CITY OF BELLEVUE
BELLEVUE TRANSPORTATION COMMISSION
MINUTES

September 22, 2016
5:30 p.m.

Bellevue City Hall
City Council Conference Room 1E-113

COMMISSIONERS PRESENT:	Chair Zahn, Commissioners Bishop, Chirls, Lampe, Wu,
COMMISSIONERS ABSENT:	Commissioners Larrivee, Woosley
STAFF PRESENT:	Kevin McDonald, Paula Stevens, Department of Transportation
OTHERS PRESENT:	Chris Breiland, Don Samdahl, Fehr & Peers Transportation Consultants
RECORDING SECRETARY:	Gerry Lindsay

1. CALL TO ORDER

The meeting was called to order at 5:31 p.m. by Chair Zahn who presided.

2. ROLL CALL

Upon the call of the roll, all Commissioners were present with the exception of Commissioners Larrivee and Woosley, both of whom were excused.

3. WORKSHOP: MULTIMODAL LEVEL OF SERVICE

Senior Planner Kevin McDonald noted that the workshop would focus on the staff recommendation for multimodal level of service (MMLOS). He said once the Commission weighs in and input is incorporated, the recommendation will become the Commission's.

Mr. McDonald said MMLOS is an organizing principle for much of Bellevue's approach to mobility for many years. The intent of the work is to document the metrics that are being used and proposed, the development of new standards for some modes, and to ensure that the metrics and standards are implemented as transportation projects are designed and operated in the city. MMLOS will also help identify, prioritize and fund transportation projects to advance the objective; help capture the synergy that sometimes comes with overlapping projects; and help reconcile competing interests where there may be limited resources and environmental constraints.

In the 1989 Comprehensive Plan , the goal for the Transportation Element was to improve streets to accommodate various modes of transportation at reasonable operating levels. In the 1993 Transportation Element, the goal was to develop a fully integrated and fully assessable public and private transportation system to accommodate present and future demand. The 2015 goal that was adopted into the current Comprehensive Plan is to maintain and enhance a comprehensive multimodal transportation system to serve all members of the community.

To implement the policy, the Traffic Standards Code from 1993, which was revised in 2009,

establishes roadway standards that balance congestion management with land use and urban design objectives. It also establishes Mobility Management Areas (MMA) with both long-range objectives and shorter-term standards that are tailored to the characteristics and the mobility options and needs of each area. Vehicle LOS standards are also adopted for each MMA that reflect other available mobility options. It is clear that many of the multimodal LOS metrics that are incorporated in the current umbrella project are already embedded in the code.

The Transportation Development Standards is the code that enables the Department of Development Services staff to obtain dedicated rights-of-way or easements as private development occurs, and to have private development projects install street frontage improvements as a condition of development approval. The implementation strategy is embedded in the code. MMLOS also pulls design guidance from the Transit Master Plan, the Downtown Transportation Plan, the Pedestrian and Bicycle Transportation Plan, and the Pedestrian and Bicycle Implementation Initiative. The first Pedestrian and Bicycle Transportation Plan was adopted in 1993, so the notion of ped/bike mobility has been around for a long time.

Mr. McDonald said MMLOS creates a framework for building and managing the comprehensive transportation system. It also covers safety concerns, as directed by the Vision Zero policy; and scoping, planning, designing, building, operating and maintaining streets, as directed by the Complete Streets ordinance.

Mr. McDonald introduced Chris Breiland and Don Samdahl with Fehr & Peers Transportation Consultants. He noted that they have been working with staff over the summer months on getting the metrics right based on the guidance provided by the Commission in March, and on developing standards for each mode that are consistent with the policy based expectations of the community.

Mr. Breiland said the March 10 Commission meeting resulted in a framework for developing metrics and leveraged work done a couple of years ago focused on best practices. There was agreement around the fundamentals of the metrics that were discussed, which was a mix of qualitative and quantitative measures. The Commission indicated a desire to retain the vehicle LOS metrics and standards; voiced concerns about the level of complexity to calculate and apply MMLOS; agreed with the need to be mindful about funding constraints and setting standards appropriately; gave direction to focus to the quality of the environment for pedestrians and bicycles; and gave direction to focus on those elements of transportation level of service over which the city has control.

Mr. Breiland explained that LOS metrics and standards ultimately adopted will need to be reflected in an update of the Transportation Element of the Comprehensive Plan, and regulations in the Traffic Standards Code and the Transportation Development Code.

Mr. Samdahl noted that the Commission on March 10 concluded that the existing vehicle LOS metrics and standards are working generally well and have stood the test of time. The city currently uses one metric for concurrency and another for planning. For concurrency, the metric used is the volume/capacity (V/C) ratio at system intersections, while for long-range planning the metric used is vehicle delay at intersections. The city is divided into 14 MMAs and the V/C and delay standards vary by area due to urban form and the available mobility options. In the next phase, consideration could be given to adjusting some of the MMA boundaries, but for the current study they are kept intact.

Answering a question asked by Commissioner Wu regarding V/C ratios and intersection delay, Mr. McDonald noted that during the Comprehensive Plan update process in 2015 the Commission looked specifically at the MMAs and intersections therein. Some minor adjustments were made to reflect traffic patterns. Commissioner Wu asked about the difference between concurrency and long-range planning and Mr. McDonald explained that concurrency helps define the actual configuration of potential future projects and allocates resources toward building them. For long-range planning, the focus is on the general capacity to move vehicles within specific geographic areas and around the city based on the delay vehicles encounter at intersections, without necessarily constraining the environment in which they are moving.

Commissioner Bishop said he had no argument with the system of calculating the LOS standard either for concurrency or for intersection delay. He said the issue that concerned him was the level established as the standard in the Comprehensive Plan and in the code. The downtown MMA allows for nine intersections to exceed the 0.95 standard. Currently, the downtown's LOS is less than 0.80, and only one intersection exceeds the standard, yet everyone complains about how bad traffic is in the downtown. The difference between 0.80 and 0.95 is huge and the resulting congestion would be significant. He noted that Commissioner Woosley is involved in a development project in MMA 10 in Eastgate where the LOS standard is 0.90. The Planning Commission has been holding hearings with regard to the plans for the Eastgate/I-90 corridor and people are swarming to those meetings with complaints about traffic in Eastgate. The standard is high enough that almost any development can be permitted without exceeding the concurrency or planning LOS, but the perspective of those that live and work there is quite different.

Chair Zahn said she was having a difficult time reconciling the view of many people who experience overwhelming congestion in some areas of the city with the notion of an acceptable average level-of-service within MMA boundaries. The fact that the transportation levy that will be voted on in November is different from the version that the Commission talked about in March; it is something that highlights the need to prioritize where transportation dollars are spent.

Commissioner Bishop asked if the current process will include looking at the standards in the individual MMAs. Mr. McDonald said that is a topic to be discussed after the metrics and standards are settled on.

Commissioner Chirls said he has been struggling with the same issue, particularly as a downtown resident. No matter how it is viewed, traffic in the downtown is a problem, which is hard to reconcile with the fact that the metric for the downtown has not been exceeded. The ped/bike section has a discussion of how people feel, but there is nothing similar as it relates to LOS for cars. The recommendation is that changes to LOS vehicles should not be made, but he suggested that position should be discussed.

Mr. Samdahl explained that the current process of translating intersection v/c and delay into the LOS letter grades (A-F) is largely based on driver perception of how bad things are for them, personally. The problem comes in, especially in a place like the downtown, where there is a corridor having delay at three or four intersections in a row. The same comments were made, and the same discussions were held, at the time the Traffic Standards Code was first drafted and adopted. In the initial code, a level of service was set for each individual intersection. Development that came in that would worsen the LOS at any single intersection below the standard was either not allowed to proceed or was required to effect some improvements. For a period of time, that resulted in the city chasing individual intersection problems, adding double

turn lanes and the like. That resulted in looking at things a bit more holistically, and that is where the MMAs came in.

Mr. Samdahl asked Commissioner Bishop if his concern was that the standard is too high for the congestion allowance, or if the way things are measured accurately reflects reality. Commissioner Bishop said his belief is that the standard is too high. He agreed that LOS calculations are largely based on how drivers feel. The profession has evolved over the decades with regard to how LOS should be defined, but it always comes back to how the A through F LOS grades feel to drivers. Most agree that LOS C is okay, but LOS D is not. LOS D is between 0.80 and 0.90, while LOS E is 0.91 to 1.00 and is deemed very uncomfortable. The closer to LOS 1.00, the greater the number of people who are screaming at the Mayor, and LOS 0.95 is tipped toward the screaming level, and under the current approach, nine downtown intersections are allowed to exceed that level.

Commissioner Chirls pointed out that construction is a clear contributing factor to congestion in the downtown and could potentially become a factor in Eastgate. New development can cause congestion to worsen once it is fully occupied, but so can the development process that can take up to three years or more for very large buildings. Based on the plans that are in place, construction congestion is undoubtedly going to occur for the foreseeable future. Mr. Breiland agreed and pointed out that the SEPA process addresses construction impacts. It is not possible to look out six to twelve years into the future and say with any degree of certainty which streets will be impacted by construction. Construction impacts need to be addressed through the permitting process and the associated mitigations; construction impacts are not part of the overall process of determining LOS and intersection delay metrics.

Mr. Samdahl explained that under concurrency, six years are allowed to make improvements. In the worst case, a development going in could make things worse until they get better. It could also be argued that, assuming development will continue as it has been, there could be a somewhat permanent reduction in capacity because of the associated construction activities.

Mr. McDonald said the point is well taken with regard to congestion management. It is outside the scope of the current MMLOS work, however. He added that the right-of-way managers who deal with construction traffic mitigation have been invited to attend an upcoming Commission meeting to discuss a number of different topics.

Commissioner Chirls suggested there is only so much that can be done to mitigate construction problems. If during a timeframe spanning six years or more multiple projects come online in the same area, the way to address the impacts may be through changing the standards. Mr. McDonald said the issue certainly lies within the bounds of the concurrency report produced on a semiannual basis. The Commission is set to receive an update in October from the transportation forecasting manager who does the concurrency analysis.

Commissioner Wu asked why the intersection level continues to be used for measuring LOS instead of taking a corridor or subarea network approach. Mr. Breiland commented that while intersections form the basis for calculations, at its core the current approach is based on the MMAs. The intersections within each area determine the congestion level. The approach does not currently employ a corridor approach, which is something some cities do. Mr. McDonald said in some cases is may make sense to retain the area approach, while in other areas it may make sense to overlay the area approach with a corridor approach. The project will include revisiting the MMA assumptions and could ultimately result in adding a corridor evaluation layer.

Mr. Breiland said the issue of pedestrian LOS has not been explicitly defined to date. He said in considering what the pedestrian LOS standards should apply to, the determination made was that the metrics could be applied anywhere, but the standards should apply to arterial streets. Arterial streets connect a lot of land uses and enjoy transit options; they are also the most difficult streets for pedestrians to cross. The elements of the pedestrian LOS standard should be sidewalks, intersections and arterial crossings at non-intersection locations. He said in looking at developing standards and metrics, heavy reliance was put on the city's street design standards and the Land Use Code. The recommended pedestrian LOS standards attempt to recognize different land use contexts for the street environment and different expectations relative to location.

Continuing, Mr. Breiland said the land use context is defined for five areas: 1) downtown, which has a lot of defined expectations set for the pedestrian environment by the Downtown Transportation Plan and the Downtown Livability Initiative; 2) activity centers, including BelRed, Crossroads, Factoria, Wilburton and Eastgate; 3) neighborhood shopping centers as defined by Neighborhood Business zoning, specifically Northtowne, Lake Hills, Newport Hills and similar areas; 4) pedestrian destination areas, such as schools, parks, community centers, Frequent Transit Network stops, trail crossings and libraries; and 5) other areas not specifically addressed but which can be put into the broad categories.

The process of developing pedestrian LOS standards began with the design manual. For arterial streets, the city's design manual calls for sidewalks on both sides of the street that are six to eight feet wide separated by a landscape buffer of between four and six feet in width. The design manual covers all areas of the city except the downtown and BelRed, areas that have their own standards. The Downtown Land Use Code houses the standards for the downtown and the Downtown Transportation Plan includes the intersection concepts of standard, enhanced and exceptional.

The design manual, the Downtown Transportation Plan and the Land Use Code that relates to the BelRed subarea were relied on in developing a recommendation for what the pedestrian LOS standards should be across the city. Mr. Breiland said three elements were determined with regard to context: 1) sidewalk and buffer width; 2) arterial crossing frequency; and 3) signalized intersection treatment. He called attention to a matrix outlining the recommend standards for each element as they relate to the five specifically defined land use areas of the downtown, activity centers, neighborhood shopping centers, pedestrian destinations, and elsewhere. He explained that for the parts of the city not covered by higher density designations, the recommendation was to follow the design manual. For each more dense area, additional refinements are added, such as increasing the width of sidewalks and buffers, and increasing the distance between arterial crossings. For intersection treatments, the recommendation is to conform to the design manual for neighborhood shopping centers, pedestrian designations, and other areas, but to meet the dictates of either the Land Use Code or the Downtown Transportation Plan for activity centers, and the Downtown Transportation Plan in the downtown.

Commissioner Lampe commented that the standards for development shared with the Commission appear to be very good. He noted, however, that down the road as projects get prioritized, there will need to be some data that offsets one approach against another, such as whether a turn lane or a protected bike lane should be installed at a particular location. Having more quantifiable elements will assist in the prioritization process. Mr. Breiland cautioned against pitting the LOS metrics against one another to avoid having to face trading one mode

for another. Having the standards in place will make it possible to determine how much of the city's arterial pedestrian network meets the standards, and how many of the city's intersections exceed the congestion allowance. To date, the quality of the pedestrian environment has not been measured in any way. The approach will facilitate being able to determine what percentage of people live or work within areas that do not meet the defined standards, and the percentage of the system that falls below the standards.

Commissioner Bishop suggested the pedestrian standards are as much about the development review and approval as they are about capital construction costs. Any building permitted for construction would be required to build to the new standards. The problem is that the result could be some patchwork of wide sidewalks, narrow sidewalks, and gaps that a CIP project will eventually have to address. He added that changing the standard for 156th Avenue NE would be unlikely to change any development proposal for the back side of the Crossroads Mall site because the only thing facing 156th Avenue NE is parking lot. He also suggested that a usage metric relative to the Frequent Transit Network stops should be applied in determining pedestrian facilities rather than simply distance; the stops that enjoy a much higher usage are more in need of pedestrian facilities. He also questioned implying in the standards that a crosswalk is needed every 300 or 600 feet; midblock crosswalks are directly opposed to the Vision Zero goals.

Commissioner Wu said it appeared to her the intention behind the proposed standard was to facilitate pedestrians in crossing streets to get to the library or a shopping mall. She agreed, however, that a standard calling for a crossing every so often is not realistic in practice. Mr. Breiland clarified that the proposal does not call for a midblock crossing every 300 feet or every 600 feet, rather it calls for having an appropriate and engineered crossing within a set distance of the Frequent Transit Network stops, especially where there is a matching stop on the other side of the street. Where opportunities are not provided for pedestrians to cross the street, they tend to jaywalk.

Commissioner Bishop pointed out that most high-use bus stop pairs are near intersections. Mr. Breiland agreed but said the intent is to provide crossing opportunities at those bus stop pairs that are not located near intersections. The question about applying a threshold to the standard on ridership was discussed with Development Services staff who brought up the issue of a new apartment building being developed in BelRed where the current ridership of the existing stop is almost zero. The fact that some 600 units will be brought online is evidence that use of the stop will increase. Adopting standards will pave the way for the city to make sure frontage is retained for bus stops as properties develop.

Chair Zahn suggested that the table should more clearly outline the purpose for it and the desired outcome rather than simply stating prescriptive solutions. Commissioner Wu agreed.

Chair Zahn asked what changes the East Link project will bring and how the city is addressing the change in traffic patterns. Mr. McDonald said the sidewalk dimensions and intersection typologies reflect the presence of East Link stations. Mr. Breiland added that the Transit Master Plan, which serves as the basis for the Frequent Transit Network, also factors in the ultimate development of East Link.

Chair Zahn asked if consideration has been given to developing pedestrian bridges instead of at-grade midblock crossings to improve safety for pedestrians. Mr. Samdahl said there are good guidelines in place relative to appropriate crossing treatments that are based on conditions such as traffic volume, roadway width, traffic speed and the like. A grade-separated crossing would

address the most extreme traffic situations. The problem with elevated crossings is that they are often not heavily used because they require extra effort for the pedestrian. He agreed, however, that elevated crossings should be included in the mix of appropriate treatments.

Mr. McDonald pointed that that except in the downtown, there is no prescription for where pedestrian bridges are supposed to go. The downtown locations where they are allowed are spelled out in the code and they are done in conjunction with development on each side of the street. The midblock parameters for elsewhere in the city are not prescribed. Typically, midblock crossings outside of the downtown are publically funded. The one to be constructed on 116th Avenue NE to match Frequent Transit Network bus stops on either side of the street about 600 feet north of the intersection with NE 12th Street will include rectangular rapidly flashing beacons.

Commissioner Wu asked when the design manual was last updated. Mr. McDonald said the manual is administratively managed and updated. Implementation of the document is authorized by the Transportation Department director. It is typically updated annually, though an update has not yet been accomplished for 2016 because a new chapter focused just on the downtown is being added. The update will be completed soon. The document is available online for anyone to view.

Turning to the issue of bicycle LOS, Mr. Breiland said the recommended approach also relies on what has been adopted by the city or adopted by other agencies. He said bicycle LOS is the youngest of all the LOS concepts; the idea goes back a long way, but in terms of its practicality, it has only been in the last three to five years that it has started to come into its own. The metrics can be applied to any street, but the standards that are recommended would apply to arterial streets in the Bicycle network mapped in the Pedestrian and Bicycle Transportation Plan. The metrics were derived from work done by the Mineta Transportation Institute on the concept called Level of Traffic Stress, which is a measure of how comfortable people are bicycling with various levels traffic volume and speed. The methodology has been modified by Montgomery County, Maryland, and by the Washington State Department of Transportation for the Bicycle Design Manual.

The components that affect bicycle LOS are the city's standard designs, the Ped/Bike Plan recommendations, and the Bicycle Rapid Implementation Plan recommendations. The methods focus on bicycle rider comfort and riding ability, and the standards vary based on the priority of the bicycle route and traffic characteristics.

What works for bicyclists who identify themselves as interested but concerned is not the same as what works for bicyclists who identify themselves as confident riders. Based on the bicycle Level of Traffic Stress model, bicycle riders are divided into four groups: 1) interested but concerned – children and older adults; 2) interested but concerned – adults; 3) enthused and confident; and 4) strong and fearless.

The Commissioners were referred to the map of the bicycle network. Mr. Breiland pointed out that the corridors are defined as arterial corridors and priority arterial corridors. He noted that there are also off-street trails which will not have a level of service determined because by their nature they are low-stress environments for people riding bicycles.

A chart indicating the recommended bicycle LOS standards for travel along streets was shown to the Commissioners. Mr. Breiland stressed that the chart numbers are based on research. The somewhat complicated chart showed on the left roadway speed limits and the level of the

arterial traffic volume. The columns to the right indicated the types of treatments that could be implemented given the roadway characteristics; the treatments ranged from no street markings to sharrows, striped bike lanes, buffered bike lanes, protected bike lanes and physically separated bikeways. The higher the traffic volume and the higher the traffic speed, the more substantial is the treatment needed to make people comfortable riding along the street.

With regard to intersections, bicyclists experience additional stress and discomfort in situations where bike lanes end before the intersection. Mr. Breiland shared with the Commissioners a chart indicating the treatments needed at crossings to mesh with the recommended bicycle LOS along corridors. The chart indicated the bike signal actuation format, the bike signal type, a range of crossing treatments, a range of near-side intersection treatment, and a range of near-side with right-turn lane treatment needed to achieve each LOS standard. He noted that for bicycle LOS 1 and 2, the bike signal phase allows bicycles to move out before the vehicle traffic is allowed to move; for bicycle LOS 3, the initial green is adequate to allow bicycles to clear the intersection before cars move.

Mr. Breiland said the recommendation is to have a bicycle LOS 3 standard on all arterials in the Ped/Bike Plan, with the exception of a couple of exempt corridors, including NE 8th Street between Bellevue Way and 156th Avenue NE, Bel-Red Road, and Bellevue Way from the Y north to SR-520. Those streets, which are defined as priority corridors in the Ped/Bike Plan, are recommended to have an LOS 2 standard, except that within activity centers the standard should be LOS 1.

The Commissioners were shown a map of existing conditions as determined by applying the proposed metrics across the arterial network, with the specific corridors excluded. The map was color-coded to indicate the four LOS ratings. He noted that of all the arterial corridors, 46.2 percent meet the standard, and 27.1 percent of the priority arterial corridors meet the standard. Adding in the bicycle rapid implementation program projects, the bicycle LOS standard will be met by 70.5 percent of the arterial corridors, and 59.7 percent of the priority arterial corridors.

Mr. McDonald clarified that the comparison was made using the basic investment of $6.8 million in the bicycle rapid implementation program.

Commissioner Wu suggested the proposed bicycle LOS standards chart should be more conservative relative to traffic speed than by basing it on the 85th percentile of actual vehicle speed. She also noted that the various treatments needed to achieve bicycle LOS as shown on the standards at crossings chart are very good, but some of them have not been in use for very long. She suggested that because the tools shown may need to be updated frequently, they should be housed somewhere other than in the code. Mr. McDonald said the point is well taken. The treatments probably should be embedded in the street design standards instead to allow for administrative amendments as needed.

Mr. Breiland concurred. He pointed out that an LOS 1 facility warrants an LOS 1 intersection crossing. The research shows that the biggest failure of most cities, that are otherwise doing a good job of implementing bicycle infrastructure, occurs at intersections. Intersections are the hardest place for a bicyclist to navigate and are the location where the majority of collisions and injuries occur. The intent behind the recommendation is to make sure that the LOS standard is clear and to leave open specifically how to achieve that standard. Techniques will evolve over time.

Commissioner Bishop suggested that the various treatments – bike signal, crossing treatments, near-side intersection treatments and near-side with right-turn lane treatments – should have some kind of priority associated with usage. Just because something is on a bike arterial does not mean it will be used, and investments in those locations should be at a reduced level. Any approach going forward should be built on hard data rather than on a qualitative basis. Mr. McDonald commented that if the city had unlimited resources, the system could be implemented all at once. That is not the case, however, so it is necessary to identify priorities that will put facilities where they make the most sense, presumably to serve the most people, to address a specific safety concern, or to address some aggregate of conditions.

Mr. Breiland said the proposal does not argue against the use of data to prioritize investments and ultimately build out the network that has been adopted in the Ped/Bike Plan. Rather, the proposed approach utilizes research data to identify the facilities that address the comfort level of bicycle riders in the various categories. Unfortunately, there is no data to show that building a specific facility will result in a specific increase in the number of users.

Commissioner Bishop pointed out that the data indicates that there may be a thousand bicycles in the city daily, which is a very small percentage of the 1.2 million daily person trips. The proposed approach holds the potential for really skewing the CIP in favor of non-motorized facilities in that it is based on giving people what they want.

Commissioner Chirls said that Commissioner Bishop's comment neglects one aspect of the studies, which is safety. Facilities such as those that allow bicycles to get out in front of cars at intersections are specifically designed to reduce the number of accidents. The research that has gone into the presentation is about far more than just what people want. The evidence for various cities around the world and in the United States shows that when biking facilities are provided, people take advantage of them. Bicycle ridership is low, but investing in facilities will increase the number of riders.

Chair Zahn reminded the Commissioners that during the discussions regarding the bicycle rapid implementation program, questions were raised about whether the facilities would serve those going through the city or would ultimately serve to connect neighborhoods and activity areas. The transportation levy specifically talks about neighborhood safety and sidewalks, and if that is something the city believes in, then the proposal is on point. She also pointed out that with the new school start times, traffic on the city's arterials has grown worse because those going to high schools and elementary schools are all on the streets at the same time. It is entirely possible that if there were more safe bicycle paths, more kids would be willing to bike to school.

Commissioner Wu agreed that school traffic is a very big part of the morning commute. Having truly safe facilities could result in more kids walking or biking.

Commissioner Chirls suggested that a field trip would be in order so the Commissioners could experience the different bicycle facilities and treatments.

Mr. McDonald said the importance of maintenance cannot be overstated with regard to the level of usability of bicycle facilities. Systems that are not well maintained may as well not even be there. The city has good maintenance standards, and they are intended to provide for the mechanical sweeping of striped bike lanes. The city does not have the tools to maintain some of the types of facilities that are being suggested, and it will take investing in new tools and techniques.

With regard to transit LOS, Mr. Breiland said the focus has been on two factors: 1) the stop and station amenities; and 2) transit speed. He said access to the stops and stations is generally covered by the recommended LOS standards for pedestrians and bicyclists, and by vehicle LOS where park and ride facilities are involved. The transit speed standard has to do with implementing corridor and intersection improvements that can be effected by the city to keep transit moving, including transit priority lane/business access and transit lanes; queue jump lane/in-lane stop/station; and transit signal priority. The standards consider urban form and quality of transit service. For stops the focus is on where they are located and how much ridership and service they have. The speed factors consider only the Frequent Transit Network, the core backbone transit network in the city between activity centers. The standards are adapted from the recommendations of the Transit Master Plan and some of the amenities identified in that plan as well as the Downtown Transportation Plan.

Mr. Breiland shared with the Commissioners a matrix identifying the recommended standards for stops and stations. The matrix identified specific components and their relation to local stops, primary stops, Frequent Transit/Rapid Ride stops, and multimodal hubs. The components were weather protection, seating, bicycle parking, bike share station, and wayfinding. Having the standards will assist the city in making sure space is not lost when development occurs, and on guiding the city in prioritizing investments where capital projects are needed to fill in gaps. The chart recommended weather protection and seating at all stops; bicycle parking in the form of one short-term rack to accommodate two to four bikes at all but multimodal hubs, where the recommendation was for two short-term racks to accommodate four to eight bikes along with a bike cage or lockers. Bike share stations were recommended only for Frequent Transit/Rapid Ride stops in activity centers and at multimodal hubs. Wayfinding oriented to help people connect to other transit lines or destinations was recommended for all stops except local stops.

The recommended transit LOS standard for speed was identified as being focused on the Frequent Transit Network connections between activity centers and the target speed of 14 miles per hour was based on the Transit Master Plan target for speed of the Frequent Transit Network. The approach is fairly consistent with King County Metro which targets between 12 and 16 miles per hour for their Rapid Ride routes.

For the sake of rating the system, green relates to speeds higher than 14 miles per hour; yellow relates to speeds between 10 and 14 miles per hour; and orange relates to speeds of less than 10 miles per hour. Based on King County Metro data, the speeds between the core transit routes serving the downtown, Overlake, Crossroads, Eastgate and Factoria, none of the routes currently meet the proposed standard.

Commissioner Wu asked how much benefit there is to transit riders between an average speed of 10 miles per hour and an average speed of 14 miles per hour. Mr. Breiland said there is a large body of research focused on what makes transit work for people. Transit speed is not the most important element; reliability of the trip length is deemed to be more important. That is not, however, something over which Bellevue has control. Transit speed is important and is an element over which the city can have some control. There is a moderate interest on the part of transit riders where average speeds are greater than 14 miles per hour, but from the perspective of the transit agency, the increased speed is fairly significant relative to overall operating costs, and is important to riders relative to frequency.

Commissioner Wu asked what constitutes short-term bike parking and Mr. Breiland explained

that it relates to exposed racks that accommodate a few bikes. Long-term parking relates to lockers and cages that provide for more security. Local agencies are moving toward on-demand systems in which riders rent secure bike storage space.

Commissioner Bishop pointed out that the Transit Master Plan ended up with nine different scenarios based on transit funding levels. Each of the scenarios essentially had a different Frequent Transit Network. He asked which one was used in determining the recommended LOS standards. Mr. Breiland said all of the Frequent Transit Networks had roughly the same speeds identified in the plan, which was a little above 14 miles per hour. The proposed standards were determined based on the Frequent Transit Network routes between the activity centers, however they may ultimately develop.

Commissioner Chirls asked what scenario would justify a short-term rack at a multimodal hub. Mr. McDonald said the Bellevue transit center is currently the closest thing to a multimodal hub in Bellevue. There are bike racks there that people use to store their bikes instead of putting their bikes on the bus and taking them with them to where they are going. That is not the standard for future multimodal hubs, which will focus more on cages and lockers, which are more secure. Part of the problem is capacity; the buses can only carry three bikes, and the trains are designed to carry two bikes per car. People are encouraged to leave their bikes in a secure location. Mr. Breiland said it would be beneficial to include more cage and locker facilities. It is not uncommon for people to ride their beater bikes and park them at the less secure short-term racks.

Mr. McDonald reminded the Commissioners that the city has an investment program focused on putting in short-term bike parking facilities at visible and high-demand locations. In addition, the private sector is building secure bicycle facilities within buildings, particularly in the downtown but also in other areas where bicycle commuters are part of the employee demographic. It is turning out to be a recruiting tool for many, especially millennials.

Chair Zahn agreed as a bus rider that speed is less important than reliability. She asked if the wayfinding elements are intended to include information for riders about when the next bus is expected, how full it is, and other pertinent information. Mr. Breiland said initially real-time arrival information was factored into the transit stop LOS, but after an excited debate among staff, it was pulled out because of the transition toward having that information readily available on mobile devices. The wayfinding is actually focused more on helping people who want to rapidly orient themselves to the area. Tech savvy cities still rely on signs and other wayfinding techniques for that purpose.

Chair Zahn cautioned against making assumptions that all riders will have mobile devices at their disposal. She also suggested that in addition to focusing on transit that connects retail, healthcare and senior housing, attention needs to be given to accommodating high school students in riding to and from their campuses.

Commissioner Bishop voiced concern about including the bike share station component in the recommended standards for stops and stations. He asked if it implies a need for more right-of-way. Mr. Breiland explained that a bike share station takes up an area of about six feet by 12 feet, which of course requires right-of-way. They fit, however, within the 16-foot sidewalk standard at activity centers and is really more of a design issue than a right-of-way issue.

Commissioner Chirls said he is fully in favor of bikes but totally against bike share. It does not make sense in Seattle, primarily because of the hills. Their program includes paying people

who just bring bikes up from the bottom of hills to the top of hills. The bike share programs works very well in Manhattan and in Washington, D.C., both of which are flat and have bike facilities. Unless the bikes are electric, and unless the facilities are in place to protect the LTS 1 and 2 riders, bike share will not work. It is too farsighted to require the preservation of space to allow for the possibility that at some time in the distant future there will be a bike share program. Mr. McDonald agreed that the messaging could be adjusted to reflect the imminence or not of bike share.

Commissioner Wu commented that a sharing economy has arrived. The stops/stations recommended standards chart may not be the right place to acknowledge that, but it is the right place to plant the seed. Downtown Bellevue is not all that steep and a bike share program could work well there. As outlined, the table provides the necessary clarity in terms of the best treatments. Language could be added, however, to make the intended outcomes clearer.

Commissioner Lampe asked if consideration was given to accommodating kiss and ride facilities at stations. Mr. Breiland allowed that the issue is being addressed by Sound Transit and WSDOT and is not part of the transit LOS standards. Access by the shared economy of cars via Uber and autonomous vehicles was not seen as an imminent element.

Chair Zahn agreed that in looking at stops and stations facilities, space should be reserved for components such as bicycle parking and bike share stations, but without being specific about what should go where. The table should be drafted in a more flexible manner to accommodate ideas that may not even exist currently. Mr. Breiland said initially thought was given to a simple transit pad zone. That could be the way to get to a similar conclusion while avoiding getting entangled in the issues that might be ahead of their time.

Chair Zahn asked for an update regarding allowing transit riders to park in church parking lots. She pointed out that having a place to park is vitally important to transit LOS. Mr. McDonald said the issue was whether or not to engage in the conditional use process and the associated fees for church leased lots. He said the notion has not yet advanced through the land use process.

Assistant Transportation Director Paula Stevens said to her knowledge the issue has not been pursued by Development Services Department staff. The leased lot conversation was specifically highlighted with the prospect of East Link coming to Bellevue and the need to have sufficient parking spaces as mitigation during construction. Sound Transit has the burden of ensuring that there will be enough parking to accommodate those who will be displaced from the South Bellevue Park and Ride lot. They have been working with churches and other private sector property owners to secure the necessary permits to offset the parking that will be lost. She said she would check with the staff to see where things stand regarding a streamlined permitting process for Transit Master Plan related parking lots.

Mr. McDonald informed the Commissioners that the next regular meeting is slated for October 13. He also provided an update with regard to upcoming agenda items.

5. ADJOURN

Chair Zahn adjourned the meeting at 8:27 p.m.

Kevin D McDonald
Secretary to the Transportation Commission

11/10/16
Date

Chairperson of the Transportation Commission

11/10/16
Date