

Master Plan Committee - Minutes 11/13/19
LSC 308–310

Participants: Tom Satterly, Maggie Walsh, Tim Kemp, Nancy Hurt, Lynn Johnson, Rick Miranda, Alan Rudolph, Laura Giles for Mari Strombom, Shelly Carroll, Kristi Buffington, David Hansen, Nikki Silva for Fehr and Peers, Aaron Fodge, David Bradford, Devan Durand, Jessica Kramer, Pam Jackson, Julia Innes, Fred Haberecht, Doug Max, Blanche Hughes

Safety, Access, and Mobility Infrastructure Planning: Part 3

- Early Actions included
 - In-house inspection of intersections and bike and pedestrian ways
 - Kimley-Horn report – analysis of intersections
 - Cordon study for 32 or more intersections on campus, looked at volumes and directions of traffic by mode, as well as amount of compliance by modes.
 - Fred Haberecht and Aaron Fodge presented Safety Taskforce purpose and efforts to ASCSU.
 - ASCSU is interested in being a funding partner for improvements.
- Transportation & Mobility Data and Criteria
 - Cordon study helped us understand intersections on campus, the density of traffic on campus, mix of modes on campus
 - Traffic on the perimeter intersections considered separately from the internal intersections due to different contexts.
 - CSU PD provided data on crashes occurring on campus.
 - Crashes happen all over campus and only 3% of those sought medical treatment.
 - What type of intersection or area do these crashes occur? What minor or major injuries occurred? Identify areas through traffic counts and injury data that we can learn from to apply to other locations on campus.
 - ◆ When considering parking lots, 217 out of 218 the context is car hitting car or car hitting object.
 - ◆ 90% of reported injury crashes occur at intersections, roadways, and bike paths
 - ◆ Injury related crashes are mostly car-bike related.
 - ◆ 70% of the injury-related crashes occurred on Pitkin, Hughes, Lake, and University
 - Rick Miranda asks if we understand the data for injuries per traffic count concerning number of injuries (smaller or higher) in relation to the traffic count (higher or lower).
 - ◆ Numbers are low compared to traffic count, but we are trying to be sensitive to who is the most vulnerable in crashes.
 - Bike reported crashes – understand where they occur.
 - ◆ 18 out of 19 reported bike crashes occurred at intersections, roadways, and bike paths. (50% at Pitkin and University)
 - ◆ Many bicycle crashes are unreported. Generally, crashes are reported due to physical damage or injury.
 - ◆ Consideration of surface conditions that can cause bike accidents.
 - Suggested Locations for Further Review – these are concerning areas that we can initially gain learning from. Information and tools learned at these spots will be applied to other intersections.

- Question mark area signifies new apartments with 2,000–3,000 beds that will be a location to monitor in the near future, not knowing what the situation will be.
 - There was a fatality on campus – the data analysis is not leading to that location, but it doesn't mean that area won't be studied or addressed.
 - There are many intersections on campus such as by the Administration Building at Libbie Coy that will change significantly with the construction and modification of University Ave at Shepardson.
 - Generically, most of the infrastructure to the east is primarily simpler stops, slower speeds, lower volumes and could be addressed through enforcement; does not have an inherent deficiency in infrastructure.
 - Alternatively, the LSC knuckle on the west side is an extremely complex location. Enforcement in that location may not yield the most beneficial results.
 - There are higher volumes on the west side of campus. Most people coming from the west focused on University Ave, Hughes way, Pitkin, and Plum – these are primary conflict points.
 - Surprise from Rick Miranda that there are no identified hot spots on the east side.
 - Underpass under College and low stress Pitkin crossing assist with safety on east side.
 - Compliance isn't great, for example, by Libbie Coy Way, but that means enforcement and education are key tools for those intersections. The vehicle volume is lower.
 - ◆ CSU needs additional enforcement support. It is difficult under current staffing levels to ask the police department to enforce when there is a compliance problem. They currently have other priorities.
 - Railroad tracks and MAX add complexity to east side.
 - Consultant Fehr and Peers to develop recommendations for highly conflicted areas of infrastructure, prioritize, and produce cost estimate for them.
 - Will need a multi-focused approach through people (enforcement), programs (education), policy, and projects (infrastructure improvements) to help make campus even safer.
 - Safety criteria involve speed and predictability of all the modes.
- Highest Priority Infrastructure Areas
 - Blue dots on PowerPoint slide indicate intersections that are part of the Meridian Development project.
 - Recent changes on campus influence what is happening:
 - Many intersections and corridors were designed for vehicles, but there are now much higher volume levels of pedestrians and bikes.
 - ◆ Signage and paint solutions are not enough; will need more visual infrastructure that clearly delineates and forces predictable movement.
 - Campus is more permeable. CSU and Fort Collins community migrating into campus at higher volumes. Campus is more approachable.
 - ◆ Shift in mode use for coming onto campus and being on campus.
 - Red dots flow diagrams on PowerPoint shows complexity of what's occurring and common identified issues.
 - Meridian Ave./Plum St
 - Meridian Ave./University Ave.

- Meridian Ave./Hughes Way
 - ◆ A challenge today, Meridian Village redevelopment will change this situation and has the potential to push the issue a block to the east with the realignment of Meridian. We need to be thoughtful and Don't want to repeat the same problem a block away.
 - University Ave./Arthur's Ditch Trail
 - University Ave./Green Trail
 - ◆ ATFAB funding paired with ASCSU to look at this area
 - Morgan Trail/Green Trail
 - Pitkin Street – Braiden Trail
 - Lake Street/Center Avenue
 - ◆ Enforcement is critical to this area
- Potential Solutions
 - Street modifications
 - Signalized Intersections for bikes and peds
 - Crossing beacons to give priority crossing
 - Separation of modes
 - Protected bike lanes
 - Bike roundabouts/ bike-vehicle roundabouts
 - Have we considered a roundabout solution in non-bike scenario?
 - ◆ A Senior Engineering Design Group for the Meridian Village project considered a potential location for a round-about at the intersection of Hughes Way and the new realignment of Meridian.
 - ◆ Senior Engineering Design Group 2–3 years ago looked at Plum and Meridian for round-about.
 - ◆ Roundabouts keep all modes moving, eliminating some of the right of way challenges.
 - ◆ However, roundabouts have challenges for pedestrians; they are difficult for people who are visually impaired.
- Next Steps – We need to take a comprehensive look at campus and make recommendations that include enforcement, programs, policy, and projects. We need to focus on high yield situations – using the identified 6–8 areas.
 - Alan Rudolph asks how we compare to other peer campuses.
 - Given the volumes, we have a pretty safe situation on campus. Few crashes result from unsafe behaviors. Injury-related crash data is low.
 - Alan thinks this could be a synergistic opportunity to leverage the research enterprise safety efforts.
 - ◆ Unlike traffic accidents, there aren't systems for lab safety and accident reporting – working on significant initiative around this.
 - ◆ Could have collective messaging and funding for safety.
 - National initiatives such as Vision Zero campaign or initiative through Colorado Department of Transportation that indicate we can strive for being accident/crash free.
 - How we compare in travel to other universities

- ◆ Most universities don't have split modes like we do. Most universities have about 80-85% of the student population driving, which is different than CSU. Hard to give comparison because other universities don't have the shift in transportation like we do. Most schools are dealing with how to get more parking spaces, remote parking vs. alternative transportation. Difficult to do benchmarking because schools are asking us how we are doing what we do with bikes, peds, and transit.
- ◆ Fehr and Peers uses U.C. Davis as a comparison for us.
- ◆ Boulder comparison is difficult as well because more of their students and employees can't afford to live in Boulder. They work on how to get people carpooling and on regional transit. They use Uber and Lyft. Their bike network is made up of underpasses and riding on massive sidewalks. It's a very different approach.
- ◆ Degree of permeability for CSU is unusual for other universities. It's a unique situation being able to take a bus into the core of our campus and that bikes can park in front of buildings.
- ◆ At Boise state the city transit runs the perimeter of campus, which changes their ridership.
- ◆ We have a federally funded transit center on our campus, which also separates us from other universities.
- Rick Miranda asks does having more bicyclists with experience create a higher level of stop sign compliance?
 - ◆ Aaron Fodge thinks that at the intersection of Libbie Coy Way and University employees may go through stop signs based on knowing there is no enforcement. But on the east side of campus, it's learned behavior. Generally, first year students are not as experienced as bicyclists.
- Rick Miranda asks, how will this all change with E-scooters?
 - ◆ More people who were pedestrians or rode the bus will be using E-scooters rather than bicyclists. People who are less experienced, have a greater sense of freedom without a sense of the laws that govern it. Will see a new behavior that may mimic to some degree the unsafe bike behaviors we have, if they perceive it to be safe to do so.
 - ◆ Geo-fencing for rental E-scooters, but not for personal E-scooters.
 - ◆ We need an ongoing investment in a culture of safety, as well as infrastructure and enforcement.
- General recommendations by the end of 2019. Infrastructure recommendations and cost estimates will occur in February 2020.
 - Media campaign around creating a culture of safety; educational programs; look into bike enforcement funding models
 - Most Transportation and Mobility Safety Taskforce members see this as ongoing, something that needs to be reviewed on a continual basis to keep up with changes on campus.
 - Lynn Johnson asks about the timeline of the consultants.
 - ◆ Infrastructure recommendations in Feb. 2020
 - ◆ Consultants began 11/13.