

CITY OF BELLEVUE
BELLEVUE TRANSPORTATION COMMISSION
MINUTES

February 13, 2014
6:30 p.m.

Bellevue City Hall
City Council Conference Room 1E-113

COMMISSIONERS PRESENT: Chair Simas, Commissioners Bishop, Jokinen, Lampe, Larrivee, Tanaka, Zahn

COMMISSIONERS ABSENT: None

STAFF PRESENT: Kevin McDonald, Mark Poch, Fred Liang, Kyle Potuzak, Jen Benn, Andreas Piller, Eric Miller, Department of Transportation

OTHERS PRESENT: None

RECORDING SECRETARY: Gerry Lindsay

1. CALL TO ORDER

The meeting was called to order at 6:31 p.m. by Chair Simas who presided.

2. ROLL CALL

Upon the call of the roll, all Commissioners were present.

3. STAFF REPORTS

Senior Planner Kevin McDonald said the recommendation from the Commission regarding the Transportation Development Code will be before the City Council on March 27. Chair Simas will represent the Commission in presenting the recommendation.

Mr. McDonald reported that he presented the Commission's recommendation on the Downtown Transportation Plan to the Human Services Commission on February 4. He said they were very interested in the mobility options and pedestrian facility enhancements.

4. COMMUNICATIONS FROM CITY COUNCIL, COMMUNITY COUNCILS, BOARDS AND COMMISSIONS – None

5. REPORTS FROM COMMISSIONERS

Commissioner Lampe reported that he and Commissioner Zahn attended the presentation by staff at the Newport Hills library regarding the life of a transportation CIP project. He said the meeting was well attended.

Commissioner Lampe said he and Mr. McDonald attended a symposium on transit solutions for the cross Kirkland corridor on February 8. He said there was a lot of brainstorming about high-tech applications, including personal rapid transit.

Commissioner Zahn said she recently had an opportunity to visit with Karina O'Malley of Sophia Way. It was noted that the agency is very concerned about the proposed transit cuts. Their women's shelter clients are not allowed into the shelter until 7:00 p.m. and some of the transit cuts will leave many women without a way to get to the shelter, especially those who work until later in the evening.

6. PETITIONS AND COMMUNICATIONS – None

7. APPROVAL OF AGENDA

A motion to approve the agenda was made by Commissioner Lampe. The motion was seconded by Commissioner Larrivee and it carried unanimously.

8. DISCUSSION/ACTION ITEMS

A. SCATS and ITS Program Update

Traffic Engineering Manager Mark Poch said it was recognized about eight years ago that the city was going to have to replace its signal system. When installed in the late 1970s, the system was state of the art, but while it had given good service it was wearing out and the vendor was no longer supporting it. In addition, there was general agreement that better functionality was needed from the system. The goals established for choosing a new system included the ability to reduce delay for vehicles and pedestrians, the ability to adapt quickly to changing traffic conditions, and tools to improve left turn movements. A consultant was hired to review the available systems and ultimately the Sydney Coordinated Adaptive Traffic System (SCATS) was chosen.

Mr. Poch said the principle behind signal coordination is getting a group of traffic signals working together to achieve an objective. Often the objective is a green band in one direction or another through what is called time of day coordination predicated on the typical day. The problem with the approach, however, is that it cannot respond to changes in traffic. An adaptive system continually gathers traffic data from all lanes and all intersections via detectors cut into the pavement. The computer looks at all the data, negotiates between the different intersections, and develops a new timing plan for every signal cycle. Allowing for more cycle times when there are spikes in traffic flow helps to delay the onset of congestion and can help work out of the congestion sooner.

The post-implementation travel time studies done have all shown good results. The system has improved travel times on NE 8th Street, particularly in the westbound direction, and on NE 4th

Street. Most of the intersections in the downtown have seen delay reductions to varying degrees.

Commissioner Zahn asked if the grouping of intersections is reevaluated periodically as land use and traffic patterns change. Mr. Poch said the signals along NE 8th Street from 100th Avenue NE to 112th Avenue NE all were in a single group under the old system from 7:00 a.m. to 10:00 p.m. Under SCATS those intersections can be broken up into smaller groups and are closely monitored. When the traffic flow between the groups reaches a certain level the groups "marry" and become a single group. Group bonds are formed and broken as needed by the SCATS computer based on traffic levels and parameters set by the traffic engineers.

Mr. Poch said by constantly tweaking the system and reducing cycle lengths, pedestrians are afforded walk signs more quickly. Walk signs are set for walk times of about three and a half feet per second, which is fairly slow, though some signals in the city are set for four feet per second. Pedestrians with special needs are often accommodated through field visits and assessments. The slower rate of three and a half feet per second is in line with the requirements of the Americans with Disabilities Act (ADA).

Mr. Poch said left turns are always a big source of delay. Some things are being done that are not being done anywhere else in the state or the country. Bellevue engineers have been talking to different professional groups about Bellevue's approach, and a presentation will be made in early March to the Institute of Transportation Engineers at their national technical conference in Miami. He explained that a protected left turn is where drivers turn with the benefit of a green arrow, with all other traffic stopped. When that phase completes a red arrow appears and the turning traffic must stop and wait. A protected permissive left turn starts with a green arrow, but after the phase completes a green ball appears, the opposing traffic is released, pedestrians are allowed to cross, and left turning traffic must yield. The challenge lies in the fact that there are usually two or three hours per day when traffic conditions are too heavy to allow permissive left turns. The technology does not allow for switching between the two left turn options based on time of day or traffic conditions. Bellevue has implemented an approach that does allow for switching back and forth using the new flashing yellow arrow that allows for left turns after first yielding to oncoming traffic and pedestrians.

The results of the new program have been impressive. At 72 left turns citywide that used to be only green arrow/red arrow, during most times of the day left turns are permitted on a flashing yellow arrow that follows the green arrow. There are still 76 intersections to be evaluated for implementation of the flashing yellow arrow. Some intersections will not qualify for various reasons, including site distance issues and higher speed limits.

Commissioner Zahn said there is a flashing yellow arrow installed near her home on Coal Creek Parkway at the off-ramp to southbound I-405. She said an astonishing number of people make left turns right in front of oncoming traffic. Mr. Poch allowed that accidents are the big concern associated with liberalizing left turn policies. One element of the program involves

rigorously reviewing all accident data every six months from all yellow arrow locations. Adjustments have been made as a result of the accident reviews, including turning off the flashing yellow arrow completely at the intersection of Eastgate Way and 150th Avenue SE. Near misses do happen and are very difficult to evaluate.

Fred Liang, acting ITS manager, said the left turn movement at the intersection in question on Coal Creek Parkway operates as protected only during the evening peak period. It can be changed as needed. Commissioner Zahn voiced concern about the high school students using the stretch to walk home from Newport High school; she suggested that making the change would make sense during the time they are on the road.

Commissioner Larrivee asked how well people have adapted to the flashing yellow arrow given that it is not used elsewhere. Mr. Poch said for most it appears to be intuitive. A lot of upfront work was done by including an article in *It's Your City* and on the city's website. There are, however, a few who call in saying they do not know what to do when the yellow arrow appears and when they do the opportunity is taken to educate them. Positive calls, however, have outnumbered negative calls by a ratio of three to one.

Mr. Poch said they are in the third phase of implementing the left turn project. Based on a value of \$15 per hour, the system is saving the public some \$2.2 million per year from the left turn changes alone. The anticipation is that by the time the project is completed the savings will reach \$3 million per year.

With regard to left turn/pedestrian conflicts, Mr. Poch said it was known from the start that they would need to be addressed. A recent study done by Oregon State on how drivers respond to the flashing yellow arrow found that motorists were good about yielding to oncoming traffic but not to pedestrians. Mr. Poch said his department has developed what is called the pedestrian minus left, an approach that within a decade is likely to be standard practice nationwide. The approach involves keeping the red arrow on while the walk sign is on and during the flashing Don't Walk phase, after which the yellow arrow begins to flash. Pedestrians pushing the button while the flashing yellow is going do not get the walk sign until the next cycle. The result is the elimination of the left turn/pedestrian conflict.

Answering a question asked by Commissioner Lampe, Mr. Poch said there are instances in which pedestrians are given priority over auto traffic. Under the old system, a pedestrian wanting to cross a street like NE 8th Street had to hit the crossing button before the green came up in order to get a walk sign to cross. SCATS is smart enough to know if there is enough time in a cycle for a pedestrian who hit the button after the green was activated to make it across the street; if there is, it will introduce the walk signal. Once a yellow arrow is flashing, the system will not allow pedestrians in the crosswalk.

Chair Simas asked if the SCATS system tweaks are easily done or if someone must be paid to do the programming. Mr. Poch said the pedestrian minus left was not built into the SCATS

system. TransCore, the consultant partner in SCATS, was pushed to develop the feature. The cost was absorbed as part of developing the personality of the affected intersections during development of the first phase of implementation. There is a cost to the city in the range of \$7000 to \$8000 for each intersection added to the system. Once the SCATS phasing is completed, there will a transition to a time-and-material contract for ongoing maintenance and problem solving.

Mr. Poch said the benefit realized through better corridor timing is far more subjective than the left turn benefit but will be in the range of \$6 million to \$9 million annually. When added to the value of the left turn delay reduction savings, the one-time project cost of \$5 million is fully offset. The communications element associated with the project cost \$1 million but it will be utilized for far more than just traffic control.

With regard to phasing, the Commissioners were told that Bellevue has 187 traffic signals. It was found during the research phase that some jurisdictions setting up SCATS were implementing eight to nine signals per year, so Bellevue's goal of phasing in 30 signals per year has been very aggressive. Phases I, II and III were done on time. Phase IV, the 2013 program, encountered a grant delay and was moved to become the 2014 program instead. Some of the Phase V intersections have been moved into Phase IV, and some of the Phase VI intersections have been moved into Phase V in order to have the overall project end on time.

Commissioner Tanaka asked why Factoria Boulevard and Richards Road, which are in the same corridor, are not in the same phase. Mr. Poch answered that the signals in the upper half of the Factoria corridor, which is Richards Road, are much less busy and are more spread out. The thinking is that they will marry in to Factoria Boulevard during some portions of the day, but it makes sense to implement first Factoria Boulevard corridor signals given their tight spacing and heavy volumes.

Mr. Poch said SCATS is able to accomplish transit signal priority. True priority, however, can only be accomplished through partnership with King County Metro which must install the equipment that indicates where buses are and communicates with the signal system. Because SCATS is not a fixed time system, it is difficult for the transit agency to take the data, put it in their black box, and make it work correctly. Metro is currently focused on the G and F Rapid Ride lines and does not have a lot of time available to address the B line issues where many of the locations are not currently working. SCATS does work well with the emergency vehicle preemption system.

SCATS, though a large project, is only one element of the city's intelligent transportation system program. The ITS Master Plan project is in the CIP as PW-R-156, but unlike SCATS the ongoing program has no end. Funding for the program will begin in earnest in 2016, the year after the SCATS program ends. A sub-program within the master plan will be aimed at doing SCATS upgrades. The program will also maintain and improve the other ITS systems, and will implement new ITS projects; it could also be utilized to manage the city's streetlights

to save energy, and to manage parking.

B. City of Bellevue Americans with Disabilities Act Transition Plan

Program Manager Jen Benn said Title II of the ADA focuses on two types of access: program and physical. Nearly every function of city government is affected by the ADA with the goal of making sure that all people of all abilities can participate equally in all programs. Title II has two key priorities for local agencies, the first being the self-evaluation report which requires a full inventory of all city programs, facilities and policies aimed at identifying barriers to access. On the transition plan side, the focus is on how to address every identified barrier, what each will cost, and the timeframe for addressing each. Persons with disabilities must be engaged both in the self-evaluation process and in the transition process.

In the 2010 Census 10,000 Bellevue residents reported having a disability of one sort or another. Many reported having more than one disability.

Ms. Benn said the public engagement aspect related to the self-evaluation portion is under way. It started with focus groups at Highland Community Center aimed at different types of disabilities, including mobility, hearing impaired, and vision impaired. People were also taken out into the field to provide comment and observations regarding some identified barriers. An open house held at City Hall shared the steps taken to date and outlined the issues yet to be addressed. A number of demonstrations were provided to make the event fun. In cooperation with King County Access, a survey was also sent out which generated about 110 responses from Bellevue residents.

There are far more needs than there are resources to address those needs. A true transition plan would program mitigation for each issue found, but resource constraints make that impossible. The intent is to go forward with an access enhancement plan as an interim process until details are worked out regarding how to deal with the bigger picture. Each section of the plan will have three parts: a basic overview of the law as it applies to specific functional areas, a section on things done already to enhance compliance, and a section focused on what will be done in the near-term future to enhance compliance.

Title II requires identification of an ADA coordinator. To that end, the City Manager has appointed the director of Human Resources to play that role. The city is also required to have and has a grievance policy, which is included on the city's accessibility web page. There has been recognition of the fact that the city could do some things better, including standardizing the non-discrimination notice for all departments to use. The law also requires continued engagement with persons with disabilities following completion of the transition plan; a way to do that is being investigated. One recommendation made was to have a CAC formed with a focus on accessibility.

Ms. Benn said the city of Bellevue has about 300 buildings, only a small portion of which have

public access areas. A firm was contracted with to do the Phase I and Phase II facility assessments, and a city staffer was trained to do the Phase III assessments. The assessments generated a list of needed mitigations that total a little more than \$2 million. Some of the mitigations are in new buildings. The initial focus going forward will be on completing work on 10 to 15 high-priority parks facilities. A new CIP program is being proposed to have at least \$150,000 per year to address the facilities assessments.

Commissioner Lampe asked how ADA mitigations could be needed in new buildings that were subjected to a variety of inspections in the normal course of obtaining permits. Ms. Benn said some of the mitigations are relatively minor and could have just been inadvertently overlooked. They range from parking signs and striping ADA stalls at the appropriate width.

With regard to programs and services, Ms. Benn said an informal survey was conducted with 100 program managers across the city. A number of small fixes were identified, but most importantly the managers identified a strong need for more training and a resource guide addressing ADA issues. A budget proposal will be submitted to bring in an outside person to conduct a formal program and services evaluation.

In 2009 an innovative analysis of the city's public rights-of-way was conducted. All sidewalks and curb ramps were evaluated using an approach that gained nationwide attention. The challenge with the comprehensive approach was that it returned a long list of projects totaling \$930 million as of 2010. The transition plan will update the project list with 2014 dollars. The high-priority elements will be addressed along with critical policy issues.

Driveway crossings was a huge issue in the public rights-of-way analysis. The ADA allows cross slopes on pedestrian facilities of up to two percent. Many of the cross slopes in the city are in the eight to ten percent range, the majority of which are driveway crossings. Mitigating the excessive cross slopes that already exist would be very costly, but the city can take steps to make sure more are not created. Staff are working on a driveway crossing design standard that has a flat surface across the back and the hope is that everyone in the city will buy into it.

Vertical displacement associated with heaving is also an issue. The ADA says anything over a quarter of an inch must be mitigated, but a 1996 city policy says displacements of three-quarters of an inch must be mitigated. While primary attention will still be given to vertical displacements of three-quarters of an inch or more, the policy language will be revised to be in line with the ADA.

The feedback from individuals in the field identified three primary mitigation priorities: fixed obstructions, such as fire hydrants in the middle of a sidewalk; heaves of three-quarter inch or greater; and missing ramps that transition from sidewalks to the street, particularly in the older neighborhoods. Investments in ADA repairs and mitigations in the transportation system in the form of CIP projects, development projects, and franchise utilities projects, total about \$1.25 million per year.

Commissioner Zahn asked if the sidewalk heaves of three-quarter inch or more create a liability issue for the city. Ms. Benn allowed that they do. She added that having a plan in place will not eliminate the liability risks but will give the city some wiggle room in potential lawsuits. Trip and fall cases are filed against the city every year, not all of which have to do with sidewalk heaves.

Ms. Benn said the formal draft plan will be produced and distributed in mid-March. The Council will be briefed and then there will be a two-month public comment period. The goal is to have the final plan endorsed by the Council and ready for implementation by the end of June.

Ms. Benn said presentations will be made to the other boards and commissions as part of the public engagement process. Comments will also be sought from the public via a traveling exhibit that will be placed in the community centers, from two open house events, and at a workshop to be held with representatives from local facilities rights and service organizations.

C. Comprehensive Plan Update: Transportation Facilities Plan Project Consolidation Methodology

Mr. McDonald explained that there are six or seven transportation facility plans embedded in the current Comprehensive Plan, all of which contain project descriptions for various parts of the city. The plans have all been adopted at different times and as such are somewhat inconsistent with each other. As part of the Comprehensive Plan update process, there is a desire to reconcile the project descriptions. The task has been assigned to assistant planner Andreas Piller.

Mr. Piller said the effort is focused on reviewing and consolidating the project lists in the various subarea plans and transportation facility plans. Projects that have been completed or superseded by more recent planning efforts will be removed, and redundancies will be removed. The Comprehensive Plan was originally adopted in 1993 and saw its last major update in 2004. It has been amended by ordinance several times between 2004 and 2010, and another major update is under way which will extend the planning horizon to 2035. Volume 1 of the Comprehensive Plan contains the framework goals and general elements, and Volume 2 contains the subarea plans and the transportation facility plans. There are 14 subarea plans in all, each of which addresses neighborhood needs and reflects direct citizen involvement. The subarea plans do not overlap each other in contrast to the six transportation facility plans which identify needed roadway, transportation, pedestrian and bicycle facilities. Each of the transportation facility plans resulted from a discrete planning effort.

There are other plans with which the transportation facility plans interact, including the Transportation Improvement Program (TIP), the Transportation Facilities Plan (TFP), and the Capital Investment Program (CIP).

Mr. Piller said the work done to date includes transferring the projects from all the lists to a spreadsheet, changing the location and limit formatting to be consistent and filterable, and assigning categories and types to each project also to make them searchable. Each project on the list will be subjected to a five-step process. In the first step, the individual projects will be compared against the list of projects in design, under construction, or already completed. Second, a determination will be made as to whether any overlap exists between any of the projects. Third, projects deemed inappropriate for continued inclusion in the Comprehensive Plan will be flagged, including projects that are operational in nature. Fourth, each project will be compared against other long-range plans and any matching projects will be tagged for future cross referencing purposes. And fifth, any remaining projects of uncertain status will be reviewed by staff for additional information.

Answering a question asked by Commissioner Zahn, Mr. Piller said projects expected to be completed before the Comprehensive Plan update is to be adopted will not be included on the list.

With regard to the third step, Commissioner Bishop noted that some non-capacity projects in the Comprehensive Plan are intended to be brought on line as development occurs. If such projects are not identified in a plan somewhere, developers could argue that they are not responsible for them. Mr. McDonald said there are a couple schools of thought. One is to keep the projects in the plan for the reason described. However, in some cases the projects in question were embedded in a transportation facility plan 20 years ago and may or may not be still necessary, so the other methodology might be to require the developer to demonstrate through a traffic study the intersection operational needs related to the project.

Commissioner Larrivee asked if the process will involve the Commission in reviewing projects marked on the list as being overlapping or in conflict. Mr. Piller said where a project overlaps with a project in the current TFP, the description from the TFP will be utilized. Otherwise conflicting projects will be compared to determine which is the most recent and if they are consistent with other plans in the area. The Commission will be involved in providing feedback on the staff's recommendations.

The process will result in each project being assigned to one of six status categories: 1) built; 2) partially built; 3) ongoing relative to planning, design or construction; 4) outdated due to overlap and/or a description that is similar to other projects in more recent plan; 5) deleted by prior action or process; and 6) not complete because no records exist indicating any other status or action has been taken. The status categories will inform which of six potential actions should be taken: 1) remove the project from the Comprehensive Plan; 2) remove the project conditionally if the project list remains in the Comprehensive Plan; 3) revise the project limits or description; 4) consolidate the project with overlapping projects; 5) maintain the project without change; and 6) subject the project to further review.

The ultimate outcome of the process is expected to be a single volume listing all transportation projects currently being referred to as the Transportation Master Plan, possibly organized by geographic area. As a master plan, it would be vested with the authority to implement the projects on the list. The TFP would continue to exist, but the minor transportation facility plans would not. Changes could be made over time to the master plan without having to change the Comprehensive Plan.

Commissioner Zahn suggested that for sorting purposes it would be good for the final plan to include for each project a reference indicating the plan in which each project was previously housed. Over time that reference would become less important. Additionally, it would be helpful to have the projects located on a master map, and to use common and consistent terminology to describe projects.

Commissioner Bishop noted that as subarea plans are reviewed and revised in the future, there will need to be a process for making sure projects identified get included in the master plan. Mr. Piller pointed out that only two of the city's subarea plans - downtown and Bel-Red - contain project lists, though all of them contain goals and policies. As subarea plans are updated in the future they will not include project lists.

A motion to adopt the methodology was made by Commissioner Larrivee. The motion was seconded by Commissioner Tanaka and it carried unanimously.

D. Downtown Transportation Plan: Transportation Project List

Mr. McDonald said a number of projects were adopted into the subarea plan during the 2004 update of the Downtown Transportation Plan. He called attention to the spreadsheet listing all of the projects and noted that over the last ten years many of the projects have been completed and should be removed from the list. There are also projects related to the freeways that, if not already complete, should be lumped together as regional transportation projects. There are roadway projects on the list over which the city has control, and there are projects identified as important to ensure mobility in the 2030 planning horizon. There are projects that exist in the transportation plan that were not assumed in the 2030 modeling; those projects could be removed or placed in a special category of projects not likely to be done by 2030. Projects not warranted or reasonably feasible could be candidates for removal from the project list. New projects discussed as part of the process to update the Downtown Transportation Plan will be retained on the list.

Mr. McDonald called attention to project 204, which seeks to limit left turn lanes on major arterials to signalized intersections, and said the intent is to remove it as a project but to elevate it as a policy. As described the project is not location specific and but certainly is good policy direction.

With regard to project 211, the extension of NE 2nd Street across the freeway, Mr. McDonald

said the project can be described in two parts, the freeway crossing and the approaches and intersections on each side of the freeway. The proposal is to separate out the two parts and retaining the approaches part on the list and housing the crossing part in the category of projects to occur beyond 2030.

Capital Programming Implementation Manager Eric Miller pointed out that both components of the project are listed as placeholders in the adopted Transportation Facilities Plan.

Mr. McDonald commented that projects 213, 214 and 215 all relate to either the 106th Avenue NE and 108th Avenue NE roadway corridors in the downtown. Through the Downtown Transportation Plan update the mobility preferences for those streets were defined somewhat differently from the original project description that was adopted in 2004. The recommendation is to retain the projects in a separate list and to initiate a roadway corridor study that is more focused on all modes.

The description for project 303, 114th Avenue SE between Main Street and SE 8th Street, needs to be changed due to the fact that the section between SE 6th Street and SE 8th Street is already complete. The section north of SE 6th Street is constrained by Sturtevant Creek and I-405 and as such cannot be developed as a three-lane cross section. Project 304, the intersection of 112th Avenue SE and Bellevue Way, has been deemed incompatible with the East Link project and should be removed.

Project 307, the intersection at NE 12th Street and 116th Avenue NE, is not constrained as noted in the spreadsheet and should be retained.

Project 309, SE 8th Street at 114th Avenue SE and 118th Avenue SE, has only a vague project description. Further analysis is needed to determine what HOV and/or traffic improvements are needed.

Project 503, having to do with developing a parking guidance system, should be elevated to become a subarea plan policy and removed as a specific project. The specific project can be pursued through the ITS implementation work.

Commissioner Tanaka called attention to project 106, adding general purpose lanes to I-405, and asked why a state project was included on the list. Mr. McDonald said the project is part of the I-405 master plan. He said the project has no budgetary impact for the city. The project list can be simplified by simply referencing the I-405 master plan.

Commissioner Bishop suggested that the list of new projects should include 106th Avenue NE to the list of downtown corridor studies. Mr. McDonald agreed.

9. OLD BUSINESS - None

- 10. NEW BUSINESS - None
- 11. PETITIONS AND COMMUNICATIONS - None
- 12. APPROVAL OF MINUTES
 - A. January 9, 2014

A motion to approve the minutes was made by Commissioner Lampe. The motion was seconded by Commissioner Zahn.

13. REVIEW COMMISSION CALENDAR AND AGENDA

The Commission reviewed the calendar of upcoming events and agenda items. The Commissioners were reminded that the next meeting was scheduled for February 27.

14. ADJOURNMENT

Chair Simas adjourned the meeting at 9:29 p.m.

Secretary to the Transportation Commission

Date

Chairperson of the Transportation Commission

Date