MH:Another thing is being able to say that Inouye is there. And having a president who knows our traffic. The stars are aligned! So, we gotta go know. –says that we put the cart before the horse, but don't worry, the horse is going to come; and it's going to be a good horse. It will be different from the horses we had before, but it's not going to be a mule or a donkey, it's going to be a thoroughbred.

N: You know, Mufi, some people would say that you came in gangbusters wanting this rail, with the support of all the people who are going to benefit from the project.

MH: Well it was something I felt that the stars were aligned; it was the proper time to bring it forward. I was a new mayor and we had a governor who indicated at her first state of the state that she was willing to work with the City to bring about a mass transit system for Hawaii. Governor Lingle had tried in the first part of her term; she actually initiated the idea and fell short. I said, wow, if we can bring together a strong coalition here at home, knowing Sen. Inouye still had influence and was supportive of the project. And knowing that we had a president in the white hosue, President Obama, who, with local roots understands our traffic problems and would be in a position to help. So, it was less about trying to gain points for my administration because it was going to require a lot of work, a lot of effort. It was an uphill battle. The gentleman who was the Secretary of Transportation, Norman Mineta, was a former Congressman, a key person in the House at the time that Honolulu said "no." Then he was very supportive of the project. But now, as Sec. of Transportation, he goes, "how do I know that this time is for real? That you guys actually are going to deliver?"

So, we learned from our mistakes of the past and at City Hall, what we did is basically say, OK, let's make sure that this time we build a strong coalition going forward and try to demonstrate a lot of successes early on so that they'll know there's going to be a different outcome and there's a stronger group putting it together. I just felt that this was the missing piece to our quality of life for the amount of time we were spending in traffic with no other alternative other than to drive your car or ride the bus.

N: People say that, but they still feel like other alternatives were there for us. They see you as coming in for rail, no matter what. They wonder why other alternatives were not adequately considered.

Toru: This is a statement of process. When it comes to eligibility for federal funding, one man cannot come out and say, hey, let's do this and it happens. First, you have to go through OMPO (Oahu Metropolitan Planning Organization) and have their policy makers agree to put the hike past the high capacity system in their corridor; that's the number one step.

N: Who are those people?

Toru: City Council and State Legislators, they're the policy committee. They have to vote it in. That's the first step in the federal process on any project, they have to vote in the long-range plan. Long-range plan has to be renewed, I think it's every five years, and refreshed every year.

N: So, you're saying there was broad-based buy-in for some type of rail?

Toru: Yes, for high capacity.

N: So, that's not bus

Toru: It could be bus. But as it evolved, it started being called "fixed guideway." The corridor has to be identified in the long-range plan. That's the first step. So it was not "Mufi" wanting to start this. Then it's followed by alternatives analysis, we call it AA. And that the FTA process, leaving the DOT process. It's more specific; you look at every possible alternative, then focusing down to what should be carried into the EIS. We looked at about 14-15 different alignments and technologies, altogether different systems, including no-build, TSM (transportation system management), which is an expanded bus system, and a highway option (like building the viaduct), and then the transit option. So those 4 options were narrowed down to explore in the alternatives analysis. And even prior the EIS process, there was a technical report. I have to be a little fuzzy about it because FTA has a process that is different than the EPA process; they kind of merge the AA and draft EIS together. Because we wanted to make sure to go step by step for the public, we split the AA from the EIS. That's where we narrowed it down to the fixed guideway system. If I recall, there is a sentence in there that says we will also look at light rail and everything else. And there's a supporting technical report how we did that.

N: So the AA has the information on the options?

Toru: We have a thorough but page-limited analysis, a sufficient level analysis of the four options. Leading into it is a technical report that's pretty thick and big and we took it to 2,000 public meetings. All in all I attended 500 meetings in three years. This was a series of meetings taking the chart to the people and asking their opinions, do you think this works, do you think this is OK? We provided information on how these things work and they had lots of input. This was in 2005-2006. It was an effort to narrow down and define the fixed guideway. We also looked at personal transport [science fiction kine], magnetic technology, and all kinds. It's one sentence in the AA but we have supporting documents that worked up to it.

N: What was wrong with the bus alternative at that point?

Toru: Nothing wrong with the bus alternative, that's why we carried it as an alternative in the AA. Going back to why are we doing the rail in the first place? Because it's cheaper to operate than the comparable bus system to provide the same capacity . The bus obviously requires bus drivers. We have a formula. For each bus we add we have to hire 2 bus drivers and ¾ mechanic. So labor cost is 60-80% of the operating cost. Any attempt to reduce that is a smart thing to do.

N: You know, I was really compelled by that at first, but then I began to run across numbers, especially about an elevated guideway system, with the security guards and the mainenance of corridors and structures, really the costs of all that are quite huge as well. I was kind of dissuaded that the two persons were as much of a problem as they are often made to be. You've got to hire security guards, maintenance people for these stations and they've got to be maintained 24 hours as well.

Toru: Well, there's a lot of analysis done on that, half of it done by people who don't like rail. Some are based on the National Transportation Data book (NTD). One study showed that out of 26 systems in the US, 22 show that the rail cost is cheaper than the bus, per passenger. This was a mixture of rail systems from heavy rail to light rail, any kind of rail system.

N: Any kind of rail system? You know what, I have seen numbers that are not like that at all. Numbers are so hard to compare, it seems.

Toru: Right, that's why I'm saying that out of 26 systems, 22 show the cost of rail is less.

M: Noe, you have to figure in too that we're moving more and more into a period where people are more environmentally conscious. And to me that's one of the biggest selling points where rail far outpaces the bus. The fact that we're going to reduce our carbon footprint by taking rail over the bus system. The other aspect of that, which Toro can explain, is why we didn't want to go at grade. People bemoan that, it's a monstrosity, not pleasing to the eye, more expensive and so forth. But when we went and visited, Toru talks about the public meetings that we held. When people believe it came out of City Hall, but it was vetted. It was required to do that and I wanted that kind of a process, because it shows validation. It can't be a thing where just one person. As powerful as he was, Senator Inouye couldn't move rail until we formed this tandem where we were boots on the ground to go out while he could marshal support from the feds.

N: Who did you actually talk to? Who was the coalition that made it happen?

M: We had pro-rail members on the council: Tod Apo, strong supporter of rail ;Nestor Garcia, strong supporter of rail; those are two. We had rail supporters in the legislature: the late Congressman Mark Takai, strong supporter of rail; Speaker Joe Souki, strong supporter of rail. In the community, people on the West side are very much for it. And it wasn't like we didn't have support in the downtown community; we did. But what happened several years ago when the city council said no, they felt that their best shot had come and gone. When Mayor Fasi left his seat, he was a strong supporter of rail; when Governor Waihee left his seat, he was a strong supporter of rail. So we built a coalition so it's not just coming from City Hall, it's coming from members of the community. The public meetings we held were very helpful in building support and, more importantly, in laying the groundwork for something we wanted everyone to support. There were plenty of opportunities for those who were opposed to it to be able to not only speak their voice, but to draw other supporters to vote it down. Whether it was voting against mayoral candidates who were supportive of rail, or striking down charter amendments, or making their voices known at the legislature or city council during hearings where the mayor doesn't vote, the governor doesn't vote. It's the legislative body that votes, based on public input.

N: Did you ever talk to someone in the construction industry?

M: Oh, yeah. Ongoing discussions with construction industry, with labor unions, with planners, with architects. Like everything in life, you're never going to get 100% buy in, everyone's going to have a different take on it. But, to suggest that we did this in a vacuum, or that we made up our minds and were going to push it through, there's no way. One of the biggest accomplishments is that we were guaranteed $1.55 billion, which is what we asked for, even before the EIS was finally approved. The Obama administration was ready to step out.

N: So, you're saying that the form that it took was still open but the fact that we were going to have rail was predetermined.

M: Two things I take from it. One is that all options were on the table. They looked at everything, no build, increasing the bus system… The other thing is that there were plenty opportunities for legislative bodies to say, we want to go a different way. As much as we wanted a preferred option, if the legislative bodies had said no, it would have been no.

Toru: Mufi and I wanted to make sure there was public support for the project. I'm a bureaucrat; I'm not going to go out there and try to sell something just because the mayor said to sell this. There has to be a public wish, demand for this; then it makes sense for us to start doing it. I know in 1990 we had a 75% support for rail; I cannot remember the number in a similar poll that was taken. Then it made sense for us to go ahead and say, let's do this.

N: When? Was that prior to running for office?

M: No, I came in, I did not campaign on rail. Both myself and my opponent, Councilmember Bainum, both said we were open to doing rail. But it wasn't a huge aspect of the campaign. It became a goal after I got elected and sat in on Governor Lingle's state of the state address in 2005. She said, I'm looking forward to working with the new mayor of Honolulu on a mass transit solution for Oahu. That's when I went, wow! So I went to see her and asked, how serious are you about this. Because I can see a scenario where I could go do the heavy lifting as long as I could assure the legislature that, if they should approve that a general excise tax increase could support rail, that you could sign it or let it become law. That was sort of the agreement that we had. At that time she was very much pushing for rail. That's when it became an objective. But, once again, we had to validate it, to make sure there would be public support and it wasn't just a decision being made by a governor and a mayor to do it. Towards the end, when the bill made it to her desk, she threatened to veto it. I think she was having some second thoughts on it based on some input she got and what have you. But at the end of the day she relented and let it become law without her signature.

Toru: I think it was a Republican thing to not approve the new tax. At the time that Mufi came on board, the city was going to expand the buses. Do we continue and make a commitment to buy more buses or is there something better to do for the long run? That was the question I was asked. So, we said, the rail is always better, in terms of capacity and cost, whatever. But Jeremy Harris decided rail is not the right thing, not the right timing because he could not ask for the excise tax to be increased. That was a real frustration for him that he couldn't go with a rail.

Mufi: Let me be even clearer on that. I was not a supporter of the bus rapid transit system.

N: I remember you dismantling a very important part of almost the day you got into office.

M: Because I campaigned on that. I did say that I did not believe in it. Just like I said I was not a believer in full restoration of the Natatorium, a position that the mayor at that time wanted. So having said that, I always believe that if you are going to oppose something, you have to have something better. In my mind, what would be better would be rail, but I didn't know how we were going to do it because there were so many "ifs." Gov Lingle actually helped me kick start it in her bold statement in her state of the state speech in 2005. But let me also say this: my thinking on the bus was that it shouldn't be either or. We can do rail and have the bus system complement rail. That concept, as Toru and others explained to me, is a multi-modal approach, where buses, bike lanes, cars all feed into the rail system, even a ferry system that we wanted to see. And I still believe that until today. The bus service is enhanced because of rail if you have an integrated, multi-modal approach. So, I didn't say do rail at the expense of buses, let's do both, but not to have a singular bus express system with no rail. I was against that.

N: So, Toru, this was already the third administration where you'd been doing transportation studies. By what point were you convinced that rail was the way to go, and why?

T: When you look at the textbook, it's pretty simple. There is a transition. The bus system can do only so much and then you need a higher capacity system. That transition was the way we got to be in 1995. After that, simply looking at the capacity requirements, high capacity system is obvious. Now, when you say high capacity system, you can do that with a bus, too, but at a substantial cost to the street capacity. At some point, you have to have exclusive right of way for the buses. That's what the BRT was. In the beginning, people thought buses were good, cheaper, no big deal to take one lane. But once we started to implement them in some places, people didn't like that. Kakaako and Downtown are good examples. Suppose we take another lane and ban the cars from going in there? People didn't see that would be required for a BRT.

N: But, look what they've done with the bike lane on King St. as it is.

T: The terminology "rapid" in our business means exclusive right of way. Bus Rapid Transit is exactly that, bus running on the bus way.

N: So, you're saying that you tried it.

T: We were on our way to try it.

N: I've been reading criticisms of our rail system that it isn't really all that high capacity, when you think about the number of people it can carry, the number of trains that will be running. Somebody like you would have to look at these exact numbers.

T: I think what they're talking about is comparing to something like Washington Metro with a ten-car train. Is that acceptable here? Input from the public was, no, that's not what they want. If you were to run heavy rail, a 75-foot car and line up ten cars for a 750-foot train, then you don't need it as often so you can adjust that to meet the capacity.

N: The cars that we have are even smaller than the usual cars.

T: Right. It's 240 feet as a train and we run it every 3 minutes. So that's how we'll provide the capacity needed.

N: So you were convinced that rail was the way to go because?

T: Capacity and cost-effectiveness.

N: Not only during the build-out, but for operations and maintenance?

T: Of course. The buses are not cheap to run and to maintain the streets for the bus is even more expensive. When you look at all the potholes, usually they are in the curb lane because buses are one of the heaviest vehicles on axle, more so than heavy trucks because it has less number of axles. When buses are loaded, they are very, very hard on the surface.

N: So, once you know that rail is the way you want to go, that assumed fixed guideway?

T: I'm wordsmithing, but it's not that "we" made a decision to go with rail. Alternatives Analysis was presented to the City Council. They had choice of the four options; they picked the fixed guideway.

31:18
N: OK, so that was a Council vote prior to the public vote.

T: Yes. January 2007.

M: Noe, that's the mindset we have to try to work with you on. This was a joint decision.

N: I know, but I just gotta ask you this stuff because this is what people think.

M: We've said this over and over and over again. Yes, we started the whole process, but every step along the way it had to be supported or validated or initiated by a legislative body. And ultimately, FTA is overseeing this whole process.

N: So, '07, the Council voted for what? For the fixed guideway? For rail?

T: Well, they picked the fixed guideway on alignment; even within fixed guideway we had, I think, 6 different options of alignment. At that time, they picked Salt Lake.

N: So, that's why the draft EIS looked the way it did?

T: I don't remember.

N: Because the draft EIS didn't analyze technologies, it pretty much only compared routes. How did you get to routes already?

T: At that point, our first or second chapter, we said that we are doing this in technology neutral, meaning that it could be any technology, from MagLev to steel on steel or rubber tires. We didn't want to limit that. We again left it to the City Council to make that decision.

N: OK, so steel on steel, that was what voters voted for. Why was that even put on the ballot?

T: I don't know, that was a City Council thing. But that was after the CC decision, too.

M: What went on the ballot had to come from the Council. Yes, they would ask for opinions at the hearings, but at the end of the day, they had to make the decision and that's the decision they made. So, the wording that went on the ballot came from the City Council.

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N: So, even after the full public vote, the technology was not chosen?

T: The technology was recommended by a group of engineers and selected by City Council.

N: Who would they have been? Was it the same group who said steel on steel?

T: It was 4 people

M: And Panos Prevedouros was on that group, too.

N: They recommended steel on steel, but not electrified third rail. Because this is the one type that requires grade separation.

T: No, it requires protection of the public. It doesn't have to be grade separation. It could also be fencing, like Washington DC, Vancouver. Theirs is at-grade. You might be surprised that we have an at-grade portion, too, by Leeward Community College.

N: Why couldn't it go at-grade in town?

T: Well, at-grade in town really isn't practical. From a construction perspective, in order to provide a solid subsurface for the rail, you have to dig down and fill it up with a course material. We're talking about trenching about 20 ft wide, 2-3 feet deep throughout the corridor. We'll encounter Hawaiian burials, re-doing all of the underground utilities. Plus, when you do at-grade, you cannot do automated operation, you have to have a driver. That dilutes part of the argument for having rail in the first place. Then, in the future, we'll be needing capacity to run about 3 minutes in frequency. How can you cross Alapa'i, Pali Hwy, etc. every 3 minutes in two directions? We did computer simulation of these things, side streets would become totally clogged up. Plus, if you run on existing roadway, what do you do with driveways? With turning cars? Other cities that do this have accidents, even with frequency of only about 10 minutes.

N: I remember the list of accidents you showed me. Yet, so many cities that the FTA has funded use systems like that.

40:20
T: The majority of systems like that are using old railroad tracks. The terminology "light rail" comes from the fact of using old railroad tracks, often coming into the downtown area. In order to run the regular train, you have to have a substantial system. The heavy rail, by definition, is the train consisting of several different cars. One is exclusive for driving. Another exclusive for power; if it's diesel, it's got the fuel tank on it. So you need a minimum of so many cars to make a train. Light rail contains everything in one car, so it can operate by itself very simplistically. The term light is like a light beer, not light weight. In fact, because everything is self contained in the one car, it's heavier than the heavy rail. That's the concept of the light rail.

N: So, the original group [of engineers] that did decide on the system, steel wheel, steel rail, all 4 of them went for that, but there's no record of them actually choosing the electrified 3rd rail. Where would that have come from, do you think?

T: OK, I'm not too sure where you're going with that. That's the conventional technology for getting power, the vehicle gotta get the power from some place. Do you want the overhead lines? We said that was unacceptable. That's the way most light rail has to be powered because they run on the ground. I think we had a lot of comments that we don't want overhead lines.

M: It was almost universal that people opposed overhead electrical; I remember that very clearly. From an aesthetic point of view.

N: That would have a way less aesthetic impact than pillars.

T: But, once we said at-grade doesn't work, why would we need to do overhead lines?

N: So which came first? What was the first decision? That we couldn't go at-grade?

T: Right, because of impact to the streets and lessening the traffic capacity and the difficulty in construction, trenching work. And it cannot be automated, so it compromises the operating costs. You cannot run at-grade downtown without substantial negative impact to the surface traffic. How many streets do we have? Ala Moana, King St., Beretania, Vineyard, Dillingham that's it. Essentially, you have to take 4 lanes out of one of those streets, not two.

N: So, the first decision was that we could not go at-grade and that got us to elevated.

T: Elevated or tunnel, exclusive right of way.

N: And you're sure that at-grade would have just cost us more in terms of land acquisition, construction costs…?

T: I wouldn't say at-grade would have cost more, not, but it would have had un-mitigatable impacts. Like trenching through downtown where there would be tons of Hawaiian burials. A column, a six-foot hole every hundred feet… Hawaiians didn't bury deep, so if we find them, we can shift the columns or even split them. So that's why this technology makes sense in terms of lessening the impact to the burials. I'm convinced of that. Nobody likes the visual thing, right? But, what are the choices? We can do tunnel. It actually has a tunnel alignment.

N: So, the thinking was, if we're going to have it elevated, we could have whatever technology we chose for power? And we did get the most expensive one. Everywhere I read, this particular technology is 4 times as expensive as any other rail technology.

T: Not because of the third power line. I don't know what documents you're looking at.

N: 4 times more expensive than the average light rail cost.

T: Oh, that could be attributed to many things. In Hawaii, everything costs double.

N: But in any jurisdiction, it costs 4 times as much.

T: I don't know if that's comparing oranges to oranges. And, there are a lot of systems that don't include the kind of costs we have to go through. A lot of cities had the advantage of available right of way. We were frustrated by why it cost so much, but that's not because of the technology, it's because we're constructing through a dense corridor. If you look at the isolated section of the Washington Metro through downtown, how they had to dig it, or even the Boston system, I'm pretty sure they're not cheap. And I think the New York D-line is costing almost $1 billion a mile. It's an expensive project because of the kind of things we have to do, not because of what we bought.

N: I know how cost overruns are always there. Mufi, you were always very hopeful that we would stick to budget and now we're at almost double. Can we just look at our options for the future? Can I ask you, what do you think could happen now?

M: Well, first of all, whoever becomes mayor, we've made a commitment to take it past Middle St. The FTA has made it real clear that Honolulu will not get the $1.55 billion is we stop at Middle St. So, the question is, how do we now put some cost containment in the project and how do we exercise stronger leadership? To me, it goes back to that. The mayor of this city has to be very strong on this. To me, this has not happened in the last 4 years.

N: Where can the mayor get a grip on the money?

M: Caldwell has tried to go to the Legislature to get them to lift the 10%. He was unable to get them to even think about it, to extend it beyond 2022. The first thing he tried to do was to get the 10% skim back. He was unsuccessful. But they did get a compromise by extending it 5 years out, from 2017 to 2022. To me, I think they need to demonstrate better success in HART doing a better job of what has plagued that agency for the past several years.

N: What is it supposed to be doing? Overseeing the whole project?

M: Well, it had almost Carte Blanche to do whatever. So, I'm saying the mayor has to provide strong leadership and not look so much to HART. The mayor can set policy, can make strong public pronouncements and work with HART to come up with a successful strategy to make it happen. The private sector needs to be part of this process going forward, those who are benefiting along the rail route. It should have been done sooner. When I was mayor, nothing was happening in Kakaako, nothing. It wasn't until we said we'd like to see a station in Kakaako going to Ala Moana Center, then you've had all kinds of interest and people are buying into Kakaako with the expectation that rail is going to come through. This should have been an ongoing process, a two way dialogue to get them involved and see how they can participate in the cost sharing of bringing rail into those areas where they are going to directly benefit. This should also be done on the West side. They have to come up with a series of options for them to participate, whether it's helping to do the stations or creating other opportunities to help pay for it. That's what's missing; the taxpayer is not seeing that. All they're hearing is that the rail cost is going up, we may have to extend the GET, and there's even a threat of raising property taxes. That's not the right approach, in my opinion. There has to be ways to get the private sector involved. Maybe they even have to re-look at the way Middle St. to Ala Moana is going to be built. Maybe bring in a master developer that will assume the costs, basically manage the project, negotiate the contracts, and basically take the city out of it, other than the city's guarantee to repay this master developer. It's been done in other cities in America. But they need to know they're going to get paid back, so that's where the strategy for the state to be engaged and pay more than what it's doing right now. For that to happen, the state and everybody else needs to know that this project is actually going to get off the ground. That's why I've been a strong advocate of letting people ride as soon as it's possible to do so, as opposed to waiting until it's built to Middle St. before they ride. I'm a believer that as soon as they hit Aloha Stadium, let 'em ride. Let people experience what rail is going to be like; let them be the strongest advocates. They'll say 2 things: why is it taking so long and how do we get this beyond the stadium as quickly as possible?

N: Who wants to go from Kapolei to the Stadium these days?

M: But then, you're shortchanging the people of W. Oahu. This project has been looked at all along as for West Oahu. But, it's for all of us. If you have less people from W. Oahu driving their cars into town, that's less cars competing with those coming from E. Honolulu, Kailua coming into town. And it's the concept of transit oriented development. Kalihi, Pearl City, Aiea, Waipahu, they're dying for rail to come

in to stimulate better sidewalks, better parks, affordable housing, all those things happen as a result of rail.

N: I just read a CATO Institute Report that says all those things really don't happen except in the destination.

M: Then they've never experienced Washington DC, Alexandria, Falls Church, Arlington, Crystal City…

N: I think they did

M: All that came about in the development of rail.

T: No, I don't think that's the end of it in a TOD assessment. There are tons of other TOD studies that show that where they didn't want it, it didn't happen. Like Concord in BART. But, wherever they encouraged it, it happened.

N: OK, think now Toru, about other options from Middle St. to Ala Moana. From what you know, what might other options be? Would you ever consider doing that it this point if you were the head of transportation?

T: First of all, as said by FTA, the City has a contract with the FTA to do certain things. Anything other than that will cause ripple effects we may not be able to mitigate. You can amend it, but it can take years. And by inflation alone, this project is growing hundreds of millions of dollars a year. I don't think we have an option.

M: We don't have a choice.

N: With this technology all the way down?

T: I got to argue with you on this. Maybe it's the terminology of "technology." But there is nothing else out there that you can buy today that's different from what we bought. Name one.

M: If you're going to ask the question, then you should be doing something else. Because we have exhausted that. People asked the question. Ben Cayetano, he tried to do a different system; bus system, what have you. That didn't pan out. Charles Djou re-surfaced that again, and now he's not even talking about that any more. There is no other option than to do it. Yes, to be prudent with tax payer dollars; yes HART has to do a better job of containing their costs. Stop revisiting decisions that were made several years ago that would have saved them tons of money. Do the job right and be fully accountable and transparent with the legislature. If they want money from the state, they have to be ready to deliver.

N: I'm talking about what kind of trains we use on a fixed guideway, because I know we're going to have fixed guideway.

M: It's going to be difficult to switch horses and go at-grade.

N: I was just looking at this, from the architects, the AIA. They're saying that by bringing it down to street level, they can save $256 million a mile and get it done a whole lot quicker.

M: These are architects, not engineers or construction folks.

T: and have no knowledge of transportation. All you have to do is ask, are you really going to dig a trench 20 ft wide and 3 ft deep through downtown?

N: They're going to say you can run it on the street as it is.

T: No, you cannot. It's not the technology, it's the weight. For any type of rail, you have to have substantial reinforcement of the subsurface. You need 20 feet because each car is 10 feet wide. For the stations, you need more. This industry is full of opinionated people just like me. So you can find anybody to say anything.

N: I'm really finding that out. I'm trying to get people to talk about the same thing and compare that very same thing.

M: Let me try to put a cap on it by saying, if what they had suggested was doable, feasible, we would have done it. Why wouldn't we have done it?

N: I don't know. I could be that the more expensive a project is, the more money there is swishing around. You're not even running for anything. That's why it's worth talking to you now.

M: As much as people may find it hard to believe, this wasn't done for political reasons. It is a difficult thing to do. It's the last thing I should have done if I was being political; too risky, too difficult, and you're going to have people dislike you. A trophy legacy was the last thing on my mind. It was, this is the missing piece in our quality of life. Everybody who comes here says the same thing about our traffic. And every time you look at this, from in office or out of office, it always came down to rail. And the question was, should it go elevated or at grade? I'm convinced, having all the experts at my disposal when I was the mayor, and even now as people talk to me about it and I continue to be very interested in the project, this is the only way to go. And we have a commitment we have made to the federal government to go with a certain system that they endorsed. If they had problems going with an elevated system, if they preferred the system proposed by the architects, they would have said to us, we like this.

N: But, they never actually submitted to them. I don't think the FTA saw their plans.

T: I think they (AIA) did submit as comments to the draft EIS.

M: There were several channels of communication that they could have put their ideas on the table.

N: But, look, FTA could have funded us so much more. They're funding like 12% of our project. They have funded up to 80% of other projects.
T: It was never 80%. They made a policy that says up to 80%. They never funded any of such a huge scale at 80%.

M: Back then it was 30%. Open it. Let people ride. It's like there was a lot of opposition to H-3 for a long time, even as it was being built. But, once people experienced it, where's the opposition today? That took the longest time to build, it set a record for cost of a freeway. Rail is the same, people got to start riding sooner, rather than later.

N: How can se get a grip on the finances of this whole thing? How can we find out if we're over-leveraged for this giant project?

M: HART is now being tasked to do that, but we really need to shift that to more oversight by the mayor and the city council. They need to not just defer to the HART board.

N: They don't know how to get any numbers…

T: This is risky, just an opinion. I don't believe HART's story that they cannot finalize the financial plan. Because, we did financial planning constantly. And then, in addition to that, there's that project management oversight consultant (PMOC). They are expert and have all the software; they constantly check all our financial studies. They did a cost analysis using the latest software and their projection was 0.6% off from ours at that time.

N: What are they doing now?

T: I don't know. That's why I don't believe that HART cannot come up with a financial plan or cost analysis now. There are industry standards, best practices. How can you run the project without knowing what the cost is? This doesn't make any sense, something is not right.

M: Toru, why don't you elaborate on the decision that we made, how we split up the contracts that would enable smaller companies from Hawaii to participate, and then HART comes in and changes it to bigger contracts for the bigger companies and that cost us nearly a billion dollars.

T: I'm not sure it's a billion, but hundreds of millions in delay costs alone. What we focused on was not only cost containment, but creating local jobs, hiring local people. Setting up the legacy so local people can take over. In the beginning, of course, we don't have the rail experts, we have to rely on a lot of consultants. But those people are supposed to nurture so we can take over. That was the scheme. So in line with that, Mufi agreed with me that we'd split the contract. Although it may cost a little bit more and be a little cumbersome in terms of managing it, but we know that local companies cannot come up with the bonds for $1 billion or half a billion dollar projects. But apparently HART decided to save a few million dollars by aggregating, making into big stuff. This is for the stations. The Kiewit contract had to be big because if you divided it then you don't have a consistency in the guideway system. But, we made a lot of small packages so that the locals could come in . We even had a 2-day session I called marriage arrangement so the local contractors could meet the big companies to make sure there was maximum alternatives for the locals. But HART aggregated the contract packaging that was ready to go which delayed the work by six months to a year and then they disaggregated again.

M: They revisited and went back to what we'd originally put out there. So it cost money again. The economy was depressed and they bid low, but after the changes, the economy is better and now they are bidding higher.

N: I've heard the number of jobs this has provided for local people is in the 200's.

(Mufi Hannemann leaves the discussion.)

N: Would you be concerned now about construction flaws that are coming out in the paper, or is that normal?

T: To some extent, it's normal, like defective parts. It happens everywhere, you're talking about 2% of the product that's not good. So, it's normal in the amount of what's defective, but it's also the owner's responsibility to catch it. That's where the quality control is. That's what the project management is all about. They're the people out there inspecting everything, so it should have been caught at that point, not after it's installed.

N: There are over 1000 irregularities and unresolved issues at this point.

T: Out of 100,000. So, percentage-wise, it's not unacceptable, you can't help it. If you build a house, some nails are not to standard, some lumber warped.

N: People look at this project and they do associate it with Mufi. There were articles about his campaign contributions so tied to the construction industry, so people assume that there must have been some kind of quid pro quo. But I'm not sure how that would have happened and I'm trying to figure out whether that was true in Mufi's case.

T: I don't know how much I can emphasize or tell you as a maximum level of statement, that never happened as far as I know. That's something I talked to Mufi about, something we have to avoid at any cost because it will be discovered and that can kill the project. A little scandal like that can kill it. So he totally stayed out of the procurement selection. All the selection was done by me as the chief procurement person and the chairman of the selection committee on most of the major contracts. Whenever there's a procurement done by RFP (proposal) or RFQ (qualification), there's a selection committee assisted by an evaluation committee. Elected officials or appointees cannot be on those committees. The evaluation committee is all engineers. Well, I split it into technical evaluation and financial evaluation. The people doing the technical evaluation have no knowledge of the financials, the amount of the bids, which keeps it clean. This was engineers, consultants and local guys. Each procurement has a different set of people. We did it for guideway, vehicles, station design. The selection committee would see both results and decide on who had the best proposal. No place in there was Mufi involved and at no time did he even call me to ask about the status.

N: Going in, what are the things you thought were necessary for rail?
1:27
T: First, what was needed was exclusive right of way. It needs to be rapid. That's not just about high speed, but the ability to sustain a certain speed. In order to achieve that, you have to get exclusive right of way. Now, how do you provide an excusive right of way to a transit system? At grade with fencing? Elevated? Tunnel? Tunnel is expensive, everybody knows that.

N: Street level rail will fit into one existing traffic lane.

T: No, it doesn't. Well, some places yes. Some lanes are 12-14 feet wide, so it would fit. Take two, so more than 20 feet. They are totally wrong. And the 6 ft sidewalk, that's the existing sidewalk. You need more space than that for the passengers coming off board. You need 12, not 6 feet. And the curb has to be elevated, 10-12 inches rather than the standard 8 inches. You need ADA, it's going to block the shop doors, there are tons of things that these guys are on purpose or out of neglect not addressing. The curb has to come up to meet the rail, not the rail meeting the curb. It's not like the subway where the

platform is dedicated and has a yellow line to stand behind. You gonna do that with a sidewalk when the train comes every 3 minutes? The sidewalks have to be wider, at least at the stations. And the train track has to be away from the sidewalk, not right next to it. Here's this humongous train coming on the street level. Some streets, like Kekaulike is only 230 feet long and the train is 240 feet: don't fit. When the train is stopping there, side street don't pass. I can tell you hundreds of these little things wrong with that paper.

N: What's still a burr in my mind, that I've read so many times, is that the particular technology we've chosen is the most expensive. Not just in the AIA report, but everywhere, when you look at the cost comparisons of the cost per mile, the places that are spending less are getting light rail.

T: No, that's not true. When you have a right of way and you don't have to do any substantial work, like Phoenix, they have a great street system, just dig and run the track through. Of course that's cheaper. And those are streets not used for the utility corridor. All of our streets are utility corridors.

N: I just wonder how so many other places do it so successfully.

T: More land. They have the luxury of having more space. Phoenix is a good example; Houston, same thing; Dallas, even Los Angeles. But Los Angeles, some places are elevated, same with Denver.

N: Ad far as you know, then, we DID get the most cost-effective system?

T: Not counting the current over-run, yes..

N: People say Hawaii is the shining example of a transportation banana republic.

T: I think that's easy for those who love to believe in conspiracy theories. Although I don't know what happened after I left, it never happened while I was there. Mufi, Carlyle, never got involved in the procurement. And certainly, I never did. I made a policy to not even go to lunch with them, or play golf.

N: Mufi, however, DID. He was majorly supported by the construction industry.

T: Who isn't? Construction is always there in politics.

N: I'm just wondering if we'll be able to shoulder the financial burden, $200 per person per year? Is that something the city can manage? Is there any chance we could go bankrupt?

T: The city certainly has the capacity to fund an $8 billion project

N: $11 B

T: Eleven is an extreme high, but even it goes there, it's just a matter of how long it takes to pay for it. One thing I can say is most, if not all, cities that constructed transit, they are all in mode of expanding it. Only Buffalo NY didn't expand.

N: They could be losing population.

T: Exactly. I don't think transit was the reason. That's where Mufi is coming from and we talked about this a lot. We gotta show early success; people gotta love it once they ride it. We should be opening up as soon as possible, let people ride. The city deserves this, people deserve it.

N: And the noise, the view plane and stuff?

T: What's the alternative? Highway? Viaduct? Tunnels? That's gonna be much much worse and doesn't solve anything. Vehicles of any kind have to run somewhere. The ultimate solution is telecommuting. Nobody goes there. An early mentor of mine said we can solve the city's traffic problem by requiring every commuter to pick up your neighbor and take him to work. Car occupancy during peak hours is miserable, something like 1.2. Get that to 2.0 and problem solved.

N: You're talking about changing people.

T: That's not the American way, right? So, you have to spend billions of dollars and build something people would like to ride.

N: Thank you so much Toru. I really was looking forward to talking to you. Is there anything you'd recommend me reading?

T: What is it you want to accomplish?

N: I want all of us to make a good decision about transit now. Part of that is leaving the past behind.

T: But this is where I'm uncomfortable about your approach in asking for at grade. To me that's a no-brainer; it doesn't work.

N: Really, because, that is the big thing. The architects, the outdoor circle, Sierra club…

T: Are they transportation experts? In the picture, it works. But when you start looking at the details, like what we did, it doesn't work. Believe me. Jeremy Harris was extremely serious at grade because he recognized we couldn't afford elevated. Timing was wrong to ask for taxes, so he had a cap of, I think, $600 million. What can we do for that? Elevated or exclusive right of way were out of the question, so we really looked at the light rail. The sleeper corridor in the city is actually Vineyard. Not today, but it had always been less used, nobody wanted to be on it for some reason. So, we looked at running it over there. And we looked at running it into downtown and making a real tight turnaround at Alapai and all that. We just couldn't make it work. I spent a pretty good chunk of time trying to design at-grade. At that time, I wasn't even thinking about trenching. I was strictly looking at the operational. And, we cannot do that without without serious impact. Plus, the FTA would not agree to us doing that. A true transportation guy would come to the same conclusion, I'm positive.

N: Because of the expense, the breadth and depth of land needed?

T: Depth to them is not an issue. But here, Hotel, King, Beretania, Vineyard, those are major utility corridors.

N: So, just listing why upgrade cannot work?

T: I just told you, It's not as simple as putting the rail on top of the street, we gotta dig down to make sure it supports it. Then, there's the rumbling impact to the buildings, those are the real stuff. Then the operational, that's the biggest thing. Can't do it with choking up the streets. Every 3 minutes and the train stops at least 20 seconds at every intersection. Plus, they have to yield to the side streets. How you gonna do that? You can't even run the buses. The bus runs through Hotel St. at 6 miles per hour. So, I'm hoping that your piece doesn't go there, to having substantial testimony as to why didn't we do this. That's past. If you try to focus on what CAN we do, there's no, well, easy answer: there's no money.

N: Well, that's the only answer, isn't it? And TOD, just trying to make it the best it can be. What are your recommendations there?

T: TOD takes time. I don't know of anyplace, except maybe Japan and Korea, TOD doesn't happen over night in US. It takes 10 years, 30 years in DC. In Alexandria, it was a slum end in the early 70s with boarded up shop fronts and a lot of vacant places. Now, because the station is there, Holiday Inn, Hilton, the patent office with 6,000 employees… it's surrounded by 10 story bldgs.

N: How can we make the best of that?

T: One is property tax. One is the property value goes up and there's an increase in tax revenue. The other is trying to capture it front-end. Estimate and tax the developers. They don't like it, but that's the kind of resource you look for, value capture. Another is you trade some of the cost benefits, such as reduce the number of parking required, each parking spot is like $50,000 in construction you relieve them of the CTC requirements and instead take the cash payments. San Francisco did that. Instead of adding parking you pay $5,000 to the municipality, this is in the 70s. So we have a lot of role models for catching the land owners for these things. But, the problem is, we have unreasonable requirements of the developers, like affordable housing. So those things chip away the profit. Developers don't have that much cushion in there. Or, you can go out and demand cash payment from somebody like Howard Hughes and General Growth. There's getting tons of benefit out of this and not paying a penny yet. So, I'll say something I shouldn't but I've gone this far so what the heck. Let's say we tell them we're going to stop the rail in Kakaako unless you pay for at least a station, half a mile of track. If HH wants it in Ward, pay for it.

N: That would take a big personality to pull that off.
T: I'm not bashful to tell you anything to set the record straight or if it helps you get off the track of something like at-grade.

N: What about where you kind of testified for Mufi, when you say, as far as you know, he was NOT involved in the choice of technology.

T: No, he was never involved in procurement, or anyone in his cabinet involved in who we should pick.

N: Was there any way of thinking that we should spend as much money as possible?

T: No, it was the other way around. We were scraping the bottom to save money. I had to tell our people many times that even if they had a brilliant idea, if it's going to add cost, you're going the wrong way. We had a finite amount of revenue.

N: If only we had that now, that limit, that knowledge, that finite capacity. And transparency.

T: Well, the guy who left, every decision he made went the wrong way. Lack of knowledge, lack of experience. (Dan Grabauskas)

N: He's so experienced.

T: No, he only looks experienced on paper. He was DMV Director and promoted to Transportation Director and transferred to the MTA because he was a strong, hard working Republican worker. That's the problem; a lot of appointees, people assume they know something, but they don't.

N: We lost like 3 years.

T: Five years… Well, in my opinion, small changes, like making 2-car to 4-car train in the beginning, that initiated a lot of ripple effect that's caused the cost increase. For instance, we weren't going to finish the platform, the passenger barrier for the entire length, in the beginning. There's a series of these small changes that by itself seems to be a small amount, but it had all these snowball ripple effects. Some of them made sense to outsiders, but those are the issues that we went through and I already decided don't do it now. Good example is fare collection. When I was there it was barrier-free. The fare checker would roam around the platform and train to see if you are paid and if not you'll get fined or you gotta pay. Many places boast about 90% compliance. The major reason we were going to do that in the beginning was because the fare collection technology is changing so much along with the high tech stuff. So whatever we buy today will be outdated by the time we use it 5 years from now. So, wait until we absolutely need it and we'll have the best system then. We installed all the electrical conduits to get ready for it and made a provision on the station design for the space for these things, gate as well as vending machine. We get ready, but we don't buy or install it. Saves like $18-20 million, I forgot. But, Grabauskas said no, that's silly, we're gonna install these machines today. So, buy today, that's $20 million, but by the time you're ready to use it, you gotta replace it Plus, the worst part, it has a ripple effect of needing to change the specs on the stations. That delays the station contract by I don't know how many months. Meanwhile, the project is growing $300,000 a day. Changes like a secondary power plant in case of a black out sounds like a good idea, but hardly anybody in the industry has it. Primarily because most places don't have a total black out; they can always grid out. You don't need generators along the line; we're getting to the point where there are capacitors that can be installed in the vehicles that will have enough power to push the vehicle at least to the next station. It's already being developed. Five years from now it should be ready so why install these generators now? Board members, of course, say it's a great idea, why didn't we do that. Well, there's another side to the story of why it's a stupid idea. Small things like this, we thought through this and Grabauskas did it and delayed the project, added costs, blah blah blah.

N: Is there any institutional memory at all now?

T: Jacobs should have that, yeah. Jacobs, in fact, made a recommendation not to do the auxiliary power.

N: We have to find one transportation planner who thinks this choice is a good idea. I haven't found anybody yet. I need one other person.

T: If you talk about technology, steel on steel electrified, you can pick any one of those 4 guys on the technology selection committee to tell you that. When it comes to technology, there's nothing else out there that you can buy off the shelf and expect reliability.

N: One of the problems is they said the technology we chose is single supplier.

T: Then why did we have 3 vendors bidding for it? There are tons of suppliers out there.

N: The question was why a proprietary single manufacturer technology?

T: That's totally wrong. And Ansaldo was the cheapest proposal. They're not the best, but they were cheaper by about $150 million. The Ansaldo decision was a hard one because most of them on the selection committee had bad experience in the past. But there's no solid evidence that they're not going to do it right. The concerns were not serious enough to doubt they would deliver. In fact, it's a joint venture. There's Ansaldo vehicle people and Ansaldo control people, that's the brain part of it. They really liked the brain part of it; it's the vehicle hardware part that a lot of people had a problem with it. The control guys had a substantial responsibility percentage over the delivery of the vehicle. So, we got the better twin brother taking responsibility and the evil twin brother only had to produce the hardware, so it was not a serious problem. And again, hundred fifty million dollar cheaper than the next guy. We can go a long way with that. I don't know how you gonna put all this into a …

N: Watch me. I don't know either. And I want it to be useful. This is the third time Mufi's been back on this because he really wants to get it straight. And I so appreciate that.