Research Presentations 3 Key Points

**April 14, 2023**

**Dr. Richard Matthew, UC Irvine**
1. The combination of aging and undersized infrastructure, urban development and climate change has catalyzed significant and growing environmental challenges in Orange County including heat waves, air pollution, flood risk and coastal erosion including beach loss
2. Coastal erosion cannot be reversed and several areas in Orange County are in danger of generating large economic, recreational, and ecological losses soon
3. Technology developed at UCI can model complex coastal dynamics, identify hot spots and trends, and help communities develop efficient solutions tailored to their specific contexts and values.

**Victor Negrete, Southern California Association of Governments**
1. SCAG is developing data tools and resources, including a Job Quality Index, to help the region monitor its progress towards a more resilient, inclusive economy.
2. SCAG is supporting the regional economy by developing toolkits for public agencies and anchor institutions to expand contracting and supply-chain opportunities for woman- and minority-owned businesses.
3. SCAG is working to expand access to family-supporting jobs by identifying pathways, as well as barriers, to economic opportunity with a focus on disadvantaged communities.

**April 28, 2023**

**Dr. Neil Sahota, UC Irvine**
1. The AI/robotics automation is happening at an accelerated pace because of wage inflation and staffing shortages (2022: 30% of work tasks are automated; 2025: 50% of work tasks will be automated)
2. In the next 3 years, ~12M US workers (nearly 9% of the workforce) will need retraining based on AI's impact
3. Current workforce training and educational curriculum is not sufficiently focused on teach the skills for "new collar" jobs being created from AI/robotics, like Prompt Engineers.

**Dr. Su Jin Jez, California Competes**
1. Orange County residents overall achieve better outcomes in terms of higher education attainment, work, and prosperity when compared to statewide averages. This suggests that the County has a strong foundation for economic growth and success, but a closer examination of the data reveals that this success is not evenly distributed across the County. Without addressing these disparities, Orange County risks leaving behind significant portions of its population, which could ultimately hinder the County's overall economic and social development.
2. To build a strong, inclusive economy, decision-makers must prioritize creating effective pathways and programs to and through higher education and onto better job opportunities. By engaging employers to support crafting postsecondary and training pathways that equip individuals with the skills and knowledge they need to succeed in the workforce, Orange County can help to close the opportunity gap and ensure that residents are prepared for the jobs of today and tomorrow. This can also ensure that the skills and knowledge that residents gain are aligned with the needs of local businesses and industries.
3. Transforming higher education to meet the needs of today's students, including adult learners, people with dependents, formerly incarcerated individuals, and those from marginalized communities, presents a significant opportunity for building a more equitable and competitive society. By expanding access to relevant and flexible educational opportunities, decision-makers can unlock new sources of talent and potential, leading to a more prosperous future for all.
Matt Horton, Milken Institute
1. Focuses on aligning and accelerating investments in infrastructure (e.g., housing, mobility, and transportation),
2. Develop a reindustrialization strategy that works to capture, concentrate and re-shores growth among various high-value industries (e.g., R&D, renewable energy production, biotech, manufacturing, industrial design, aerospace, etc.,)
3. Design regional career pathways and skills based learning initiatives that further cultivates upstream investments in the talent pipeline, while enhancing access for displaced and/or marginalized workers across a number of sectors.

May 12, 2023
Dr. Robert Kleinhenz
1. Orange County is a large prosperous economy that has demonstrated a history of resilience and is well-positioned to succeed over the next several years
2. The county faces two large challenges in the next several years: labor force gap and housing gap
3. The county’s ability to lift up disinvested communities will depend in part on its ability to provide education and training opportunities for members of these communities, enabling them to participate more fully in the county’s future growth.

May 26, 2023
Dr. Marlon Boarnet
Climate and Environmental Impact Analysis, Takeaways
1. Central/North County are near jobs, but job access by transit is weaker (by 10% or less) than job access by car.
2. Central/North County are concentrations of hotter temperatures (summer time highs can be 20 degrees F more inland than near coast), less tree canopy, and more impervious surface.
3. The SB 535 disadvantaged (disinvested) communities are locations that are vulnerable to heat, heat islands, and in need of cooling centers and home cooling.

Public Health Analysis, Takeaways
1. Disadvantaged communities are closer to health care facilities (hospitals)
2. That physical access does not translate into access to health care resources
   - 12.7% of persons in disadvantaged communities lack health insurance, compared to 6.6% in the balance of Orange County
3. Resource disparities translate into disparities in health outcomes
   - Life expectancy at birth varies by almost ten years across census tracts.
     - Mid-point of the highest quintile (coastal, upper income) is 85 years
     - Mid-point of lowest quintile (central, lower income) is 78 years
   - Asthma visits per year (per 10,000 persons) ranges from 16 to 49 annual visits at the mid-point of the lowest and highest quintiles, again roughly coastal/upper income to central/lower income – a three-fold difference.
Disinvested Communities Breakdown

1. At risk communities in the OC area are centralized around Asian and Hispanic Communities in the Anaheim, Garden Grove, and Santa Ana sphere of influence.
2. These communities on average make well below the median income of $95,280, in most areas the combined income of people colors is still significantly less than their white neighbors, even when they make up the majority of the population.
3. Disadvantaged areas are also marked as being in the top 25% in CalEnviroScreen 3.0 census tracts with high amounts of pollution and exposure to elements with high correlation to adverse health effects.

Equity and Inclusiveness

1. 1 in 10 Orange County residents reside in poverty with the highest rates centered around high minority population zones. A third of the region’s children live in homes that report income below the federal poverty line with high concentrations in high minority areas. Residents living in poverty face significantly limited opportunities for upward mobility, economically stunting a region whose population skews more and more majority minority.
2. Countywide homeownership barely out paces renting at 57%. Most low-wage workers in the region are not likely to find affordable rental housing. Increasing rental cost burdens matched with low wage job growth inhibits renters from purchasing and keeping homes.
3. Orange County has many adult residents with less than a high school degree. Attainment varies widely by ethnicity; only 9 percent of Latino immigrants have a bachelor’s degree or higher, while 53% have less than a high school degree. African Americans, Native Americans, and Pacific Islanders lag far behind in educational attainment as well. This is heavily influenced by high rates of “Disconnected Youth” among African Americans (17%) and Latinos (12%).

COVID-19 Pandemic

1. Native Hawaiians and Pacific Islanders were four times more likely to contract COVID-19 than the groups with the lowest rates. Latinx and American Indians and Alaska Natives were twice as likely to contract COVID-19 than the groups with the lowest rates.
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3. Low scoring, low ranking Vital Conditions areas are also centered around the previously outline disinvested areas; poor Pre-Covid vitality indicators directly aligned with areas that struggle to be economically self-sustaining. The Index shows how economic relief allocations can account for race and place by individual impact area. It identifies communities most at risk of being disproportionately impacted by the long-term economic risks associated with Covid-19.
The majority of workers in OC do not hold good jobs. More than 60 percent of workers do not hold a job that provides employer-sponsored healthcare, offers full-time, full-year employment, and pays the MIT living wage required to support a household of two working adults and one child. This definition of a “good job” is less comprehensive than the State of California’s definition of a “quality job,” indicating that an even greater percentage of workers in Orange County fall short of quality employment.

The largest three industries employing Orange County workers are middle-paying industries: Health Care and Social Assistance (15% of all county employment), Education Services (12%), and Manufacturing (11%). These industries have median wages that fall above the MIT living wage threshold. Among the next three largest industries, two are low-paying (Retail Trade, 10%; Accommodation and Food Services, 6%) and one is high paying (Professional, Scientific, Technical Services, 9.5%).

Union wage premiums are significant and a critical determinant of a worker holding a good job. In 2021, workers with union jobs earned 55% more than their non-union counterparts. Unionization likely contributes to the higher median wages in many of Orange County’s middle-paying industries such as education, healthcare, and construction. Unionization also makes a difference in lower-paying industries. Even workers in these industries have good jobs when covered by a union, e.g., grocery clerks (retail industry) and hotel housekeepers (accommodation and food services).