# Minutes of the REGULAR MEETING OF THE TAAC COMMITTEE

Wednesday, December 7, 2016

**Committee Members Present:** Chair Kjensmo Walker, Christopher Bates, Ken Rodgers, Robert Platz, Kari Sheldon, John Clark, Margot Imdieke Cross, David Fenley and Patty Thorsen.

#### Committee Members Absent: Heidi Myhre

Committee Members Excused: Julianne Bina, Adora Sage, Dona Harris and Pamela Zimmerman

**Council Staff Present:** Doug Cook, Pam Steffen, Steve McLaird, Christie Bailey and Kimberly Zlimen from Metro Transit; Dana Rude, Sheila Williams, Mai Thor, Andy Streasick, Heidi Schallberg, Mark Filipi and Alison Coleman.

Public Present: Todd Grugel from MnDOT.

# CALL TO ORDER

A quorum being present, Committee Chair Walker called the regular meeting of the Council's TAAC Committee to order at 12:33 p.m. on Wednesday, December 7, 2016.

# APPROVAL OF AGENDA AND MINUTES

It was moved by Bates, seconded by Imdieke Cross to approve the agenda. Motion carried.

It was moved by Fenley, seconded by Platz to approve the minutes of the November 2, 2016 regular meeting of the TAAC Committee. **Motion carried.** 

## **BUSINESS & INFORMATION**

Chair Walker introduced the new Vice Chair, Patty Thorsen.

## 1. ADA Accessibility on Public ROW

Todd Grugel spoke to the TAAC committee. He is the ADA Program Engineer at MnDOT. He has been in his job for six years. It deals with accessibility, construction standards and the curb ramp plan. He also does design reviews. For scoping projects, they do field locks. They work with all the design groups throughout the state. Now they are doing sidewalks, accessible pedestrian signals (APS). Basically, anywhere a pedestrian can walk. They try to make that accessible. They do about 80 projects a year.

There are basics of PROWAG (Public Right of Way Accessible Guidelines). It takes the ADA standards into the public right of way. There is a four-foot-wide minimum Pedestrian Access Route (PAR) with a maximum cross slope of two percent (1:50) is required. The PAR must be continuous and unobstructed. The PAR shall connect accessible elements, spaces and facilities. The maximum ped ramp slope is 8.3 percent (1:12). The sidewalk running slope is five percent (1:20). The maximum length of the initial ramp is 15 feet. The slopes and dimensions are absolute. PROWAG allows no tolerances for exceeding these maximums. These are minimums. The minimums lead to very poor designs. Highway engineers want to revert these minimums. MnDOT is trying to do better than that.

They used to have one kind of curb ramp (diagonal curb ramp). Later on, there are eight tier now: 1. perpendicular ramp is just a ramp coming down to the street at a right angle. These don't always work if you don't have the right-of-way or sidewalk width. They sometimes shorten the ramp up a little bit and use the slopes from the sidewalk coming into the landing to shorten up the ramp and make sure the grades are met.

2. Parallel ramps have a landing in the bottom. The sidewalk slopes down to a landing at the street surface. You always need to have a landing so the wheelchair is stable. The flat landing is less than two percent.

3. They have fan ramps. Sometimes you can't get two individual ped ramps in. Visually impaired users want to get two ramps but sometimes there is no room so they do these fan type of ramps with the radial detectable

warnings. Basically, the domes are there to mark where the two curb cuts are. Before they started to build curb ramps the visually impaired users were fine because they knew exactly where the road ended at a six-inch curb and they would stop there with their cane or dog. Now you put these curb ramps in and the visually impaired users lose their indication they used to have. These domes are what is there with that same information. Most people in wheelchairs don't like domes but they understand they are needed. There are a lot of things with the ADA code that is trading off. Fan ramps work better on smaller sidewalks. They are making the fan ramps a little flatter. The slope isn't as bad as the five-percent running slope. It gets you out of the gutter a little bit but it isn't super steep. The old diagonals were much steeper. They are opening their fans up so they are coming to the back of the walk on both sides. At least you have the straight direction of travel for visually impaired users and wheelchair users. They are trying to keep that slope to less than five.

4. They have the depressed corner. The landing is flat at the bottom. They don't like to use these because the bottom is in the gutter grade or street grade. It ices up in the winter. All of the puddles are not good for any pedestrian. They are searching harder on how to expand their scopes to avoid some of the less desirable ramps. MnDOT has been doing this for five to six years. They are working on the finer points of this. Most of the industry (consultants, etc.) hasn't put as much time into it as MnDOT. They are trying to raise the bar. But it is an uphill battle. Why is it important to cost more? Is that necessary?

5. This is the diagonal ramp (not recommended). It would point you directly into the intersection and cause a more drastic S curve. At least with a fan ramp they would open their domes up with detectable warnings to crosswalks. At least you have a more straight line of path. They do not like to build diagonals. They would have to justify doing it. Diagonals are compliant. You could build them day and night. As long as you get your eight percent slope and your landing at the top.

6. They like the directional ramps. The domes are squared up with the path of travel. These work well. They have grass boulevards. Whenever you have a six-foot grass boulevard, directional ramps work easy. They also have wider ramps that they build on trails. Less than five percent slopes on trails. Curb and gutter. They are eliminating that thump at the flow line. It has been gone from the standards for the last five to six years. A lot of the curb ramps are much more smooth. They are getting some sedimentation in them because they are flatter and smoother. They sweep the streets. They should sweep the curb ramps as well. They have cut throughs that they put in. When it is all flat the debris does collect on the sides. Those are good when you get a median crossing in.

7. Some of the projects they are doing. They are putting in combined directional ramps. They removed catch basin and built ped ramps. A lot of people think you cannot fix that. But they did do that. If your roadway is sloped and you have more than a two percent cross slope, gravity will take your front wheels through the gutter. He has to push harder to go strait.

MN MUTCD talks about APS (Accessible Pedestrian Signals) push button criteria, its button height, button separation, button setback, button offset. All for users who depart from the push button to give visually impaired users the right information. That is the main cues they are getting. The details of APS are very important. They have APS push buttons combined with curb ramps. The federal guidelines are silent on how to combine curb ramps and APS. MnDOT has done quite a bit of work on that as DOT in getting a useable and workable solution.

Ken Rodgers asked Is there any MUTCD requirements as to the space where the speaker gets placed? The speakers now butt up against the pole. That makes a sound distortion. It is difficult for somebody who relies on sound to know where that sound is coming from. Some city APS's have had speakers on the front.

The speakers are always on the back side. It is not a requirement. They are at the mercy of what the industry provides them with. They have communicated those desires to industry. There are two main suppliers on their approved products list and it is not a requirement. They are buying their stuff as is. There is not a huge interest to change. You would have to complain to the FHWA among others.

They have done some good things with push button adapters. There is one that they did put it on a pole. It is galvanized steel that allows them to adjust the height of the button on the pole. It also allows them to rotate the angle to get the true angle for users because they use the button face to face a direction and it also helps the side reach component. They put spacers on there to have better side reach on the pedestal poles.

He showed a new signal on a reconstructed road. There still is a push button. It is in the middle of the walk and is four-foot high. He showed another one where the pole is in the middle of the walk. It meets the four-foot

minimum so it is compliant. It worked. It looks dumb. It is hard to maintain. So they moved it over on the right at a six-foot clearance. It is easier to maintain it works for everybody.

They have 600 miles of sidewalk. The feds have required that they update curb ramps on mill and overlays. There is no requirement that you upgrade sidewalks. It is just part of the transition plan you are supposed to accomplish. Usually agencies wait for reconstructs to do that. At MnDOT, if you wait for roadways to be reconstructed to fix the sidewalks it would have taken them 80 to 100 years. It wouldn't have happened. They have made the commitment to try to finish the transition plan in the next 20 years so every overlay type project were not only doing curb ramps they are doing sidewalks as well. That meet a certain threshold. That is rare. Not many DOT's are doing that. Very few if any local agencies are doing that in Minnesota. It is going above and beyond. It is not required. it is part of the transition plan requirements. They also have Olmstead commitments.

They have 600 miles of sidewalks and about 260 are considered fully compliant on MnDOT's right-of-way. They have inventoried the sidewalks. Basically, for condition and cross slope. They have banners on the ones that exceed or are poor or are in failing condition or three percent cross slope. They made a decision to prioritize the sidewalks. The standard is two percent. But they decided their threshold to replace sidewalk and preservation overlays is three percent. They made a business decision to get the worst of the worst in the next 20 years. Then when the condition is all bad everything will probably be replaced. They think three percent is a very usable dimension. Also, there is public sentiment. They are trying to find the balance in meeting the needs and expectations and funding. They are doing \$10 million a year on sidewalks annually on their projects. That would be 12 to 15 miles of sidewalk. Before they were only doing two to four miles of sidewalk.

There are commercial areas downtown with landings in front of the doorways. They try to match doorways with the sidewalks if feasible. They don't want the boulevard to be too steep. It could cause a safety hazard. You need to raise the curb line in commercial areas. There are very good projects going on. In Alexandria, there is a project. it has dimensions smaller than a half inch. It has good scoring. The pavers are on the outside and in the boulevard area they are not in the par. So that helps.

He showed another one that is not as great. There are a lot of panels and bumps. A two by two pattern. Very big joints that are rough. Increased roller resistance. It also makes the curb ramp construction harder. A balance between architectural and practicality is important and we need that. At MnDOT they are keeping that out of the main sidewalk or par. That is in MnDOT's system. It is how projects get going. The towns may get excited about a project but MnDOT staff have to make it practical.

They are trying to get managers and field folks aware of wheelchairs during walk throughs. He showed a project just outside of Saint Cloud. He brought the assistant district engineers to Saint Cloud. He showed them the medians and pot holes. It helped with the awareness. There was one that couldn't be fixed. You had to start on the flow line and you have to meet at the door of the post office. The only way to fix this is to raise that curb line and maintain drainage so the curb would be three to four inches higher than the existing curb was. They got it all to work with the grades. The fan was not great. It was an improved condition compared to what was there.

They do patchwork fixes sometimes. They can't fix everything. They don't have the money to do everything but they can't afford to do nothing. They are trying to find out where is that sweet spot? Fixing driveways where they are steeper. The cross slope is often bad for driveways. In Duluth, one is a 20 percent slope going down to Lake Superior. It was to bring the sidewalks up closer to the road and make all the grades work. They had to do a diagonal. It was the only way to make the grades work. He showed a cross walk that MnDOT had to pave on their own because it was in the worst condition.

MnDOT overlays the road to the left because that is their highway and where the cars are. The city overlays their road coming down to the hill because that is their road. There is often a no man's land where everyone says it is not their crosswalk. Both agencies should have been doing this. MnDOT ended up doing it as a stand alone job.

Imdieke Cross said some of the roads in Duluth are so steep. She asked if there was any way to make the curb ramps more accessible in Duluth.

He said they were starting to gain awareness. They have a policy where they make all of the land owners fix their sidewalks. They assess the land owners. If the road grade is going up nine percent, so is your sidewalk. Curb ramps would be a little steeper. They are doing some container walls on some medians to make better

crossings. They are experimenting with things and seeing how far they can push it to see if the improvements are worth it.

On south Snelling they did all curb ramps. North Snelling because of a BRT they did a lot of landings there using bump outs and modifications. They did all the sidewalk on Snelling north of I-94, north of Hamline and north of Dale. It is as good as they can do. He suggested the TAAC committee look at it. it wasn't a total reconstruct but they got everything to work fairly well. It was one of their better projects.

In one spot they have to purchase the right-of-way in order for things to work. For MnDOT it is an 18 month process. They have to plan that out. They have tripled the right-of-way department by doing the sidewalks. It is a huge deal.

They were brought out to an intersection to look at curb ramps. It was a brand new signal installation that was done. It should last 50 years or so. They said right-of-way was out of the scope. So they put the pedestals in the middle of a five foot walk. You can't get through either one of those. This agency is done with this for 50 years. There is a lot of this going on.

MnDOT looked at another brand new signal project. People didn't think to where the ped ramps went verses the signal. It is like this today. It was off MnDOT's property. This is from 30 to 50 years before fixing this problem.

He showed a slide where there was a goat path running next to a street. They did the curb ramps at the corners. There are no connections. It is going over a freeway or overpass. People are using this. MnDOT wanted to build a sidewalk there but they could not get local participation to help maintain that sidewalk. So it did not get built. That goat path remains. This was an old style of curb ramp without APS. They upgraded this curb ramp again that didn't meet standards but they still didn't do that sidewalk. Just doing the curb ramps without thinking about the system is very short-sided.

Maintenance is a very tough nut to crack. It takes many agencies, partners and people. He showed a bridge that was MnDOT property. The city operates and maintains the signal even though it is on MnDOT property. The county overlays the highway. You would need three or four projects to get it right. If you do them all individually at each time you are going to rip up this curb ramp four times to fix it right. Actually they did do that. It was a bridge project. they lowered the bridge down where it needed to be at the expansion joint. They did not move that signal pole. The signal pole was so rusted out and had a hole in the base. The decision was to take that signal pole off, replace the steel base and put it back. They could do that because it was a safety thing. They didn't have the time or coordination to actually move the pole to a better location so it was in the middle of the sidewalk. He calls this an orphan. Some are on the freeways. As a programming agency, the Met Council has a role in this as well.

They are talking about an ADA metro transition plan on their facilities. They aren't programming the pavement or signals. It is on their right-of-way. They need to engage their local partners. These are in some of the highest volume areas. They are putting APS in the suburbs and exurbs. They are not getting to their I-94's, I-35W's or downtown corridors. The problems are complex with multiple partners and they need to tackle it.

He showed a retrofit where the county did the work on MnDOT's right-of-way. They did curb ramps only. With concrete, retrofitted. The signals are in obviously poor locations. One is compliant. There is four feet from the edge of the curb to that big signal. There is another one that is not compliant. There is less than three feet from the signal base and the new V curb. But it was beyond the scope of the project. This is how this county runs their transition plan. They do standalone projects. They fix so many curb ramps a year. It is reported in their transition plan. Everyone says great job.

Bus stops are simple in a lot of cases. PROWAG requires a landing pad with five-foot minimum width along the width of the curb. Metro Transit likes to go six-foot wide. You need an eight-foot depth to it and two percent slope out. When you have a concrete boulevard. A concrete walk at the back of the curb. The same rules apply. The landing is there. Pretty simple.

You need cross slopes and running slopes to get in and out of a shelter. Metro Transit will come in and try to fix the shelters. They will flatten them out sometimes. Their scope will be within five feet of the shelter. Constraints are a problem. As you tie into the brick sidewalk coming in you can't fix this by just fixing the shelter. MnDOT can't fix it by just fixing the corner. It is a combination of both. He sees a project from Metro Transit that has special bus stop enhancement funds. MnDOT doesn't review them. They come back to Metro Transit and say what won't work. They say it is beyond the scope of their limited bus stop funding. They say

they will do it later. MnDOT will redo what was done and more. They are not supposed to fund transit repairs. They are supposed to get agreements and have them fund MnDOT's.

They are doing Smith Avenue in Saint Paul. There are a lot of bus stops there. It is a higher ridership corridor. They are replacing all of the sidewalks from West 7<sup>th</sup> to Delaware. The funding isn't lining up. They probably didn't request it early enough. Metro Transit has 1,500 bus stops and they prioritize by ridership. Where the needs are. MnDOT would like them to focus a little bit on opportunity of MnDOT's projects. They are doing all of the sidewalks and curb ramps with APS everywhere. It could be \$30,000 to do all of the bus stops, all the pads they are talking about. They could get the sidewalks designed correctly to meet that two percent of the pad. The \$30,000 is not there as of now. They are missing huge opportunities. They are doing all of these corridors they will be hammering out (Robert Street in 2020, Concord in 2020, East 7<sup>th</sup> in 2021). They definitely need to start talking about how they can coordinate money and other things.

The only standards for bus stops is the surface be firm, stable with resistance. You can drop a sign down anywhere you want and call it a bus stop. Transit has a lot of those. Rural transit agencies have a ton of them. At one intersection there was no money to put into a five by eight pad. They are springing these projects on Metro Transit. In one spot they were going to put in a five by eight pad and Metro Transit wanted a 40-foot bus stop. So they did that. A comment came back from Metro Transit that they really needed an 80-foot bus stop. MnDOT said no and no bus stop got built. They need to coordinate funding.

They have a huge corridor going on. Southwest LRT. He reviewed the plans. They are frustrating. The pedestrian and ADA design seem to be a pretty good afterthought. The first time he saw them it was at 90 percent. He talked to the locals. They are concerned about the maintainability. The push buttons are in the middle and other things we talked about. Ten foot wide trails, four foot curb ramps. There are a lot of odd things going on in that multi-million dollar project. A lot of these things can apply to that. He encouraged the TAAC members to get involved in that.

Imdieke Cross asked if they could just say that diagonal ramps are not permitted in Minnesota.

He said that the plans say that they can only be used when the other options are not workable. A lot of agencies are using MnDOT's standard plans.

#### 2. Metro Transit Stroller Policy

Christie Bailey and Steve McLaird spoke to the TAAC committee. She is the Director of Bus Transportation at Metro Transit. He is the Deputy Director of Bus Transportation at Metro Transit. They will talk about the stroller policy on the bus side. They have a policy that has been in place for about 11 years. It requires moms and dads who have strollers to fold up their stroller before they board the bus. If you have a couple of children with you, you have to hold the children, juggle your purse or bag and fold up the stroller. That policy hasn't worked out well. Prior to 2005 they actually didn't request that. They didn't require anyone to fold up their stroller. The buses back then were a little bit larger and had a lot more space. They were high floor and people were helping parents to fold up the stroller once on the bus.

When the buses started getting smaller and had fewer seats that is when this policy went into effect. They require the strollers to be out of the isle for safety reasons and not block the isle for anybody else. Then they asked that the children either be seated or held. When Bailey became director in 2009, the most complaints they had from bus operators was the fact they had this policy that they could not enforce. All they did was get into arguments with moms with children about policy because it was hard on a single parent riding alone with the children.

A lot of the drivers over the years haven't been enforcing it. if you ride regular route service you may see it. A lot of the buses have strollers on board with children in the strollers.

They looked at all of the issues around the stroller policy. People call in to complain about it. They also have a few operators who really enforce the policy. They made the passenger fold the stroller before boarding the bus or gave them a bad time once they got on. Operators have been assaulted about a month and a half ago. A bus driver was spit on. The passenger did not fold up the stroller and they had an argument about it. When she exited the bus, she spit on the driver. Bus drivers have actually called the police when passengers won't leave the bus. They are embarrassing the parent in front of their children and the rest of the bus.

They looked at the industry. There were complaints to the Transit Research Policy Board. They looked at what the others in the industry are doing. Seattle, Portland and L.A. and San Francisco. As a result, Metro Transit is

no longer going to require that parents fold a stroller before they board. However, if there is no space and they would be in the isle, they have to fold the stroller. So the first negative at the door is eliminated. Once they board, if there is a space open they can go there. The main requirement is you must stay with your child. The child must be in a seat belt. The stroller must have the brakes locked. That way they won't roll around on the bus.

They have been talking to the drivers about this. They have a Transit Safety and Security Committee. It is represented by every garage. The drivers are out there every day with this issue. What she hears from the drivers on the committee is that for them it is a very easy communication. If there is no space, they are very nice about it. They ask the parent to close the stroller. Sometimes the other passengers help the parent handle the stroller and kids and sometimes help them to the back of the bus where there is more room.

They feel that this change will be a positive reflection for not only the bus drivers but for Metro Transit as an agency and will help the riders. The securement areas may be available and they may or may not choose to go there. The securement areas are a designated priority for people with disabilities, mobility devices and seniors.

What has been presented here is not the final policy. They are asking the TAAC members for input. She read the following proposed stroller policy:

Customers with strollers are asked to adhere to the following rules for the safety of a child and other customers:

- Customers may board with child in stroller.
- Child should be secured with ta lap belt, strollers brakes must be set and parent remains with child.
- Aisle must remain clear for safety reasons.
- Customers with disabilities using mobility devices have priority in the securement area.

They are doing a pilot of 10 buses that are coming in next year. They are the same low floor buses they have now but they are taking three seats right near the back door on the same side as the back door and making them into flip up seats. There will be a good sized space there for people who have luggage or strollers or who need to just put something there. They think that is going to be very popular with the drivers and customers.

They are going to be doing a comprehensive training with their operators. Most of the Transit Safety and Security Committee instructors are also drivers. The training will include a video and best practices. They have free ride coupons. If someone is already in the securement area with a stroller and someone else needs it the driver will offer a free ride coupon to the person with the stroller to have them move. The driver and/or other passengers may help when needed.

The driver may have a canned message to play when they need somebody to clear the way for someone with a mobility device. They are going to be rolling out a family friendly transit system. People who do have strollers have to understand that they may have some size restrictions as to how large the stroller is. Some agencies have that. ADA mobility devices and seniors is a priority. They will do their best to educate passengers as well.

They are hoping to do the policy change sooner with a soft rollout then do a robust training in the spring. As soon as the marketing team can do it. They will have bulletins for the drivers.

Imdieke Cross asked that this speaker return to the TAAC committee in four months for an update.

Chair Walker asked if some members of the TAAC committee could help advise with the training. Bailly said yes. Just let Pam Steffen know and she will arrange it with Bailly. Sheldon and Walker said they would be interested. Bailly will get back to the TAAC committee before they are ready to start with the training.

#### 3. Performance Measures for the Transportation Policy Plan

Mark Filipi spoke to the TAAC committee. He is the Manager of Technical Planning Support at the Metropolitan Council. He does air quality modeling and forecasting Mapping for informational services and most recently performance measures with the introduction in Map 21, the federal legislation from 2012 moving ahead for progress in the 21<sup>st</sup> century. That federal law directed the Council and all MPO's around the country, the planning organizations, to do performance based planning in the development of their long-range transportation plans. The last time they came before this committee was December 4, 2015. They have been working with modal groups. Two members of this committee have been on a couple of their committees. The Bike and Ped Modal Group and the Transit Modal Group. They also had modal groups for highways and aviation. Those groups came up with some suggested changes to the measures that were in the

Transportation Policy Plan that was adopted in 2015. They have been shopping those around the various committees for their input.

They took it to an ad hoc policy maker group consisting of a couple of Transportation Advisory Board members and a couple of the Metropolitan Transportation Committee members and a representative of the CTIB (County Transit Improvement Board). They looked over all of the performance measures they had developed at that point and came up with some suggestions. What he is going to present today are the measures that are unchanged from the discussions they had with their modal groups. Measures that are to be changed to be used in the Transportation Policy Plan. New measures that they had previously thought of using in the Transportation Policy Plan and new measures that were going to what they call the Transportation System Performance Evaluation, which is a document that under state law were required to prepare the year before they do the Transportation Policy Plan update. They are currently working on developing that document as they intend to start rewriting the Transportation Policy Plan next year.

There are some measures that had changes that were suggested by that group they were not recommending carrying forward.

Unchanged measures. There are some that are coming down from the US Department of Transportation as required in the federal legislation. Particularly at this point all they know about are road conditions, bridge conditions, and safety. Then there is Transit State of Good Repair.

There are more measures to be coming out of the federal government but they don't know what they are yet. The unchanged measures that they are carrying forward are some reliability of the MnPASS system, HOT lanes and the usage of those, the airport system in the region, the condition of the runways, the average delay, and the cost per passenger for the use of the MSP airport.

In the transit side, mode share and the mode participation rate. Mode share is how many trips by transit rather than other modes. The mode share rate is the total number of trips in a day. If you take 10 trips and three of them are by transit you have a mode share of 30 percent. Mode participation rate is if you use transit at all it is counted as one. So you can get a much different reading of how important transit is to a person. If they use transit at all during the day rather than a percentage or portion of their trips.

Reliability index is directed to the highway side at this point. How reliable is the speeds, travel times on the system, annual hours of delay for Peak Period Auto Commuters, which is calculated by the Texas Transportation Institute. Transit ridership is always a big question for a lot of people. Implementation of the regional bicycle transportation network. What percentage of the bicycle network that is being defined in the last TPP is completed?

Unchanged measures. Ten-ton truck corridors. Trying to get at our economic competitiveness of the region. The truck travel time index is an indicator of what is the difference between the time and prep it really takes to make a trip verses a free flow condition. The population in the region with a half mile access to high frequency transit service. Greenhouse gas and criteria pollutant emissions. Carbon monoxide, ozone, etc. Bicycle and pedestrian miles traveled. At this point in time they have information from the 2010 Travel Behavior Inventory. They are working with the Transportation Advisory Board and MnDOT to change how they gather that data to a system where they will be doing every two years to have more current data and track that on more of a real time situation. Acres of riverfront and rail-accessible industrial land is a combination of land use and competitive economy question. How well we can get to the land that is critical for some of the industrial uses we have in the region. Then there is job and population growth near high frequency transit service.

Measures that have been changed over what has come out of the committees. The number and rate of fatalities. Tabulating that the least of which it is one of the federal required performance measures. The ad hoc group wanted the Met Council to report the yearly data as well as the five-year rolling average which is what the federal government requires. Both for fatalities and serious injuries. They also asked that they tabulate that data for the bicycle and pedestrian crashes in the region. That has also been added by the USDOT in their rule making for the final performance measures. They want average commute time. Reporting for transit as well as auto commuters and compare them. They can also do it for walking.

The new measure for the TPP that hadn't been considered previously by the modal groups was the support of the Transit Supportive Comprehensive Plans. This would be transit oriented development, support of transitway corridors within the communities, etc. That will take some work to try to identify what is the appropriate measures to use and to evaluate the comprehensive plans. There are some communities that do

not and likely will never have fixed route service. What sort of standards should they be held to compared to first ring suburbs and cities?

New measures for this Transportation System Performance Evaluation (TSPE) that is done before the TPP. The Transit Farebox Recovery which they have since 1997 in that document and will continue to do so. The cost of transportation - the percent of household income that is being spent to provide transportation on an annual basis. The solar power generate at transit facilities and recycling options at transit stops and stations – policies not currently in the TPP but could be considered in the plan update if included in the transportation plan update. It should be tracked in the TSPE.

Measures with changes but not recommended. Job accessibility – requested change would add MnPASS routes. They are doing the job accessibility for transit and auto. It was asked that they add in the separate MnPASS accessibility changes. That information is not available. The University of Minnesota Accessibility Observatory has been asked if this is possible, but they have not yet responded. They can't get the travel speeds because they don't know which lanes the information comes from. A model could be used, but it would not be consistent with methodology of the University of Minnesota work. Transit On-Time Performance. They are not recommending they carry this forward. This varies among providers. This is more an indicator of quality of schedule planning.

These performance measures will be looked at as a region-wide system level. But there is also the question of how they can interpret them on a finer grain. Those measures that do have enough geographic detail, they will be trying to look at how it affects areas of color, poverty, etc. To the best degree that they have information a part of the problem is looking forward into the future. All they have is forecast data for where population households are going to be located. How much detail they can get into evaluating how the Policy Plan will be going into the future remains to be seen as far as the equity assessment is concerned.

Next steps. Submit recommendations to Ad Hoc Policymaker Work Group. Present to TAAC. Return to TAC-Planning for endorsement. Present to TAC for endorsement. Present to TAB for endorsement. Present to Transportation Committee for endorsement. Target setting. None of these have been out for a full public outreach and vetting. They are not asking for an adoption at this point in time. They will be going out as part of the TPP's full public outreach process. At the end of that process they would be adopted finally and officially as performance measures in the TPP. But they will not be official until that point in time. Once they have more endorsements of what these measures might look like. They will be setting targets for them or directions of change that they prefer to see depending on what the measure ends up being. Whether they want to have an absolute number or they just want to get an indication that the rates should be increasing, declining or whatever is appropriate for the measure in question.

They are hoping to get into a situation where they can start talking about scenario planning in the future TPP's looking at where money is spent. Then what types of projects and what type of better mix to achieve goals of the region as a whole. At this point in time in the past policy plan basically they evaluated whether or not the policy plan program projects that was listed was better than if we just spent the money on ongoing maintenance.

Whether they are successful or not depends on the measures. What they are shooting for at this time is an annual tabulation.

## 4. Light Rail Barriers, Door Indicators and Light Rail Wayfinding

Kim Zlimen spoke to the TAAC committee. She is a Principal Engineer at the Engineers and Facilities department at Metro Transit. She is going to touch on two subjects today. One is a test project that they have the Green Line's Raymond Avenue station and is between car barriers and door locator tiles. The other is to give an update on the study of light rail stations for improvements for customers with visual disabilities.

She showed a picture of the between car barriers at the Raymond Avenue station. The between car barriers are flexible bollards installed on a curb attached to the edge of the platform. It is attached on that two-foot tactile edge of the platform. The bollards are an inch and a half in diameter. They are a combination of 26 and 36 inch tall flexible bollards. On the westbound platform they have the different heights alternating. On the eastbound platform they have one system that is 36 and one that is 26 inches high. The whole thing is 15 feet long. These bollards are spaced every nine inches and they go at two locations on the platform. One is for light rail cars. Typically there are three but sometimes there are two. Oftentimes three light rail cars are at the point where two cars couple together. There is one between the first and second cars and one between the second

and third when the car is stopped at the platform. They prevent people from mistaking the gap between cars for a door in stepping off to the platform. They come from a Federal Transit Administration requirement. Some type of barrier be provided to prevent people from mistaking this gap. It is a requirement for anytime you have level boardings. You don't have to step up to get on the train, which means there is a step down to get to the rail level. In this case for light rail it is 14 inches. For some transit agencies it is much deeper like 40 inches for heavy rail systems.

The next item is door locator tiles. They are four feet wide and three feet deep tiles. They are installed behind the two-foot tactile edge on the edge of the platform. They have a directional tactile pattern that lines up with the doorway. It has a non-slip surface. Right now, at the Raymond station, they have this installed just at the front door at the first light rail vehicle. If they implement this at other stations they could do more doors. They could only do it on the first car. The reason is because they have two different kinds of vehicles in the vehicle fleet and the doors aren't in the exact location.

After these are installed in November they did a few different things. They have to get vending machines and platform clings. They communicated with orientation and mobility specialists that have worked with those who were training people to use Metro Transit light rail. They communicated with State Services for the Blind. One of the reasons the Raymond Avenue station was chosen for the pilot project is because State Services for the Blind has an office approximate to the station on University Avenue. They sent emails out to the American Council of the Blind. She went to a meeting with the National Federation of the Blind in August to speak to them about this. They communicated with Blind, Incorporated, which does orientation mobility training. They also had information sent out through social media. They have a webpage with more information about the project. That also includes a link to a survey that customers can take regarding in between car barriers and door tiles to offer feedback on the pilot project.

They are planning on keeping these up through the winter to see how they withstand winter maintenance. How the materials stand up during the winter with snow removal and also to get customer feedback. If anyone intends to visit the Raymond Avenue station she would be happy go get your comments.

Her hope is they can also have possibly another pilot station with higher ridership next spring.

The second part is to give an update on a study that she spoke to the TAAC about in April. They were looking for improvements they could make to improve safety and accessibility for customers with visual disabilities. This was looking at the Green Line and Blue Line existing Light Rail areas. Then trying to incorporate as much as possible their recommendations to the Blue Line and Green Line Extension projects. Recognizing that those projects are moving fast. Plans on the Green Line are wrapping up quickly.

There were four main parts of this. There are best practices. Consultants were working on this study with them and they reached out to other transit agencies in the US to see what types of infrastructure that were implemented to assist customers with visual disabilities. That is part of what led to the barriers and the door tiles. The Federal Transit Administration say that the barriers between doors have to be provided. There are a number of agencies including Los Angeles, Pittsburgh, Saint Louis and Charlotte that use the same system that has been installed at the Raymond Avenue station. They are just finishing up that memo and providing some cost information.

The second piece is they went out and evaluated a light rail station area and did an inventory to determine where items were deficient or missing and what improvements could be made.

The next steps are to combine all that in addition to feedback that they have gotten from customers to come up with recommendations that they will present to the Rail Change Review Committee that is made up of Metro Transit directors on the rail side before they come up with final recommendations and then turn them into standards on light rail platforms going forward.

A few of the things they heard from customer feedback. LRV door locator tiles on the platform are desired. Consistent cues to know when and where it is safe to cross streets or tracks (accessible pedestrian signals, tactile pavers) are needed. Guide barriers are needed where platform landings meet the street. Consider sound-emitting features on ticket vending machines and smart card validators. Provide information on website about platform layout. Consider features such as tactile maps or I-Beacons.

The 15 foot for the between car barriers was chosen because the actual gap is much shorter than that. It comes in sections. You can make it longer or shorter but the 15 feet was chosen specifically because it is extra long to cover that gap.

Rodgers asked if there could be a sound that was made when the doors to the light rail vehicles would open. It would help identify where the door is.

Zlimen said sometimes the doors won't open because of the temperature. She would look into it.

The best practices memo looked at in talking to other transit agencies and looking at different technologies out there it outlined a menu of different options – sounds, tactile features such as a door locator mat or tactile pavers you would see at pedestrian crossings at the edge of the platform. Some agencies, especially in more complex settings have tactile floor paths. It is a directional pattern that some people can follow. They are wrapping it up now because they want to get cost information.

Chair Walker asked Zlimen if she would meet with some of the TAAC members at the Raymond Avenue Station to give a tour. She also asked the TAAC members if they would like to go there as a group.

Zlimen said yes.

# SUBCOMMITTEE REPORTS

#### 1. Blue Line

This was not presented.

## 2. Green Line

This was not presented

#### 3. Orange Line

Chair Walker informed the TAAC committee that there was a vacancy here and anyone who wants to represent the Orange Line committee should talk to her. Fenley and Sheldon are interested.

## PUBLIC COMMENT

None.

# **MEMBER COMMENT**

Some of the TAAC members were surprised by what Todd Grugel said in his presentation. Steffen will give a copy of these minutes to Robin Caufman to get in contact with Todd.

The TAAC members discussed some of their concerns. Bates, Rodgers, Fenley and Imdieke Cross are interested in discussing this further. Chair Walker will get this on the books.

Chair Walker spoke to the TAAC committee about three workshops for TAAC members:

- 1. Orange Line Station Design Workshop January 25
- 2. Blue Line Extension Station Design Workshop February 8
- 3. Light Rail Type III Vehicle Workshop March 8

Bates asked Steffen about the US Bank station. He read in the news that it was \$1 million over budget. She said she would look into it. She will email the TAAC committee with the answer to his question.

# ADJOURNMENT

Business completed, the meeting adjourned at 2:37 p.m.

Alison Coleman Recording Secretary