

CITY OF BELLEVUE
CITY COUNCIL

Summary Minutes of Study Session

June 19, 2006
6:00 p.m.

Council Conference Room
Bellevue, Washington

PRESENT: Mayor Degginger and Councilmembers Balducci, Davidson, Lee, Marshall, and Noble

ABSENT: Deputy Mayor Chelminiak

1. Executive Session

Mayor Degginger called the meeting to order at 6:01 p.m. There was no Executive Session.

2. Study Session

(a) WSDOT Noise Policy – Discussion of Possible Noise Mitigation Techniques

City Manager Steve Sarkozy introduced representatives from the Washington State Department of Transportation (WSDOT) to provide a briefing on the agency's noise mitigation policies. Kim Henry, WSDOT I-405 Project Director, briefly reviewed the topics to be covered by WSDOT staff.

Mia Waters, WSDOT Air/Acoustic/Energy Program Manager, explained that when traffic volumes double, noise increases by 3 dBA (decibels). Similarly, 2000 cars per hour are twice as loud as 200 cars per hour. Traffic speed also affects noise levels with cars traveling at 65 miles per hour generating twice the noise as cars moving at 30 miles per hour. For comparison, a refrigerator runs at 40 dBA; clothes dryer, 50 dBA; air conditioner, 60 dBA; pickup in traffic at 50 feet, 70 dBA; and a medium truck at 80 dBA. Every time the distance from a highway is doubled, the noise level drops 3 to 4.5 dBA.

Ms. Waters explained that WSDOT tests highway noise when one of the following conditions is present:

- New lanes are added to an existing highway,
- New highways are built,
- Existing highways are moved,
- Slopes are changed, exposing homes to an audible increase in noise, and
- Will test upon request for neighborhoods built prior to 1976, which is when federal noise regulations came into effect.

WSDOT tests for noise to determine compliance with state and federal guidelines and to identify whether noise mitigation (protection) is warranted. Tests are performed in outdoor use areas closest to highways, such as a backyard, and multiple sites are chosen to assure the model can verify the topography that has already been input into the computer model. Preliminary measurements are taken with a noise meter and input into the computer to ensure the accuracy of the model. Data regarding anticipated traffic volumes 20 years into the future are added to the model in order to determine the most protective mitigation.

Ms. Waters said WSDOT measures the noise and utilizes federal traffic noise models. Based on the results of the modeling, WSDOT determines whether state and federal criteria are met to further evaluate if mitigation is warranted (greater than or equal to 66 dBA). If mitigation is warranted, each location is reviewed to determine whether a dirt berm or noise wall is feasible and reasonable. If so, WSDOT includes them in the project design. Mitigation is considered reasonable when a noise wall or berm can be built within the right-of-way for the allowed cost per number of affected homes. Walls are built when it is considered to be technically feasible based on the topography and stability of the soil. Feasibility also addresses whether it will produce a minimum noise reduction of 5 dBA for the majority of the closest homes and a reduction of 7 dBA for at least one of the closest homes.

Ms. Waters said 70-90 percent of roadway noise comes from tires connecting with the pavement. Auto and truck engines, truck stacks, exhaust pipes, and occasional truck compression (jake) brakes produce the remaining noise.

Tom Baker, State Materials Engineer, said the primary determining factor regarding roadway noise is the texture of the pavement. A positive texture is louder and a negative texture is quieter. A common concrete pavement that has been used is called transverse random tining, which has tines going across the road. This provides excellent friction but is very noisy. The main types of concrete quieter pavement are:

- Longitudinal tining with tines in the direction of vehicle travel.
- Carpet drag created by dragging Astroturf or burlap along the wet concrete.
- Diamond grinding, which has a corduroy texture cut into the existing pavement surface. A newer whisper grind is designed to further lower noise levels.

For asphalt pavement, the primary technology is an open graded friction surface with 20 percent air pockets (holes) to dissipate the noise. Typical asphalt pavement is called dense graded and contains 4 percent air pockets. Asphalt is aggregate rock held together by glue made from either rubber or polymer material.

Mr. Baker said quiet pavements permit a range of noise levels depending on how the pavements are built and compacted at the time of placement. For asphalt, it is critical that the pavement is rolled and compacted to adhere to the base pavement. Mr. Baker reviewed a graph of sound intensity levels for different types of pavement based on data collected by Caltrans in the state of California. The graph includes data collected from Arizona and reflects concrete pavement segments on the loudest end of the scale as well as open graded friction pavements as the most

quiet on the graph. Pavement generally gets louder over time. Data from the Arizona Department of Transportation indicates an average increase in noise levels of more than 1 dBA per year over a six-year period. Mr. Baker noted that sound intensity measures reflect only the tire pavement noise and do not take into account noise from engines, exhaust, and other sources.

Mr. Baker said Washington state has some of the best performing and longest lasting pavements in the country. Concrete pavements have lasted 50 years and longer. Dense graded asphalt pavements have an average life of 16.5 years west of the Cascade Mountains and 11.3 years east of the Cascades. Quieter pavements used by other states (Alabama, Arizona, California, Georgia, Florida, North Carolina, and Texas) in the form of open graded friction asphalt have a life expectancy of 8 to 10 years. These states have warmer climates and minimal or no use of studded tires.

In Washington, the state legislature has directed WSDOT to design pavements that are durable, smooth, and safe with good skid resistance. The Washington State Pavement Management Service measures every state highway annually for structural pavement condition, rutting, and smoothness. Highways are tested every two years for friction. Any degradation of conditions results in pavement rehabilitation, which achieves the lowest life cycle cost.

Mr. Baker said the use of quiet pavements presents a tradeoff with durability. Placing quieter asphalt pavements on all urban state routes in Washington, assuming an expected life expectancy of eight years, has an added cost of approximately \$18-20 million per year. Mr. Baker noted the concern for safety associated with quiet, smoother pavements given Washington's weather conditions. Arizona DOT, a leader in the use of rubber-modified pavement, specifies a minimum surface temperature of 85 degrees for effective placement. For the test segment of pavement near Lynnwood, WSDOT modified this to use the Caltrans' specification of 60 degrees air temperature. It is not likely these specifications can be met in Washington with pavement work occurring overnight.

Current noise and pavement research includes:

- WSDOT Pavement Noise Study to research other states' experiences as well as initial and long-term noise reduction and pavement performance.
- National Tire-Pavement Noise Study to promote state discussion on tire-pavement noise issues and research.
- National Concrete Texture Study to examine surface characteristics to address noise, smoothness, friction, and other traits.

WSDOT will be testing quiet pavement in five areas around Western Washington and one location in Spokane.

Denise Cieri, I-405 Project Manager, described Mr. Baker's interest in testing quiet asphalt overlaying concrete. This material will be tested on I-405 through Bellevue from 112th Avenue SE north to SE 8th Street. The pavement will consist of open graded asphalt with half of the test section using the asphalt rubber binder and the other half using the polymer binder. In addition,

the new diamond (whisper) grinding will be tested on existing concrete from SE 8th Street south to I-90.

WSDOT is testing to learn about initial noise reduction, the reduction of noise over time, and long-term pavement performance. The components of noise to be studied are the sound intensity of the tire interface, noise along the side of the road, and noise inside the vehicle. WSDOT will monitor the ride over the pavement as well as the effectiveness of friction. Both the asphalt and concrete paving associations are supportive of WSDOT's test sections. Their concerns about cost, longevity, and constructability are similar to WSDOT's.

Mayor Degginger is pleased with WSDOT's plans to test quiet pavement along a portion of I-405 through Bellevue.

Responding to Ms. Balducci, Ms. Cieri said the quiet pavement through Bellevue will be installed by project completion in 2009, if not sooner.

Dr. Davidson thanked WSDOT staff for working with Bellevue. He noted that current sound walls through Woodridge have not proven to be very effective.

Responding to Mr. Noble, Ms. Waters said the minimum reduction of 5 dBA for sound mitigation is based on federal guidelines adopted for Washington state. She described how the reasonable cost per household is determined in considering noise walls. In further response, Ms. Waters said WSDOT cannot provide protection beyond the decrease of 5 dBA due to the need to be fair and equitable in its treatment of all areas.

Mr. Lee appreciates WSDOT's decision to test quiet pavement in Bellevue. He encouraged WSDOT to continue to consider the needs of the community.

Mrs. Marshall added her thanks for WSDOT's efforts. Responding to Mrs. Marshall, Mr. Baker said the less effective test pavements would not necessarily be replaced upon completion of the pavement test period for Bellevue's segment of I-405. It would depend upon pavement performance, degree of wear, and available funding.

(b) Sound Transit East Corridor High Capacity Transit Study

Mr. Sparrman introduced Rick Ilgenfritz, Sound Transit Director of Communications and Government Relations, and Don Billings, Eastlink Project Manager.

Mr. Ilgenfritz noted that for the past year, he also has been serving as interim Sound Transit 2 administrator coordinating an agency-wide effort to prepare a Sound Transit 2 ballot measure. He explained that Sound Transit has been preparing for a second ballot measure for the past two years. In 1996, the Sound Transit Board adopted a long-range plan with a 2020 planning horizon, which subsequently has been moved out to 2030. Sound Transit commissioned a corridor analysis by the Puget Sound Regional Council (PSRC) to study and prioritize regional corridors for mobility projects.

Throughout the EIS (environmental impact statement) preparation and long-range planning process, approximately 500 project proposals surfaced for the three-county area (King, Pierce, Snohomish). By the beginning of 2006, the Sound Transit Board had narrowed the long list to 63 projects, of which approximately 20 are in East King County including high capacity transit options between Seattle, Bellevue, and Redmond.

Mr. Ilgenfritz described joint efforts by Sound Transit, WSDOT, PSRC, and RTID and the decision to not present a ballot measure in 2006 but to wait until the fall of 2007 to present transit and roadway packages. A joint Sound Transit-RTID meeting was held on June 1, and alternative investment scenarios were presented to the Sound Transit Board on June 8. Mr. Ilgenfritz noted ongoing partnerships with local jurisdictions and community outreach efforts.

On June 22, Sound Transit staff will present an evaluation of five investment scenarios to the Board. On July 13, the Sound Transit Board is scheduled to identify one or more draft transit plans for public review and comment. Public outreach activities and joint meetings with RTID will continue through the fourth quarter. Mr. Ilgenfritz said the Sound Transit Board anticipates adopting a preferred transit plan by the end of the year.

Moving to selection of the East Corridor high capacity mode choice, Mr. Ilgenfritz said the Board updated the long-range plan last summer and decided that grade-separated transit will provide the quickest and most reliable transportation. Prior to this decision, three types of bus rapid transit (BRT), monorail, and light rail were studied. The Board narrowed its focus to rail-convertible BRT and light rail. The East Corridor identified for Sound Transit Phase 2 planning connects Seattle, Bellevue, and Redmond. Mr. Ilgenfritz noted numerous studies involving I-90 and SR 520 over the past several years, which resulted in a determination by regional forums to target I-90 as the first choice for high capacity transit.

Mr. Billings reviewed the guiding principles identified in Bellevue's interest statement as follows: 1) Enhance Bellevue's place in the regional economy, 2) Preserve neighborhoods, and 3) Provide ample opportunity for public involvement. The statement further identifies desired system characteristics including direct service to downtown Bellevue and major employment centers, increased transportation capacity, the consideration of multiple alternatives (aerial, at-grade, and tunnel), and adequate Park and Ride capacity and integration with local and regional bus service.

Mr. Billings explained that the initiation of project-level work involves: 1) Design from a representative alignment to multiple routes and alignments, 2) Environmental review from the system to alignment level, with public scoping in late summer/early fall, and 3) Outreach to move from the system to alignment level with coordination between Sound Transit 2 and RTID planning. The fall public scoping effort will provide a 30-day comment period regarding a range of alternatives and the impacts that should be studied. A screening level evaluation of identified alignment alternatives will be conducted by staff. The Sound Transit Board is expected to select alternatives for final EIS review by early 2007.

Mr. Billings described Sound Transit's comprehensive communications and outreach program, which will incorporate input by local jurisdictions. Information sources include a web site,

community briefings and meetings, email updates, mailings, advertising, and fact sheets/project updates.

Dr. Davidson noted he was on the original RTA (Regional Transit Authority) Board. He is disappointed by communications stating that RTA/Sound Transit projects approved in the first ballot measure are on time and within budget. Projects to be completed within 10 years have not been completed. Further, the original initiative indicated a vote on the second phase would be held in 10 years. He questioned whether the Attorney General's Office has been consulted to determine if a joint Sound Transit Phase 2/RTID ballot measure is legal.

Mr. Ilgenfritz confirmed that the first segment of light rail (14-mile segment from downtown Seattle to Tukwila) Sound Transit attempted to develop is behind schedule and over budget. The Board then revised the project scope, rescheduled the timeline, and proceeded with construction. The modified project is on time and under budget. Mr. Ilgenfritz said he does not know whether WSDOT, as the steward of RTID, has asked the Attorney General for a legal opinion. Sound Transit's attorneys have directed staff to proceed with development of the ballot measure.

In further response to Dr. Davidson, Mr. Ilgenfritz said it is anticipated that Phase 2 transit will undergo two to three years of project development and six to eight years of construction. All investment scenarios considered by the Sound Transit Board on June 8 assume simultaneous construction of the North Corridor, East Corridor, and South Corridor.

Responding to Councilmember Lee, Mr. Billings said the I-90 bridge was built later and designed to higher standards than the SR 520 bridge. The I-90 bridge was designed with rapid transit in mind for the future. Mr. Billings said Sound Transit estimates three years to complete the environmental process and preliminary engineering on the project. If approved by the Sound Transit Board, the project would proceed through final design and the acquisition of needed right-of-way.

Ms. Balducci questioned the impacts on the area between downtown Bellevue and I-90. Mr. Billings said the range of alternatives to be studied in the EIS will be known before the ballot measure in 2007. Ms. Balducci suggested email notifications to local organizations and neighborhood associations regarding the project. Mr. Ilgenfritz said the Sound Transit web site provides the opportunity to register for email updates.

Mayor Degginger concurred with Ms. Balducci's comments. He questioned the criteria to be used for mode selection.

Mr. Ilgenfritz said the Sound Transit Board adopted a set of evaluation criteria last year. An expert review panel appointed by the State of Washington subsequently advised narrowing the list of criteria. The current top criteria are cost, ridership, connectivity, environmental benefit, and customer experience. However, an additional six criteria originally identified will be presented to the Board later this year as well.

Responding to Dr. Davidson, Mr. Billings said Sound Transit is not aware of any other instances in which light rail has been installed across a floating bridge. However, there are several rapid

rail transit systems operating on bridges with ranges of movement that are similar to a floating bridge. Dr. Davidson stated there is a two-foot movement of the bridge due to fluctuations in the water level. He noted a preliminary finding that this will slow down rapid transit travel across the bridge. Mr. Billings said systems in Vancouver, BC, and Portugal are able to accommodate similar movement with a series of springs. Mr. Ilgenfritz said the expert review panel studied this issue and recommended further study by Sound Transit, which was completed.

Mr. Lee asked Sound Transit for a report on alternative technologies studied by the agency and additional information about the criteria and process used for mode selection. Mr. Ilgenfritz said he would provide the information.

Mayor Degginger noted that the Bellevue City Council will hold a public hearing regarding Sound Transit Phase 2 high capacity transit on June 26.

(c) Bellevue Sign Code

Mr. Terry described a proposal to amend the Sign Code to allow for increased signage for theaters and other outdoor public assembly uses within downtown land use districts. This is consistent with Comprehensive Plan policies regarding the viability of entertainment uses in the downtown.

Patti Wilma, Land Use Manager, explained that the Sign Code amendment defines entertainment and public assembly uses. The content of signs would not be regulated. The amendment establishes a maximum sign size of 400 square feet per sign. Total signage cannot exceed 35 percent of the tenant façade on which the signs are located. Signage will be approved or denied by the PCD Director based on design review criteria in the Sign Code. Signs will be located no higher than 85 feet above the average finished grade of the sign locations.

Ms. Wilma reviewed examples of potential signage. Signs proposed for Lincoln Square are approximately 85 feet to the top of the signs. Additional examples include PACE (Performing Arts Center Eastside), Meydenbauer Center, the 1020 Tower, Bellevue Galleria Cinemas, and Bellevue Art Museum.

Councilmember Marshall expressed concern that content will not be regulated. She questioned what would happen if someone wanted to install a R- or X-rated movie sign. Mr. Terry said the City can regulate time, place, and manner of signage. Kate Berens, Deputy City Attorney, said the City can regulate obscenity. Mr. Terry further stated that Lincoln Square's proposal is graphically rich and evokes the type of activity occurring within the cinema, which is what the City wants to encourage. However, the specific design of signs is not regulated in the Sign Code.

Responding to Mr. Noble, Mr. Terry said the signage must reflect a use within the building on which it is placed.

Responding to Dr. Davidson, Ms. Berens said flashing or blinking signs are not allowed under the Sign Code. Further, the Code regulates the frequency with which the message can change.

Ms. Balducci expressed concern about unintended consequences of the Code amendment. Responding to Ms. Balducci, Legal Planner Lesa Hutnak said the definition of public assembly uses includes theatres, performing arts centers, expo centers, and sports arenas but does not include bars, pool halls, or mixed use entertainment venues. In further response, the Code specifies that all signs must be rigid and permanently affixed to a building.

Ms. Balducci questioned whether a fairness issue could be raised by entertainment uses outside of the downtown. Mr. Terry said staff debated this issue and determined that the scale and type of development in the downtown is dramatically different than other areas and therefore signage in outlying areas would have different impacts to the neighborhoods. He noted that distinctions between the downtown and other areas are already included within the Sign Code.

Responding to Mr. Lee, Ms. Hutnak said churches are excluded from the definition of public assembly within the Land Use Code.

Mayor Degginger noted a consensus to place the item on a future Consent Calendar for Council action.

At 7:57 p.m., Mayor Degginger declared recess to the Regular Session and noted Council will continue with Item (d) later this evening.

(d) Transportation Department Budget Discussion

The Study Session reconvened at approximately 9:32 p.m. following the Regular Session.

Transportation Director Goran Sparman explained that the department's budget has been flat since 2003 and staffing has decreased. Resources are realigned on an ongoing basis relative to priorities and available funding. Major outcomes for the department are to:

- Provide a local and regional transportation system that supports land use and level of service standards.
- Increase the use of alternative travel modes.
- Minimize the impacts of increasing regional congestion of neighborhood streets and quality of life.
- Minimize congestion by optimizing vehicle flow through signalized intersections.
- Maintain pavement condition to preserve the roadway infrastructure.
- Provide clean and attractive streets.

Current and future infrastructure planning are focused on concurrency methodology, ADA (Americans with Disabilities Act) transition plan, high capacity transit planning, planning and implementation of redevelopment in the Bel-Red corridor, and transportation capital funding. Primary operations and maintenance items are downtown right-of-way management, Intelligent Transportation System (ITS) expansion and maintenance, expansion of the Major Maintenance Program, pothole patching, and snow and ice control.

Mr. Sparrman explained that in the past the department patched potholes with a less expensive material based on the thinking that the repairs only needed to last until the next overlay application. However, the department would receive a complaint that a particular pothole had deteriorated again and needed another repair. As a result, the department has gone back to hot mix asphalt repairs, which is a more durable but also more expensive material.

Mrs. Marshall expressed support for the hot mix pothole repairs and commented that cold mix material used in other cities does not hold up for any length of time.

Mr. Lee observed that perhaps some of the potholes are caused by construction and utilities trucks. Mr. Sparrman acknowledged that heavy vehicles likely contribute to potholes. He further explained that Bellevue requires utility companies needing to cut into pavement to complete their work to repair and restore the pavement to its intended life cycle.

Responding to Mr. Noble, Mr. Sparrman confirmed that the Puget Sound Regional Council conducted a regional concurrency study approximately three years ago. Bellevue recently requested a meeting with PSRC to revisit the study results and plan for the future.

Ms. Balducci said the Pedestrian Bicycle Plan is important in terms of creating and maintaining a sense of community and a high quality of life. She expressed concern about the level of funding needed to complete future transportation projects.

At 9:53 p.m., Mayor Degginger declared the meeting adjourned.

Myrna L. Basich
City Clerk

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