



Leonard Transportation Center
CAL STATE SAN BERNARDINO



CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO
Jack H. Brown College
Business and Public Administration

Regional Mobility Dialogue Series: Results and Summaries

Opportunities and Tradeoffs in Transportation: Maintaining the Region's Competitiveness and Quality of Life

February 20, 2018

Leonard Transportation Center, CSUSB

Sponsored by:

HNTB

Introduction

The Inland Empire's future competitiveness and quality of life are dependent upon mobility -- the ability of goods and people to move quickly and efficiently across the region. This first Regional Mobility Dialogue, held on February 20 on the campus of CSUSB, focused on the challenges and possible solutions to improving mobility. As part of this conversation, we brought together leaders from the public sector -- San Bernardino City Councilmember Jim Mulvihill, and private sector -- Southern California Edison Environmental Policy Manager Tom Gross, to discuss their perspectives, along with a regional leader -- San Bernardino County Supervisor Janice Rutherford. The conversation identified challenges and opportunities from different perspectives. After the expert presentations, the attendees at the meeting identified their top three ideas to move this Dialogue forward. The following is a brief summary of the event.

Public Sector Leader -- James Mulvihill, San Bernardino City Council, Ward 7

"Most people ask me, 'Well, what is smart growth', well it is not dumb growth" -- Jim Mulvihill

James Mulvihill's point of view towards transportation is based on the integration problems within housing and smart growth.

Part of "dumb growth" is a concept known as urban sprawl, which is the great expansion of low-density urban development, segregation of commercial and residential land uses, and associated with various design features that encourages automobile dependency. The negative impacts from sprawl include more pollution, loss of wildlife habitat, traffic jams, loss of farmland, increased taxes, increased school costs, deteriorating downtown areas, and loss of community, to name just a few.

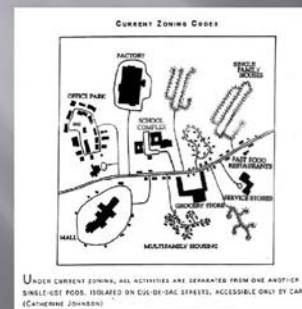
"Did anyone here not come by automobile? OK, that is part of dumb growth, we have no options."

Southern California, and most of the United States, after the Second World War, developed their communities based on the dependency on the automobile. Where people live is separate from where they work, schools, shopping and so on, which requires a person to drive their automobile. He uses housing in California as an example. Besides Hawaii, California has the highest housing costs in the country, with areas along the coast up to three times

Urban "Sprawl"

- ▣ **Urban sprawl** is the great expansion of low-density urban development, segregation of commercial and residential land uses, and associated with various design features that encourages automobile dependency. Negative impacts include: disappearance of rural land, increased traffic congestion and reduced air quality.

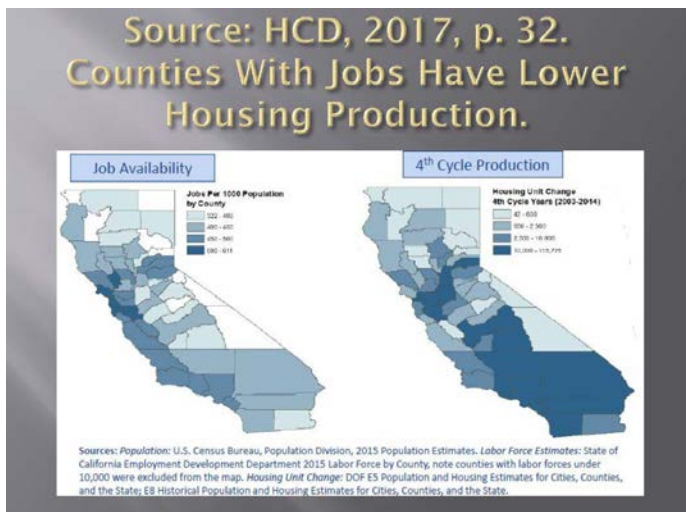
Automobile-Dependency and the Sprawling Metropolitan Area.



After 1945, the U.S. followed an unsustainable, auto-dependent urban development model. This model led to: wasteful consumption of resources, abandonment of central cities, economic segregation, etc.

more expensive than inland areas. Why, if housing is so high, have no more houses been built? Why is there no more profit in building homes? If housing and jobs are located next to each other, there would not be a transportation problem. That is a large component to congestion. Specific to our region, everyone is trying to go from the Inland Empire to Los Angeles County or Orange County because that is where all of the jobs are. “But of course, they are not producing housing there”, according to Mulvihill.

Why no housing? One of the main issues, especially for a politician in promoting housing in coastal areas is community resistance. This includes, community resistance to new housing, lengthy environmental reviews that reduce or stop housing development, local financial structure favoring nonresidential development and limited vacant, easily developable land, to name a few.



Transit Oriented Development: “Smart Growth” With a Focus

- ▣ A transit station with surrounding pedestrian amenities.
- ▣ Higher intensity development nearest the station and decreasing to the edge of the TOD area for compatibility with non-TOD.
- ▣ A compact, walkable area with pedestrian connection linking businesses, residential neighborhoods and transit station.
- ▣ An interconnected street network with walkways, open space/landscaping, and traffic calming features, e.g. curb pop-outs, bicycle treatments, etc.

What is Smart Growth? Mulvihill explains Smart Growth as “a mix of land uses, it’s four stories or eight stories, compact building design, higher densities, a sense of place identity, preserve open space and farmland. If you condense and compact growth, you are going to have more land for parks and open space, which goes along with clean air quality.” Alongside Smart Growth are Transit Oriented Developments (TOD) that include a transit station with surrounding pedestrian amenities, higher intensity development nearest the station and decreasing to the

edge of the TOD area for compatibility with non-TOD. Also, a compact walkable area with pedestrian connection linking businesses, residential neighborhoods and transit stations, an interconnected street network with walkways, open space/landscaping, and traffic calming features, e.g. curb pop-outs, bicycle treatments, etc. A fine example of smart growth development can be found in the City of Claremont, California’s new Packing House District. The Packing House, which is about a quarter mile from the metro link, contains boutiques and eateries, and hundreds of upscale housing units in nearby locations. This leaves recreational and restaurant areas close by, so people do not have to drive; and the metro link nearby that can take them to downtown Los Angeles and other locations.

"Packing House" in Claremont, California.



- ▣ In 1950, Claremont was center of 4000 acres of citrus.
- ▣ In 1965, one million boxes of lemons were packed.
- ▣ The "Packing House" is the remaining image of four major facilities.

"Packing House"



Packing House contains: 50 boutiques; 40 "eateries"
And, with the availability of MetroLink, can be classified as "transit oriented."



Though, with some exceptions.
Parking might be made more peripheral, allowing more mixed uses near the transit stop.
...the transit stop is ¼ mile away.

New Housing Immediately Adjacent to the Packing House District.



Finally, the question that remains is do TODs provide an opportunity? In the past, from post WWII and up until 2012, there was a reliance on redevelopment agencies "to come in and condemn property if necessary through eminent domain". Through this process, construction of buildings, including shopping malls and housing, were possible. However, during Governor Jerry Brown's term, he and the court system eliminated redevelopment agencies in February of 2012.

Is Transit Oriented Development an Opportunity?

Over most of the last 60 years, California cities relied on local Redevelopment Agencies to fund and implement many urban revitalization programs that transformed the state's cities. A similar effort would be necessary to initiate the widespread adoption of TODs.

However, in 2012, in a move to close California's budget deficit, Governor Brown's administration closed all Agencies - thus the entire Redevelopment program was ended.

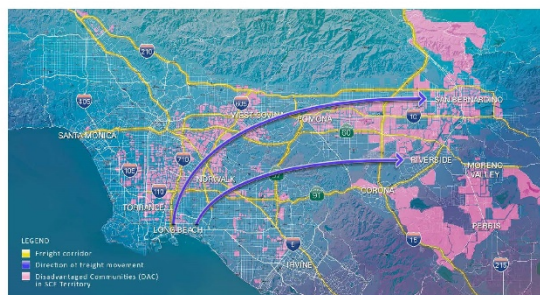
In conclusion, as Mulvihill stated, "the reality is that you all got here with your cars and of course you didn't have any other option of getting here. If we lived in another city, like San Francisco, the choice would have been different, in other words, some of you would have come with mass transit."

Tom Gross' talk focused on the need for a balanced approach between the transportation sector and the environment in the Inland Empire. The logistic industry is a large part of the local economy providing jobs for many individuals – particularly in this region that is challenged with a low education rates. Yet, with this growth in logistics and truck traffic comes community challenges with air pollution and environmental health issues.

There are a number of companies with large distribution centers in the Inland Empire. Those companies include, Amazon, Sketcher Shoes, and Stater Bros. These distribution warehouses provide a job and income to a demographic of people in the area that includes many without a high school diploma. However, as Gross states, "But one of the problems that it has created is that you have thousands of additional truck trips that add to an already existent heavy pollution load and the two criteria pollutants that are subject to national air qualities which are part of the Clean Air Act." Diesel emissions are one of the biggest problems as they generate Nitrogen Oxides (NOx) and Particulate Matter (PM). The first, NOx is unique because once it is mixed with volatile organic compound and in sun light, it creates ozone. Both are harmful to people's health, in particular leading to high asthmas rates, especially for the region's children.

What is the solution to the negative environmental effects and health complications? New rules are being considered at CARB and AQMD to regulate source point pollution at the ports, warehouses, railyards, and airports. There are also a number of initiatives to limit vehicle miles traveled (VMT), but the use of new technologies will be key to the solution. Cleaner vehicles are being developed, with approximately eight to ten companies, including Peterbuilt, GM, and Tesla, all designing new heavy-duty trucks with electric drives.

Air pollution Can Affect Multiple Locations



4

Energy for What's Ahead™

Jobs But With Added Pollution: Is There a Solution?

- Indirect Source Rules are being considered both at CARB and SCAQMD
 - Ports
 - Warehouses
 - Railyards
 - Airports
- Attempts to limit VMT
- **Technology will be a key to the solution**

5

Energy for What's Ahead™

Alternatives to Diesel

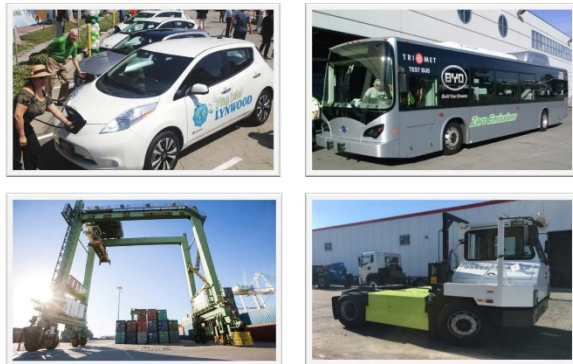
- Natural Gas
 - Technology exists now
 - Still contributes to GHG emissions
- Electricity
 - Zero Emission Technology
 - Greater reliance on renewable energy
 - Excess solar generation during the middle of the day



Natural gas is an alternative to diesel, but it still contributes to Greenhouse Gas Emissions (GHG). Electricity is a zero emission technology and currently there is excess solar generation within the system. This allows for many possibilities and opportunities in the advancement of this technology to improve the negative environmental and health impacts from diesel trucks. Gross stated that “the California Independent System Operator, is struggling with what do you do with the excess solar generation during the middle of the day”

It is projected that if in a few years there are more electric vehicles out in the road, the energy being generated during the middle of the day can be used to power both personal vehicles and vehicles used to move goods. New technologies allow companies, such as AQMD and Edison, to send a phone call or notify you that your vehicle is fully charged at a specific location. This lets people know to move their vehicles to another parking spot so another vehicle can be charged. During the evening, there is “a lot of wind generation, and the wind generation can charge a lot of vehicles that are parked during the night, and again, you are able to take advantage of the generation of renewable energy.”

Current Electrification Projects



Roadblocks to Clean Technology

- Many of the truckers are owner/operators
- Indirect Source Rules
- Zero Emission Technology is still several years away
- Infrastructure is not readily available and it is expensive
- Limited resources to purchase new and expensive technology
- ISR will prohibit incentive funding
- NAAQS requires changes now
- Who Bears Costs of Infrastructure

8

Energy for What's Ahead™

the cost is not applied to ratepayers, what would happen if the Port of Long Beach would take on these infrastructure fees? The port is a property owner and a department of the City of Long Beach. This means that taxpayers would have to pay more in taxes to cover those fees for the city. However, if you spread it over all the ratepayers, the feeling is that it is more equitable.

Commitments are needed to ensure adequate incentive funding

- This requires strong advocacy
- Proper prioritization of projects and thoughtful regulatory approach
- Further development of clean transportation technology
- Development of additional electrification projects in the DACs
- Commitment from both the private sector and the public sector

10

Energy for What's Ahead™

The biggest challenge to fully using these new technologies is an undeveloped infrastructure. From this we need to ask “who bears the cost of infrastructure?”

Gross used the example of Edison’s projects at the port terminals. He states that new construction and engineering has started, but it has not been completed and is expensive. Edison ratepayers are bearing the costs, therefore, the larger the area that is impacted, the lower the individual cost. If

Gross concluded his talk, stating that strong advocacy will play an important role in the adaption of new, cleaner technologies. Projects need to be prioritized as there is not enough funding to do everything. A commitment needs to be made from the private and public sectors to find the best solutions to the region’s problems.

Regional Perspective – County of San Bernardino Supervisor Janice Rutherford

Janice Rutherford focused her talk on the transportation principles she believes Bill Leonard would be promoting if he were here today. “I want to remind us of the principles of transportation that guided his thoughts and decisions and suggest that they are the kind of principles that need to guide the decisions and research of this center from here forward, and indeed do good for all of us policy makers and staff to think about as we make transportation decisions.”

“The first principle is that our transportation solutions and our discussions need to be customer oriented, bottom-up not top-down.” – Janice Rutherford

Janice Rutherford advocates a bottom-up approach to transportation planning. She promoted a transportation system that is customer oriented – taking into consideration what the consumers of the system want. “They want the flexibility, the independence, the comfort, the safety of their own vehicles. We ought to be taking our brain power and our money and figuring out how do we make the individual car more efficient and better both for the consumer and for society as a whole. How do we make that car cleaner? How do we make it more efficient? How do we adapt our road ways and our parking systems, to accommodate the choice that people are making every single day?”

The second principle is that the government, “when coming up with new transportation policies, and does a cost benefit analysis, it really needs to be done from the perspective of the consumer, from the driver, and not from the perspective of the government and the tax system.” This is especially true here in the Inland Empire that is a major hub for the logistics industry, providing regional jobs and products for the whole country. Government should respect business decisions on how to ship out their products the most efficient way. “We need to respect the research they have done and work with them instead of against them.” If regulations, such as indirect source rules, are imposed on these businesses and shipping companies, it would drive the area back to a recession, companies will leave, the warehouses that people speak ill of, will be gone. “We do not do a cost benefit analysis from the perspective of the consumer, the resident or the businessperson. We do it from the top-down, and it hurts our decision-making.”

The third principle that Rutherford spoke on was taxes. If taxes are levied for roads, and highway construction and maintenance, those monies should be spent on roads, and highway construction and maintenance, and nothing else. She stated, “people pay gas taxes, because they expect the roads to be in better condition than they are today.” Additionally, the consumer wants more roads to help them get to where they want to go.

The final principle she talks about is innovation. The Leonards were advocates for new technology yet ideas from 30-40 years ago still have not been implemented on our roadways. “How much technology, how much computing power is in the phone that is in your pocket right now? We are not harnessing that to benefit ourselves, to benefit the economy of the region. My hope is that through these conversations that the Leonard Transportation Center is having, you will take on some of these challenges from the Leonard’s perspective. That you will provide policy makers with research and data that we can actually use to make decisions needed for the Inland Empire.”

Moving the Dialogue Forward: Ideas from the Participants

After the presentations, participants discussed the ideas presented and worked together in groups to discuss solutions to moving the Dialogue forward. The top three ideas from each table have been categorized and summarized here.

Emphasis needs to be on the Inland Empire Region: This point was made a number of different ways, but the ideas were clear that more outreach and research that is locally based is needed. Participant's ideas included:

- Opening discussion to a much larger audience/ public awareness.
- Emphasizing needs of the region and spotlighting the Inland Empire.
- Policy decisions must reflect local context
 - a. Talk to the people
 - b. Different people need/want different policies
- Open research/ studies that really listen to the local population.
- More studies that listen to local population.
- Public outreach
- Make surveys for customers focused on policy makers.
- Impacts of possible job loss.
- Showcase regional studies.
- Develop more public participation.

Get a Better View of Technology and How It Can Be Implemented: New advancements in transportation technologies have the possibility to improve the quality of life of individuals throughout the region. More funding, research, and implementation is needed as seen from the comments of this Dialogue's participants:

- Understanding the options for technologies and how they feed into solution.
- Thinking long-term, what will happen after everyone has their own electric vehicle and the population grows? Will we have the energy to power those vehicles?
- We are not talking advantage of the technology that is already available to us.
- More technology research for local level management.
- Allow for more fuel/ tech options in policy making.
- What types of technology? How do we build trust in new technology?
- Research/ studies for transportation advanced technology
 - a. Safety
 - b. Efficiency
 - c. Capacity
- Allow for more fuel options in policy making.
- Technology advances with:
 - a. Autonomous shuttles, connected to station/regions

b. Autonomous vehicles

Public Financing Support and Transparency Is Key: Financing public infrastructure projects is a key component to quality of life improvements. This topic will be explored further at the November 2018 Dialogue. The participant's ideas included:

- Look closely at prioritization for spending money we do have – is it the best for the people being served.
- Who pay for all the incentives to use new technologies?
- Methods of delivery, procurement issues.
- Transparency with tax dollars.
- Federal regulations and tax incentives/low interest loans for helping small transportation businesses.
- Discuss the importance of the changing policy environment from the state to the federal government.

Address Suburban/Urban Transportation Issues: There are many diverse issues when analyzing suburban and urban areas. These range from environmental issues and health to safety to the balance between public transit and personal vehicle usage. As we move forward, finding the right balance is needed as noted by the participant's comments:

- How to balance air pollution regulation and the economic stability of the Inland Empire?
- Address safety concerns of urban/downtown transportation centers.
- Driving is not statistically safer than taking transit, 30k people die in American roadways every year. If transit were more frequent and had priority over cars, more people would want to take it. For example, in LA, transit ridership is down but imagine how much more congestion there would be if all people who ride transit were in separate cars. It is better for everyone that some people choose to take transit.
- Safety concerns need to be taken into consideration.
- Gain an understanding of the balance between single vehicle versus transit now and in the future.
- Are we using our space more efficiently by making more freeways?

Final Comments

Regional transportation issues in the Inland Empire are varied and complex. The overall findings from this Dialogue are that there are different perspectives on the role of government in transportation planning and financing, and that technology advancements need to be explored and implemented. The Leonard Transportation Center is prepared to help by providing forums such as the Dialogues, and working with community groups and regional

experts to provide critical insight through research and analysis. The overall goal is to provide a voice to local issues and work to improve the quality of life for all residents in the region. If you have any feedback on this event or any of our other activities, feel free to contact us at lrc@csusb.edu.