integrated, systems-level approach</td>
<td>• Strategic and prioritize</td>
</tr>
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Timeframe – How long will this take?

**2019**
- **Long Range Development Plan**
  - Data Collection
  - Discovery
  - Studies
- **Campus Master Plan**
  - Data Collection
  - Discovery
  - Studies

**2020**
- **Long Range Development Plan**
  - Synthesis
  - Draft Recommendations
  - EIR analysis
- **Campus Master Plan**
  - Synthesis
  - Draft Recommendations

**2021**
- **Long Range Development Plan**
  - Draft EIR published
  - Revision and adjustments (Final EIR)
  - **Goal: Approval by the UC Regents**
- **Campus Master Plan**
  - Revision and adjustments
  - Prioritization
  - **Goal: Adoption by the Chancellor and EVCP**
Governance Structure

Project Management and Oversight Groups

Project Management
- Day-to-day logistical management of LRDP and CMP processes
- Prepares reports and preliminary review of content
- Project involvement at all stages, plus coordination with consultants

Stakeholder Groups
- Provide input throughout LRDP process
- Consult with Working Group on CMP assessments and component plans
- Project involvement as needed

Working Group
- Develop LRDP principles, program and framework
- Participate in stakeholder meetings
- Oversee CMP assessments, guide development of 10-year plan and component plans, and phasing scenarios

Advisory Group
- Overall strategic direction for LRDP, EIR and CMP
- Decides LRDP principles
- ID’s CMP priorities
- Reviews LRDP and CMP project progress

Approval Groups
- UC Regents
  - Adopt and certify LRDP and EIR
  - No role with CMP
- Chancellor, EVCP
  - Approve final LRDP and final CMP
  - Project involvement for final UC Berkeley approvals
- Capital Planning Committee
  - Updates and approvals as needed
  - Project involvement at key milestones

UC Regents
- Adopt and certify LRDP and EIR
- No role with CMP

Chancellor, EVCP
- Approve final LRDP and final CMP
- Project involvement for final UC Berkeley approvals

Capital Planning Committee
- Updates and approvals as needed
- Project involvement at key milestones
Consultant Team

Sasaki Associates is our lead consultant, along with Page as our LRDP strategy consultant. The Sasaki team complements and supports on-campus expertise and governance. They will:

• Analyze existing conditions of the physical campus environment
• Synthesize key areas of need from the Strategic Plan
• Hold listening sessions with a wide range of campus stakeholders
• Develop design guidelines
• Identify potential projects and priorities for the Campus Master Plan

Additional sub-consultants that will be part of our planning effort:

• Biddison Hier – Strategic Planning Advisor
• PGA Design – Landscape Heritage
• Forell / Elsesser – Structural Engineering and Seismic
• Fehr & Peers – Mobility Planning and Parking
• ARUP – Energy, Utilities, and Sustainability
• Sherwood Design Engineers – Civil and Storm Water Management
• Page & Turnbull – Historic Architectural Resources
• TBD Consultants – Cost Estimation
Campus and Community Engagement

Objectives

• Provide information and updates on the planning process

• Promote inclusive dialogue, open discussion, and consensus building

• Encourage early and ongoing participation

lrdp.berkeley.edu
masterplan.berkeley.edu
Today’s Workshop

Purpose

• Engage the campus community in active problem-solving
• Learn about the planning process

Format

• Planning Context: Key issues to be addressed
• Breakout Activity: Brainstorm together on a specific issue
• Report Back: Share key takeaways from each table
• Next Steps and Wrap-up: What happens next
Attachment B

Planning Context Presentation Slides
Planning Context
• **Mobility:** the potential for movement. The ability to get from one place to through all systems including vehicular, pedestrian, bicycle and scooter, accessible, transit and service systems. Mobility includes the entire transportation system including the infrastructure for the various travel modes, parking for automobiles and bicycles, and transportation and demand management (TDM) programs.

• **Accessibility:** combination of various elements in a building, facility, site, or area, or portion thereof which allows access, circulation and the full use of the building and facilities by persons with disabilities.
Why is mobility essential to support the campus Strategic Plan?

• Signature Initiatives all require interdisciplinary collaboration, supported by a mobility system to better connect campus areas and populations
• Robust and efficient mobility system enhances the campus experience by helping to meet basic needs
• Better connections to the community facilitate external partnerships and collaborations
• Permeability, navigability, and accessibility within the campus promotes a sense of welcoming and belonging
How do people get to campus?

- Overall drive-alone mode share has decreased from 2001-2002 to 2016-2017
- Although total campus population has increased, total automobile trips have decreased

Source: UC Berkeley Commute Surveys, 2001/2002 and 2017/2018
How do we compare to other universities?

UC Berkeley has the lowest drive-alone rate of the other universities surveyed.

Source: Data compiled by Fehr & Peers, 2017
### Parking

- Changes in parking between 2001 and 2018:

<table>
<thead>
<tr>
<th>Metric</th>
<th>2001</th>
<th>2017</th>
<th>Net Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Parking Supply</td>
<td>7,690</td>
<td>6,560</td>
<td>-15%</td>
</tr>
<tr>
<td>Permits Sold (C, F, and S)</td>
<td>6,430</td>
<td>5,580</td>
<td>-13%</td>
</tr>
</tbody>
</table>

Includes attendant parking

- Reduced parking capacity supports lower drive-alone rates
- Not all faculty, staff, and students live within convenient distance to walk, bike, or take transit, and may need to drive to campus
Transportation Demand Management (TDM)

UC Berkeley TDM measures contributing to reduced driving:

• AC Transit Class Pass for all students

• AC Transit Easy Pass and BART subsidies for non-students

• Bike share through BayWheels, including stations around the Campus Park, and subsidized memberships for Educational Opportunity Program students

• BerkeleyMoves! Commuter Club (app and website)

• Improved bicycle parking and FixIt stations

• Car-share discounts and dedicated spaces

• Modified night-safety program

• Designated TDM Administrator and increased marketings
Transit

- BART connects to larger region
- AC Transit connects to City of Berkeley and surrounding areas
- BearTransit connects to downtown Berkeley, satellite locations, and within Campus Park
- Buses/shuttles share street with motor vehicles and other modes
- Transit decisions involve multiple jurisdictions
Bike Circulation and Parking

• Bike mode share increased by almost 50% since last LRDP
• Improved bike infrastructure in the City
• Improved bicycle parking
Pedestrian Routes

- Paths provide connectivity within Campus Park and connections to surrounding areas.
- Most of Campus Park has minimal conflict with other travel modes.
- Campus Park and surrounding areas separated by automobile focused streets.
Pathway Slopes

• Most of Campus Park are easy to moderate (<5% slope)
• Alternative paths available (ramps, elevators)
• LOOP shuttle provides service within Campus Park
How can steep slopes be made more accessible?

C. V. Starr East Asian Library
External elevator leads to the accessible main entry, which can also be accessed by ramp

Haas School of Business Ramp
Comfortable route and landscape feature

Upper to Lower Sproul Connection
Ramp and stairway landing intersections create potential collision areas
Accessible (ADA Compliant) Routes

- Accessible routes within Campus Park are not always clearly identified.
- Accessible routes between student housing and Campus Park can be challenging.
- Consider centralized student services to increase accessibility and visibility.
- Universal accessibility should be part of project planning.

Source: Berkeley Website http://access-guide.berkeley.edu
Motor Vehicle Access

• Constrained access throughout the Hill Campus

• Consider designated service routes and hours for deliveries

• Consider restricting vehicular access within the Campus Park to service and emergency vehicles only
What are the key issues and the LRDP and Campus Master Plan?

• Create a clear, legible, and flexible multi-modal mobility network on campus that aligns with current and proposed land uses

• Improve accessibility and wayfinding for people with disabilities—minimize barriers

• Optimize parking capacity and distribution; continue to reduce employee drive-alone rate

• Further pedestrianize campus

• Collaborate with regional transit agencies to provide reliable, efficient transportation to off-campus housing destinations

• Continue to integrate the campus mobility strategy and sustainability goals
Breakout Activity and Reporting Back

Mapping Exercise 1 (30-minutes)

• How do you get to campus?

• How do you get around campus once you arrive, and what are your primary destinations throughout the day?

Mapping Exercise 2 (30-minutes)

• What opportunities and challenges would arise if vehicle parking were moved to the periphery of campus, and the Campus Park were prioritized for pedestrians and bikes?

• Where would you relocate the affected parking? (Please note that this exercise is a hypothetical scenario for discussion purposes.)

Report Back (20-minutes)