Physical Development Committee (PDC) Minutes – November 19, 2021

Location: Virtual on Microsoft Teams

Participants: Bob Kaempfe, Nik Olsen, Fred Haberecht, David Bradford, Kristi Buffington, James Sites, Sadie Kinney-McGrath, Michelle Carroll, Mike Ellis, Mark Paschke, Justin Dove, Ria Vigil, Amy Barkley, Tonie Miyamoto, Susan James, Stacey Baumgarn, Ali Raza, Mark Ritschard, Tim Kemp, Monica Latham, Christie Matthews, Beth Adams, Paula Mills, Becca Mueller, Tom Satterly

Guests: Jason Huitt, Brian Hood, Aaron Fodge

1. University wireless and cellular technology - current guidelines
   A. This item is meant to be an update about the current status of cell service and cell tower distribution across campus.
   B. It is possible that the current guidelines may translate into a policy. A copy of the guidelines has been sent prior to the meeting and Jason also added the document to the chat.
   C. Fort Collins has many regulations related to cell phone towers within city limits to prevent obstructions to sightlines, which is similar to CSU’s perspective.
      a. Jason shared a recent survey that Fort Collins conducted for their Telecommunications Master Plan, which includes CSU properties.
      b. Gaps in service include South Campus and Foothills Campus. More coverage would be beneficial in these areas.
      c. Jason will share this report with the Committee in the chat.
   D. There has been a modest uptick in requests by carriers to increase coverage on Main Campus, which has overall good coverage and does not need additional.
   E. Telecomm invests a lot of time in reviewing requests to determine if the infrastructure to support the request is available, understand construction impacts, and discuss with campus stakeholders such as PDC.
   F. 5G is also of concern.
      a. 5G doesn’t penetrate buildings as well as 4G and carriers want to densify to coverage. Density of cell tower structures may not be desirable for our campus.
   G. Guidelines developed are meant to set expectations about baseline requirements. Evaluation criteria of proposals is outlined in the guidelines.
      a. Financial specifics are not the only criteria evaluated within these proposals.
      b. The guidelines also indicate that there is no right of way on CSU campus. Carriers need to understand this from the onset.
   H. CSURF will have the ability to refer carriers back to the guidelines to move forward.
      a. CSURF receives the requests and engages with Facilities Management and Telecom. Other stakeholders are engaged as needed. This is a time consuming process.
   I. Telecomm will continue to refine strategize new technology application as those technologies evolve.
   J. Telecomm is also engaging in conversation with peer institutions to borrow lessons learned to evolve strategy.
      a. Some universities have developed an RFP specific to 5G coverage.
   K. Fred asked if Telecomm has received complaints from students that they have inadequate service on campus.
a. Jason responded that student invest in the campus wireless network through the technology fee. General Assignment classroom buildings re prioritized and Telecomm refreshes the technology with latest and greatest.

b. Students are interested in bolstering outdoor Wi-Fi coverage outside. University Technology Fee Advisory Board (UTFAB) expresses the desire to roam across campus without loosing connection.

L. Fred asked how fluid is this situation. Will cell towers installed now still function in 10 years?
   a. Yes, if we allow carriers to install cell tower equipment, they will continue to upgrade if they are given a foothold on campus.
   b. Telecomm has a 5 year lifecycle on wireless access points, except for high traffic buildings like the LSC or Morgan Library. Those buildings are refreshed more frequently but Telecomm maintains a continual refresh cycle for Main Campus buildings.

M. Susan said that the guidelines seem to be reacting to carriers asking to put up towers but normally CSU conducts a procurement process. Is that happening as well? How do we be more proactive?
   a. Jason replied that Telecomm is trying to take conservative position because the technology is evolving. When 5G first came to campus, towers were needed every 500 feet, which would have required major trenching across campus. We need to maintain the look and feel of campus and avoid the unnecessary development of now outdated technology.
   b. We can develop a full RFP but that would make more sense for areas for targeted areas like Foothills Campus, where we know we have coverage limitations.
   c. Brian added that procurement isn’t used as the carriers are bringing their equipment and leasing the space/land from CSU.

N. Stacey said that the guidelines do not explicitly state that the carrier should follow campus standards and do not mention the specific aesthetic impacts or criteria around which the PDC would allow cell towers.
   a. Fred replied that this topic formerly came to the PDC with questions regarding aesthetics and about how much coverage we can allow to be provided. We felt we were overcommitting a finite resource of fiber.
   b. The PDC is the keeper of the aesthetics and have feedback about what these should look like, similar to our light poles.
   c. Brian added that cell leases are one sided leases. The cell tower can get out of the lease by 5 or 10 years but the University cannot. If overall aesthetic desires or infrastructure resources change, the University cannot get out of the lease.
   d. Jason said that fiber resources are needed on Foothills Campus and that investment is significant. If we commit fiber to third-parties on Foothills, it is not available to research on Foothills Campus. We need to be mindful about the resourcing of the fiber.

O. Jim shared that the business model for the provider may not match with the needs of the University. A carrier may pay the University or in some cases, we may have to pay a carrier to get the coverage we need.

P. Jim also asked if the indirect cost of the return on research projects has been discussed in relation to how we decide what projects to invest in?
   a. Fred said no, indirect cost to research has not been in the conversation yet.
b. Jason will look into indirect costs and may discuss with peer institutions.

Q. Tom asked about the current limitations at Foothills Campus, specifically IDRC. What is the resiliency of communications at the IDRC? Can the limitations be addressed by this project so that CSU becomes the university of choice for partnership for the IDRC mission?
   a. Jason replied that they are aware of buildings needing more resources on the Foothills Campus such as Atmospheric Science
   b. All network infrastructure at this facility will soon be upgraded.
   c. There are known gaps in outdoor technology such as at the Hydrology Lab. Telecomm is working with users to solve issues but they are often in a reactive position.

R. Tom also asked how often information about technology gaps for foothills is collected. Do we check in with these users?
   a. Stakeholder engagement could be done better and it is difficult to evaluate with third party groups at Foothills as they maintain their own infrastructure.
   b. Wireless network team sweeps campus once per year to do a coverage survey, ensure technology is working, evaluate if coverage is sufficient, and to monitor the performance of the network.
   c. Telecomm would welcome end users to be more vocal about their coverage needs.
   d. Fred added that the CST outreach session showed a common theme of leveraging communication/technology/connectivity resources.

S. Mark P. commented in the chat - “Please keep the Mountain Campus in mind as an area of need.”
   a. Telecomm has had a lot of conversation with HDS and WCNR with regards to Mountain Campus connectivity. A campus focus approach is needed for network planning.

T. Stacey mentioned electricity demand and metering in relation to the cell towers. Where does the lease payment actually go? To increase campus transparency, we should be explicit about who is being impacted and who is receiving the benefit?
   a. The lease payment partially cover the cost of construction and operation.
   b. Brian stated that most rooftop tower leases are less than $5,000/per month and we have 7 right now. The idea is not to be financially profitable to the but to bring a benefit to the University overall.

U. Fred said the process is ongoing and involves a partnership between ACNS, Facilities Management, and CSURF.
   a. We want to be strategic about how we address the demands of the carriers. This topic will return to the PDC in the future.

2. West Elizabeth Street Corridor Improvements
   A. Aaron Fodge introduced the West Elizabeth Street Corridor Improvements project as a result of city planning efforts in coordination with the Stadium project.
   B. West Elizabeth is a vital corridor used heavily by students and staff, with many transit routes.
   C. The project secured a grant and the University and the City of Fort Collins both raised matching funds to support the design of the project.
   D. As proposed, the project will connect to the existing MAX through campus and navigate the West Elizabeth corridor to connect to a new Foothills Transit Center.
   E. The project aims to meet the needs to increase capacity, improve transit connectivity, increase multimodal safety, and increase interconnectivity between modes of transit.
Currently, trailer busses are running along Elizabeth to ensure students are not getting left behind due to high capacity of busses.

Better connectivity from Main and Foothills campus is needed as research opportunity grow.

Walkways and bikeways along Elizabeth are in need of improvement

Complete Street Standards will be implemented in the project to ensure safe inaction of modes of transportation.

The West Elizabeth BRT will have busses run every 7.5-10 minutes during peak hour to directly connect to Foothills Campus, the LSC Transit Center and the MAX station at Laurel.

A new Transit Center at the Equine Center on Foothills Campus will be constructed.

Roundabout at Overland Trail will be created

Protected Bike Lanes on Elizabeth will be added.

Other benefits of the project include safer crossing at Overland Tail and a multiuse path on west side of Overland Trail to connect to path at Rampart Road.

Currently, transit routes to and from Foothills Campus down the Elizabeth corridor are overburdened and sometime difficult for students to navigate.

The project will increase capacity and frequency of transit.

Aaron shared several graphics of planned routes and stations, station plans, a typical cross section and conceptual designs.

Aaron’s presentation will be shared with the PDC to review.

Outside of the City’s outreach efforts, CSU staff have engaged with ASCSU and RHA to communicate this project’s goals.

Staff have also hosted listening sessions at Foothills Campus and three tabling sessions at the LSC Plaza, Morgan Library, and Transit Center.

An online interactive map and a survey was created and was distributed through SOURCE and The Collegian.

The survey was also available via a QR code on busses and the high-density student housing developments surrounding campus received the survey via email

Tim shared details regarding the project’s funding and schedule.

The passing of the infrastructure bill will increase the likelihood of funding.

This project is on the Federal Transit Authority’s list as a legitimate project to be eligible for funding.

Staff have identified right of ways and footprints.

The City is finalizing plans this December and CSU will finalize by February 2022.

We don’t know specifically what the total project cost or match of funding will be but will plan to come back to PDC for an update.

In general dates if all goes according to plan, final engineering would start in October 2022, construction would begin in November of 2023 and last until summer of 2025.

The project schedule is laid out as Deign/Bid/Build but there may be opportunity to adjust project developer to get a faster schedule.

Fred asked Aaron to share details of ridership pre and post MAX.

Ridership is tracked by RamCards and tracks both student and staff.

Pre-MAX ridership of students = ~900,000

MAX Year 1 ridership of students = ~1,500,000

Post-MAX ridership of students = >2,000,000
M. The grant also provide opportunity to address some deferred maintenance issues on roads and underground utilities at Plum and Meridian.

N. Fred reminded the group that part of the charge of the PDC is to give guidance on projects and to also communicate back to your constituency to gather feedback about projects.
   a. Share this presentation and information with your colleagues and report back with any questions or comments.

O. Tom thanked the team and for strategically investing in opportunities and he believes the project is well positioned to move forward rapidly.
   a. Ali commented in the chat - “Big fan of this project - especially as a daily transit rider! Appreciate the work, Aaron and crew.”
   b. Susan commented in the chat - “It looks like a great project and I hope you get your grant.”

P. Fred shared a concern about limited awareness about the project. Are there other ways to put information out about the project to gain more awareness?
   a. The President’s Office is in support of this project if it increases safety and eases challenges to ingress/egress of campus. It is positive to hear about the partnership with the City and more details about the funding of the project would be helpful.
   b. Ali commented in the Chat - “Connecting with Lindsay Mason from Off Campus Life (if not done already) may be a good way to continue getting the word out.”

Q. Christie asked for clarification about how the route connects to the MAX.
   a. Route will head east from Transit Center on Main Campus to Laurel Station via Meldrum.
   b. Nik commented in the chat - “Agree that Meldrum is a much better entrance than the Oval connection.”
   c. Discussions of a station on Howes by USC/Howes Business Center are happening.

R. Fred shared that he is excited about this highly impactful project and the PDC will learn more as it develops.