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>> Councilmember Liccardo: Good afternoon. Meeting is called to order. We'll have a self-initiated roll call. Councilmember Campos, here. Councilmember Rocha, here. I'm Sam Liccardo, I'm present and I believe Councilmember Herrera will be here shortly. We'll move on to the work plan. There are no items there so we'll take on the consent calendar. The electric vehicle infrastructure update report, I'd ask to pull that item from consent for just one question. Are there any other questions on this item? My question was this. I understand initially we're looking for two sites for the electrical vehicle switching stations. And at one point I think we were looking at Taylor near 87 and I think we're also looking at the environmental innovation center over on Los plumas. I recognize Coleman might be more promising but are those sites essentially eliminated?

>> Hans Larsen: Members of the committee, I'm Hans Larsen director of transportation. We have been looking for a better location for a BART battery swap location. Councilmember Liccardo you are correct, the two sites that we have identified available for them to evaluate the feasibility of one is at the 880 Coleman interchange next to the airport Northeast quadrant and the second site is at the environmental innovation center.

>> Councilmember Liccardo: Those are still going forward then?

>> Hans Larsen: Yes those are the two locations, Manuel can correct me if I'm wrong but the focus was to start with one location. Our understanding the one that seems to be most viable as the configuration location is the one nearest the airport.

>> Councilmember Liccardo: Great, that will be very visible. Councilmember Rocha.

>> Councilmember Rocha: There was a follow-up, from past presences and going from memory, downtown area, as far as a long term plan I'm kind of curious if we're working on that or if that's a little bit far off in terms of the rest of the city. We've talked about public facilities, libraries, community centers, but beyond that is there any plan in mind to start looking at where we would place those?

>> Hans Larsen: Yes, that's a great question. So I think what -- so the grants we've received, we're placing them currently in public garages in the downtown area. What we've committed to when this went to council was that we'd come back to this committee approximately a year after the first charging stations were up and running and evaluate the use or sort of the market or industry is. What we're finding is that there are places like Target, and pharmacy locations that are actually installing charging stations within their private lots. And so what we're seeing is, interest in others to provide availability of electric vehicle charging stations. We've had great success with permit applications from individuals that want to locate them in their own property in their garage. I think we had a little over 200 permit applications. That may be a trend, people want their own personal charging stations. The other dynamic is electric vehicles have a large longer range. And so whether -- the question of whether there's going to be a great need for public charging stations, or it just spins off into a private market, something we'll have to wait and see. On the other hand, there are more and more electric vehicles coming online. So I think where we're at is we'd like to wait and see wasp over the next six to 12 months and then evaluate what kind of direction the city would want to take to continue to support the electric vehicle industry.

>> Councilmember Rocha: Thank you, that makes sense.

>> Councilmember Liccardo: I notice Walgreen's is now making them available now as well, so that's great news.

>> Councilmember Campos: I do have a question. Along those lines Hans are those going to be part of for example your department recommendations for planning on development standards when new developments come in that those be highly considered when new developments are coming in particularly commercial developments or possibly even new housing developments as we're trying to get them to become more towards the -- what is it, Build It Green standards?

>> Hans Larsen: Yeah, it's -- so that would be led by the Department of Planning, Building, and Code Enforcement. And they have been participating in the development of a guideline for development within the Bay Area. So the cities within -- in the Bay Area have put together a consistent standard on how you would

accommodate electric vehicle infrastructure in new developments. At this point, we have it as a guideline. And we think that it's likely that building developers and others will want to have their properties be accessible for electric vehicles. So at this point, we're not mandating or requiring it but it's something we will take a look at evaluate and see where we want to go in the next six to 12 months. But there are some uniform standards that are out there, so that if the developer wants to consider it, there is some good, strong guidance to help them with their decision making.

>> Councilmember Liccardo: Okay, no further comments, we'll accept a motion.

>> Move for approval.

>> Councilmember Rocha: Second.

>> Mayor Reed: All in favor, that passes unanimously. Going on to reports to committee. Parole to name overpass at blossom hill and the UPRR Xander's crossing. Councilmember Kalra, welcome.

>> Thank you, Mr. Chair. And councilmembers Rocha and Campos. Thank you for allowing me a moment to speak about this item. So as you can see, there's a request and recommendation to name the pedestrian bridge, which is just south of Blossom Hill Road crossing over Monterey Highway, in memory of Alexander Arellaga. And the recommendation that I would ask the committee to consider is to name it Xander's crossing. We did go through the appropriate public comment period and public comment process for it and we got nothing but positive feedback. We do have with us here today the mother of Alexander. Her name is Nicole Wilson. And she came here from Fresno where she currently lives. And Nicole, I'll ask you to join me make your way up here as I say a few words about why we arrived at this name and why it's so significant. Nicole was living in San José at the time her two-year-old passed away on those tracks. This is in fact her first time back to San José since then, so she wanted to let you know she's a little emotional about even coming back to San José brings back some of those very bad memories, as you can imagine. However, I would like to point out that through the tragedy of what happened to Nicole and her family, and the passing of young Alexander, something good has come from it. And I

really want to start by giving credit to councilmember Forrest Williams who used this unfortunate tragedy as a way of really getting the community together and getting support, ultimately, for funding to create this pedestrian overcrossing which is approximately \$10 million in total. And he was beating every bush. He eventually got to the senators office in Washington, D.C. in order to get some federal funding for it. And so really, this wouldn't have happened without, of course, the tragedy that occurred, the community coming together, and councilmember Williams really pushing for that funding. And I just want to really thank Ms. Wilson for making the trek up here and for allowing us to name the bridge after her son. And I know and I hope that you feel even a small amount of solace knowing nothing can take away from the tragedy and knowing that this bridge happened because of your son and that other mothers will not go through what you had to go through.

>> Councilmember Liccardo: Ms. Wilson, welcome.

>> Thank you. I can't believe it's been six years. Still feels like yesterday. I'm here today to express my feelings about the name of the bridge, that will now allow for a safe crossing for pedestrians who so frequently cross the railroad tracks today on Monterey load. After the death of my son Alexander, or Xander, as he was known to his family, life seemed to speed by. The events that took place soon after, it was hard to see straight. Katrina Hatton, the woman who was with my son during his last, precious breath, was arrested, she was tried and placed on probation with many stipulations. Given that she was released home and entrusted to follow these guidelines for her probation, she was able to leave town with her daughter who at the time was taken from her. She has been able to live a full life with her daughter and other children that she has had since. The original babysitter, who I entrusted my son's life with, was able to walk away from the situation given that she was not present at the time of death. So she, as well, is able to; live her life fully, having no children with no consequences owed. There was no justice in the death of my son. Did he even matter at the time? It seemed not. I found out that money has been raised to build a beautiful bridge erected because of this tragedy that has bestowed upon me. When I found out I gave a sigh of relief that now, no one else's child will be hurt at this place that has been used illegally as a crossing to the shopping center beyond. I received a call asking about my feelings about the groundbreaking. Imagine my surprise as I had no idea when it was. This is something that I feel I should have been a part of. I was very upset that I could not be there and show gratitude and take it in full force of my

emotion. As I realize that my son's death would bring about something positive that could potentially save many more lives. Did my family even matter at that time? I thought not. When I got the call about possibly naming the bridge in my son's honor for the first time in a long time I had tears of joy. When I began to tell my family and friends that Xander's crossing is in the making, at the time not knowing that that is the exact name that everyone else was calling it. This was meant to be. When I was e-mailed the proof shot of what the crossing was going to look like. My chin hit the floor. It was not just an elevated cement sidewalk. It is going to be this beautiful structure that is going to be noticed by locals and visitors alike. People of San José who know what happened here are going to remember Xander. People from everywhere else and people who don't know what happened here, are going to see this bridge and still feel the emotion behind it and what a positive thing this means for this area. I'm so honored that my son is being remembered and so many people are letting me know that Xander did matter. And for that thank you, and God bless.

>> Councilmember Liccardo: Thank you, Ms. Wilson. Thank you for sharing your feelings with us.

>> Councilmember Kalra: With that, Chair, I would ask that the committee pass the recommendation before you. I anticipate it would stand before the council so the next opportunity we will have to celebrate this great achievement will be at the actual ribbon cutting.

>> Councilmember Liccardo: Wonderful.

>> Councilmember Rocha: I'll move approval.

>> Councilmember Campos: Second.

>> Councilmember Liccardo: If there are no further questions, all in favor. Forgive me. I see a person who would like to speak. Ma'am, members of the public typically fill out these cards. I'm happy to ask you to come on up but perhaps you could fill out the card after you speak that would be helpful. Come on up top microphone right here. Thank you, and if you could just state your name for the record.

>> My name is Barbara Cunningham and I live in that area. And I'd like to know why it took so long to build it? Why isn't it finished by now? When they have said it's to be done in April, it's going to be done in September. You're not done yet! I can hardly wait to get to use it. So I can go over to Walmart instead of having to take bus 68 and then backtrack to get to and from. So I wish everybody would finish that bridge, so all of us that are in chairs, whether it's a wheelchair, electric or whatever, or the strollers, can enjoy going over that bridge. Thank you.

>> Councilmember Liccardo: Thank you. Okay. There was -- yes, Councilmember Herrera.

>> Councilmember Herrera: I just want to say how much I -- support this and support the naming of this. And I'm deeply moved by Xander's mother who is here today. And I want to say a number of things. There are many lives lost on this bridge, too. Xander's going to be the one that will have the name on it, but I also want to mention that Jessie Dominguez, who was a community worker, died on this same crossing. So it just highlights the need to get this done soon. Thank you again so much for coming today to put a faith and a memory on this project.

>> Councilmember Liccardo: With that, all in favor? That passes unanimously. Thank you again. We will take up item number 2. It's the LED street light update report. Welcome Hans.

>> Hans Larsen: Mr. Chair, members of the committee, again I'm Hans Larsen director of transportation. We have a report for you on our LED street light conversion program. We have two actions for you. One is to accept status report on the progress we're making to convert our street light system to bright light adapted LED street lights. We'd like to get the committee's feedback on the direction we take with future conversions. So two-part report one is to give you a status where we're at and then the staff report and some of my comments will be intended to facilitate feedback in terms of our next steps as part of our comprehensive street light conversion. I like this picture here because it just shows an example of the difference between the white LED street lights which are on the closer part of the street and our current yellow lights that we have here in San José. This is one of our demonstrations corridors out in district 2, where we got community feedback on preferences in terms of the

light. And obviously the whiter lights are the ones that are -- that we are favoring. Little bit of context for this. We have 62,000 street lights. We spend about \$6 million a year in O&M, 4 million in energy, about \$2 million for maintenance. San José has very unique street lights. We are one of the only street in the country that has the yellow lights and they were selected in the '80s for many reasons. One is, because they are more energy efficient than other more white street lights. And this was done in order to accommodate the research work that's done by Lick Observatory. So the yellow lights can be filtered out and allow them to conduct their research. As part of the City's Green Vision there was a goal adopted to convert our street light system to smart LED street lights. And this would provide greater energy savings. It was designed in a way to continue to support the work of Lick Observatory. So we have pioneered the concept of smart adaptive street lights. These are white LED lights that have a brighter light during the early evenings but have the ability to be controlled where we can dim the lights to a lower level, say between midnight and 5:00 in the morning to allow Lick Observatory to do their research work. There's a lot of great firsts that the City of San José has pursued in this. We did the first demonstration project, the technology is actually designed and developed based on our partnership, demonstration partnership program here. The city council adopted the first design guideline for adaptive dimmable lights. Because there wasn't a PG&E rate for dimmable lights we had to pioneer the development of a new rate. And we recently selected a vendor that could provide street lights for us with the adaptive controls with the LED lights. And we have a current contracts for three years, to buy many lights as we can fund. So we have everything on board to move ahead as quickly as we can, and primarily the key issue was the funding resources. So we have a program underway to convert about 6% of the city lights, over 3,000 lights and this is done through a number of programs listed here. We had our demonstration projects where we were testing out different technologies. We got CDBG grants, we got federal ARRA grants. Those are being implemented this summer. And then interestingly is we have incorporated this as a new standard with other public and private projects. So things like the lighting, landscaping, pedestrian and bike improvements on Capitol Expressway will have the new LED lights. When VTA comes in and does the BRT project in the Alum Rock corridor we'll have the LED lights. The San Fernando bike corridor when we do green bike lanes in that corridor, that grant that we received also covers converting the lights to LED lights. So we have integrated this into other projects we have. I have some additional good news. Last week the city council approved the allocation of CDBG funds for a couple of communities. They have made a priority to have street lights in their neighborhoods converted. So both the Santee and Mayfair neighborhoods will

have street lights on their neighborhood streets, and so we'll be adding another 500 lights bringing us over 4,000 lights that are funded for conversion. As we talk about where do we go in the future, I want to just kind of distinguish a couple of things between basic LED street lights and the committee members may have heard that other jurisdictions, New York City, Los Angeles and many others, are actively working towards converting their lights to LED lights. But in all cases, they're convert converting basic LED lights. They're not using the adaptive controls that we have. And I wanted to just kind of distinguish between those because it does have a factor in terms of the overall cost and pay-back period. So basic LED street lights are good, they give you energy savings, if you've had yellow lights, and you get the white lights, you get improved visibility and safety. And LED lights have -- last longer and require less maintenance. The lights that we have require maintenance every two to five years depending on the lights. The new LED lights have a ten-year-plus expected life. So less resources go into changing burnt-out street lights. So the added benefits that San José is a leader on is the smart adaptive street lights. And so you get greater energy savings with dimming at night. This allows us to have darker skies for astronomical research. The lightbulbs last longer because they're low energy use with the dimming. And one of the key benefits that we're learning to appreciate even more is that the controls for dimming the lights allow us to have realtime monitoring of the system. And so we will know, we will get messages if the lights are out, or if somebody has cut the wire to the lights which has become unfortunately an increasing concern. So the smart lights have the added benefit of us knowing when something is going wrong with the system and we can deploy our maintenance resources and take care of it right away. Without that feature we rely heavily on members of the community to report that the lights are out, and oftentimes you know, there can be many months lag before we get the information that there's a concern. Typically we get a spike on reports on lights being out when you get the time change in October and all of a sudden it's dark at 5:00, then we get a spike of activity and it takes us a while to be able to catch up with that. The smart lights will know in realtime we can fix the problem very quickly. From a financial perspective, we put this chart together just to illustrate sort of the difference between cities like San José that are going to smart lights, and that already have very energy-efficient street lights, and then the Los Angeles example. So just looking at the chart here, San José, we have for our neighborhood street lights, the lights are 55-watt low pressure sodium. Compare that to Los Angeles, their neighborhood street lights are 100 watts high pressure sodium. And the energy per light cost is more for Los Angeles than San José. But we already have a very energy efficient street light system that we have today with the yellow light. And so as you convert your

lights, there's a difference between a city that has a more expensive light, they convert to LED, they get a better rate of return or greater savings. With the replacement lights, because we are doing the smart lights, these are a 37 watt smart LED lights. And we have a lower rate, \$1.23 per month with dimming. But because of the components of it, part of the fixture that has the dimming controls, it is a more expensive light than if you didn't have that. And so you could see with the Los Angeles example, they've got basic LED lights, they don't dim then, so it's a bit more expensive. But one of the most expensive parts of the lighting system is the adaptive controls which is about \$300 per light. What we're finding is that the LED lights themselves have gone down dramatically in price, because there are a lot of communities that are converting, but because we're relatively unique with the adaptive controls, there isn't the market to drive the cost down at this point. Looking at these two examples, you can see Los Angeles has about a ten-year rate of return for their investment, to go from a higher energy light to a basic LED, compared to San José, for our neighborhood lights, they have about a 20-year pay-back period. So quite a difference. I've heard this quite often, how come everybody else is doing it and they essentially finance themselves? It's because we're coming from a different base, more energy efficient base, and we're pursuing the adaptive lights. This chart is a summary of what we've included in your reports. And what we wanted to communicate is there are differences in the type of lights we have in the city. You can break them into four different categories. We have the lights that are on the major streets which are higher energy lights. We have the doubt lights which are even higher energy. We burn up to founder-watt lights, high-pressure sodium in the downtown area. Our local streets have a lower wattage light and then we have ornamental and pedestrian lights. And each of these has a different pay back period because of the -- the energy usage, and the cost of LED replacement for these. And can you see the numbers there in terms of what it costs. It's about \$60 million to convert all of our lives and different lights have a different pay back period. And what we're suggesting, have a suggested policy direction is if we don't have the resources to be able to do all the lights, that we would look at them in some kind of priority order, and our suggestion is that we would start with the major street, that they have a reasonably good pay back. Again it's not fully cost recovery for any of our lights. But we get, we think, more safety benefit for the white light on the streets that have the faster faster and higher volumes. The white lights have potentially a very good pay back but there's a question about whether the highest wattage LED light that's on the market today has an equivalent or adequate level of light for the downtown. We've put in place a test section of LED lights on San Fernando street between market and Almaden and we're seeking feedback from

groups like the downtown association to determine whether that's bright enough. If it isn't we would probably look towards continued development of brighter white lights, that would meet the lighting needs in the downtown. So there's a little bit more study needed for the downtown area. Neighborhood lights which make up the largest group of lights that we have, as I mentioned they have a fairly kind of long pay back period, about with years. I might add that these numbers that we're reporting are very conservative. They just look at the energy cost as a rate of return. We are not taking into account fully labor savings that we would have on maintenance. And as I indicate in the staff report, until we were able to -- you know mostly or completely convert over all of our lights, we would propose that the savings in maintenance would go towards improved service levels in terms of dealing with street light outages and things like copper wire theft. Because of many years of budget reductions, we're at a fairly low service level in dealing with light maintenance, so if we get more LED lights that will provide us with the same resource base, the ability to provide more service on the lights we already have. But theoretically we could save more and then we have not taken into account the benefit of dimming. We are part of a three year pilot principal with PG&E to get the energy savings from the dimming. We can't guarantee at that time program will continue or at the same level so we have been very conservative with that. So I would expect that we have better pay-backs than this but if you look at the lights lasting about ten years, most of our lights have a pay-back period well beyond that. So I think we should look at while we get energy savings and cost savings, the reason that we're doing it is there is an overall better enhancement in terms of community quality and safety and a number of other factors. The last category is the ornamental and pedestrian lights. If you look at the cost, we have 6,000 of those, \$19 million to replace those. Very low effectiveness and that's primarily because there aren't that many products out there that provide LED bulbs for the ornamental or historic street lights that we have. And so those are very expensive at the current time. So we would recommend waiting on those as a last priority until such time that additional products and technology catches up with this product type. My last slide is just some thoughts in terms of policy considerations. We're suggesting looking at priorities, if we have limited resources and in the order listed here on the slide, we have council direction already to explore private financing options where we would look at batching the energy savings from LED street lights as well as energy savings from an expanded city building energy efficiency program. So we are currently working as staff and with the mayor's office, looking at different options on that. There's been council direction to consider LED street lights as part of the potential future ballot measure particularly the G.O. bond measure that's potentially for consideration in November. We'll be coming

back in June with initial community survey information in terms of elements of that program that are most compelling to the community. And then as I mentioned, we would continue the effort of integrating street light conversions with other projects. So if we had streetscape projects or investment in our roadways we would try to make them as convenient as possible and include the LED conversion along with it. That concludes our report, I'd be happy to take any questions the committee has.

>> Councilmember Liccardo: Thanks, Hans. Councilmember Campos.

>> Councilmember Campos: Hans, going back to, I think I heard this correctly, financing against the savings in order to I guess speed up conversion, how many years could we knock off the overall plan we have right now if we're able to do that?

>> Hans Larsen: Well, so we have -- by if we converted all of our lights we would get about \$2.4 million in energy savings. So if you look at the lights lasting approximately ten years, and again we think that that's fairly conservative. So there's about \$24 million savings that we would get just on energy. Now to fully convert all of our lights it's about \$60 million. So it's not one that pays for itself because of the direct energy savings, there would need to be some other funds apply to it in order to achieve the conversion.

>> Councilmember Campos: You would look at this strategy combined with the potential ballot measure?

>>> Yes.

>> Councilmember Campos: If that happens. Let's say a ballot measure, either we don't do it or it doesn't pass. Would you still be able to do a portion of the light by going against future savings?

>> Hans Larsen: Well, I think -- let me go back to this slide here. Saying for example if we put the major streets downtown and the local streets, that adds up to roughly to about \$40 million. So in a ten-year period we get \$24

million of savings. That means for \$16 million additional from, whether it's grants or a bond measure, or other sources we'd be able to achieve converting most of the lights in the city.

>> Councilmember Campos: And we would be able to save time by -- because right now, without doing anything, you know, we're looking at this being a ten-year project, right? I thought I heard that way back when, when we first started talk about this.

>> Hans Larsen: No, I don't think we have a particular time frame. The time frame will be based on the ability of funds for this.

>> Councilmember Campos: Then my next question not related. Notice that there are ornamental lights in the downtown. Would those be put into category four as well, or would you want to convert those ornamental lights in the downtown as being second-category as well?

>>> Yes, that's a real question. If there was preference from the committee on this, it would be her to -- I could do the year of head treed light, and then say in corridors we're going to do all the lights so the lighting is consistent, recognizing the ornamental lights are very expensive. The question is to be consistent with all the lights or would it be acceptable doing if street lights be white and the ornamental, kind of minimum and match of lights is a question or dilemma of, is that going to raise questions of how come you only did half of them versus doing them completely? I think we're open to feedback in terms of the pros and cons of that. So we don't have an opinion at this point. I think with our initial deployment we have kind of purposely avoided corridors that have a mix of overhead street lights and ornamental lights. At the time we headed that direction there weren't ornamental lights available, and so now there are some coming onto the market so we have the ability to do some conversions. But I think that's as we kind of grapple with what direction we go I think that's a good question for committee members or other policy makers to give us some feedback.

>> Councilmember Campos: And so over time we're like judges like anything technology will get better and these ornamental lights we'll probably see better products out. And so theoretically, by the time we get to our fourth priority, we could see significant savings in ornamental lights begin that technology will probably get better.

>> Hans Larsen: That's my belief that that would be the case.

>> Councilmember Campos: Okay, thank you.

>> Mayor Reed: Councilmember Rocha.

>> Councilmember Rocha: Thank you. Now how does this play into all the street lights that are shut off, so to speak? Do we envision replacing all of them eventually with these and it's written in this, I'm sorry forgive me, there's also the other issue you talk about and that was the repair, and you already answered that question as far as Councilmember Campos.

>> Hans Larsen: Yes, so we had it for kind of budget-balancing reasons, we did turn off 900 street lights in the city in the past. What we're proposing where we do conversions to LED lights that we would turn on the lights that were shut off in that corridor. We would reactivate all the lights within that corridor.

>> Councilmember Rocha: So we would only get to those when we do replacement?

>> Hans Larsen: That is the current practice that we have. Again, that's another area that I know we continue to receive concerns, as I'm sure councilmembers do about lights that have been shut off. People say oh the lights need to be retained, and they say no that was shut off. That's sort of another open question, is as we move forward with -- if we did get additional funds, how would we deal with the lights that are shut off, do they get earlier priority, or do we deal with them when we're in the corridor doing conversions.

>> Councilmember Rocha: And you just touched on it and Councilmember Campos did, as well, in terms of the savings that we talked about reinvested in either further replacement or repair, or the other lights that are turned off. So you kind of covered that and it sounds like it was really a matter of policy direction in terms of priorities. I raised this, and you kind of alluded to it as well, is pedestrian safety. We've had some fatalities in San José in terms of pedestrian safety, and some of the concerns has been some of the lights in those areas were dim or off. Given that issue, there's a case to be made that we might want to look at maybe turning those lights back on. Again that is a full discussion which will lead me to my next point, which is, as far as cross referencing this on the council agenda when this goes through, was that something you had in mind?

>> Hans Larsen: We had -- we absolutely can do that, yes. Again we set it up as a status report with feedback from the committee. If this is something we have a larger discussion with the council on, I think that's certainly appropriate.

>> Councilmember Rocha: I think it's a great report, and whoever makes the motion, I think if they wouldn't mind including that direction to cross-reference it for the council agenda.

>> Councilmember Liccardo: Is that a motion?

>> Councilmember Rocha: So moved.

>> Second.

>> Councilmember Rocha: This is another issue kind of related to what you talked about, and that was the consideration of staff reductions is not recommended until at least the majority of the street lights are converted. Could you expand on that a little bit more? I guess we would get the savings in terms of the cost reduction for the investment or the cost for the light. But explain to me the theory behind the staff reduction.

>> Hans Larson: We have -- so right now the lights that we have in the city, they require a replacements ever two to three years, some three to five years. So we have a maintenance staff that does street light maintenance to deal with that. As we get more LED lights, which are expected to have a life of 10 years plus, then we wouldn't have the demand for street light maintenance, and it would allow some ability to be able to scale back our maintenance staff. So our suggestion is, until we get to the point where a major of our lights are LEDs, we don't see that we could actually get the savings by reduced maintenance immediately until we get enough of these sort of under our belt, so to speak.

>> Councilmember Rocha: In terms of getting them online?

>> Hans Larsen: In terms of being able to reduce staffing for street light maintenance, because still would have majority of our lights needing maintenance, and I think that we have, with budget reductions, we used to be able to maintain lights that were out, you know, within a week. We're more on a two-week turnaround, but because of the really the very difficult issue of dealing with copper wire theft, we have lights out for many months before we can catch up and do those. So I think we would -- if we get more LED lights I think we would want to invest in improved service levels initially, until we get to a point where we could consider some reductions.

>> Councilmember Rocha: That's exactly how I feel as well, thank you. Last question was, some direction in terms of the privately financing I've had the opportunity to meet with, I think it was Chevron Energy, a wing of Chevron. That invests or offers I guess support in finding funding for improvements, and this was one of them. We had a pretty lengthy discussion about this and I know staff took the time to sit down with them, so I appreciate that. I might, should this come to council, and if it is cross-referenced it may be an opportunity to maybe sit down with some of my colleagues and talk about some direction around that. But I'm not going to get into that issue now. The slide you showed that had the number of lights, major streets downtown, local neighborhood, ornamental --

>> This one here?

>> Councilmember Rocha: Yes, as far as the priority list you have, you have downtown number 2 and again I tend to always raise the issue about the neighborhoods and the investment there and trying to under the investment here, or at least the prioritization here. Clearly there's a much smaller number, and in my mind that means you can finish it quicker, and then you can move on to the next phase. But try to understand a little bit more, if you don't mind sharing with me, why you had that particular order, so I understand.

>> Hans Larsen: I would say in terms of the cost-effectiveness and the Fay back, the downtown lights would have the best pay back. The only thing -- and potentially that they could pay for themselves, as the PowerPoint slide has left detail but on attachment 3 it has a little more detail in there that the downtown lights are 250 Watts to 400 Watts high pressure sodium. So those burn a lot of energy. And we think we could get a terrific amount of savings by converting those to LED. The problem is there's not an LED light in the market that provides that level of lighting intensity. So I would probably say we've ordered these in terms of having the best pay-back period highest to lowest with the exception that it doesn't appear the market's quite ready to do the downtown lights. And so I placed it second behind major streets to give it a little time to catch up. And if the market is there, then we probably jump on doing the downtown light replacement. Downtown is a place where people all over San José and the region come to for culture and entertainment. And to have a well lit safe place in the downtown I think is you know part of the overall citywide interest.

>> Councilmember Rocha: Yeah, yeah, I agree I wouldn't argue that point, I would just go back to the pedestrian sayings and looking at some of the issues we have. I'm trying to think priority for me might be that. And going through my memory I might not have a good recollection, maybe Councilmember Liccardo does in terms of incidents downtown in terms of pedestrian safety. And I also picture in my mind as I'm going through the neighborhoods late at night or downtown. I generally feel like I've got a good visual of what's going on downtown and I can see because there's plenty of lights whether it's from businesses or the street lights. You go down the residential areas I don't have that same impression. So for me it would be measuring those two as well and I'm not suggesting that is right or wrong, just sharing my feedback. And again if this is cross referenced I may take the opportunity to talk about it further at council.

>> Hans Larsen: If I could add on the issue of pedestrian safety, we would -- most of the incidents we have with pedestrian safety are people trying to walk across the major street. High speed, higher volume, four-lane, six-lane streets, clearly that's where we have the majority of the incidents. So that was a factor in us putting major streets as the highest priority, because we think that that's the area that we would bet the greatest safety benefits citywide.

>> Councilmember Rocha: Thank you.

>> Councilmember Liccardo: Councilmember Herrera.

>> Councilmember Herrera: Thank you and thanks for the report Hans. I remember talking about this over the years and I remember at one point you saying this is one of the best returns or if best savings we could get in terms of doing some infrastructure projects. Have you -- is that still the case? Because it looks like a longer ROI than I had anticipated. Can you comment on that? I'm trying to remember we talked about energy savings and saving money out of the budget and LED came up as the top one and I can't remember the report or the date. But I think you know away I'm talking about. Can you comment on that, tell me if that's changed at all?

>> Hans Larsen: There's not too many investments we make where we save money, this is kind of a unique category. What the tradeoff here is if we could get the capital investment to convert the lights then it frees up operating funds we could use for other purposes. I might add that the operating funds we use to power or street lights and traffic signals, it's not a source that's directly from the General Fund. When we use the City's allocation of gas tax revenues that we get and it's those that are used to pay for our energy bills. So I've heard some comments about if we save here we have more moan to free up for libraries or Public Safety. That wouldn't be the case. But I think another important need that we have is if we could free up operating funds from street light energy that's something that we could put into dealing with our citywide payment maintenance needs.

>> Councilmember Herrera: Ah, so that's also really important to consider, too. Thank you for pointing that out. So I too am concerned about pedestrian safety. So can you help me understand, so I think you've addressed

a little bit in terms of Councilmember Rocha's questions. But are there other connections we see with lighting and especially I'm thinking in the neighborhoods with lighting and safety. For example, just helping with preventing crime. I mean, can you just talk about that a little bit?

>> Hans Larsen: There -- yeah, clearly, I think one of the huge benefits of the conversion program is for improving overall visibility in our community. Whether it's on major streets or within neighborhoods. So certainly, the -- that has a benefit, whether it's traffic safety or dealing with property crimes and other things like that. One other issue that we've had with the yellow street lights is that the color recognition isn't very clear. Under the yellow lights the green car going by doesn't maybe look green at night, and if you have the white broad spectrum lights you are better to more accurately describe what may be out there in the community. So I would say certainly this also has other community safety benefits other than on traffic.

>> Councilmember Herrera: Interesting. The white light isn't so intense. Different wattages, different power output?

>> Yes, so they use about 40% less power. So that's just --

>> Councilmember Herrera: The white lights?

>> Hans Larsen: The white LED lights. There's additional savings there and additional savings with the dimming. So yearly, we would be reducing our energy bill for street lighting by 60% between -- two-step conversion to LED and then employing the dimming.

>> Councilmember Herrera: The smart light feature.

>> Hans Larsen: Right.

>> Councilmember Herrera: I guess what I was asking is qualitatively for the resident having a yellow light versus a white light, how -- is it going to be bright enough -- what's the perception going to be in the neighborhoods in terms of that light quality?

>> Hans Larsen: The perception and Councilmember Campos has them in his neighborhood.

>> Councilmember Campos: Yeah, they're great.

>> Hans Larsen: He can provide a personal testimony. But generally converting to the white lights it's actually brighter. And then when we dim them late in the evenings, is that the light quality is even perceived as being brighter or better with the dim lights than with the yellow lights that we have today.

>> Councilmember Herrera: So is there a way to look, to prioritize and I'm assuming we're going to go for grants and we're going to look for a way to get money for these lights. And hopefully there's some grants for neighborhood areas for lighting too to address some of the safety issues we would be discussing. Would we be able to prioritize those areas where lights are out or more light shed on the situation would help the safety issue there, is that something staff's considering?

>> Hans Larsen: Those are two key questions we're wrestling with. One is, how do we get more funds to be able to do more conversions and then with more funds where is the best place strategically to deploy them.

>> Councilmember Herrera: I know in one of my SNI neighborhoods one of their top ten is getting better lighting.

>> Hans Larsen: Two neighborhoods that have CDBG funds, they both said we want better lighting within our neighborhood, made that a priority. So we'll be delivering on their new street lights over the next year. So I think in terms of resources, there may -- you know we get not a lot of money through the CDBG program. So that 500 lights a year isn't going to get us too far. We did get federal stimulus funds to do most of the deployment we're

doing this summer. I'm not sure how much more money is going to come from those kinds of sources. So I think where we have the ability to use the energy savings that we get, so to pay off some of the cost but part of the message we're delivering is, it doesn't fully cover it, it would need some additional supplemental money investment.

>> Councilmember Herrera: Certainly that helps. I was wondering about the TBD on the downtown. Why don't we know what those numbers would be?

>> Hans Larsen: Again, we're not sure that we have sort of a technical solution for our downtown lighting yet. The highest wattage LED light on the market we're not sure is a really an appropriate equivalent replacement to the lights that we have out there now. So that's an area that needs some further study.

>> Councilmember Herrera: And when you talk about ornamental pedestrian lights help me understand which lights you're talking about exactly.

>> Hans Larsen: These are kind of the historic lamps.

>> Councilmember Herrera: That's what I thought you meant. You don't mean something in the bushes, you mean something standing?

>> Hans Larsen: Correct.

>> Councilmember Herrera: Just want to make sure I know what you're talking about.

>> Hans Larsen: I guess we have included in this there are some corridors where we have palm trees in the median and uprights that are part of the ornamental or decorative part of the corridor. So we have those included within these. The vast majority of the 6,000 lights are not -- I don't mean historic --

>> Councilmember Herrera: I understand what you're talking about. They're actually lit and they're on light poles, fixtures, but they're historic in nature. So are maintenance districts, would they be treated any differently? Can the folks that are paying taxes to have maintenance districts, does that include the lighting and could they direct some of that to go to conversion of LED?

>> Hans Larsen: I don't believe -- that's a good question.

>> Councilmember Herrera: I mean, could they put together a program where we could start converting and that would save money for their maintenance district and that could be applied in a similar fashion that we are talking about with the rest of the City's budget for this. Since the taxpayers have voted, I mean they're -- maybe they voted for this or they bought into a community that had been set up that way, so I would think there would be some way to somewhere they opt in for this because it's their own funds that are paying for it.

>> Hans Larsen: I'd have to check into that. I'm not sure we have districts that have street lighting as part of them. Unless it's clearly like supplemental and ornamental lights. I'll have to check into that.

>> Councilmember Herrera: I'd ask you to check into that so that might help us get more lights. I had one more question, and I'm forgetting it now, let's see. Oh, I guess that's enough for now except I do support this, thank you.

>> Councilmember Liccardo: Thank you. Hans, I'm just interested in the decision that we're making. Somewhat uniquely I think, to go with the smart technology and I certainly appreciate the fact that PUC and PG&E are encouraging this pilot and we're participating in that and I think that's a great thing. At this point is the PUC kicking in any money to help us with the additional expense? Is that part of the pilot?

>> Hans Larsen: It is not part of the pilot for the dimmable street light rate. It doesn't include any funding other than we have the ability to just pay the energy for --

>> Councilmember Liccardo: Right.

>> Hans Larsen: Pay for the energy we use.

>> Councilmember Liccardo: Rather than a flat rate.

>> Councilmember Herrera: One of the elements in a senator street light is the ability to capture the actual energy use and that becomes the basis in which we get billed for lights.

>> Councilmember Liccardo: Right.

>> Hans Larsen: We dim 40% levels, 60% level we get the benefit of that savings. There are, notice, grants available both for LED street lights, and there are some grants that are encouraging the adaptive street lights that we have. So there are some funds available to help pay, help subsidize the control system to be able to do the dimming. So that's one of the benefits of perhaps moving in the near term, is to capture some of those available incentives to do this.

>> Councilmember Liccardo: So I appreciate the direction that I think we all see PUC and the industry going is towards adaptive street light tariff. But I assume that has to be in place ultimately for us to capture, calculating 41 cents a month in savings by going with the smart lights, right?

>> Hans Larsen: Uh-huh.

>> Councilmember Liccardo: We would need that to be sort of a citywide thing that PG&E and PUC and everybody is in board with in the long run for us to really see those savings, is that correct?

>> Hans Larsen: That's correct. So we're in a three-year pilot, and in order to get long-term savings we would want to see that program continue on in perpetuity.

>> Councilmember Liccardo: And I appreciate the fact that we are pushing technology as we continue to do in the city and that's a great thing. When you look at it in a pure numbers standpoint about what L.A. is doing and what we're doing, the payback on that marginal system to go with the smart system is not great, right? I just did the back of the envelope calculation and I get 41 cents a month, you're trying to make up about 300 bucks difference in the adaptive controls which is a really long, I don't know, I guess about 75 years to pay something like that off. Are we anticipating that those adaptive controls are going to come way down in cost? What are we looking at that sort of justifies that marginal decision from a cost standpoint or is this more about the objective we have from an environmental standpoint?

>> Hans Larsen: Well, I think there are a couple of things. One is we believe the costs will go down. We're seeing interest within other communities in the industry to move towards the adaptive lights and kind of the active management and controls. There is the benefit of being able to know what's going on with your street light system and when it now functions you're able to deal with that. So there's that additional external cost. I guess sort of the main benefits of going to it, one is sort of a long standing policy direction on being able to continue to support research from lick observatory. And that was I think probably the main driver by having them support the conversion from yellow lights to white lights was really based on the ability that we could dim the white lights late at night. So that they could continue their research. But then there's also a greater increment of energy savings. But we also believe that the dimmed lights are going to have a longer life. And so there's some cost savings associated with that, that's the bake street lights, may last ten years. But a light that's dimmed late in the evening could have a longer life you know 12, 13, 14 years.

>> Councilmember Liccardo: Agreed but that's all captured in that 41 cents a month savings right?

>> Hans Larsen: That's purely the energy savings we get billed from PG&E. I might add that this example is just for a residential street light example.

>> Councilmember Liccardo: Okay.

>> Hans Larsen: That if you apply it to the brighter lights say downtown I imagine that's another policy issue of whether we dim lights downtown in the evenings or on major streets, we would get greater energy savings with dimming the lights on other parts of our system.

>> Councilmember Liccardo: Okay. I think I understand. So then as we alook at that chart on attachment 3, the 1600 lights sort of follows up on Councilmember Campos question, 1600 lights that we have downtown does that include the ornamental lights, or is that entirely all the ornamental lights in the downtown captured in the 6,000 number that we see in the fourth column?

>> Hans Larsen: I believe these are just the pure overhead street lights in the downtown corridor, not including the ornamental lights.

>> Councilmember Liccardo: So those would be pretty high cost-effective lights, if there is a product out there that will take it?

>> Hans Larsen: Yes.

>> Councilmember Liccardo: That's helpful too. I one thought I want to add is as we think about development projects, I don't know away the limits are to the Quimby act here in terms of what we can get developers do or not do. But assuming you know that we can draw the legal nexus that people who live in those buildings will be using the streets that will be benefitting from the lights, it seems like that would be one of those near-term kinds of projects we would want to roll out because development interest is really starting to heat up now. Certainly I'm getting a lot of calls now from developers who are looking at a lousing market that continues to stay at least warm if not hot, and on the rental side and it seems to me that we would probably want to get something in place and an ordinance soon to take advantage of this next window which may be small or large, depending on how our economy fares. Is that something we're likely to push forward with in the next six months?

>> Hans Larsen: So we have in the city can don'ted the LED street lights as a city standard. So any new street lights that are constructed through private development or public projects are being built to the new standard.

>> Councilmember Liccardo: Retrofitting existing lights.

>> Hans Larsen: Yes. If you have a development that's going in, you know, the redevelopment of some way --

>> Councilmember Liccardo: Most of our developments are nowadays, right?

>> Hans Larsen: I'm not sure kind of from a nexus perspective how you do that, but it's something we could look into.

>> Councilmember Liccardo: Okay, well I know Kevin's writing, so I'm sure that means there will be a legal issue in there somewhere. All right, well, I appreciate the report and the motion. I don't see any cards from members of the public so we'll proceed to the vote. Motion is on the table. Was there any desire from the committee to express any preference on the direction staff has in terms of priorities in the motion?

>> No.

>> Councilmember Herrera: I think there was several questions attached that staff's going do come back.

>> Councilmember Liccardo: Great. We'll move it on to council. All in favor? Any opposed? That passes unanimously. Thank you, Hans.

>> Hans Larsen: Okay. Thank you.

>> Councilmember Liccardo: On to item 3, the automated transit network evaluation report, Hans is back.

>> Hans Larsen: Okay. Our next report is an update on the automated transit network project. This is a project we have been exploring the last couple of years to evaluate potential application of a new emerging transit technology. We refer to as automated transit networks. Other places they call them pod cars, other areas it's referred to as personal rapid transit. Pictures here show Mineta San José international airport on the left and on the right is the London Heathrow airport, which has a pod car system, automated transit network that is serving that area. So the project we're looking at is one that looks at integrating this transportation technology in and around our airport. Provide a little bit of background. I think that Councilmember Rocha and Campos may not have been here when we first did the investigation of this. I'll provide a little bit of background in terms of the context. This project has its genesis from a project that was listed in the 2000 measure A program. So when that program was approved that included BART there was a number of other projects listed in there. One of them was to create an automated transit connection to the airport from light rail on first street connecting the airport and then with CalTrain and the future BART station on the other side of the airport. What was originally, away was looked at by VTA was a system using traditional automated people mover, similar to what you found at San Francisco airport or Dallas or other airports. Around they looked at a system where you would be able to connect to the nearby transit systems, tunnel underneath the runway at the airport. Have one connection at the airport terminal B rental car facility. And this project was costed out as \$668 million back in 2008. That raised a lot of eyebrows in terms of the cost of it. And several folks brought to the City's attention new emerging technology, the automated transit networks, and suggest we might take a look at that as an alternative to the more traditional airport people mover system. And so with the support of the City Council, the VTA board, the VTA allocated funds to the City of San José to evaluate automate transit network technology to sort of address and improve transit connection into the airport. So I have a quick video here that illustrates how this works. Well, it worked in practice.

>> Councilmember Liccardo: I can testify that that little thing moves up and down the track. I remember seeing that video before.

>> Hans Larsen: There we go. What this is is a driverless system. Some people refer to it as a horizontal elevator. You have a number of these lined up. You walk to it, press the button, it opens up and because these

are small and nimble they can integrate right into a building such as an airport terminal or hotel lobby. They're fully grade-separated and an interesting thing is they will go directly to the location that you want to go. So it provides directed point to point service from whatever your destination is. You don't go through a course, stop at every station. It has the ability to bypass stations you don't want to stop at. So it provides a highly convenient form of transportation that's very personalized. So these systems are increasing in popularity. It's actually a technology developed in the U.S. in the '70s, Morgan Town and the University of West Virginia started the system in 1975. I had a chance to ride this when I was at a conference in Washington, D.C, a very impressive system. It needs to be enhanced because of the age. But it serves that community and of the university extremely well. There are some modern systems being developed, primarily by European vendors, to get their system, it's a Dutch based system that has a project in Masdar city in the Middle East, Vecta systems is a Swedish product and they are implementing a project in south Korea, and then Ultra is a British firm, and their project is now operating at London Heathrow airport. Little bit more of the detail of these projects. You can see the number of stations and the miles. And how they've been developed. A couple of -- the London Heathrow system connects a terminal on to parking facilities, Masdar city is part of a new sustainable city that has the ATM network as a distribution system within that new community. The project in south Korea is one that connects a parking lot to access to a national park. So with the car-free park, you come up to park your vehicle, hop on the ATM system, and it can take you to locations within the park. And there is an ambitious new project also by ultra in India, that is set to open in 2014. There is continuing evolution of kind of the industry and more projects being developed. So we've looked at, we hired a consultant team that did a very rigorous review of the industry, and the potential application for a project in San José, that essentially met the specifications of what was in the 2000 measure A ballot measure, and that's to provide service at the airport and connect to transit. And so we proposed a system that looks at two phases, one that connects with light rail and provides connection within the airport. And the goal of the airport project is to essentially replace the shuttle bus system that the airport has now, that connects parking, the terminals, and rental car facilities. So this would actually serve as a replacement. Phase 2 is the longer extension to get around the airport, connecting with BART and CalTrain. So you can see, if you add this cup up, it's over a six-mile network with ten stations. It is larger than anything that has been contemplated using this technology in other projects that are up and running or in the implementation phase. So what are our conclusions of the work that we've done are these here, one is that this is a technology that has a lot of promise. And there's

an increased level of interest in doing projects in Europe and Asia. And the projects and their sophistication complexity and technology continue to advance. In looking at an application for San José there are several conclusions. One is we believe this technology can have a lower capital cost than a traditional automated people mover system using the larger vehicles and the larger infrastructure. So we continue to believe that this is cost-competitive to other technologies. The operating cost of the system is comparable to the operating cost of what it cost to run the shuttles, both the VTA shuttles between transit and the internal airport system. And so while these are driverless vehicles so you don't have the labor cost with them, there is an operating cost to have many vehicles running through the system and provide the service. But it's a comparable one. One of the key technical issues though that we find is that the ability to process passengers at high-demand stations particularly between terminal A, terminal B, rental car parking or theoretically if you had a BART train come in and then you have to process people, unloading from a large transit system and then getting them into multiple small cars, that the systems that are out there and the vendors have not kind of developed from what we've seen the ability to handle that kind of high passenger demand. And so we believe that is a limiting factor for the San José application right now. Our consultants believe that there are likely some solutions to deal with that. But there's nothing that gives us the confidence that hey, we're ready to jump into this and be able to make this work. Another issue is that there isn't an established regulatory process for these kinds of systems that deal with the safety requirements and other things. So it's somewhat -- there is not an institutional arrangement to deal with bringing this technology into a public varietal. The projects that are up and running now all operate in a private environment. Heathrow airport is private. They're just moving within their site. The Masdar city is a private development moving within their site. There are not examples how this has been rolled out in a public environment that likely has greater standards in dealing with safety. And so that creates some challenges. How do you move forward without an established regulatory process. We believe that there is a need for a federal role in helping support innovative transportation solutions like this. And so I think there -- where we would -- I think we're continued to be interested in this as a technology. But our belief is that it's not something that San José or VTA or the airport can really handle alone. That there would need to be some indication, either at the state or likely at the federal level to say yes, if Europe and Asia are doing this we want to get into the game and be an innovation leader in transportation. And we want to support additional research in development so this technology has larger applications than what's been demonstrated around the world. We're willing to provide some funding to do pilot

projects that cover the capital cost of doing these, and we're willing to put some effort into establishing a regulatory environment. And so that's kind of where we're at, is that it continues to fascinate us as an opportunity but needs some more work and in order to move it forward we think we need some more partners to step up and participate. So we have been in contact at the federal level and looking at this. Obviously there's a lot of challenges in the transportation industry in just dealing with what we already have. And so it's something that you know, requires sort of a bit more thought in terms of where we go. What we're -- our purpose here is to really just provide an update to the committee of where we're at. What we would like to do is complete the technical report that our consultants are producing. It will be out in June. We want to have a feedback loop with the stakeholder community about where we're at, what our findings are, get that feedback, adjust you know our perspectives and recommendations. Finalize the study and then come back to this committee likely in September and say okay, here's where we're at and we would present to you some policy recommendations on how we might move forward from here. So I did -- we did want to bring this report to you at this time. Because we expect that when the report comes out, that there's going to be a lot of sort of talk about where we're at and is San José pursuing this or not. And so we wanted to give you a little bit of aheads-up where we're thinking, our consultant teams are advising us where we go out and get stakeholder input open this over the next couple of months. That concludes my rot and I'd be happy to take questions.

>> Councilmember Liccardo: Councilmember Campos.

>> Councilmember Campos: Measure A does require us to do something, is that correct? We're going to have to do something, regardless?

>> Hans Larsen: Yes, that's an interesting policy question. It is listed as one of many projects that that program was supposed to fund. When the measure A program was approved in 2000, it was expected we would have about \$6 billion to do a lot of things, including get BART to downtown and up to the airport. Unfortunately, because of the dot-com bust, and then the more recent recession, there's not enough dollars in the original program to cover all of the projects. And so that kind of a question of you know, do we deliver all the projects and find additional resources to do that, or there are some other adjustments to the program. That's kind of a policy

question in terms of is there a requirement to do this or is it more advisory. I think one of the things that we've done with this project, and that the VTA has supported is, if we can find a way to deliver that project in the measure A program at a lower cost that this technology has the promise of potentially being able to do that.

>> Councilmember Campos: So then this wasn't necessarily a CEQA requirement? And a way to mitigate traffic to and from the airport. Because if that's the case then we've got two potential hurdles or requirements. One, the voters said we need to do this because that's what they voted for. And then two, the environmental analysis says you got to do something about traffic.

>> Hans Larsen: Yes, to Kevin if you want to speak for to that. I know he's been the attorney for the airport.

>> Thanks, Hans. Kevin Fisher, assistant City Attorney. The airport master plan does not require the construction of a people mover or a transit network as one of the mitigation measures. I do want to add though, another piece of the puzzle was the airport safety and traffic relief act back in the late '90s early 2000s which had set a number of prerequisites for transit improvements that had to be under way, constructed or funded before we could build the terminals which we've completed. And one of them was with regard to the people mover that the city had to identify the funding for the transit connection between light rail, the airport, and BART. And measure -- the city did identify the funding which was in measure A. So that's kind of how all those pieces fit together. Again, just to be clear, there is no requirement in the master plan or in CEQA that we actually build a people mover or some kind of fixed rail system.

>> Councilmember Campos: Can we get feedback or additional analysis sort of what happens, it was in measure A, the voters voted for it. Perhaps there were some voters that voted for it just because it was in the -- is there any requirement we have to --

>> Councilmember Liccardo: Maybe I could help a little bit here. I think Dumbarton rail for instance is another project that was in the Measure A. There are going to be projects that are simply not going to get funded with

Measure A funding. We did get I think it was two or \$4 million from measure A to actually start the analysis on this if I'm not mistaken. Was it four?

>> Hans Larsen: There was yes, the VTA board allocated \$4 million to this, so the first \$2 million wept be to do the study and scoping work and there was another \$2 million that was allocated to be a match for potential future work.

>> Councilmember Liccardo: Right. I guess the point is A some there has been measure A money allocated and B, there's no way in the world Measure A is going to pay for all the projects on that list, I think that is sort of the end result. Which is that is an issue between the voters and us on the VTA board, ultimately.

>> Councilmember Campos: I want to make sure that from the legal perspective, that is before the voters, what happens? And what could be the remedy? I'm glad that we're still working on options and this does seem to be a pretty good option that perhaps offer time it could be the most economically feasible option which isn't a bad option. So that we can satisfy -- you know I think that the one thing is we have to continue looking at the future and you know, we're not going to be living in these dire times, you know, in -- you know forever. You know so we have to look at this region growing, and part of the growth is our airport. You know, our airport is still going to grow. I mean let's keep in minds that there's still triggers. We get the 14 million passengers which could happen over time, we build additional gates. We have to look at how do we keep up with providing for the Silicon Valley economy? And that's our biggest economic generator right there, sitting in our laps right here and we should not be -- we should not be handicapping it so that it's to our detriment in the future. And you know, we need to look at every option, to make this a much more viable airport. Don't even get me started on if departure and arrival roadways, because that's a whole different story. And I know we're going to regret not building that second deck.

>> Councilmember Liccardo: Where FY.

>> Councilmember Herrera: Yes, thanks for the report. I think the issue of having a whether it's on a measure A ballot or whether it's the airport safety and relief act, I think that's an issue that is going to keep getting asked,

because there is a need to have some kind of a connection. So I think that regardless of whether it gets pushed by the measure A aspect or some other aspect, I think that's a concern and it's going to keep coming up. And as Sam said, measure A there's so many projects in measure A that we would like to see happen, not the least of which is light rail from capital to Eastridge which I want to see happen. By the way, how much did we estimate the cost of this automate transit network? What was the cost of it?

>>> Yes, the earlier study of the traditional technology was \$670 million or so.

>> Councilmember Herrera: And how much would this be?

>> Hans Larsen: This one, we're having our consultant team kind of refine the work on it. This is not cheap project either. I think we should look at it --

>> Councilmember Herrera: Just ballpark, how much?

>> Hans Larsen: It is roughly \$500 million.

>> Councilmember Herrera: How much?

>> Hans Larsen: \$500 million.

>> Councilmember Herrera: So I've heard estimates that we could do Capitol to East Ridge for \$80 million, now we could get that finished. I think we should focus on projects like that, that we promised voters, that will actually deliver value for people who actually ride buses all the time and that connect point A, to point B, connect people to BART, connect the east side to BART, connect us to Eastridge, which is one of the largest sales tax revenue generation on the east side. I think this is a great juxtaposition between this thing we're looking at here and light rail to Eastridge. We need to get that one completed. Sorry for the commercial, but any chance I get I'm going to talk about it. And I do think there is a question about how we connect BART and the airport and light rail. That is a

valid question and I think we are going to continue to look at it. The only analogy I can think of is you get this big giant you know I'm thinking about water, water hose, going from the Bart main outside when you are talking about Bart arriving to the garden hose in your front lawn. Trying to take people to move them around the track. I know what it looks like. But I just can't imagine arriving on BART and have a bunch of people running off BART trying to gym get somewhere. You've got like five cars and 100 people, that's not the businessiest thing I brought up but it's gorgeous. If there's some way that we could be that city, to have that thing I would love to do it because I think it would put us on the map. But I just don't see how you get to from A to B, but you can do.

>> Hans Larsen: If I might add just something else that's on our minds as we're thug through this and we'll come back to the committee in seven. This study has been scoped out in regard to how do we serve the airport, light rail, CalTrain, connecting at 1st Street and CalTrain station. Something that's come up in other forums is looking between emotionally a connection between the airport and the Diridon station down toy. Is that a more enexcelling or higher proproperties need to look at that? Since this was concept for the 2000 ballot measure, but as is the Diridon station develops and the land use plan we have there and the potential for a ballpark and other things that are happening, Diridon station has light rail. It has BART. It has CalTrain, and so we may want to do some cessions, maybe the wins we have looked at is maybe our pliers, compelling than what's been looked at to date.

>> Councilmember Liccardo: Thanks, Hans, actually you beat me to the punch. I was going to raise that very question. I'm wondering did the consultant look at all at Diridon?

>> Hans Larsen: We were limited with the scope of work based on this study was funded by VTA dollars in measure A that specifically was looking at those two connections. We as staff have looked at it. Is a I know that the Diridon joint powers advisory committee. Now I know you've heard in many of us urging it so --

>> Hans Larsen: It has come into the context of high speed rail, if it comes in at the connection of high speed looking at this it up in perhaps this may be a solution to make that connection.

>> Councilmember Liccardo: Yes, I appreciate that, and for all the reasons you stated, in addition to having connection to the arena, to capital corridor station, and Diridon is a destination I hope we'll focus on in future analyses. I had heard about this, the challenges of people loading about this system. So when I was out in London last year, I took a look at Heathrow's thinking well, you know, the one that could do it would be Heathrow, right, so I was kind of surprised when I went out there and really didn't see anybody riding on it. And I don't know if I was there at a really bad time, I rode on it and couldn't find anybody else to ride on it. It was kind of a lonely experience or answer my question about peak loading.

>> Councilmember Herrera: Was it a good right cam private public partnership P-3, eye capital cost we have we're looking at is that fair?

>> Hans Larsen: I would say yeah at this point, I think there's a lot of risk for private party of this magnitude so I don't think we're quite there in looking at a P-3 proposal. But certainly, when we first got into this, there were vendors you know very eager to demonstrate doing this to help move the industry forward. I think you know there was -- one thing that we considered is, well would we want to look at a demonstration project say just went from light rail to one stop in the airport, I mean it's largely what Heathrow has. Heathrow is, they're very pleased with the system and is looking for expanding it. So it tended to have greater use. But we were concerned with going in trying to do a demonstration project that we weren't confident had the ability to scale a larger need around the airport area. The ride you had at Heathrow, pretty cool, nobody's using it I think one of the roles we're looking at is, we'd like to be able to hold San José up as here is a more challenging concerns how it works we're not positioning it as oh it doesn't work, we dismiss it but for a challenge that for this to work in San José and more places and a more demanding environment let's see somebody coming up to the table with a solution to some of the issues we've raised.

>> Councilmember Liccardo: Okay, great. Last question, I know from administrator Rogoff when he was out here a month ago, and maintenance expenses maintaining our transit system so we have -- I recognize this saves O&M costs on -- because you don't have human operators in everywhere car but do we see significant

maintenance savings that we could justify this and pitch it to the Feds as hey, this could be a potential future to our challenges of maintaining transit?

>> Hans Larsen: So that is one of our findings that the O&M expense of the existing shuttle system, both the airport and the VTA system has a certain cost. But this system has O&M costs that are a little bit different. So you don't have the labor and the drivers. But you have a lot more vehicles than you would have with a larger transit system.

>> Councilmember Liccardo: There could be more maintenance potentially.

>> Hans Larsen: I think our initial it's not you know this saves a lot of money. And so the reason you go to this is you would save O&M, there is a significant level of O&M involved with it. But you know I think the benefit of it ask, it really is a higher level of service for the passengers that use it. So rather than sitting and waiting for the shuttle to come and then it stops at every location, it's there waiting for you and you go directly to where you want to go.

>> Councilmember Liccardo: Thanks Hans. No further questions or comments?

>> Councilmember Herrera: I make a motion to accept the report.

>> Councilmember Campos: Second.

>> Councilmember Liccardo: There's no cards from any members of the public. All in favor? Opposed? That passes unanimously. We'll move on to our final item today. Thank you, Hans. We'll move on to our final report for today, report from commercial solid waste system redesign. Beautiful bags provided by republic services, thank you republic.

>> Kerrie Romanow: Good afternoon, Kerrie Romanow, acting director of environmental services. We'll switch gears and move from transportation to environmental services. I'll move it to deputy director, Jo Zientek. .

>> Sold waste systems going into effect Monday July 2nd, less than two weeks away.

>> Supervisor Shirakawa: Christina Gallegos, Michelle Young and Jennifer Garnett. energy zero waste in the about their preparation.

>> Councilmember Liccardo: Very patient people, thank you.

>> The commercial solid waste system just a quick overview is about a third of the City's total garbage, about 250,000 tons a year. This redesign is a result of a little over five years worth of evident. We began engaging businesses on issues, and how they'd like to see a new system in 2008. We notified all hauling companies, in the city that were franchised to haul under our current nonexclusive system in 2001, and then again in 2007. That we were looking at making our system exclusive. We did extensive outreach with the haulers in 2008 and 2009. We issued an extensive request for proposal document and process in 2010. And we awarded those contracts in 2011. And the last 12 months have been working on implementing the new system. And just a quick reminder about how it works. The new system will have one hauler, republic industries for most services. It is a wet-dry system. So businesses only sort into two categories. The wet is food, yard trimmings, soiled paper, for example. The dry is paper, wood, glass, and plastic. The organics generated from the systems will be delivered to zero waste energy development company that will process the organics using a weighs-to-energy technology and the system is very flexible. It allows customers to use any combination of bags, carts, bins, boxes depending on their need to sort the material. We will have an all-new compressed natural gas fleet picking up the garbage and recyclables. All those trucks have recently been delivered here to San José. And we will have two state-of-the-art recyclable facilities ready to go for the new system. And I'll talk a little bit about more of that later. It's important to note, that San José is one of the only cities in the Bay Area that actually does all of its processing within the city limits. Almost all other cities including San Francisco and Oakland haul their recyclables and waste long distances and process them. So we get not only the environmental benefit but also the economic benefit of having these facilities here in San José. The new exclusive system has a targeted 80% recyclable rate. We have planned for it to be the best performing system in the United States. It will provide businesses in San José a complete recycling

system. It will provide many businesses in San José don't have any recycling at all. We think at least half. So this will provide recycling services to these businesses for the first time. This service will also make sure medium and large businesses that fall under the state mandatory recycling law, AB 341, that goes into effect in 2013, will be compliant with the system. And this enables businesses to be compliant without having to find the recycling services themselves. We will be providing it. It's a significantly reduced carbon footprint than our current system. We're able to route trucks to the most efficient way possible because we'll gain efficiencies by routing all customers throughout one system throughout the city and we anticipate it will save the carbon emissions of city will fit max rates will ensure a provide and it will provide consistent rates for the improved level of service. And the system will also stabilize the General Fund revenue commercial solid waste franchise fees which has been declining. Not to continue the theme of comparing us to languages, the city of Los Angeles is basically copying this system. They actually have a staff report out to mimic it, to go to an exclusive system provided by district to meet these same benefits, meeting our staff and contractors here a couple of times this past year. What's in and what's out? Republic will be collecting most common regular waste pickups in the city. But there is a significant amount of work that's still outside the exclusive franchise system? And this can be largely characterized by temporary work. So construction and demolition projects, temporary household cleanups, this -- there are 17 haulers that have applied for franchises to do this nonexclusive work, roughly the same that have franchises now. It's important to note that haulers that collect through a non-- through our nonexclusive system do not pay any city fees. Neither the franchise fee nor the AB 939 fee and those applications will be coming to council in -- May 15th, next week. Then the other portion of the waste stream that's outside our system is highly specialized waste like document shredding services and things that aren't typical or don't apply to most businesses. There's been extensive amount of customer preparation done by Patrick to get their customer base ready for the new system. It's important to note that over the past three or four months republic's had the system. So they purchased the accounts from Greenteam, green weighs and reRecology. leg up on new services. They are already routing, they're already doing day changes. They're getting the customer information updated on their system and that will help make this transition significantly more smooth than we normally have say with the residential side where everything changes in one day. We had Cascadia do waste help them set up their routes and their programs. And they've assigned recycling coordinators to do technical assistance to help sign businesses up for the new services. The outreach has been very simple and straightforward. It's a wet-dry

system. Can you use any combination of carts, bags and bins and they're providing examples of that for all customers. They did direct mail in March and they're continuing now through the start with site visits and cold calls and walking neighborhoods and facilitates where businesses are. And all customers will be contacted prior to startup and have material delivered and have waste assessments completed before startup. And then it's also important to remember that we do have a six month transition period with republic. So even after we start services we still have a full six months to hone the system, make sure the customers are ready before the actual performance year of the contract begins, it provides us extra time to make sure it's all working okay. As I mentioned before we have two significant new waste facilities being newby island resource recovery park facility. This is a retrofit of a 100,000 square foot old facility republic had. It will be the largest and most extensive multi-line processing facility for waste in the world when completed. It will be the only one in the country capable of producing wet-dry commercial single stream recycling and residential streams at a rate of about 110 tons per hour. It includes the most advanced screening, optical and air separation technologies and is really designed to recover the material, the waste for the highest and best use. Get the paper out and get it out clean and the early material to make sure we get the highest resale value for the material. Approximately 60% of the equipment has been installed and our staff walks through the there about every other week it is a very impressive facility. Republic planned to do an official grand opening in August but it will be ready July 2nd to take the material. Republic is also working with PG&E to get their new CNG equipment online and the new facility will have about 110 employees. The second very significant facility that we're working on with zero waste energy development company is the high solids, dry fermentation waste to energy facility. This will also be built in San José. It is the first in the U.S. There's similar commercial facilities in Germany but none in our continent. It is roughly where that triangle is across from the water pollution nine building. There will be a groundbreaking I understand imminently that I'm sure you all will get invited to. We hope the facility built and ready to be operational next July. In the meantime zero waste will be taking the composting to their alternate facility in Gilroy, the organic waste for composting . Just wanted to touch on customer rates. The current system, the current nonexclusive system for regular garbage pickup and the new exclusive system, both cost roughly about the same, \$54 million is roughly the amount of revenue we currently generate and we expect to generate in the new system. So the total annual cost, about 33.4 million is retained by republic for their cost. 11 million is the city franchise fee which goes to the General Fund. That fee is flat, and is paid to the city on equal monthly

installments. Currently it varies a lot because it's based on the amount of garbage generation, makes it highly variable. The next category is the cost to zero waste to process the organic waste and that's about \$6 million a year. And then the final category is the fee the city uses to operate, administer, the City's of City's commercial solid waste system, including public litter can recycling, in business systems, collection of garbage from public litter cans. The fee load, just back on that odor slide, the fee load here is about 27% of revenue. It comes back to the city in fees. That's roughly the same as it is now. Just a quick comparison. Many cities, most cities in the Bay Area they already have a system for commercial so we're easily able to compare our maximum rates to rates of the other jurisdictions and we are very low. In part we think the new system was really able to capture the efficiencies of going to one hauler and the economies of scale which helped us keep these rates on the low side. We -- that being said, the current system, there is no council or city regulation on the rates the current haulers charge. So it tends to be extremely variable. I mean, a rate for the same service can vary two or three times depending who negotiated the rate and who they negotiated it with. We did do some benchmarking last year using the research arm of San José State to work directly with customers to get their bills because that information was not available from the haulers. We were able to determine that our rates were within the realm of what people are paying now. However there is a greatly deal of variability within the rates. We anticipate about half the customers will receive a rate decrease, about half will receive a rate increase. The total system costs will be roughly the same but when you go from a completely unregulated system to regulation, there are going to be some of those swings. In order to mitigate that we're working with republic to see if there's some increases and decreases that we may recommend that council smooth out as an amendment to the rates, as we are able to further analyze that, working on those analyses now with republic. But like I said, about our current estimates, about 56% of customers will get a rate decrease and about 44% will get a rate increase. There are several actions that are scheduled to be before council next week regarding this item. One is setting these maximum service rates and setting the city fee for the recycling services that we provide internal to the city for commercial customers. The -- the methodology for calculating the maximum service rates was set in the republic agreement that council approved last June. So this is just taking that methodology and inflating it to 2012 dollars. I think that ended up being 3.5% from the 2010 numbers that council saw last year. That we will also be bringing forward the 17 nonexclusive agreements for the portion of the system outside of the exclusive franchise. And then there's some code changes that we have to do, to implement the change from the nonexclusive to exclusive system. We

are continuing to work with republic on customer service outreach and media support, often city and republic staff go out together for either individual meetings with customers or business association meetings, and other types of meetings to help prepare customers for the changes. And we are monitoring and supporting republic and zero waste preparations to transition to the new system. And with that, if you have any questions, we'd be happy to address them.

>> Councilmember Liccardo: Thanks Jo.

>> Councilmember Herrera: It sounds like we're moving forward. I'm looking forward to having the service actually change and get started. I think you know I support this and I'm looking forward to this moving forward.

>> Councilmember Campos: Just can we get some of these for -- I have two really long business districts. Can we get some of these so we can pass out to them?

>> Yes, sure.

>> Councilmember Liccardo: Actually that's a great idea. Maybe we can help also with some outreach in our business districts as well. I do have one member of the public who would like to speak. David Wall.

>> Good afternoon, upper. I have long not supported either one of these projects but the less there's a couple of questions you can absence. One deals with Newby island, we look at this facility as far as ventilation and odor control issues, you might want to look into that. The zero waste how much of this forecasted money which I don't portend to put any faith into anything that ESD calculated. But these monthly variable rates that should cause you great concern. Also, how much is the ratepayers going to get from the sewer service and use charge paid back to lease this land? Is this in real cash or is it funny money? Now previous reports last year, it is from the City Manager's office, the quote, estimated benefit. I don't support estimated benefits. Also, how many other cities are going to use this facility? In other words, San José is going to become the garbage center of the Bay Area? I do not know. I would suppose it's going to be quite a bit to feed this zero waste machine out there which raises also

significant odor issues. I don't like the discrepancy I also find it very laughable that out of one corner of their mouth they say that San José doesn't transport their garbage but yet we see garbage organics being transported to Gilroy. At great cost. There are other things. But one other thing you should look at is the integrated waste management division's organizational chart. Now you would think, with organics, resource management and zero waste planning and disposal, that would have the most people there. It only has a couple. Now I'm going to run this up to the auditor's after we get done today. But you should get a copy of this. It's another glowing testimony of no confidence from the office of the City Manager to the ESD. There are other issues but time has run, thank you sir.

>> Councilmember Liccardo: Thank you, Mr. Wall. I just have two brief questions. One is since the issue of Newby island is raised in the memo I know that we've been dealing with, Ken tell me if I'm steering too far off the agenda here, we've been dealing with the encampment cleanups and sweeps and the challenges of finding sites for the possessions that are being swept up. In the past through those encampments, I'm wondering if there's been any progress with folks at Newby island or elsewhere about whether or not we could reserve sites in fact near waste disposal, existing dumps essentially where we could segregate materials RF I.D. tag them, so if Nebraska 30 or 60 days, or at least they would keep the materials at the dump so they wouldn't have to be continuously handled. Oftentimes these materials are dangerous, needles and waste and so forth. Has there been any exploration or progress in that area?

>> Yes, I mean our current plan is because we don't know how much of that waste is actually has to be reserved and then the back-and-forth between getting an appointment time for someone to come to the site and sort through and see if it's there is or not, when they want to pick it up, we are planning to do two drafts in June, we have draft procedures when we're out in the field collecting the site that we'll have staff determine whether it's trash or whether it's an item that we should catalog and hold in storage. And then we're going to temporarily hold the material from the two pilot cleanups at the homeless shelter site. We already have some space put a side there that's vacated there now. And that will give us both way to see how much waste is generated depending on the size of the cleanup and then of that, how much is waste we would need to catalog versus how much is trash. And then what the back and forth is between a person who had lived in the encampment needing to assess

-- needing to come and sort through and see if they -- if we have any of their belongings. So we were going to do those two pilots, have more of a sense of the total space need and then begin that so we could talk about all our waste facilities. Newby obviously takes the garbage from the homeless encampment cleanups.

>> Councilmember Liccardo: Yes.

>> And that how much space we would need.

>> Councilmember Liccardo: Okay, I just encourage us to really explore actually doing all that sorting and inventorying at the city dump so at least we're not engaging in reinventing the wheel, having to constantly pick up and sort and move stuff that we know ultimately will probably end up there anyway, 95% of it at least. The other question I had was around I know a year and a half ago there was some discussion around Evergreen provisions that may or may not be included in the contract, there was some discussion about staff coming back to discuss that. Is that slated to come back to this committee at some time in the near future?

>> We hadn't had it on the fall work plan. It would pertain to the residential --

>> Councilmember Liccardo: Okay, that was just residential not commercial?

>> Yes, yes.

>> Councilmember Liccardo: I'll save that, forgive me something I had that mixed up. Councilmember Herrera.

>> Councilmember Herrera: I 74th the idea of this pilot project in terms of sorting and seeing how that would work and I also think that the results of that might inform us to be able to go and push back on these regulations at all if we end up with 90%, 99% of it is trash and garbage. And I think that we need to actually go back and address it from a kindergarten way and that is challenge the whole idea of us having to do that.

>> Councilmember Liccardo: Okay. I want to thank the patience of the good folks of the industry who have endured this meeting without a single comment or peep. With that I'll entertain a motion. Unless someone would like to speak you're all been very quiet.

>> Councilmember Herrera: Motion to approve, accept the report.

>> Councilmember Liccardo: There's a motion and second. All in favor? That passes unanimously. Thank you. We now have time for public comment. David Wall.

>> First the bad news for the city, sergeant Anthony Colon, passed away, retired police sergeant, 26 years. It is my opinion and request that the city should do something nice for the family. I don't know if the police department knows that he's passed away. It's in the obituary of today's paper so something nice, a letter of thank you from the city would be nice. Like to thank gay Gayle of Public Works with her efforts in helping with the city desk issue. I'd like to thank the San José fire department of coming to my rescue by chance. I tripped and fell today in the garden, lot, if you heard a tremor, it was me. I have a hard time getting up because of my implants. They I couldn't get their names, they had another call pending. Also on your rules packet please pay close attention to the waiver of the revolving door by all means dealing with South Bay water recycle. You should look into this matter because it goes to the issue of no succession planning if people were to die or people were to retire in this case, then the department, the city through what I call incompetence, doesn't have anybody to fill the shoes and they come to you folks to waive the door for this revolving door business. There are a lot of problems with funding for South Bay water recycling that's a problem. You all should get a copy of this organizational chart from ESD. You have supervisors that have nobody to supervise. This has been ongoing. Lastly with this, it shows that they're reacting to the auditor, because the auditor -- they're hip-deep, neck-deep in management and they created this from the last time I was here to talk about. Thank you and a good afternoon.

>> Councilmember Liccardo: Thank you, Mr. Wall, the meeting is adjourned.