CITY COUNCIL RAIL COMMITTEE

Special Meeting
May 26, 2011

1. Roll Call

Council Member Chair Klein called the meeting to order at 8:04 a.m. in the Council Conference Room, 250 Hamilton Avenue, Palo Alto, California.

Present: Burt, Klein, Shepherd

Absent: Price

2. Oral Communications

None

3. Approval of Minutes from April 4, 2011

4. Continuation of Discussion of Caltrain Informational Matters

Council Member Burt Move to Item 4A

Director Planning and Transportation, Curtis Williams said Staff was in the process of reviewing the Environmental Impact Report (EIR) and Chief Transportation Officer Jaime Rodrigues was looking at the traffic aspects and train trip impacts at crossings. He said Jeff Smith, RMT, had reviewed the High Speed Rail (HSR) reports and would be reviewing the EIR. He said he wanted to give Mr. Smith proper direction and needed to know what areas the Committee wanted to focus on.

Chair Klein said Mr. Williams wanted Caltrain's input in order to provide fair remarks during the electrification process. He asked if Caltrain had a timetable

for the certification process.

Seamus Murphy, Caltrain Manager of Government Affairs, said a specific date had not been determined but certification would be sometime in summer 2011.

Chair Klein asked if Caltrain had a format and if there were plans for hearings.

Marian Lee, Caltrain Executive Officer of Planning and Development, said the schedule was tentative because they were working with the High Speed Rail (HSR) community coalition on issues and resolutions. She said once all issues were resolved they would ask the Board to certify the Environmental Assessment/Environmental Impact Report (EA/EIR) and to commit to all mitigated measures contained in the document. The public would be given 30 days after the project's completion to comment on the action. Certification would be contingent on the public's approval and any challenges would need to be addressed prior to certification.

Council Member Burt referred to a letter from Caltrain, dated March 23, 2011, and said the letter contained two questions that needed to be addressed. He asked Ms. Lee if she could provide the answers to the following questions: 1) how would the Caltrain electrification EIR address impacts on local traffic, and 2) how would Caltrain account for the changed traffic conditions since the circulation of the draft document.

Ms. Lee said one approach was to follow up on jobs that needed to be done, such as looking at design options to avoid mitigation, or to determine if a mitigation measure was required in traffic areas of concern. She said the existing document would be adequate if a condition was found to be acceptable and a supplemental would be required to clear up conditions that were found to be unacceptable.

Council Member Burt asked if it was subsequent to the approval.

Ms. Lee said yes, that was one approach.

Council Member Burt asked Ms. Lee to clarify her statement that Caltrain's environmental approval process was to approve a document that was based on former traffic levels that somehow met the California Environment Quality Act (CEQA) requirements, and that any mitigated measures Caltrain had identified subsequent to the document's approval would go through a supplemental process.

Ms. Lee said that was one approach.

Council Member Burt asked how would that met CEQA legal requirements.

Ms. Lee said project advancement was done in increments on projects she had worked on. Milestones were assumed on conceptual levels at 10, 35, and 65 percent. One approach was to assume there would be supplemental documents for additional work that had not been considered during the conceptual stages or the need to explore additional changes. Changes would be packaged and another environmental assessment would be done to see if the added work was required. She said another approach would be to do an assessment prior to certification of the document.

Council Member Burt said that was not his understanding of how CEQA requirements were met. He said he looked forward to the City Staff's report on the legality of Caltrain's approach. He asked when an evaluation was completed on conditions that were used for the impact analysis.

Ms. Lee said it was in 2004. She said a technical study was conducted in 2008 and a portion of the evaluation was updated. The study found there was an increase during the peak traffic hours and the magnitude of the change did not spark a need for grade-separation. She said the team had looked at the 2004 conditions as well as projected conditions through 2035.

Council Member Burt asked to see the detailed information on the 2035 projections.

Ms. Lee said that could be provided.

Council Member Shepherd said when she was the Valley Transportation Authority (VTA) Rapid Transit liaison, she experienced the same questions with the VTA regarding the consideration of traffic, the Stanford Hospital build, and Caltrain's. She said there were failures at intersections and asked if Caltrain would be incorporating the VTA's plans for El Camino Real into their evaluation. She raised concerns that the certification would take place and subsequent approvals would not be addressed.

Mr. Williams addressed Council Member Burt's concern regarding subsequent work on EIR's. He said Staff used a subsequent document when a project required a negligible change. Major change such as impacts requiring mitigation measures were handled differently. He said changes that were known at the time the original document was being processed had to be

included in the document.

Council Member Burt asked if his understanding was correct that if a change was known at the time of certification, legally the condition could not be pushed out with the intent to deal with it at a later time.

Mr. Williams that was correct.

Council Member Burt said he felt a follow up was in order on Caltrain's study on train volume and traffic since there had been mandates and build outs since 2004 and projected housing the Association of Bay Area Governments (ABAG) projected through 2035.

Chair Klein asked Mr. Williams to give a recap of the questions he had received from the meeting.

Mr. Williams said there was a need to look at traffic, the volume of trains, traffic impacts at crossings, impacts on the level of service, wait time, noise issues, and out-dated information on an EIR that was done several years ago.

Chair Klein asked to add the Mountain View power station being built in Palo Alto.

Council Member Burt asked about engaging Caltrain to determine if the EIR was outdated. There was concern that current and projected traffic impacts had not been addressed. He felt it was important not to wait for the appeal period to engage Caltrain on these issues.

Mr. Williams said Staff should have a traffic analysis and an assessment on the staleness of the EIR.

Chair Klein said he was in favor of having dialogue with Caltrain to seek information and solutions.

Council Member Burt expressed the importance of having Caltrain be forthright on what was addressed in 2004 and to incorporate current information.

Marian Lee, Caltrain Executive Officer of Planning and Development said she was committed to having a transparent and open dialogue, sharing information, and respecting everyone's positions. She wanted to be able to go to the Board and say that the appropriate steps had been taken to share information. She said due diligence was required on her part along the corridor for outstanding

items prior to going to the Board. The Caltrain group would be going through the document and providing a clear understanding so that Staff would be informed on the decisions that needed to be made.

Dominic DiBrito, Engineering Design Consultant with LTK Engineering Service gave an overview on the difference between Electric Multiple Unit (EMU) vs. Diesel Multiple Unit (DMU). He said his firm specialized in vehicle procurements for transit operations throughout the United States and had been in business for 80 years. The firm stayed with their clients from the time of the vehicle's procurement until the time the vehicle was retired or replaced 30 to 50 years later. He said Caltrain currently operated a locomotive consisting of a push-pull unit.

Mr. Emslie said it seemed the decision factor between the two types of units was in the operating cost differential. He asked how they differed in performance.

Mr. DiBrito said performance was a key factor in making a decision. Passengers need to be able to move quickly in a reliable and safe manner. The operating cost was critical for Caltrain because operating funds were limited across the country for passenger and commuter operations. The ability to reduce the cost was valuable.

Chair Klein referred to the "How Local Needs Drive Vehicle Selection" chart and said stations and miles had fixed numbers while the ridership number was variable. He said Caltrain was at its highest of 41,000 and projected to 70,000. He asked how that would affect a ridership of 50,000 rather than 70,000.

Mr. DiBrito said it would be different. He said when choosing a fleet infrastructure improvements should be based on a projected ridership and not on the current. Rail vehicles lasted a minimum of 30 maybe 50 years and infrastructure was a 100 year investment. He said there was a risk when fleets were changed prematurely. It was acceptable to add vehicles but to set limits in a way that would require increasing the fleet could hurt the performance in the long-term. He said to use the current number of vehicles that was sufficient for the current ridership and to not have enough vehicles to allow for more passengers could degrade the performance of the system. Ridership could be diminished due to unattractive service or by other factors such as insufficient platform lengths where the trains become too long to fit in the station.

Council Member Shepherd asked if it would be cheaper to run electric vs. diesel

when considering capital improvement and on-going cost.

Mr. DiBrito said in 2008 Caltrain spent $14 million in fuel. He said by using that as a baseline for cost-savings, electrification would have saved approximately $10 million per year. DMU's required longer trains and have no savings on fuel. The annual savings of $10 million over 30 years would not meet the price of infrastructure investment for electrification and would need more incentives than operating cost to impact the decision.

Council Member Shepherd said in terms of noise she asked the difference between the new diesel trains vs. electrification.

Mr. DiBrito said EMU's have rail-borne noise from electric fans and cooling equipment. DMU's were less quiet than the push-pull locomotives and EMU's were quieter.

Council Member Burt asked if the "How Local Needs Drive Vehicle Selection" chart assumed every train stopped at every station.

Mr. DiBrito said Caltrain's current approach was to use express trains, local trains and skip/stop trains to maximize the number of stations the train could stop at in an attempt to provide the best service. He said a simpler approach was to have an express train that made more stops.

Council Member Burt asked if the assumption was to have all trains stop at every station.

Mr. DiBrito said the chart did not reflect that but the objective would be to stop at as many stations as possible.

Council Member Burt said another purpose for the system was to have an operating system that would be financially viable and provide a certain service level to the community. The two purposes competed with each other. Caltrain had characterized the "Baby Bullet" as "the greatest success of their system." The success was measured on the number of riders and fare box recovery that worked against the purpose of providing a certain service level. What worked in recent years for Caltrain and the purpose for service level was not one in the same. He said electrification could work where it was the best of both worlds. It was important to note there were different objectives with outcomes that could address both rather than only one objective.

Mr. DiBrito said he was talking from the technical aspect but said Council

Member Burt had a great observation regarding policy decisions. He said the business model was difficult to understand. The better job you do, the more riders you get, the more successful you are, and the more expensive it is to operate.

Council Member Burt suggested having an open discussion regarding the business model and reviewing the range of possibilities before making the final decisions. There might be alternative models in moving towards getting a greater fare box return and fewer subsidies.

Chair Klein said there was a $10 million savings per year in electrification versus DMU's. He said if there was a $500 million to $750 million capital differential it raised concerns on how to justify spending the additional funds.

Mr. DiBrito he said the single energy savings cost in this case would not show a pay off in 30 years. There would have to be more to that decision than economics.

Council Member Burt said the calculation was correct but the source of funds was different. The benefit accrued to Caltrain but the capital costs came from other sources. Caltrain did not have to demonstrate the return because it was not their capital dollars.

Mr. DiBrito said budget was a constraint as was the right-of-way. He said the corridor was expansive and land taking was expensive. Americans with Disabilities Act (ADA) accessibility was an important consideration and vehicle heights needed to be considered for tunnel clearances. Caltrain had a mix of platform lengths and the shortest was 530 feet. To lengthen platforms was costly. He said the potential downtown extension (Transbay) had tunnel issues and would require an exhaust system for diesel units. He said there were uncertainties in decision-making for the next 30 to 50 years. There would be the need to consider energy pricing regarding increase of diesel fuel faster than electricity, potential changes in federal regulations such as in Environmental Protection Agency (EPA) and ADA requirements, the economy in terms of funding, ridership changes, and the potential in technology advancements. He spoke of the EIR operations in 2035 with 114 trains per. There would be a transition with new EMUs or DMUs when units retired or moved to Gilroy. The fuel was set at $4/per gallon and electricity at 5.09 per KWh. The performance comparison consisted of getting as many cars in the platform area as possible and would necessitate multi-level cars to accommodate higher ridership. Multi-level EMU's would use 1723 KWhs for a one-way trip and 122-gallons of fuel for an 8-car DMU's and 80 gals for double-deck.

Council Member Burt asked what the dimensional length was of the cars.

Mr. DiBrito said bi-level EMU's were 82 feet, a single-level DMU was 85 feet, and the double-deck EMU's were 89 feet. Over half of the platforms would need to be lengthened for 8-car consists. Platform boarding levels for ADA would be 25 inches for single-level EMUs and double-deck would be 48 inches. Double-deck would not fit current tunnels. Tunnels would require exhausts systems for DMU's. There would be a savings of over $500,000 in energy and vehicle maintenance in EMU's and DMU's would be over $1 billion over 30-years.

Mr. DiBrito he said the EMU was a proven technology and a low risk in procurement as opposed to a prototype. Electrification was more attractive as additional trains were added. EMUs had a higher acceleration rate and would provide the maximum stations served. It kept fleet size at a manageable level, fit with current platform lengths, and had lower noise and air emissions. There were hybrids emerging that contained batteries and battery weight was a challenge. Fuel-cell switch engines had low-mileage use but were experimental and only used in confined areas.

Council Member Burt asked which platforms would require lengthening. He said the energy use on EMU's was comparable to single-level DMU's and it would decrease on the Lifecycle Cost Comparison.

Mr. DiBrito agreed, stating there was a decrease and the trade off was performance for fuel.

Council Member Burt said the double-deck EMU's required half the number of cars but was twice the price.

Mr. DiBrito agreed.

Council Member Burt asked if electrification was not required for the whole system on Hitachi hybrids for commuter rail lines.

Mr. DiBrito said that was the intent. They worked better on the smaller, lighter vehicles because of the amount of batteries used and were developed at the street car level, light rail level, and the metro level. He said the Palo Alto platform was long enough to accommodate any of the trains.

Council Member Burt said the constraint on the current system was during peak

hours.

Mr. DiBrito said locomotive coaches did not give a level of flexibility and EMU's and DMU's did. The units could be split and run shorter trains during the day to save energy. Another savings on EMU's was in regeneration. Energy was stored in the grid when the train breaks were applied another train could pick up the stored energy which would give a 10 percent savings in electricity.

Council Member Burt asked if DMU's with distributed traction have better acceleration than in the conventional diesels.

Mr. DiBrito said yes, but the double-deck DMU's were limited because of their weight and were slower than a locomotive.

Council Member Burt asked about seating capacity.

Mr. DiBrito said the current capacity with eight cars was 700 to 800 seats.

Council Member Burt suggested adding to the chart the current Caltrain cars and the total train capacity. This would give an estimate of how many cars were needed during peak hours.

Mr. DiBrito said the train lengths were developed on peak hour estimates.

Council Member Shepherd said the hybrids and DMU's could be expanded to go to Gilroy and not have to stop at the Tenamen Station where EMU's would need to stop.

Mr. DiBrito said that was correct. He said some of the DMU's could not operate to Gilroy if they did not comply with federal regulations and would not extend on the Caltrain waiver.

Council Member Shepherd asked if it was the tracks that made the difference.

Mr. DiBrito said it was not the tracks but the freight service that ran on that line. Union Pacific would not agree to the terms that Caltrain had agreed to do the operation.

Council Member Shepherd said diesel would be able to travel further if the agreement happened.

Mr. DiBrito agreed.

Chair Klein asked Mr. DiBrito if he was part of the decision-making when Caltrain pushed for the electrification seven years ago.

Mr. DiBrito said he was not.

Chair Klein asked if Mr. DiBrito's company was involved.

Mr. DiBrito said he had been involved with the project for the last 5-years and could not speak for any time prior.

Frank Guzzo, Director of Business Development, Siemens Mobility in Sacramento, CA, said his role was in marketing and business development for the western region of the United States (US) and had been following the project for a number of years. He said Siemens' was an international company, in the US with headquarters' in Germany. The company consisted of 64,000 employees in the US with 5,000 in California. They had three business sectors; industry, energy, and health care. The mobility division handled traffic solutions, logistics, complete transportation solutions and rolling stock. The mobility sector operated out of Sacramento, California. The operation was established in the early 1980's and manufactured product and created car bodies. They were the leading producer of light rail vehicles in North America. He said Caltrain operated from San Francisco to Gilroy with an aggressive schedule and ran a combination of an express service with limited service and traditional service with a stop at almost every station. The system consisted of push-pull cars, 28 locomotives, 93 gallery cars of which 27 were cab cars and had 17 bi-levels used in the Baby Bullet service that have 7 cab cars. The European approach used speed versus distance to determine what made sense for the application of equipment. He said the primary difference between DMU and EMU was one was powered electrically and the other was diesel driven and carried its own power supply. The electrical system received power through what amounted to a long electrical extension cord. The EMU was the most advanced form of high speed, distributed traction through the car, not every car was powered, and ran on 25,000 volts AC, single phase down to 1500 volts DC. He discussed a DMU or Zero Classic that had been in service in San Diego operated by North County District who owned a fleet of 12, with 20 stops along a 24-mile line. The vehicle contained its power or operating equipment under the floor or on the roof and had a diesel-mechanical system driven by a shaft from an engine with 450 horse-power through an automatic transmission that drove the wheels on the track. The maximum length was 136 feet with 120 seated and 200 standees during peak service. The Zero Mainline was developed because of safety requirements to handle front-end impacts and

energy absorption upon collision. The configuration consisted of a 3-car consist and had the capability to add cars. It had an acceleration speed of 2.5 mph per second. The base Caltrain serviced looked at a 4-car arrangement and could operate under different voltages. An option for consideration in the long-term was an AC locomotive, capable of 120 mph, fully electric, and built in Sacramento. He said he would leave the presentation on a memory stick made available to Palo Alto Staff.

Nadia Naik wanted a list of platform lengths and asked if changing the headway affected the lifecycle and cost. She asked to include a slide regarding platform heights in the MOU discussion because high speed trains had an average height difference of 45 to 48 inches from Caltrain electrification requirements. She further requested to have slides regarding policy decisions that drove the consultants' analysis at the beginning of the presentation.

Eleanor Hansen spoke regarding the traffic analysis. She suggested having two baseline analysis; one for cumulative and the other should be as lean as possible for current and existing conditions to determine different the affects. She said the 2004 analysis was stale and should be compared with 2010 conditions.

Adina Levin asked about operating cost and the interaction between electrification and high speed rail. She asked if the $10 million in savings included the maintenance of the overhead wires.

Mr. DiBrito said the savings were ballpark figures and catenary maintenance could be a couple of million dollars less.

Adina Levin spoke of a current Caltrain study in running HSR within the right-of-way in regard to the number of trains, grade separations, and other issues. She wanted to know how Caltrain studies interacted with HSR studies in terms of deadlines.

Chair Klein said Ms. Levin's concerns would not go unnoticed but the main focus of the meeting was on electrification.

Roland Lebrun spoke in support of Ms. Levin's comments and said that her concerns needed to be looked at to obtain a blended system.

Jack Ringham spoke regarding the alleged $10 million cost in energy cost on electrification vs. diesel. He did not recall a claim on the EMU savings. He said the presentation indicated a savings of 9 cents per kilowatt hour (KWH) and the

HSR Business Plan projected a savings of 15 KWH which need to be verified. He suggested an impact study on the combination of positive train control and a mid-line overtake track that would permit running 6 trains per hour during peak hours and to also consider rather than increasing train lengths to increase train frequency to provide better service.

Management Specialist, Richard Hackmann reminded Chair Klein of the item for approval of the April 4, 2011 Minutes.

5. Discussion of City Position on Eshoo/Simitian/Gordon Rail April 19, 2011 Press Release

MOTION: Council Member Council Member Burt moved, seconded by Council Member Shepherd, that the Rail Committee recommends to the City Council support of the position by Eshoo/Simitian/Gordon and to begin the process of drafting the letter to be ready for the Rail Committee meeting on June 6, 2011.

Herb Borock felt it was premature to approve the Eshoo/Simitian/Gordon position prior to the conclusion of the EIR lawsuit. He spoke on the conflict between running HSR trains and conventional trains on the same city tracks. He said discussed the recommendations of the legislative analyst and the HSR Authority Board to delay the HSR start date or move the starting segment from the Central Valley and to use the federal monies before the matching monies. He did not think anything could be accomplished until the judge made a decision on the current lawsuit.

AMENDMENT TO MOTION: The High Speed Rail Committee authorize Council Member Burt to share the draft letter at the next Peninsula Cities Consortium meeting.

Council Member Burt said the draft letter would have greater impact if other peninsula cities choose to take similar positions. He suggested they add to the Motion that as the Peninsula Cities Consortium (PCC) representative he should be authorized to share the draft at the next PCC meeting.

Council Member Shepherd agreed to addition of the Motion. She suggested a review of the guiding principles to see if adjustments were necessary to accommodate dealing with issues as a Rail Committee instead of the High Speed Rail Committee.

Chair Klein agreed to Council Member Burt's addition to the Motion and said Council Member Shepherd's concern was a good topic for a future meeting.

MOTION AS AMENDED PASSED: 3-0, Price absent

Mr. Emslie said Staff would draft the letter and provide Council Member Burt a copy to be presented at the PCC Meeting on June 5th. The item would be agendized on the City Council Meeting of June 6th. The draft would be circulated for editorial comments prior to giving a copy to Council Member Burt.

6. Reports on Meetings:

High Speed Rail Authority

Assistant Director, Rob Braulik said there was nothing to report since the HSR Authority had not met since the last Rail Committee meeting.

Peninsula Cities Consortium

Council Member Burt said the San Mateo Rail partnership group had determined their future meetings would be open to the public. The group had a letter for participating cities to sign which was different from the Eshoo/Simitian/Gordon proposal and would be discussed at the next PCC meeting to vet the difference.

Council Member Shepherd raised concerns of having two separate elements trying to build a coalition and if there was a better way to get the two committees to work together in getting better results on the peninsula. She asked if San Francisco should be involved in future conversations due to the interest of the train stopping at the Caltrain station or to continue to the Transbay terminal.

Council Member Burt said there was no update from Caltrain regarding the Policy Working Group (PWG) and the Technical Working Group (TWG) in addressing issues such as those Council Member Shepherd mentioned. He said the recommendation to Caltrain for the group's to participate was not executed properly and not adopted. The issue needed to get resolved.

Chair Klein did not feel optimistic in persuading the San Mateo Rail partnership group participating with PCC as they were not in agreement with the PCC. He said it was unfortunate there were different positions up and down the peninsula and needed to acknowledge the reality.

Council Member Shepherd said her understanding was it was an unacceptable situation and nothing Palo Alto could do to make that change for the better.

Chair Klein said that was correct.

Council Member Burt said there was room for dialogue and Chair Klein may be correct but was not quite at the point of confirming their positions.

Council Member Shepherd said she was pleased to hear that because ultimately one group wins and the other looses and or a third interest comes forward to use the divide for obtaining a different object accomplished. Her preference was to have one entity.

Adina Levin said at last Friday's Friends of Caltrain meeting two staffers from Assemblyman Gordon and Senator Simitian's office stated their offices had not reached out to San Francisco regarding the Eshoo/Simitian/Gordon proposal. She said she contacted Assembly Member Ammiano and Senator Leno's and received confirmation that Ammiano's office had not heard of the proposal and Senator Leno's office had not hear from their constituents regarding the proposal.

Greg Conlon spoke regarding quad gates sending a signal to trains of when a vehicle was stuck on the tracks. He said it was a significant feature to help avoid fatalities.

Morris Brown, Menlo Park, spoke of implications that federal funds would be going to Central Valley and not anywhere else. He said Caltrain had been orphaned because of no money for HSR for Caltrain for several years in the future. Electrification would be the only choice if there was money.

Next City Council Rail Meeting scheduled for June 23, 2011.

7. Adjournment

ADJOURNMENT: Meeting adjourned at 10:21 a.m.