

2020

Leonard Transportation Center



Inland Empire Regional Mobility Dialogue Series

Results and Summary

Apr 21, 2020

WWW.CSUSB.EDU/LTC

A New Vision for the
Inland Empire's Transportation
Infrastructure:
Responding to Change and Crisis



Introduction

As we look at new innovations in the transportation sector along with what some are calling a “new normal” with the health pandemic created by the Coronavirus (COVID-19) – how prepared is the Inland Empire? Handling these two issues, independently of each other, generally results in different types of responses and actions by government, business, and community members. The first, transportation, is tied with long-term planning and the second, pandemic and other public health responses, is based on crisis management techniques. How can we bring these two together? Is it possible to create plans and invest in the infrastructure to look beyond the status quo? Can we prepare our transportation systems (logistics, transit, TNCs, and micro-mobility, etc.) for a future for a new normal, which may have to be ready to handle more disruptions over time?

Additionally, we must note that suburban and urban spaces in the Inland Empire have seen significant development over the years. The relationships between the transportation foundation that connects us, the community, and the livability of our cities is impacted by the changes we may see during and post-pandemic. We will begin with a vision of what the possibilities look like and this will be followed by local leaders responding and providing perspectives from their cities.

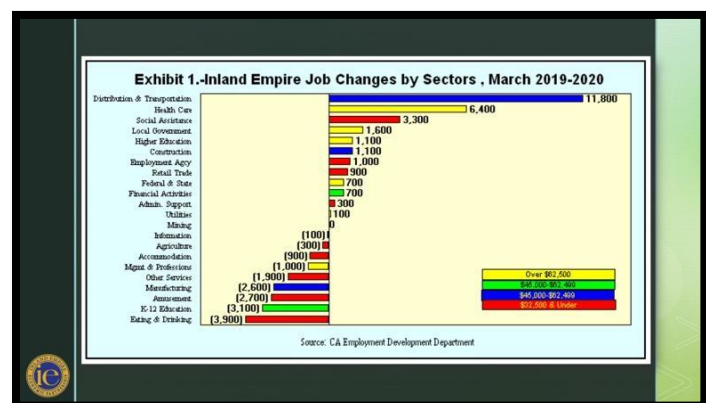
Experts for this Dialogue included:

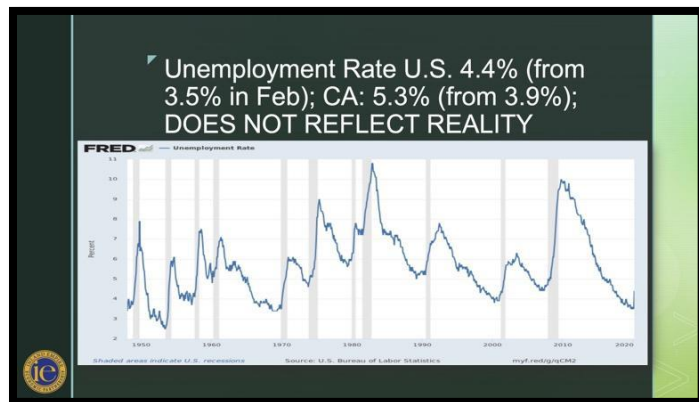
- Paul Granillo, President & CEO, Inland Empire Economic Partnership (IEEP)
- Steve Fox, Transit & Rail Planner, SCAG
- Beth Ann Falstad, Ph.D., Lecturer, Regenerative Studies, California State Polytechnic University
- Alan Wapner, Ontario Council Member & President of the Ontario International Airport Authority

The major takeaways from this discussion include understanding how COVID-19 has affected the region in terms of jobs and transportation, how we can be more sustainable with our resource use, and how local government can move forward having weathered through this crisis.

Paul Granillo, President & CEO, Inland Empire Economic Partnership (IEEP)

To describe the present status of our situation with the COVID-19 pandemic, Paul Granillo started off by quoting Eeyore, “well, it could be worse. I don't know how, but it could be,” a comical reference, but Granillo stressed the seriousness of the economic crisis at hand and proposed to find solutions moving forward.

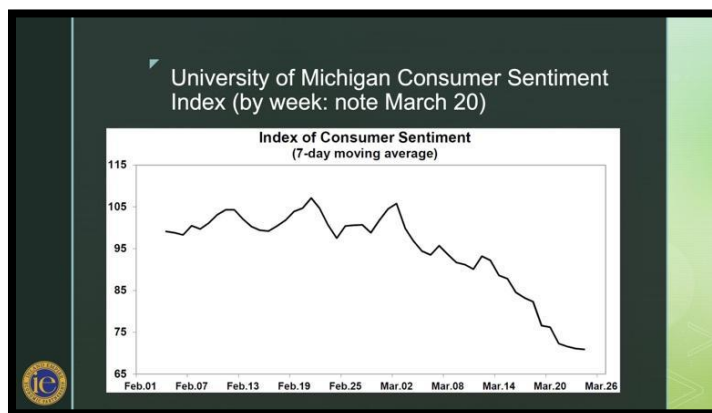




Granillo showed that between March 2019 to March 2020, the distribution and transportation sector was the number one job creator in the Inland Empire. However, at the other end of the spectrum, the eating and drinking, education, and manufacturing sectors experienced the most job losses.

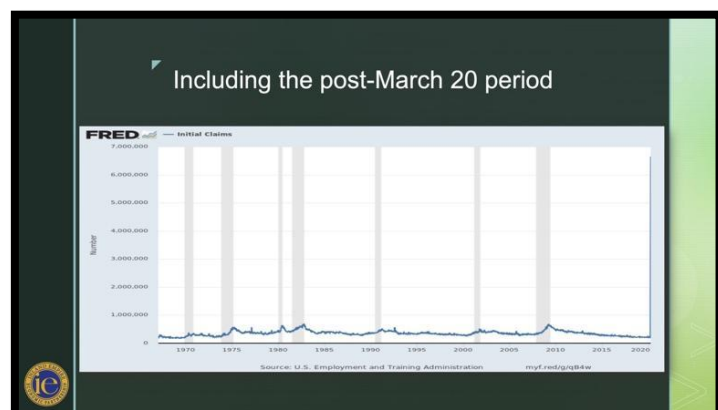
Granillo noted that a significant spike in April's unemployment numbers is expected. Consumers will think differently on how they access their money and how to spend their money going into this crisis and these attitudes on spending will define how long the recession will last and what the recovery would look like.

Businesses in the leisure, hospitality and restaurant sectors rely on people partaking in activities in close quarters, but social distancing requirements will have a great impact on how these businesses



can realistically operate. Most small businesses surveyed claimed that they have about 2 weeks to a month to survive under current pandemic mandates and dining room closures. The first round of Payroll Protection Plan (PPP) dried up very quickly. Although there will be another round of stimulus money, many bankers have claimed that it is not enough.

Granillo then discussed on what a worst-case pessimistic scenario would look like, stating "I've heard if we can't recover or have to go back into shelter in place because we can't get the virus under control that the worst-case scenario is, we won't see a recovery until 2024." Optimistically, if the Coachella Festival takes place and is sold out in October and many of the schools are back to in person classes in the fall, there should be



faster recovery – closer to a V-shaped recovery. This would mean that there will be a small national recession in 2020 Q2 and 2020 Q3 but a recovery in 2021.

However, many people from the federal and state level believe that the Coachella Festival, NFL season and other major gatherings will not take place in 2020. Other things such as car ownership, and how we utilize transportation and transit will have to be redefined. Granillo stated that there is value observing what a recovery looks like for other nations – such as China, Singapore, and South Korea. Additionally, we must look at how these countries use transportation and transit and how they have been affected by COVID-19. “There are going to be new protocols that need to be put in place for us to gather, for us to go out and shop and eat, but also for how we drive, fly, and use modes of transit. I guess my bottom line here is it is a difficult situation. There is not going to be normal. It will be a new normal, we don't have all the answers, we can't tell how long, but we also have to begin to work together on solutions,” said Granillo. He also drew analogies to the great depression and post-world war events in comparison to the current social and economic crisis brought on by COVID-19. And lastly, he quoted Dr. Collins by saying, ““Out of those difficult situations come new opportunities and new ideas and many times thing to be for the better.”

Steve Fox, Transit & Rail Planner, SCAG

Steve Fox began his presentation by providing some facts on the jurisdiction of the Southern California Association of Governments (SCAG) region, which includes 191 cities in 6 counties, 19.1 million residents, and accounts for 48.1% of the state’s population. SCAG accounts for a GDP of \$1.2 trillion which makes the region the 15th largest economy in the world.

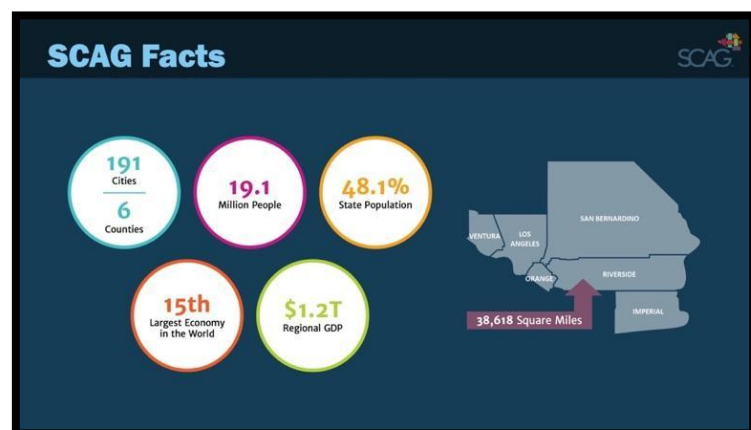
Fox went on discuss the primary roles and responsibilities of SCAG. Some of these included developing:

- a long-range Regional Transportation Plan (RTP) with a Sustainable Communities Strategy (SCS) to meet greenhouse gas (GHG) reduction targets.
- a short-range Transportation Improvement Program.
- a long-term Regional Growth Forecast.
- the Regional Housing Needs Assessment (RHNA).

Additionally, SCAG serves as a regional data and information center.

Connect SoCal


The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy has been named “Connect SoCal.” As a federal requirement, this plan is a long-term vision and investment framework that is updated every four years in order to maintain



eligibility for federal funding. As part of the state requirement, Connect SoCal must meet SB 375 on air quality requirements to address emissions and GHG reductions that result from transportation projects that the counties in the SCAG region builds and implements.

Connect SoCal also coordinates the region's projects and facilitates regional and local competitiveness for funding. Additionally, it integrates transportation investments and land use strategies and allows any federally funded or regionally significant projects to maintain their eligibility for federal funding.

As part of a very large investment in transit and rail, Connect SoCal allocates \$66.8B in transit and \$53.3B in passenger rail capital projects. Transit funding is directed towards the development of traditional bus, bus rapid transit (BRT) services like San Bernardino County Omnitrans SBX rapid bus line, and express bus services. Additionally, the Redlands Rail Arrow Service, a rail transit service, is currently under construction with allocated passenger rail funds. This service will run between downtown San Bernardino and Redlands. There is also the development of the West Valley Connector Phases One and Two, which is a San Bernardino Country project, as well as the San Bernardino County Transportation Authority which is a future BRT service bus rapid transit service that generally follow line 61 along Holt Blvd from Pomona to Ontario International Airport and going up to the Rancho Cucamonga Metrolink Station. Other funded projects include the Ontario International Airport Rail Access



Connect SoCal
2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

WHAT?

- Long-term Vision and Investment Framework
- Federal Requirement
 - Updated every 4 years to maintain eligibility for federal funding
 - Long Range: 20+ years into the future
 - Financially-constrained: Revenues = Costs
 - Passes regional emission standards (Conformity)
- State Requirement
 - Must meet SB 375 requirements (address GHG reductions)

CONNECT SoCal

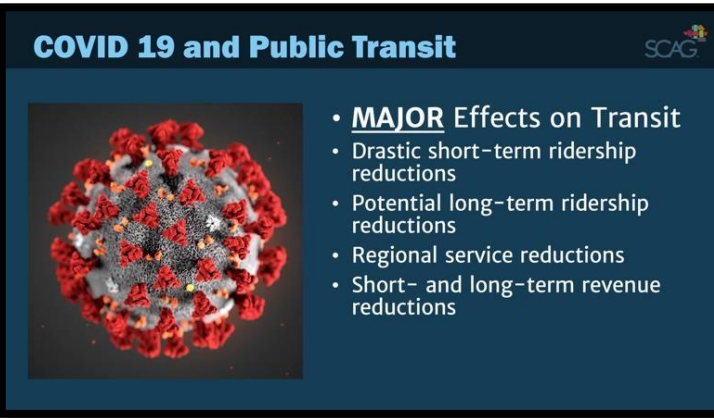
WHY?

- Transportation knows no boundaries
- Coordinate regional projects
- Facilitates regional/local competitiveness for funding
- Integrates transportation investments and land use strategies
- Allows any federally-funded or regionally-significant projects to maintain their eligibility for federal funding



SCAG Deals With Regional Issues

TRANSPORTATION, GOODS MOVEMENT, HOUSING, AIR QUALITY, SCS/LAND USE, FUNDING, LONG TERM GROWTH FORECAST, WATER



COVID 19 and Public Transit

MAJOR Effects on Transit

- Drastic short-term ridership reductions
- Potential long-term ridership reductions
- Regional service reductions
- Short- and long-term revenue reductions

Project, Large Metro Rail expansion in Los Angeles County, OC Streetcar in Orange County, Metrolink SCORE Program, California High-Speed Rail, XpressWest from San Bernardino County to Las Vegas.

COVID-19, Public Transit, Safety and Mitigation.


With the COVID-19 pandemic, increased teleworking, safety and health concerns, short-term transit ridership has drastically decreased with potential for long-term ridership declines as well. As of April 15, 2020, ridership in the SCAG region has dropped anywhere from 65% to 95% where Metrolink is down 85%, Amtrak Pacific Surfliner down 95%, and Omnitrans down 70%.

This also translates to major decreases in both short-term and long-term revenue. There have been up to 50% cuts in service, massive drop in fare revenue, and significant reductions in current and long-term sales tax proceeds. “The most pessimistic of scenarios – there will be huge reductions in the sales tax proceeds from transit agencies for capital projects and for operations and maintenance,” explained Fox.

When the CARES Act passed, it included \$25 billion dollars for public transit agencies across the country which would provide a short-term relief for transit agencies. However, long term revenue and funding options may continue to be impacted as the pandemic continues.

Several safety mitigations measures have been put into effect in public transit systems to combat the spread of COVID-19 for those who have continued ridership. These include rear-door boarding, no fare payment, increased sanitizing and cleaning efforts, mask requirements for passengers and the front door is closed for out of concern for the

Ridership – As of 4/15/20



- Ridership in SCAG region down 65% to 95%
- Metrolink down 85%
- Amtrak Pacific Surfliner down 95%
- Omnitrans down 70%
- Potential long-term decreases
 - Increased teleworking
 - Safety and health concerns
 - Recent regional and national trends


Source: California Transit Association

Safety and Mitigation



- Rear-door boarding
- No fare payment
- Front of bus closed off
- Stepped-up cleaning and sanitizing
- Passengers required to wear masks
- “Front line” transit employees threatened and sickened

Path Forward and Recovery



- Public transit remains an essential service: for transit dependent individuals, congestion relief and air quality.
- Marketing campaigns—what is the message?
- New technology
- Active Transportation and Micromobility
- Some COVID 19 mitigation efforts made permanent?
 - Cost of increased cleaning and sanitizing
 - Social distancing could reduce fare revenue and increase costs.

safety and health of the bus and train operators.

Path Forward and Recovery

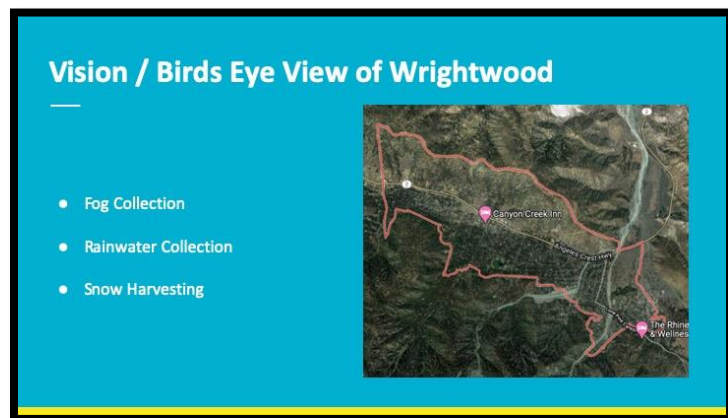
Fox added, “Public transit is an essential service. They are very large shares of people and workers and students and all other residents who are dependent on transit to get around and they are going to need to go back on transit,”

There are also transportation industry technology and mobility options that are competing with public transit under the best of circumstances and disrupting revenue, such as transportation network companies (TNCs), namely Uber and Lyft. SCAG has also partnered with UCLA on a study that found lower income households have been buying cars at a higher rate – which has considerably lowered the number of zero car households. These factors have impacted ridership in recent years and will likely play a significant role in the ability for public transit to recover post-pandemic.

Beth Ann Falstad, Ph.D., Lecturer, Regenerative Studies, California State Polytechnic University

With the reduction of commuters on freeways since the onset of COVID-19, the Inland Empire and Southern California have experienced a massive reduction in vehicle emissions and pollution. Beth Ann Falstad, a lecturer for regenerative studies at Cal Poly Pomona says that, “we are in a pivotal moment and we have the opportunity to imagine a new structure in our lives.” With the reduction of emissions and pollution, as well as the stay-at-home orders given, residents are now able to appreciate the environment much more than they previously were able to. Falstad adds, “If we want to see the continued reduction in pollution and this connection that many of us have the pleasure in experiencing increased attention to the ones we love and things that bring us joy, how can we retain some of that as things come back to a new normal. More people will be working from home, leaving more time to interact with and enjoy their local environments.”

Falstad also brought several students in her regenerative design class to the Dialogue, each of which explained different regenerative



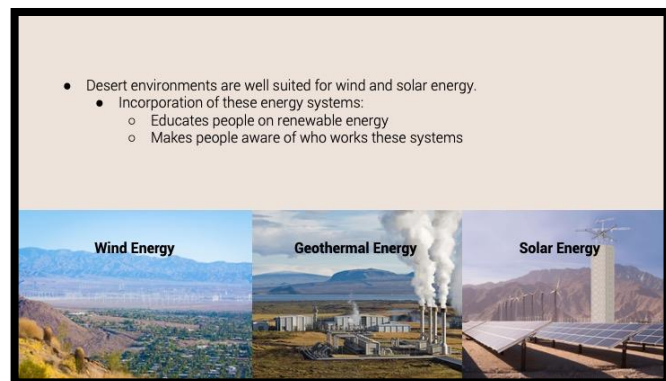
design practices focusing on water, energy, waste, shelter, food, and people. According to Falstad, “Regenerative design is the means to living sustainably within the Earth’s ability to regenerate itself.” These practices reduce the impact that humans have on the environment and attempt to bring a more sustainable system of how people live every day.



Starting the student presentations, Melissa and Tran focused on regenerative practices regarding water. In their example, the students chose Wrightwood as a test city. Here, they chose to implement fog water collection, rainwater collection, as well as snow water harvesting. Students carried out their experiments and studied how the various approaches worked. Fog and rainwater were collected and stored in tanks

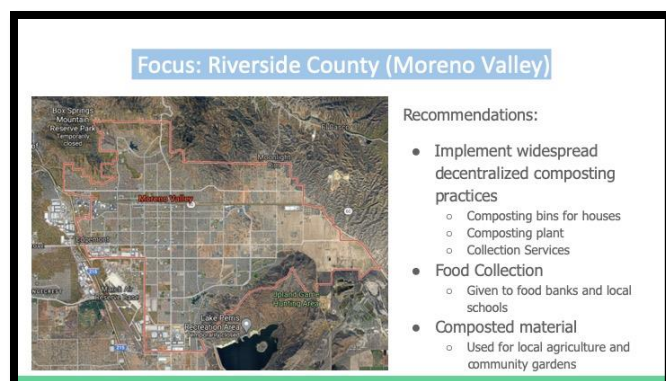
In the snow harvesting approach, artificial ponds were created by creating a trench and placing a plastic tarp over the trench. The snow was collected and made into snowballs. These snowballs were then rolled to the plastic covered trenches. Eventually, these snowballs will melt. Water from the pond can be used for irrigation as needed.

The next student group, which included Tori and others, focused on regenerative energy. For their example they focused on Palm Springs, where they implemented solar panels, wind turbines, and geothermal energy. The groups showed how these systems do not need to be intrusive in the daily lives of the residents and how every home can be fitted with this technology.



In desert environments such as the Salton Sea and Palm Springs, there is a significant potential for energy to be harvested – both solar and wind energy are well suited for the region.

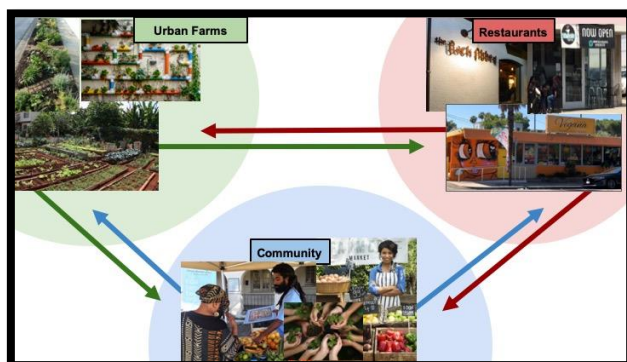
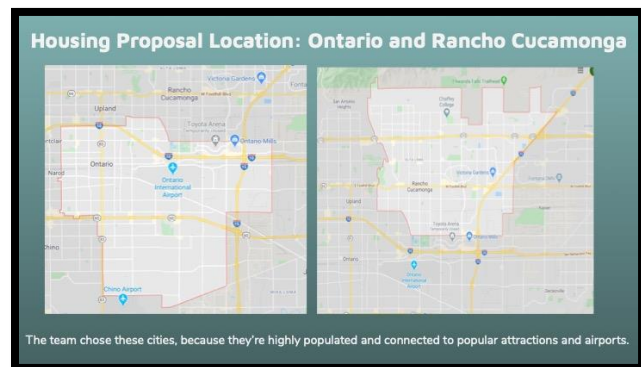
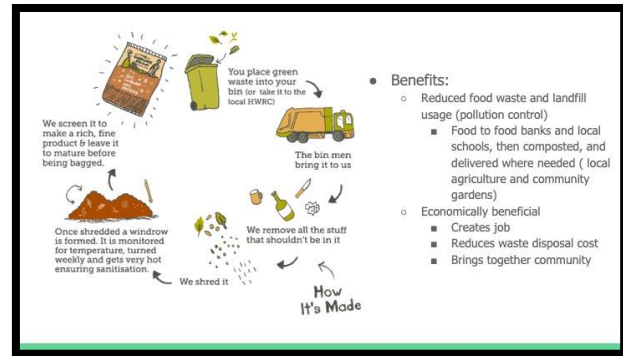
Sophia and Raymond focused on waste management. They proposed an expansion of the current composting system in Moreno Valley. This expansion would form “a cyclical, decentralized



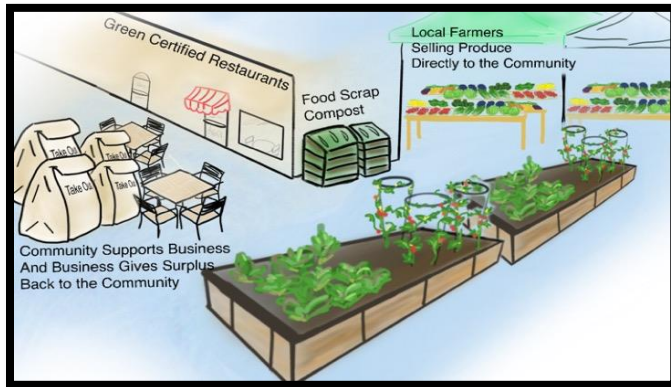
process that is community-based and supports the community to be involved at all levels, whether that be small businesses, homeowners, government officials, and other agricultural needs.” There are many benefits from this approach. Food waste is reduced which would also reduce landfill usage.

Food waste instead be collected, compiled, and composted. The compost can be distributed to local agriculture and community gardens. Additionally, this approach is economically beneficial as it creates jobs, reduces the cost of waste disposal, and brings the community together.

The next group focused mainly on housing initiatives and mixed-use development. Rosalinda and her group chose Ontario and Rancho Cucamonga as an example. To achieve their vision, they proposed, “transitioning from toxic heating oils to power HVAC systems to natural gases and renewable energy.” They also proposed mixed-use housing where residential housing was located at the top of buildings and retail spaces, as well as workplaces, at the bottom of the buildings. This would reduce the amount of commuting that is needed for people to get to their jobs and back home and further reduce emissions.

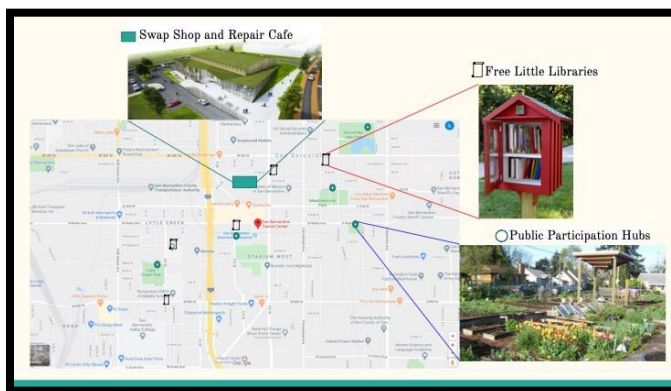


The next group discussed on regenerative food practices that can be implemented in the Inland Empire. For some families within the Inland Empire, the accessibility of fresh food is very limited. This group proposed that fixing the “convoluted supply chain” of food would impact many by creating a cyclical relationship between communities, food producers, and restaurants. This model is adaptable to each city and could include local farms



and composting centers. This approach solves the issue many people seeking fresh food need to travel far to find it. In doing so, this system reduces waste, increases community relationships, and incentivizes business models which are sustainable.

The last group examined various community concepts such as little libraries, repair cafes, swap shops and public participation hubs. These innovative ideas promote reuse and repair rather than throwing items into the garbage and eventually to the landfill. For example, people can bring electrical appliances, clothes, toys, bicycles, appliances, furniture, crockery, and many other items to be repaired or modified by skilled volunteer community members for free. While little libraries allow the community to donate a book (and can take a book if they wish).



Regardless of the social distancing and the new behaviors that are being implemented, including wearing masks in public and keeping a distance, the need to connect with our community and each other is not going away. It is the students and Dr. Falstad's hope that our local communities can adapt some version of these models because of their flexibility to their unique circumstances.

Alan Wapner, Ontario Council Member & President of the Ontario International Airport Authority

Alan Wapner, a Member of the Ontario Council and the President of the Ontario International Airport Authority continued the topic of recovery and the pandemic's effect on the region. To begin, Wapner explained how "these are trying times and they are having an impact at every level of government." Wapner has sat on many regional transit organization boards and was SCAG's immediate former president. The recent COVID-19 pandemic has caused many disruptions in the transit industry.

Wapner was concerned greatly for both the riders of public transit, as well as the employees in public transit. Wapner stated, "I'm really concerned about the conductors and the folks who do fair enforcement as their personal contact. What we did is we backed off of any fare enforcement within the Metrolink system just to avoid that one on one contact." In regard to safety measurements put in place for both employees and riders, Omnitrans also is now requiring rear boarding only for all riders in attempt to reduce the contact employees have with riders.

Several industries have already been affected negatively since COVID-19 began spreading. “What we have taken a heavy hit on is our hospitality industry,” Wapner added. “We have the Toyota Arena, we have our convention center, and all the hotels depend on those to generate activity.” With the amount of people travelling at an all-time low due to the pandemic, the City of Ontario is seeing a dip in the amount of taxes that are being collected. The Ontario International Airport is also negatively affected due to COVID-19. “Everything was going great and then now you probably heard we are down 95% at our airport,” Wapner explained. Fortunately, the Ontario International Airport is one of the largest exporters in the United States, so they are not as greatly affected as other industries in Southern California.

Even if the pandemic were to suddenly stop and people began travelling again, some industries within the Inland Empire would need time to operate normally again. Wapner explained this by adding, “If we solve this today and everyone went out and started doing their thing, we still wouldn’t see any results in most of these industries that I talked about for at least a year or two. Conventions, concerts, sporting events are all planned a year or two years in advance, so it is going to take us that long to build it up which means the whole hospitality industry is going to be on low.” Once the COVID-19 pandemic is controlled, industries will not be able to bounce back quickly. “There is no on-off switch,” Wapner concluded.

Although there are protests against the stay-at-home orders around America, there are not many in the Inland Empire. “Of course, the fear of many is that we are going to allow people out of their homes prematurely. That may cause another problem with the virus,” Wapner explained. Currently people appear to be growing weary of staying at home and want to be able to do as they please again. Governments, however, are attempting to reduce the number of infections by issuing stay-at-home orders but are met with local resistance, which can prolong the severity of COVID-19 infections and, subsequently, the recovery of industries most affected by COVID-19. Concluding his presentation, he recommended that residents of the Inland Empire take the advice and information from scientists and professionals. He says, “So again, all we can do is take all the information that our technicians, professionals, scientists provide us and then based on that and other information we have, try to make the best policy decisions that we can.”

Overall, our expert speakers believe that we will have to prepare and adjust for a new normal post COVID-19. Even though the industry is facing difficult situations, with those hardships come new opportunities for improvement. Looking at the regenerative design Dr. Falstad’s students discussed, we must keep in mind the current state of crisis gives us the opportunity to imagine a new structure and create a more sustainable system moving forward.

Moving the Dialogue Forward: Ideas from the Participants

After the presentations, the Dialogue attendees discussed the ideas presented and worked together in groups to discuss solutions to move it forward. The top ideas have been summarized below.

The new normal. Several participants discussed what the new normal will look like for the transportation sector due to the impacts of the pandemic.

- Due to COVID-19, there is a decrease in ridership with social distancing. What are the opportunities to collaborate more and more efficient for the region or community? Can we consider consolidation of some agencies?
- Universities and colleges need to get skill sets out there that are competitive? I'm not sure what this means in relation to transit or COVID.
- People are not trying to go back to normal, but create a new normal, with new policies and education standards for more of an online learning system.

Effects on public transit. Some of the group members were discussing how social distancing has decreased transit ridership.

- As ridership has already been decreasing pre-pandemic, will there be a continuing trend of less lines being served? We need to develop a roadmap on how to handle this moving forward.
- What other actions is public transit taking other than having riders come through the back of the bus or other actions already mentioned. How can we keep riders safe?
- Our attention needs to be focused on how to keep transit agencies operating during and after the recovery—and how to keep our transit workers and riders safe.

The Leonard Transportation Center (LTC) at California State University San Bernardino (CSUSB), presented a bi-monthly dialogue series on topics relevant to the future of transportation in the Inland Empire. The series, which was open to the public, was sponsored by HNTB Corporation and was held every other month starting in February 2018.

Dialogue topics ranged from understanding the current mobility dilemma and its causes to potential solutions like congestion pricing, transit; emerging technologies such as autonomous and connected vehicles and new ways of funding transportation infrastructure. Attendees had the opportunity to hear from transportation experts and engage in vigorous discussion about the transportation challenges facing the Inland Empire.

Leonard Transportation Center

The Leonard Transportation Center (LTC) at California State University, San Bernardino opened in 2006 with a focus on regional transportation needs. The vision of Bill and Barbara Leonard was to create a center that focuses on the unique transportation opportunities and challenges the Inland Empire faces. Today, the LTC is working to expand its research and student engagement programs. Focal points include transportation management and governance issues, development of new technologies, and transnational studies. Their vision is to work collaboratively to seek solutions to assist residents, businesses, government and nonprofit agencies, and international partners to work together on improving sustainability and quality of life in the Inland Empire. For more information, visit www.csusb.edu/LTC

HNTB

HNTB Corporation is an employee-owned infrastructure solutions firm serving public and private owners and contractors. HNTB's work in California dates back to its founding in 1914. Today, HNTB continues to grow in size and service offerings to clients in California from seven office locations, currently employing more than 350 full-time professionals. With more than a century of service, HNTB understands the life cycle of infrastructure and addresses clients' most complex technical, financial and operational challenges. Professionals nationwide deliver a full range of infrastructure-related services, including award-winning planning, design, program management and construction management. For more information, visit www.hntb.com

San Bernardino International Airport

Conveniently located in the heart of the Inland Empire, close to major freeways and just 60 miles from Los Angeles, San Bernardino (SBD) International Airport is strategically positioned to meet growing aviation activity, including cargo, business aviation, general aviation, and commercial airlines by providing competitive rates for aviation companies and local businesses looking to stretch their wings and expand their horizons. With extensive stretches of pristine runway and acres of prime land available for aviation development, SBD International Airport is ready to help our community and region reach new destinations. For more information, visit www.sbdairport.com

San Bernardino Valley College

San Bernardino Valley College will become the college of choice for students in the Inland Empire and will be regarded as the alma mater of successful, lifelong learners. We will build our reputation on the quality of our programs and services and on the safety, comfort, and beauty of our campus. We will hold both our students and ourselves to high standards of achievement and will expect all members of the college community to function as informed, responsible, and active members of society. For more information, visit www.valleycollege.edu