Mr. Matoff introduced two distinguished guests. He introduced James Mills, State Senator from San Diego County. He also introduced Dr. Brian Sullivan, who received his ph.D. from Stanford Business School.

I would ask them to speak for 20 minutes or so on their observations of the federated approach; this might help us reach our goals.

Mr. Laing:

Thank you for being here and welcome to today's workshop.

Senator Mills:

With reference to the TDA, you might be interested in how it was done. In 1971 I created a bill which applied 1/4 of a cent sales tax statewide for transportation services in all metropolitan areas to be used for public transportation. In smaller counties there was an option because their needs were more for roads and streets. Most of them finally used it for transit. That now produces over $500 million a year as a single subsidy program. Money is allocated to jurisdictions on a per capita basis so that each city and each county has money provided for transit services within their area. That was the most important measure I undertook.

I also mentioned five in 1974, which allowed highway funds to be used for railways. Specifically they could be used for railways in the same way they were used for highways. There was opposition from the highway people. They were against using funds for the purchase of vehicles or the subsidy of operation. Governor Reagan built opposition. The bill said it could be used for railways as though they were highways. You could build a railway with it. Mr. Matoff mentioned that is done on a local option basis but it is done by a vote of the people.

I am not aware that any county has been denied these funds. It is also interesting to know that California, which is supposed to be so auto-oriented, approved it by almost two to one. That bears out what was mentioned earlier about the support for rail. It isn't Puget Sound, but in California and elsewhere when the polls were taken, there is more support for rail expenditures than highway expenditures. This suggests people tend to be well ahead of the public officials on this issue in many jurisdictions. I am
not suggesting that is true in any specific jurisdiction, but it is commonly the case.

Building the light rail system in San Diego. It is a much more modest system, put in a more modest area. The first line opened and some people came. It was from downtown to the Mexico border. 

It opened in 1981. We expected patronage on that line on an existing railroad was over 9,000 per day. That was based upon how many people were then using the bus and we anticipated a certain increase because of the improved service. Upon opening, we saw much better utilization. It was 11,000 per day at the beginning and growing steadily. It is at about 33,000 per day now; these are people drawn out of automobiles. They previously did not use transit.

All of our public opinion samplings of user opinion showed about one-third of the people using that light rail line drove to the line to use it. We have a system where the is not sufficient. One-third of those entering the system are pedestrians, about one-third ride the bus and transfer and one-third drive to the system. About one-third were asked how would you make the trip without the light rail line, and one-third said they would drive. This is probably the same one-third that drives to access the system.

One of the things that has resulted in this substantial increase in ridership of 300% from the beginning over 10 years was an increase in the ridership on the bus system of about 100%. That surprised many people. They hadn't anticipated what an attraction the rail system would be for the people in the local jurisdictions. Previously Chula Vista bus system people got on the bus and they went someplace in Chula Vista with reasonably good service but we made every effort to coordinate the bus service with the light rail line. The way that is done is to provide a timed transfer system where the bus lines terminate at the rail station so you have a minimal waiting time. The bus lays over and leaves shortly after a train has arrived. This minimizes the transfer. One of the deterrents to using the system is the requirement to wait a substantial length of time to transfer.

The rail stations became very important destinations. The local transit system, which previously served the area, became a feeder for the regional system. It provided access to the entire area. That has a wonderful effect.

The east line hasn't been as successful; however, one year after opening, we did the counts and found the increase in ridership in one year was 100%. Not all of that was on the rail line; a good deal was on the bus line. It depends more heavily on the park-and-ride lots. We have had a very successful system. It does
very well in farebox recovery. The official figure is 65%. I believe that figure is quite low. That is very good. I think there is only one other transit agency in the same and it is a small system in Philadelphia.

It is a conservatively simple system. We avoided unnecessary complications partly because of the nature of the system. We run about a 15 minute headway most of the time. That may be of some use to you. Consider the impact of a rail system on ridership on the general system when they are properly coordinated. It is always important to remember, when building a rail line, that it is not a new service but an improved corridor. We have a couple of rail lines that fit into that bus system. It is that it be one system that relates to itself.

I carried legislation that created the agency that was set up and given money from the highway fund to build the light rail system. It was given the authority to plan for the area. Long-term planning is still done by the Council of Governments; short-term planning is done by a metropolitan transportation board which has the ability to approve or disprove sales tax funds to local agencies. The purpose of that is to give agencies some clout to be sure all local operators are part of the seamless system. That is a hammer that has never been used. We have never been required to use it. The general managers met and reached a consensus and presented it to the various boards. We have had that situation where no one has said here's what you have to do. There has been a reasonable process.

San Diego transit was owned by the City of San Diego. Chula Vista and various others were contracting with private operators and they are still doing so. Ultimately the San Diego Metropolitan Transit Board became owner of San Diego Transit. It was a matter of a desire by the City of San Diego. It is a one fare system where you utilize transfers.

During the time I was Chairman of the Board, the increase in patronage was about 100% with no substantial increase in subsidies. We had a good success in doing something quite similar to what you are considering. We went in 1987 for more money for expansion and we obtained approval. My involvement in that campaign gives me empathy for you all.

Dr. Sullivan:

I will speak about some of the principals involved in a transit agency achieving certain goals. Fundamentally there is no surprise that we are in a period of innovation. Innovation management becomes an issue. Secondly, the major agenda seems to be one of multi-modal, which I would describe as making the best
effort to get the best characteristic that each mode can offer you and offer it to the public in a way that it comes in a unified manner. It should be seamless as far as fares so it is presented to the public in a consistent fashion.

Early in the 1970s I began pursuing the question of organizational changes in Europe and North America. There is a copy of a paper from the Canadian Transport Commission that deals with the status in North America at the time. Subsequently, in 1980 there is one from the APTA Transit Journal. Maybe I can show you how carriers change in response to the agenda of innovation and multi-modal, but in earlier days they were different.

Prior to the industrial revolution, a carrier would take the position of and transport them and sell them. With the industrial revolution the carrier became the builder and provider and operator of the trains. With the 30's and the beginnings of rapid growth of a freeway-based road system and elaborate air transportation, the change was to separate the carrier from the infrastructure. It was now a public works responsibility. Now there is another institutional shift to separate operations from marketing, planning and the demand side of things. You achieve several things. This was done in the 1960's in Germany and now through Western Europe. England, France, Germany and Denmark are following this institutional separation of agencies looking after customer and policy issues and one that looks after the supply side of things. Another way of saying this is the institutional separation is sometimes called a transit which is taking operation owned by the same entity and putting all of their services together for the public without actually buying all of the companies and putting them into one giant enterprise.

We approached this knowing of the German model. We spent some time in Germany reviewing how they were structured. Essentially, there were a series of public or privately owned operating companies. They were responsible for service delivery, planning and marketing. The federation is responsible for establishing what the routes will be. Once the theme was understood, the operating company took more detail onto itself. The enterprise that is your planning and marketing enterprise, which was BC Transit Services, is responsible for forward planning, setting fares, providing an overall assurance that the system will perform.

In BC the same enterprise details with Vancouver, Victoria and all of the small cities throughout the province and some rural areas. Those who deal with one category, which is commercial or the customer oriented side, will meet with their counterparts who deal with planning issues and strike a conceptual plan. This is implemented by a municipality on the transit
professional owned or privately owned. In Vancouver, we have a transit agency; this is still the only one that doesn't share the same paint scheme. Your transfer is as valid on their buses as it is on the buses owned by BC Transit. After the system had been running several years in the federation mode, the major professionally owned operator was acquired by BC Transit. This tends to divert your attention to operating issues.

When we started there were several operators with which we had to deal. Operations were very complex. If you want to deliver the service reliably, the great benefit we get from bureaucracy is that it takes something fairly complex and delivers it day in and day out reliably. Because they were specified in that form they were resistant to the change. They had made it work like clock work and they didn't want to change it. The Bellevue Transit Center was designed by one of our staff. There was real skepticism about whether this would work. BC Hydro is the operating entity and we looked at delivering the ability to move from suburb to suburb easily. Because we are dealing with real professionals in the operating company after operating 2-3 days they became ardent supporters of it. You have the customer representative here and the operating company over here. If you maintain new communications, there is a certain amount of . As long as you have that tension, the product is operable and we found we had very few requirements to go back and make changes. Some thing occurred in Victoria and around the province . This was a good way of introducing new approaches to transit.

You could probably do the same thing in the private sector. That is my area now. Maybe I should stop and allow questions.

Mr. Morrison:

When you proceeded with your suggestion that highway funds be utilized for rail building purposes, did California already have a constitutional amendment restricting taxes or some other form of revenues for highway purposes?

Mr. :

Yes. That had always been the policy since 1938, not in the constitution, but it was a policy so that remained unchanged until 1974. At that point the issue was presented to the voters. What is the best way to spend money to solve transportation problems? If it is a highway, fine. If you can accomplish more by building a rail line, put it in a rail way. And you have I-5 and there is no way another freeway will be built. It is a highly congested corridor. To go from Los Angeles to San Diego can take five to six hours. What do you do about that? We can't build another
freeway. But there is a rail line that can effectively be used to relieve congestion. The public agreed with that.

Mr. Morrison:

That is the situation we are in. What do you do with your assembly, which is now 39/41. You are a 40/40 tie and can't elect a speaker.

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In 1974 in the 40 member Senate we had 19 Democrats but I was not as newsworthy as Willie Brown is.

Mr. Drewel:

I am curious about the 300% increase in ridership. Do you know, is there any correlation between population growth? Are these people who have lived there all the time or are these new people?

Senator Mills:

The 300% was for the south line. During that time there was some growth in population. It was not as much as 100%; it was probably 40 to 50%. The system was so much better than what they had before. Previously the bus took 1-1/2 hours. The railway took 40 minutes. It was on our own right of way and so we were not affected by traffic or signals or pedestrians. You are loading at all doors. One of the things that drew people was that the service was so much more expeditious. With a service that got them there faster, people began to use it because it was cheaper to buy a pass then to park their cars downtown.

Dr. Sullivan:

We did a post-mortem on the first set of timed transfers we did in the fall of 1973. This is an area 13 miles from Vancouver. This has a competing town of New Westminster which draws people and it is own internal shopping and work area. It seemed to be ideally suited to a cobweb network. We had within a six month period a result that was very dramatic. Even though the area was growing there were so many multiples it was a result of the service design. Going from a very service with two routes one by the intercity bus operator and the other by a private carrier, it is that offering a full standard of services. We went from two riders per capita to 40 riders per capita in about three months, and up to 50 per capita in six months. I thought we would get up to 30 riders per capita in a year. This is what sold the doubting Thomases. The first morning it didn't work but it worked on the second morning.
With regard to commuter rail planning, the model that is used in many cities, including Vancouver and San Francisco, is called Emmy. It is a sophisticated gravity model. It gives a forecast of ridership and tells you what ridership will be from a) diversion from existing modes of transportation; and b) people reorienting themselves over time. You get a modal shift and a reorientation of where people live and work. This is a six to 12 month process.

When you do the modeling, it gives you two pictures.

Mr. Davidson:

I was curious about the sales tax base you mentioned of .25. What base is that on? How much sales tax is there in California. What other revenues do you have?

Senator Mills:

One thing constant statewide is the .25 that is on the sales tax. All commodities are taxed except for food and medicines. Statewide it was $580 million last I heard. The general sales tax at the time it was enacted was lower. Now 1 cent goes to local governments in general based partly on population, partly on where it was collected, and the remainder goes to the state although various jurisdictions opted for sales tax for transit. Had half a cent in Las Angeles; now have a whole cent in Los Angeles County. A whole cent in most of the bay area counties. There is half a cent in Santa Clara and now one cent and I think it is one cent in San Mateo. There is a full cent in the BART counties.

Mr. Matoff:

Sacramento enacted a half cent transportation tax; only one-third goes to transit.

Senator Mills:

Because of the nature of San Diego County, one-third went to completion of the highway system, one-third city streets and county roads and one-third for transit. We had an interesting campaign. I was the chair and general manager. We were dealing with a very conservative constituency. We were able to pull it off but it took ingenuity. In order for us to get something passed, we had to divide it in that fashion. We wouldn't have received enough votes from cities in the north without money going to the state highways, even though the polls showed rail was much more popular.

Mr. Earling:
Senator, I know your area has several bus companies that interface and Dr. Sullivan, maybe you can comment on the kinds of challenges faced when bus companies do cooperate and integrate their service and how you overcome some of the challenges. We have discussed.

Senator Mills:

Riders want to get on and they want many options for destinations and they don't want to pay another fare when they transfer. We have had an ongoing negotiations. The umbrella agency has not told them they must do things. There has been a matter of negotiations and agreement. We have had to reach compromises.

Dr. Sullivan:

Our situation was we had a contractual situation between the planning and marketing organization and the individual carriers that spelled out how things would be done. We prepared a draft service specifics for routes and then met with the operating company and their sales come up with something we agreed to. That became the statement of what was to be delivered. It originated with the demand side and then a compromise and then the supply people put it into effect. The private sector was used to this process from the school bus service.

Mr. Nickels:

When I talk to a transit driver about service planners, their response is that talking to a service planner is like talking to someone from another planet. It seems you might have the same situation if you have the RTA deciding what is best for the transit operations people. How do you deal with that cul?

Dr. Sullivan:

We encouraged the selection of our employees with operating experience. They begin to understand what it meant to face the customers. We encouraged people who worked there to take transit to work. The operating guys all drove to work. Third thing we did was to get BC Hydro to transfer its obligation. We felt there should be some cross-posting of people. Have someone spend some years in an operating and done in planning and marketing. Because we didn't have that formal agreement, we made a point of getting together and talking a lot.

Mr. Matoff:

I think we found in our outreach to the public and business community in the last six to eight months that the idea of a
seamless system and all that means is very popular with the public. I think I have seen the authority provided the rail system is approved, is the catalyst to bring that about. Probably not something that can be done by . We have four existing operators with local pride, a lot of understanding of their local markets, it will take some time to do. It does require a process of negotiation. Development of good transit requires intelligent decision-making and collaborative decision-making. Could you comment on that?

Dr. Sullivan:

If the Bureau of Transit Services, BC Transit, hadn't come up with a workable things there would have been no credibility. If the operating companies had been clutzes at running a timed transfer system, they wouldn't have credibility. Once each has mutual respect for the other, there seems to be a lot more willingness to be sure the next project works well. It is that initial period of time. There is a lot of stimulus and pressure on the guys doing the demand side work to come up with something innovative and workable. It is a professional thing as much as anything else. You have the two separate entities.

Senator Mills:

I would like to make the observation that San Diego started in 1981. Since that time there have been various other light rail systems in the United Sates. These are largely as a result of our success. Sacramento, San Jose, St. Louis and Portland. In none of those circumstances is there a more favorable environment for rail transportation than you have here. This is clearly a community that is organized in such a way that there is a much more favorable environment than elsewhere. I think that is something you might want to keep in mind and maybe point it out to the general public.

Mr. Laing:

I appreciate having those kinds of points emphasized to use in the near future.

Mr. Nickels:

You mentioned one of the systems went from two to 50 riders per capita in a relatively short time.

Dr. Sullivan:

This was in Coquitlam. We started at that level and pulled open what is already a ridership base similar to many rail cities.
Mr. Laing:

I appreciate the comments both of you have made. I think the observation related to expansion of total ridership to total utilization of the transit system in general is useful to us. We hear assertions that rail steals riders from the bus system and nothing changes. Hearing your expressions that the results have been measured is interesting to us.

Senator Mills:

Someone from Harvard says that. This never responds to the points I made here. In one year patronage in public transportation and on the south line it is much more than that. People on the trains increased 300% but at that time you were getting increases in bus patronage as well. If that is true, it was true at the beginning. There is no way to intelligently review the statistics in our situation and others as well.

Mr. Morrison:

There also was a cultural shift. We have been trying to do that with growth management. Transportation is probably the way you achieve a variety of other societal goals.

Senator Mills:

A fast system becomes a very important planning tool.

Mr. Laing:

There is a car here for you. I think we have exhausted our questions. Thank you very much, both of you.

Senator Mills:

I would be delighted to help further if possible.

The workshop concluded at 3:10 p.m.